

# **Deliverable # 7**

## **Partnerships Development Report**

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**Agro Business Planning, Technologies and Marketing  
Advice and Implementation Support, under  
Livestock and Dairy Development Project (LDDP)**

**Package: SD-67**

**Department of Livestock Services (DLS),  
Ministry of Fisheries and Livestock,  
Government of Bangladesh  
Project ID: IDA 6330-BD**

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In joint venture with



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## Abbreviations

|            |                                                                 |
|------------|-----------------------------------------------------------------|
| ADB        | Asian Development Bank                                          |
| AI         | Artificial Insemination                                         |
| B2B        | Business-to-business                                            |
| B2C        | Business-to-consumer                                            |
| BAU        | Bangladesh Agricultural University                              |
| BBS        | Bangladesh Bureau of Statistics                                 |
| BDFA       | Bangladesh Dairy Farmers Association                            |
| BDT        | Bangladesh Taka                                                 |
| BMPCUL     | Bangladesh Milk Producers Co-operative Union Limited            |
| BMPIL      | Bengal Meat Processing Industries Limited                       |
| BLRI       | Bangladesh Livestock Research Institute                         |
| CBO        | Community based organization                                    |
| CMSME      | Cottage, micro, small and medium size enterprises               |
| DLS        | Department of Livestock Services (Bangladesh)                   |
| DLO        | District Livestock Office                                       |
| FAO        | Food and Agriculture Organization of the United Nations         |
| FDI        | Foreign Direct Investment                                       |
| FMD        | Foot and Mouth Disease                                          |
| GDP        | Gross Domestic Product                                          |
| GOB        | Government of Bangladesh                                        |
| IFAD       | International Fund for Agricultural Development                 |
| IFC        | International Finance Corporation (World Bank Group)            |
| ILST       | Institute of Livestock Science and Technology                   |
| INGO       | International Non-Government Organization                       |
| IUBAT      | International University of Business Agriculture and Technology |
| KII        | Key Informant Interview                                         |
| LGED       | Local Government Engineering Department                         |
| LDDP       | Livestock & Dairy Development Project (Bangladesh)              |
| M&E        | Monitoring & Evaluation                                         |
| MFI        | Microfinance Institution                                        |
| NATP       | National Agricultural Technology Program - Phase II Project     |
| NDDB       | National Dairy Development Board                                |
| NLPMI      | National Livestock and Poultry Management Institute             |
| NGO        | Non-Government Organization                                     |
| P2P        | Peer-to-peer                                                    |
| PG(s)      | Producer Group(s)                                               |
| PKSF       | Palli Karma Sahayak Foundation                                  |
| PPP (3Ps)  | Public-Private Partnership or Private-Producer Partnership      |
| PPPA       | Public-Private-Partnership Authority                            |
| PPPP (4Ps) | Public-Private-Producer Partnership                             |
| SME        | Small & Medium Enterprises                                      |
| VMCC       | Village Milk Collection Centre                                  |

Foreign Exchange (as on 30 May 2023): USD1 = BDT107.270

## Executive Summary

As governments, companies and producer organizations embark on commitments and initiatives to address United Nations Sustainability Development Goals or entrenched problems of poverty, global warming, or conservation of natural resources, it becomes abundantly apparent that governments alone cannot solve the problems. The need for collaboration to achieve shared goals and create results that last is widely felt. Partnerships allow two or more organizations to pool their assets, strength, knowledge, technology, networks, and reach to solve a common challenge or seize a new opportunity together. There are many ways to build competitive and cross-sector partnership to advance sustainable supply chains, achieve impact targets, and develop new markets.

Bangladesh livestock and dairy sector is largely unorganized with 14 million smallholders contributing over 90% of milk and meat supplied to the market. As per the 2008 Agricultural Census, farmers with a land size of less than 50 decimals have the highest ratio (33.15 per cent) while only 19.28 per cent of small farm households occupy a farm size of 150 to less than 250 decimals. LDDP, NATP and several development initiatives have embarked upon forming producer groups at village level and creating larger producer organisations. This is an herculean task given the large number of households and atomistic nature of farms. The creation of viable producer organisations is an essential step for building bottom-up partnerships.

The examples of successful partnership in Bangladesh are limited. Though partnership approach has shown promising results in value chain programs funded by international donors, yet there are significant challenges in design, and execution. The government's management systems are not well calibrated to respond to private sector and producer organisation's needs compounded by deep distrust between public, private and producer actors. There is dearth of strong business-oriented producer organisations at district and national level.

This report on partnership development may be read together with AFC/SSIL reports on Slaughtering Facility Report (D#2), Value Chain Analysis (D#3), Livestock and Dairy Business Structure Report (D#4), Farmers Capacity Development Report (D#5), and Critical Structure and Grant Modalities Report (D#6). These reports have underlined the importance of building partnership to increase productive efficiency, enhance market linkages for the small producers, increase access to bank finance, climate smart livestock production, and hygienic and safe food production. Partnership approach in these areas will contribute to the growth and development of the sector, leading to increased incomes and employment, encourage new entrepreneurship, climate resilience, and nutrition and food-safety in the livestock sector.

The major sources of information in this report were collected from secondary literature reviews, key informant interviews, field visits and case studies.

Key recommendations of the report are as follows:

- **Reorientation on partnerships development in livestock and dairy sector through dedicated institutional mechanisms.** This will be done through establishment of new specialized agency '*Prani Sampad Bikash Foundation*' (PSBF) as a government company under the Companies (Bangladesh) Act, 1994. The dedicated agency will create two specialized funds: (a) Special purpose vehicles (SPVs) to invest in livestock and dairy development initiatives by the partners and (b) Livestock sector partnership fund (LSPF) which will support with seed funding, subsidies in developing infrastructures, building capacities of the partners involved in livestock and dairy development projects.
- **Partnership development to support improved productivity:** Livestock production has increased over the last three decades in Bangladesh. Nevertheless, productivity remains low compared to that of neighboring countries, such as India, Pakistan, and Thailand, and it is not meeting the growing domestic demand. The partnership development may play an important role to improve the productivity in livestock and dairy sector.
- **Partnership development to improve efficiency in dairy and livestock product marketing:** The purpose of marketing partnership is to help businesses grow efficiently and reach their highest potential for return on investment (ROI) by promoting brands, products and services. The importance of marketing is that it makes the customers aware of products or services, engages them, and helps them make the buying decision. Furthermore, a marketing plan helps in creating and maintaining demand, relevance, reputation, competition, etc.
- **Competency and capacity building partnerships:** DLS need to encourage banks, microfinance institutions, business service providers, vocational centers, producer groups, small entrepreneurs to work together to foster mutually beneficial partnerships. This collaboration can help to reduce risks associated with investment, promote market development, and encourage innovation.
- **Partnerships for improving investments and financial services:** The primary goal of both financing and investment decisions is to build wealth of capital owners. Investment decisions revolve around how to best allocate capital to maximize their value. Financing decisions revolve around how to pay for investments and expenses. Companies can use existing capital, borrow, or sell equity. Without internally accrued capital or external investment, businesses will find it difficult to grow, and serve more customers.

Successful implementation of the above recommendations is expected to enable Bangladesh to create a favourable environment to bring the agencies, companies, and producers on one platform working hand in hand. This will in turn drive economic growth, reduce poverty, and improve the quality of life for the smallholder livestock community of Bangladesh.

## 1.0 Background

Recognising the significant contribution of livestock and dairy sector in food and nutrition security, generating income and employment, women empowerment and poverty alleviation, the government has taken pro-active stance in promoting both public and private sectors to mitigate the challenges in livestock and dairy sector through plethora of initiatives.

In pursuit of Bangladesh Vision 2041 and national sectoral goals, the government of Bangladesh is supporting collaborations among, public, private and civil society organisations to establish an enabling atmosphere through liberalizing its present policies so that the benefits of the development percolate to the small producers and entrepreneurs in the livestock and dairy sector. As per the latest available information (2021-22), total livestock population in the country was 432.23 million which is up from 349.47 million in 2012-13. However, this increase of 24% in livestock population in the last 10 years was not accompanied by an increase in public spending on livestock and dairy sector which resulted in limiting the extension services, research in animal husbandry, disease control, and minimum compliance to food safety norms. To meet this inadequacy, emphasis in recent years has been shifted over to decentralizing veterinary and extension services, cost recovery, and introduction of contractual services.

Partnerships are critical for improving livestock production as this sector involves a variety of agencies in the supply chain of livestock products from producers to consumers. Moreover, partnerships provides the necessary resources, knowledge and expertise needed to improve animal genetics, nutrition , and health, as well as access to markets and infrastructure. Partnerships require collaboration between farmers, research institutions, NGOs, development agencies and government agencies. By working together, they can improve production efficiency and cost-effectiveness, resulting in better profits, enhanced animal welfare, and environmental sustainability. In Bangladesh, there are well established partnerships, which needs standardisation to become more efficient and socially inclusive. Some of the ongoing partnership models are working well in some locations but visibly not significantly benefiting the smallholder producers at the ground level. One of the major objectives of the LDDP is provisioning of direct benefits to the livestock and dairy producers. It is imperative to understand the existing models of partnerships and provide advice on the new, emerging and scalable partnership models from Bangladesh and other countries.

### 1.1 Introduction

The Government of Bangladesh recognizes the role of private sector and NGOs in bringing about socio-economic development (Bangladesh Planning Commission, 2020). The goal of transiting to a developed country status by 2041 will require investments in infrastructure, larger provisioning of livestock and extension services,

and access to finance for working capital and asset creation. The livestock and dairy value chains involve a variety of actors and institutions, the vast majority of which are private-sector entities who are active in both side of the value chain (input supply and output processing and marketing) and service providers. These companies provide the financial services, technology, know-how and information needed to meet the standards laid out by government agencies. There are many partnerships model evolved during the last 50 years in Bangladesh to enhance collaboration between a private entity (company) and the public agencies (PPP) to improve the efficiency to reach out to the farming community. However, in the livestock sector, PPP type of partnership is rare. Most of them are contract growing between a private company and the producers, or between two companies. Therefore, it has become imperative to introduce broaden types of partnership in the livestock and dairy sector that can boost productivity and profitability of the livestock business.

## 1.2 Objectives

The overarching objective of this partnership development report is to understand the existing partnership models in the country that are supporting the development of the livestock and dairy sub-sector and suggest on innovative approaches which are possible to implement under the current context of livestock development paradigm. In the context of Bangladesh, the objectives of partnership development would focus on five critical areas which indicates the overall development of the livestock and dairy sector: (a) Increased productive efficiency, (b) Enhanced market linkages, (c) Increased access to finance, (d) Climate smart livestock production and (e) Hygienic and safe food production. Implementation of the above objectives will contribute to the growth and development of the sector, leading to increased incomes and employment, new entrepreneurship development, climate resilience, nutrition and food-safety in the livestock sector.

The specific objective of this report is to: (a) Recognise the existing partnership in the areas of livestock and dairy sector in Bangladesh, (b) Understand what is important to and drives the other partners – benefits sought, ways of working, flexibilities and constraints, red lines, etc, (c) Comprehend their own and other partners responsibilities, (d) Identify the importance of communication and key relationships – formal, structured, and less formal, and ensure there are processes in place to deliver effective communication, and (e) Facilitate to establish a “National Platform” to enable advocacy for the principle of partnerships (PPP and 4P) and provide a forum for different stakeholders to get to know each other, build trust and work towards engagement in partnerships.

## 1.3 Theory of change and pathways for partnership development

The partnership development initiatives follow a classical theory of change (ToC) which clearly shows the input-output-impact relationship at different timescales when implemented successfully as demonstrated in figure 1 below.

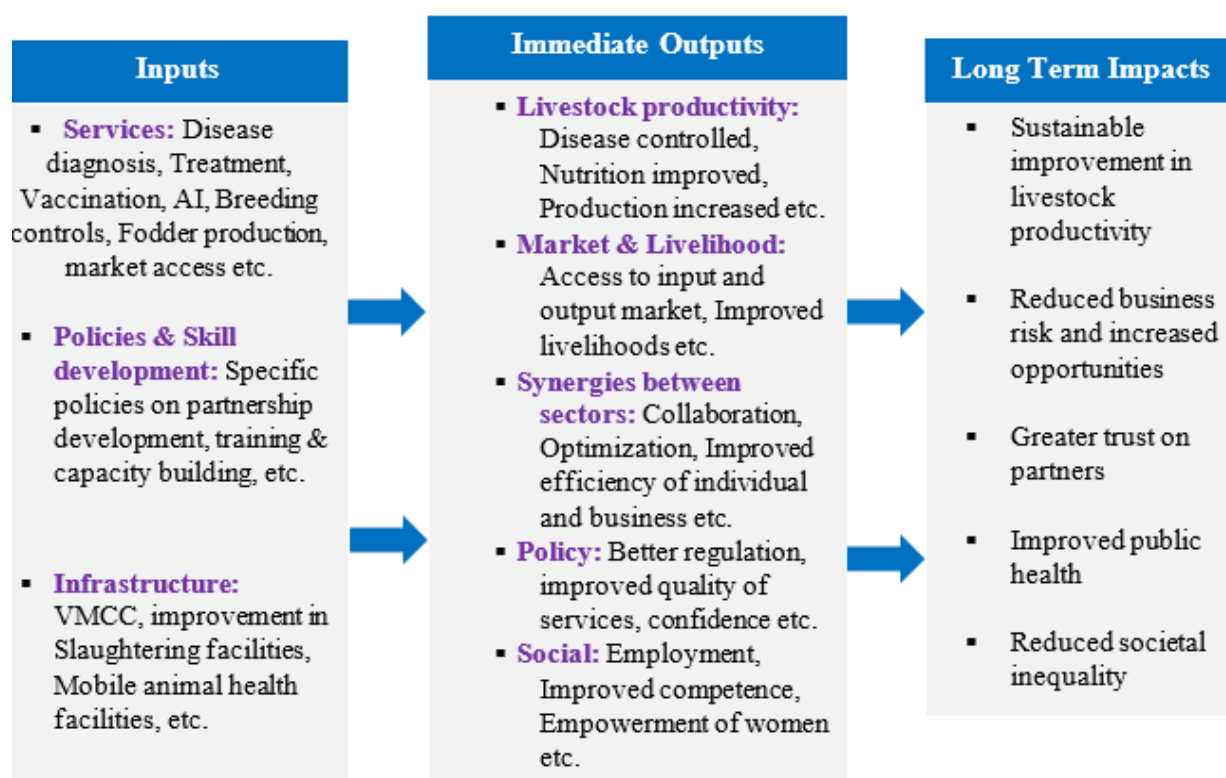


Figure 1 Theory of change in partnership development

However, keeping in view the types and extent of partnership evolve at different stages of economic activities take a different pathway to achieve the objectives (Figure 2):

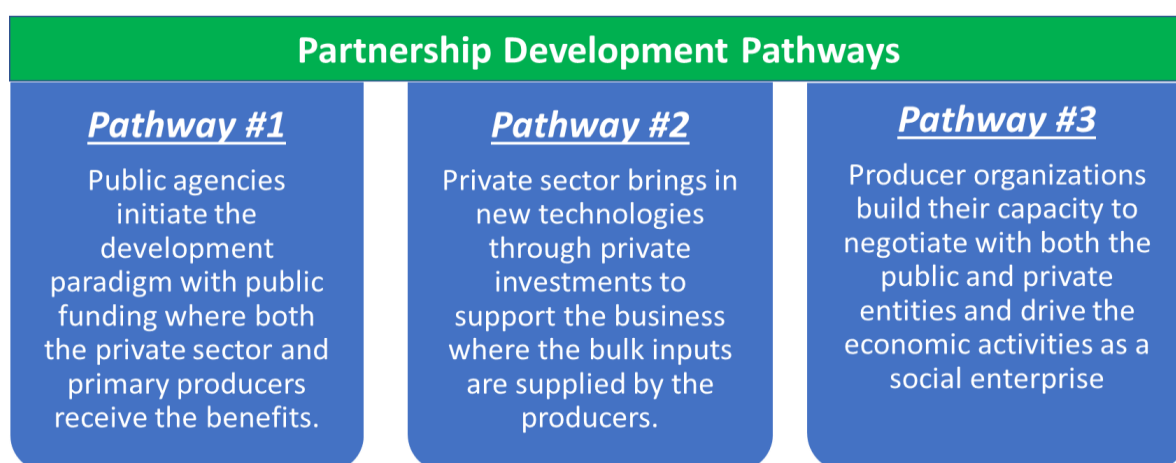


Figure 2 Partnership development pathways

## 1.4 Study methodology

The main goal of the study is to capture a diversity of points of view, representing the different categories of partners in the ecosystem. Keeping this goal in the background the study undertook a robust methodology and used relevant and important literatures

(both published and unpublished) from Bangladesh and other parts of the world with similar socio-economic settings. The study also used different participatory tools such as semi-structured interviews with the agencies (both public and private) involved in various types of partnerships (technical, financial, marketing etc.) to promote livestock and dairy sector in the country. The study team also undergone field visits to reach out to the producers and producer groups to understand the qualitative impacts of the partnerships on the ground and their aspirations from the emerging partnership models and approaches.

- **Literature review:** All relevant and important literatures (national & international) on partnerships were reviewed and the qualitative and quantitative arguments were analyzed to articulate various experiences and learn lessons to the core issues related to partnership development in livestock and dairy sector. To summarize, the experience of partnership initiatives, 17 case lets were prepared. The case lets from Bangladesh and other countries are instructive on the role of key parties, mutual benefit to the parties, the synergy achieved by the parties, and issues related to post-project sustainability. Wherever possible, the contents of the case lets were updated by the project authorities.
- **Key Informants' Interview (KII):** The KII format was developed following a previously prepared checklist in such a way that it seems like “*dialogue with the actors*”, which were administered with the key informants of the agencies responsible for partnership development in Bangladesh in the context of livestock and dairy development. These were mainly individual interviews to facilitate the capture of individual points of view and were a very important source of primary data. The themes covered in the KII for the actors at the conception of the PPP were: (a) building blocks of the partnerships (*inputs, technology, finance, markets* etc.), (ii) functioning of the partnerships (*structure, governance, collaboration* etc.), (iii) outputs of the partnerships (*capacity development, economic empowerment, gender mainstreaming* etc.). In all, 36 KIIs were conducted –10 public agencies, 7 private sector representatives, and 19 with NGOs/civil society.
- **Field visit:** Field visits to a dozen of enterprises in Bangladesh was undertaken to appreciate ground realities, and interact with entrepreneurs, workers, and customers.

## 2.0 Models of Partnerships in Livestock Sector

It is essential to form a collaboration between the public and private sectors towards achieving the target of mobilizing investment from private sector towards creating a public asset or project for creating public utilities or services to be enjoyed commonly by all inhabitants deriving benefit from the public investment. This collaboration can be termed as partnership which is highly beneficial for increasing productivity and profits in a business.

A partnership is, by definition, consists of two or more parties which combine their resources to form a business and agree to share risks, profits and losses. The partners in a partnership may be individuals, businesses, public agencies, private companies, NGOs, faith-based organisations or combinations. The organisation can enter into partnership as it increases likelihood of each achieving their mission and to amplify their reach. A partnership may result in investment in assets, usually, a verbal or written contract guide on how profits or losses from the business will be shared among the partners.

Keeping the above in view, the countries in global south developed many models of partnership some of which are described in this section.

### 2.1 Partnership between two parties (2Ps)

This is a partnership model involves *inter alia* two individuals or one individual and one company, or two companies. Several permutations and combinations of 2P is observed in Bangladesh. These include:

- Partnership between two private parties/individuals (example: *Mudareba* contracts)
- Partnership between a private company and a producer (example: contract growing)
- Partnership between a public agency and a private entity (example: service agreements)
- Partnership between private companies (example: joint ventures)

### 2.2 Public-Private Partnerships (3Ps)

The public-private partnership (PPP) approach till now proved to be one of the most efficient instruments to blend the technology and enabling policy to transform the rural economy in the country (Batiargal, and Zhang, 2021; de Moraes, 2015; Endo and Ram, 2021). However, very few of the PPP models are meant for the livestock and dairy sector. An effective PPP model brings both public and private sectors together to work in synergy, each understanding their role and responsibilities and getting benefits (FAO. (2016). This approach potentially can mitigate against the risk of unregulated and potentially damaging private sector intention of profit maximization and creating monopolistic market economy.

The PPP frameworks provide important instruments for attracting investments. Potentially, it is a viable means to effectively address constraints of financing, managing and maintaining public goods and services. Additionally, PPPs can enable the Government to fulfil its responsibilities in efficient delivery of socio-economic goods and services by ensuring efficiency, effectiveness, accountability, quality, and outreach of services. Partnership represents a paradigm shift in Government working culture from creating a physical asset to delivery of services which the producers need and demand. A thorough analysis of the current initiatives of the national government for the livestock and dairy sector shows that the government support to private investments and promote producer groups of small farmers has started yielding good results and fostering growth in the sector to some extent but still there are gaps in terms of maximizing the value involved in the entire value chain. The complexity of the livestock and dairy supply chain and still largely unorganized Bangladeshi livestock and dairy industry provide an ample scope for the private players to come in a PPP mode with the public agencies and bring a turn around and transformation. The 3P model is being used mostly in case of infrastructure development particularly construction of roads, highways, airports, and ports.

The relationships and capabilities that are developed through PPP may be utilised in case of livestock epidemics and other emergencies, for example if there is a need to respond to a livestock disease outbreak or vaccine demand or feed shortage in disaster affected areas that exceeds the capacity of the public sector. These immediate benefits will also lead to longer-term positive impacts for livestock and dairy sector, for example:

**a. National economic development:** The positive impact of improved animal health and nutrition on livestock/dairy productivity, livelihoods, and domestic and export competitiveness of the sector will contribute to national economic development.

**b. Trusted services by all the parties:** High quality services and other activities delivered through PPP model could improve the reputation and trust of the business service providers (both public and/or private). The partnership may also support development of animal production, health and welfare policies, capacity development, or enabling exports etc.

**c. Risk mitigation:** Innovative approaches and positive working relationships of public sector with the private entities at national and local levels potentially reduce the risks of income loss in livestock and dairy sector.

**d. Public health support:** High quality veterinary services will reduce zoonotic disease risks and increase food security by providing access to affordable technologies in availing proteins for the smallholder producers in livestock sector.

**e. Social coherence:** Livestock is a major asset, important to the livelihood of economically vulnerable communities and women play an important role in maintaining these household assets. Improved animal productivity, health care and market access resulted in additional revenues that may directly contribute to reducing gender inequality and improving social status.

Various skills and benefits are brought to the table by the partners and supports in a structured PPP settings which is shown in figure 3 below.

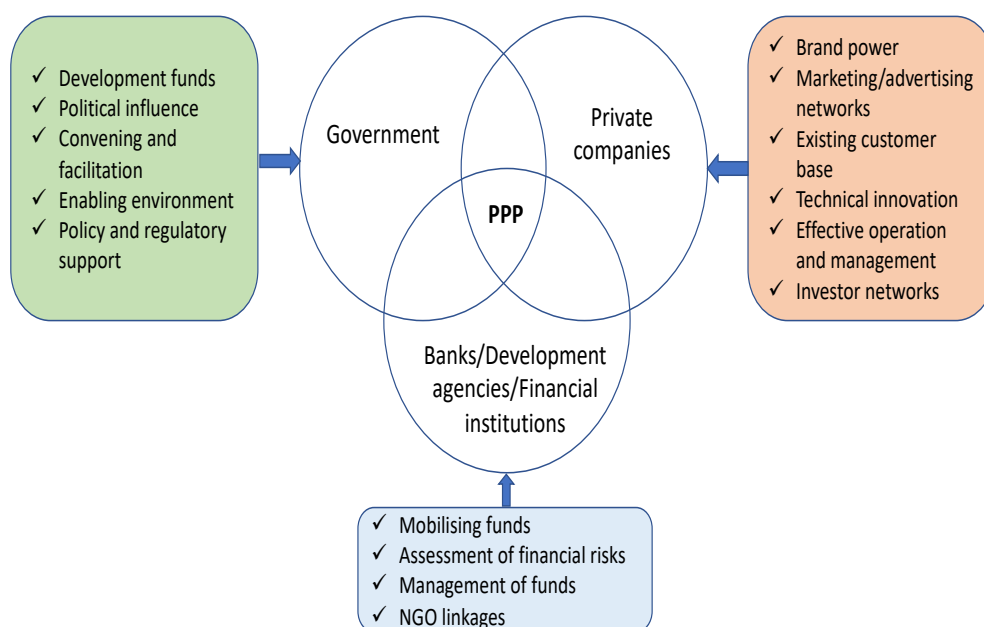


Figure 3. PPP model at a glance

Development agencies are involved in playing multiple roles, such as technical support, finance support, risk guarantees, convening, brokering, etc. The NGO's (national and international) are involved in some cases of PPP for their social/grass root engagements. They may work with private partners and the government to identify potential PPP's and in creating an enabling environment for their formation and success.

### 2.3 Public-Private-Producer Partnership (4P) Model

The public-private-producer partnership (4P) approach puts extra emphasis on forging linkages between small-scale producers, private companies, and government agencies. The private sector often perceive working directly with smallholder producers as non-remunerative and costly and wasteful. While smallholders often accuse private companies of offering low prices and stiff conditions they cannot cope with. The facilitating role of the government agencies brokering deal is essential to establish trust between the prospective partners (Thorpe & Maestre, 2015). Since the United Nations Millennium Declaration in 2000, followed by the United Nations Sustainable Development Goal, there is a renewed emphasis on making the markets for the small holders and poor (World Bank, 2003; Mielhlbradt, 2005; Committee of Donor Agencies for Small Enterprise Development, 2001).

The 4P approach, popularised by the International Fund for Agriculture and Development (IFAD) is a locally implemented approach through national governments stresses strong inclusion of local (sub-national) governments, private companies and producer organisations as equal partners. 4P approach calls for a vision on sustainability post-project by capacity building for public institutions on the way markets function and how market players think and act different from public services (Campagni et al 2016). IFAD defines 4Ps in agricultural value chains as *“4Ps involve cooperation between a government, business agents and small-scale producers, who agree to work together to reach a common goal or carry out a specific task while jointly assuming risks and responsibilities, and sharing benefits, resources and competencies.”*

A 4P is not a panacea for all the public sector's funding and infrastructure problems and 4Ps are not always the most appropriate procurement option. Experience from Ghana, Indonesia, Rwanda, Uganda and Tanzania suggest that most of the complexities in 4Ps can be minimised under certain circumstances and through careful management of 4P design (Camagni, & Ketting, 2016, pp. 25). Insufficient investment in building producer organisations hurt integration of producers into the value chain. Producer ownership to many 4P initiatives have plagued their after project sustainability. Due to elite capture and corruption, many 4Ps are transparency, and remain unaccountable to the partners. Figure 4 below illustrates the linkages between public agencies, private sector, and producers in typical 4P models.

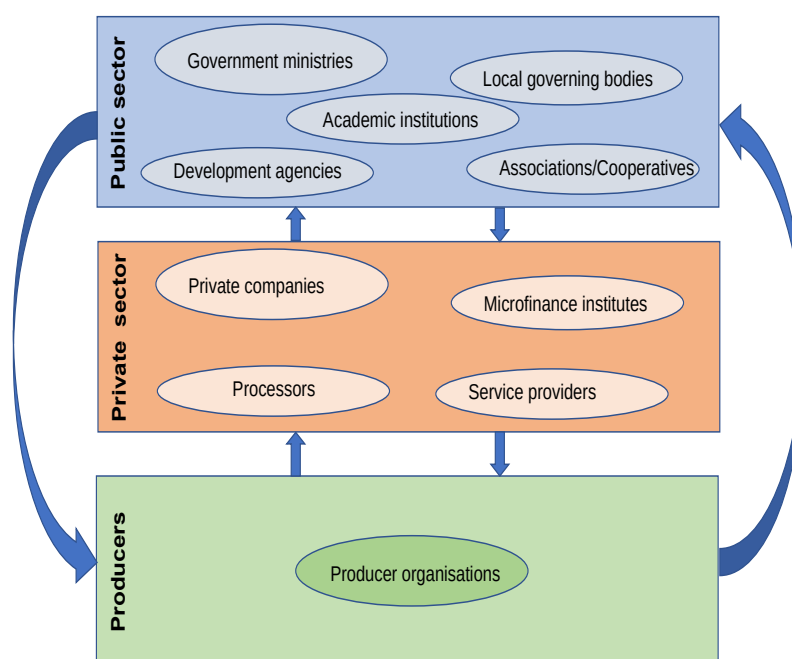


Figure 4 Institutional arrangement for a typical 4P

## 2.4 Cooperative Model

Cooperatives in Bangladesh are organised under the Department of Cooperatives in the Ministry of Local Government and Rural Development of Bangladesh (Sarker et. al. 2016). Milk Vita has organised 345 primary cooperative societies of dairy farmers. This has been hailed as a successful model which has ensured the livelihood of numerous smallholders along with a large increase in milk production in the country. But competition among public and private dairies has severely affected the dynamics of cooperative societies. LDDP has a target of first mobilising 5500 producer groups, and then aggregating them into cooperatives. Some key potential benefits of the cooperative structure are listed below:

- collective bargaining capacity for input purchasing and marketing.
- capacity development and training.
- enhanced access to institutional finance; and
- better bargaining position.

Potential challenges with the smallholder cooperatives include:

- Where regulatory or quality system upgrades are required, cooperative farmers can become vulnerable.
- Similarly, where technological and sectoral reforms are required, they can be difficult to implement in old conservative cooperative structures.
- Farmer representation can be vulnerable to corruption, social factors, and political interference.
- Multiple cooperative structures can become competitive to one another in surplus production zones.
- Where external funds/financial support services are withdrawn over time, smallholder cooperatives can often cease to function in the long term.

The women milk cooperative of Panjor Bhanga in Northern Bangladesh is a positive example of partnership among the stakeholders (Box 1).

### Box 1 Women's milk cooperative of Panjor Bhanga, Northern Bangladesh

This cooperative is a successful partnership of women, local bank, local dairy and capacity building from FAO supported programme. In 2011, the cooperative was formed with 15 women as member. Through a bank loan, the members were able to buy high yielding cows. Milk production in the cooperative increased and they started to sell milk to local sweet shops and dairy processing companies. As a recognition of the cooperative's good work, in 2016 Prime Minister of Bangladesh, presented a National Agriculture Award to Renu Bala, the chair of the cooperative. However, since 2011, no bank has provided additional resources to members to buy more cows or improve cow sheds. Expansion of such a successful business has stalled because of lack of capital to buy new cows which needs attention by the relevant sectors.

(Source: AFC/SSIL, 2023)

## 2.5. Comparison between 2P, 3P, 4P and Cooperative models

There are similarities and differences between the 4 models. All the partnership models involve producers, and private entities. A major difference is the treatment of ownership issues related to assets. In 2P poultry model, the day old chicks very often are the property of the contracting firm, not the farmer. The farmer retains all ownership rights over the land and chicken shed. Under the 3P for infrastructure development (road or port construction), the asset remains with the government; the private companies are invited to design, build, and operate the facility on public-owned leased land. In contrast, under 4P model, there is no transfer of livestock and land from the farmers to any other party. A Cooperative is a legal person, assets financed by the Cooperatives belongs to it. Another difference is the manner in which investments are mobilised for the projects. In 2P projects, the source of finance are largely private companies. The main financiers of 3P projects are the government agencies and private companies. The main financiers of 4P projects are Governments and donor agencies. A central tenet of the 4P model is to use public funds provided by governments and donor agencies to leverage financing and investments from the private agribusiness and financial sectors, and producers themselves. The aim is to ensure the long-term financial viability of the 4P. Cooperatives are subscribed by member shares, and donations by external parties. Table 1 below provides a parameter-based characteristics of the four types of partnerships.

**Table 1 Characteristics of 2P, 3P, 4P and Coop models**

| Parameters          | 2P Model                                                                                                                                                                                                    | 3P Model                                                                                                                                                                              | 4P Model                                                                                                                                                                                                                                                                              | Coop Model                      |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| 1. Purpose          | Assured and predictable supply of raw material and access to markets.                                                                                                                                       | Bring in financial investment, better operations and management in the case of large infrastructure projects.                                                                         | Improve livestock productivity, increase access to markets and strengthen linkages in value chain.                                                                                                                                                                                    | To maximize benefit to members. |
| 2. Role of partners | <ul style="list-style-type: none"> <li>• Private agency: (a) Proprietary technology, (b) working capital, (c) Market facilitation.</li> <li>• Producers/Producers Group: Supply of raw materials</li> </ul> | <ul style="list-style-type: none"> <li>• Public agency a) policy, and b) business environment facilitation</li> <li>• Private agency: a) new technology and b) investments</li> </ul> | <ul style="list-style-type: none"> <li>• Public agency: (a) Policy and (b) Business environment facilitation.</li> <li>• Private agency: (a) New technology, (b) Investments (c) Market facilitation</li> <li>• Producers/Producers Group: (a) Supply of raw materials and</li> </ul> | Similar to 4P.                  |

| Parameters                    | 2P Model                                                | 3P Model                                                                                                             | 4P Model                                                                                                      | Coop Model                                    |
|-------------------------------|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
|                               |                                                         |                                                                                                                      | (b) Co-create the market                                                                                      |                                               |
| 3. Drivers and facilitators   | Private companies are the drivers.                      | Private Sector as the driver and public agencies as the facilitator                                                  | Producers and their organisations are the drivers, public and private business are the facilitators           | Members are the drivers.                      |
| 4. Familiarity of the concept | Well understood in policy circles.                      | High in policy circles                                                                                               | Not well understood                                                                                           | Well understood.                              |
| 5. Procurement                | Private procurement.                                    | Cumbersome public procurement.                                                                                       | Mix of public and community procurement.                                                                      | Simple.                                       |
| 6. Financing mix              | Private companies                                       | Government/Public agency, private sources                                                                            | Government, private and producers/producer groups                                                             | Member shares, and own earnings.              |
| 7. Benefit sharing            | Skewed towards companies                                | Skewed towards private companies                                                                                     | Skewed towards producers                                                                                      | Only for members.                             |
| 8. Suitability                | Appropriate for producers looking for assured buy-back. | Appropriate for large ticket size projects (mainly infrastructure) requiring private financing and latest technology | Appropriate for small and medium ticket size projects backed by government/public agencies and donor funding. | Appropriate for small producers.              |
| 8. Sustainability             | Proven and well documented.                             | Proven criteria                                                                                                      | Developing sustainable relationship among the partners                                                        | Mixed results                                 |
| 9. Gender focus               | Business orientation is strong                          | Need more evidence to prove gender neutrality                                                                        | Main focus is to achieve social equality and gender neutrality                                                | Women led cooperatives are highly successful. |

The experience of Sri Lanka illustrated in the box 2 below highlights some of the field level difficulties in implementing partnership models with communities.

### Box 2 Market access under public-private-producer framework in Sri Lanka

The National Agribusiness Development Programme (NADeP) (2010-2017) of Sri Lanka is an example of market access and value chain innovation for smallholder farmers. Financed by IFAD, the objectives of the Programme were to assist smallholder farmers, landless households and young people by: (a) increasing their incomes through participation in the Marketing Chain Development and Linkages component to improve farm gate prices, on-

farm productivity and add value to processed farm products; and (b) the provision of financing and training to the landless and youth to offer them improved and increased employment opportunities. The target groups were organized as community-based organizations (e.g., Self-help groups, producer groups, cooperatives). The groups were provided with financial assistance so that they could take equity in selected agro-companies. At the end of the project, 17,651 household received extension and technical advisory services from 12 agro companies, and 6,208 household received agricultural seasonal loans or investment loans averaging US\$464 (LKR 70,513) from 8 commercial banks. 25,816 rural household were mobilized under self-help groups, who received loans for income generating activities or on farm activities. The Sri Lanka experience point to three major lessons. First of all, in spite of the general interest expressed by the public and private sectors, they were not ready to have small producers as shareholders with participation and representation rights. Moreover, lack of institutional capacity (public and private) and legal instruments for the formation of the board of trustees to oversee the funds added complexities in implementation of equity financing model. Secondly, the companies preferred contract farming arrangement wherein they would provide the inputs and buy-back the raw material. Thirdly, the CBO-led market linkages model was found unrealistic due to lack of CBOs with strong organizational and governance structure, market exposure, and financial management capacity.

Sources: Prasada, D.V.P. (2020). Public–Private–Producer (PPP) Partnerships in Sri Lankan Agriculture. Agricultural Research for Sustainable Food Systems in Sri Lanka, Volume 2: A Pursuit for Advancements (pp.353-369) edited by R.P. de Silva, G. Pushapmara, P. Prasada, and J. Weerahewa, Springer (DOI 10.1007/978-981-15-3673-1\_16)

Small reforms can have a big impact on the lives of producers and small traders. Pakistan has taken bold measure (Box 3) to privatise its cattle markets which has resulted in greater tax revenue for local authorities, and more amenities for producers and traders.

### Box 3. Cattle Market Reform in Punjab, Pakistan

The Local Government and Community Development Department (LGCD) of Punjab Government has taken effective measure to restructure and reform of operation of cattle markets and their management to discourage extortion, leakage, and operation of cartels of middlemen and officials. In this connection, nine cattle market management companies have been established in each division. These companies are responsible for the operations of the existing cattle markets and improve facilities and livestock trading environment in the province. Each cattle market management company provide general public, traders and farmers:

- Free water, electricity, veterinary services, shade (sheds), loading and unloading services, parking, security, cleanliness and toilets
- Provision of banks and secured cash transactions through banks.
- Other available services offered through outsourcing in the market are fodder shops, straw and stubble points, manual machine used to chop fodder *for cattle* canteen and hotels, small grocery stores, tea stalls, ornamental shops, lodging and boarding.

Few of the cattle markets have installed Solar System and Biogas System to make cattle market self-sufficient in energy requirements. The main source of revenue of the cattle market companies auction fees collected from outsourcing the operations of animal levy,

parking fee and allied services. Online, transparent bids have curbed corruption and leakage of user fees.

Source: [https://lqcd.punjab.gov.pk/cattle\\_market\\_management\\_companies](https://lqcd.punjab.gov.pk/cattle_market_management_companies)

## 2.6 Best Practices

Partnering with another organisation in a related vertical/business area to advance a business goal is potentially a lucrative strategy for the participants that can help diversify channels for marketing and/or gain new customers. A standard operating procedure (SOP) need to be developed by commercial or professional entities which can help give partnership a sound base (United Nations, 2022; IFAD 2016). The cycle of best practices is illustrated in the Figure 5 below.

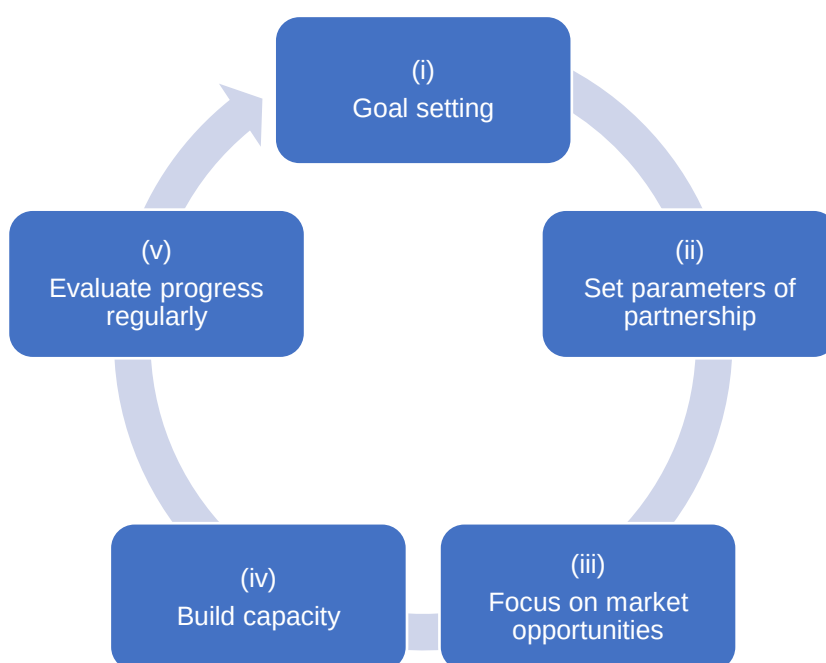


**Figure 5 Cycle of best practices**

- i) *Define a clear goal for your expected outcomes at the beginning.* Having a defined goal is vital. It is also essential that goals, mission, and culture of all partners are in alignment with each other. It is important to answer a question such as: ‘*What does this 4P bring to a livestock producer group that cannot be delivered by any of the partners intervening independently?*’ The rationale should demonstrate the partnership’s advantages and its potential for achieving sustainability and scale.
- ii) *Determine the parameters of the partnership.* Having set the goal of the partnership, all partners must discuss and agree on how the partnership will be operated, as well as the sharing of resources and capacities. Outlining roles and responsibilities is an essential part of any partnership action plan. All partners will function better if they fully understand their roles, responsibilities and expected results within the partnership.
- iii) *Ensure a clear market pull.* The key justification for promoting partnership is to achieve sustainable economic or financial goals. The partnership can help to

identify key opportunities such as new product development and new market demand, and how they can be exploited in the partnership.

- iv) *Build capacity of partners gradually and incrementally:* Technical assistance is essential to empower and build the confidence of all actors to negotiate with other parties, noting that trust is at the heart of any successful partnership. Producer organizations in particular require sustained handholding in price setting, legal and contractual issues, market intelligence and negotiation skills.
- v) *Evaluate the partnership regularly:* Monitor the progress of the partnership against agreed indicators. By collecting and analyzing data, the partners can examine if the achievements are on track. If not, you can work collaboratively to adjust the partnership and make sure it meets everyone's goals. Regular reviews can prevent or reduce misunderstandings or conflicts as the partnership flourish.

### 3.0 Observations on Partnerships in Bangladesh and Abroad

The study was undertaken to assess the current partnership systems and procedures in the livestock sector of Bangladesh. To assess this, a detailed interview was conducted with the 37 key informants from public and private sector players<sup>1</sup> engaged in the subsector. Different case lets were also developed from Bangladesh and other countries to understand various issues in connection with the partnership development process. It was observed that the Public-Private Partnership Authority (PPPA) under the Prime Minister's Office is a catalyst to proactively realize PPP projects in Bangladesh. The PPP Office supports line ministries to identify, develop, tender and finance PPP projects. Apart from the policy intervention, the PPPA also operates 3 important funds (Box 4) to ensure smooth functioning of the PPP projects.

#### Box 4 Large size partnership funds to support PPP projects

**The PPP Technical Assistance Fund (PPTAF)** provides early-stage project development funding support to sanctioned PPP projects. The PPPTAF will help defray the cost of professional consultants and advisors needed to assure the government achieves appropriate risk allocation in PPP projects and pre-develops projects to a standard that attracts maximum interest from investors and lenders.

**The Viability Gap Fund (VGF)** provides supplementary government financing to projects that the PPP Unit deems economically vital to the public interest but that may not be fully financially viable on a commercial basis. VGF monies can be used to share the up-front cost of a project or provided on an annual basis to effectively subsidize PPP project costs.

**The Bangladesh Infrastructure Finance Fund Limited (BIFFL)**, was incorporated by the Ministry of Finance in 2011 to provide long-term financing in local currency to infrastructure projects that meet BIFFL's investment criteria. BIFFL seeks to attract investment from both institutional and retail investors (including non-resident Bangladeshis and overseas foreign workers) to provide an alternative savings/investment vehicle in the Bangladesh market. BIFFL is managed independently following objective investment criteria.

(Source: [http://www.pppo.gov.bd/ppp\\_office.php](http://www.pppo.gov.bd/ppp_office.php))

An women centric partnership fund was established in Bangladesh by the intergovernmental agencies, national government and private sector (Box 5) is a classic example of partnership development which may be designed in livestock sector to provide support particularly to the women farmers.

#### Box 5 Women-centric partnership fund, Bangladesh

The Inclusive and Equitable Local Development Programme (IELD) is a joint global initiative of UNCDF, UNDP and UN Women. The programme addresses structural obstacles that inhibit women from entering the labour market through local public and private investments, with a particular emphasis on unlocking domestic capital for women's economic empowerment and entrepreneurship. IELD Bangladesh is facilitating the locally produced, targeted, public and private investments through private sector development, entrepreneurship, and the integration of women into the labour market. Structured Project Finance in the form of collateral guarantees, is available for SME infrastructure projects to unblock local sources of private capital. Financing can be made available for SMEs ranging in size from US \$1 million to up to US \$20 million.

Source: <https://indiaunfund.unsouthsouth.org/#projects>

<sup>1</sup> Including international agencies, NGOs and civil society actors.

### 3.1 Current partnership models in livestock sector in Bangladesh

In general, there are three main types of partnership models are currently active in Bangladesh: (a) Partnership between two parties (2P model), (b) Public-Private partnership (3P model), and (c) Cooperative model of partnership (Coop model). The status of all the four models were studied and detailed are provided below.

- **Status of Partnership between two parties (2Ps):** In Bangladesh, the applicable law regulating partnership is the Partnership Act 1932. Here partnership is the relation between people who have agreed to share the profits of a business carried on by all or any of them acting for all. Persons who have entered a partnership with each other is called individually 'partner' and collectively 'firm'. A partnership may be constituted in writing or verbally and is not required to be registered, However a partnership is considered as a legal person with separate identity from its owners only if the partnership is registered. Where a partnership is not legally registered, parties cannot sue each other or third parties to enforce a contractual right. So, in certain circumstances, a partnership firm is necessary to be registered for performing its mandated works. There must be a minimum of 2 and a maximum of 20 partners.

Partnership in raising cattle, goat and sheep is a common practice in rural Bangladesh, whereby some partners provide the capital and others provide the labour, feeding, cleaning etc. In rural areas of Bangladesh, *mudareba* contracts are well understood. *Mudareba* is an Islamic finance technique in which an investor (*rab al maal*) and an investment manager (*mudareb*) would enter into a profit-sharing partnership to undertake a livestock activity. It is not exceptional to find affluent households in rural Bangladesh would let their bull or cow be raised by *mudareb*. When the bull is sold, profits are shared in a pre-agreed manner. Another variation of *mudareba* observed in rural Bangladesh, is that an investor would place their cow with a producer who will rear the animal. The cost of feeding and vet care would be paid by the *mudareb*, while the loss due to natural death of animals is borne by the investor. The *mudareb* will have equal share of offsprings and milk. These partnerships are informally arranged and are not registered under the Partnership Act.

New models of private investor- producer have emerged in poultry sector (Roy et al., 2021). In rural areas access to inputs and markets is often a major problem. Some private companies have entered contractual agreement with producers to supply inputs and collect the final product. One such example is grower contract between poultry producers and large poultry companies. In Bangladesh, Kazi Farms, Paragon Poultry, Aftab Bahumukhi Farms are among three dozen vertically integrated companies with its own hatcheries, processing plant, feed mills and marketing companies. They enter into contract with growers for raising both broilers and layer strains of poultry.

The Poultry Grower contract agreements have many variations. As per the observations of this study team, typical poultry grower contracts in April 2023 had the following main features:

- ❖ Contracted farmers are supplied free of charge from the company all day-old-chicks (DOCs), all feed supplies from company feed mill, veterinary vaccines & required medications, plus technical and veterinary support services as needed for the rearing of birds (parent stock or commercial stock).
- ❖ Farmers must supply their own farm land, farm sheds and all internal poultry equipment (such as feeders, drinkers, ventilation fans, brooder heaters, lighting, floor litter, catching partitions, nesting boxes, egg storage room equipment, etc.), plus all their own (family or hired) labour.
- ❖ For parent stock growers, farmers rear the breeders and supply fertilized eggs to the company and get paid a margin per fertile egg produced. The company collects the eggs and transports them to a contracted Hatchery company. The Hatchery then supplies vaccinated DOCs to contract growers of commercial stock birds (either broilers or table egg layers).
- ❖ For commercial stock broilers, farmers rear the broilers and supply them to the company after attaining a liveweight of 2.0 kg/bird, with a feed conversion ratio (FCR) of 1.7. Farmers get paid a margin per kg carcass weight, agreed to with growers at the time of flock placement. If production costs can be kept within Tk. 119.80 per kg liveweight, the farmer will make a profit of Tk. 10.00 per kg.
- ❖ For commercial stock layer hens, farmers rear the pullets and then transfer them to egg laying cages. Farmers get paid a margin per egg produced.

The poultry contract grower model has both advantages and disadvantages (see Box 6 below). The producer benefits from technical and veterinary support given by the poultry companies. Power imbalance of over details of contract agreements is a major concern. The loss incurred due to mortality falls squarely on the producer, which at times can financially wipe off small producers.

### Box 6 Contract farming in poultry production in Bangladesh

Contract farming system in poultry sub-sector was institutionalized in Bangladesh during the last decade. During 2016-17, it was found that approximately 30 corporate entities supply chicks, feed, and medicines while farmers get a remuneration of Tk12 per kilogram of chicken as growing charges only if the production cost remains at Tk88. Currently, an estimated 5,000 farms are operating under such contracts with the corporates. The opinion is divided as to whether the system benefits the farmers or burdens them.

The Poultry Association, the industry body in Bangladesh, and large contracting companies like CP Bangladesh, Paragon Group, and Kazi Farms hold that contract farming is a win-win situation for both farmers and the companies. Farmers receive a fixed price and technical assistance. They are interested in producing standard, antibiotic free safe meat to meet the increasing domestic demand. However, many farmers hold that contract farming is not profitable for them. Due to rise in chick feed and production cost, the farmer does not

get 12-14 percent of the production cost as a growing charge as per the contract. Since farmers are unable to exit the contract because they have given away blank cheques and land documents which the companies use in case of contract default.

(Sources: Nobel, Shariar (2023) How profitable is contract farming for poulterers? Not much, say some. 27 February. bdnews24.com. Accessed on 15 April 2023)

- **Status of Public-Private Partnership (3Ps) :** The public-private-partnership projects of Bangladesh are being regulated under the provisions of the following laws of the land:
  - ❖ Public Private Partnership Law, 2015 (PPP Act)
  - ❖ Procurement Guideline for PPP Projects, 2018 (PPP Guidelines)
  - ❖ Guideline for Unsolicited Proposals, 2018
  - ❖ Policy for Implementing PPP Projects through Government to Government (G2G) Partnership, 2017; and
  - ❖ National Priority Project Rules, 2018.

The PPP Act and PPP Guidelines prescribe a step-by-step process for selecting projects to be implemented on a PPP basis. The GOB procuring entity needs to propose a project to the PPP Authority (PPPA) to be undertaken on a PPP basis. The Act, establishes the Public Private Partnership Authority (PPP Authority) as a statutory body with the power to acquire, hold and dispose of property, both movable and immovable. The power and functions of the PPP Authority are as follows: promulgating, approving, publishing in the Gazettes and issuing PPP related policies, regulations, directions, and guidelines; providing decisions on the financial participation and provision of incentives for PPP projects by Government; providing necessary direction to the contracting authority; resolving any constraints or difficulty in implementation of PPP projects; providing opinion on matters relating to PPP projects; framing technical and best practice requirements. pre-qualification and bid documents; developing model PPP contracts and obtaining vetting; giving consent on PPP project matters; determining the process for selection of private partners; approving the selected bidder for PPP projects; approving the termination of PPP contracts. where applicable; approving model PPP contracts; assisting in PPP project activities; etc. The overall management and administration of the PPPA are done by its board of governors, chaired by the Prime Minister.

To date, PPP model has been deployed in Bangladesh in support of big-ticket infrastructure projects in power sector, road building, urban infrastructure development, metro rail network, and telecom sector (Rashed et. al. 2013). There are limited number of 3P examples in livestock sector in the country (**Annexure III**). Mention may be made of the following cases which has proved much effective.

- ❖ PKSF's Microenterprise Financing and Credit Enhancement Project. The project is financed by ADB, executed by PKSF (a government company), and implemented by NGOs.

- ❖ Market infrastructure development project in Charland regions. The project was financed by IFAD. It involved road connection by LGED, financing by microfinance agencies, and managing of market yards by local market committees.
- **Status of Public-Private Producer Partnership (4Ps):** There is no 4P project in the livestock and dairy sector in Bangladesh.
- **Status of Cooperative Partnership in Bangladesh (Coop Model):** In tune with the Fundamental Principle of State Policy concerning cooperative ownership of productive resources, the legislative framework visualizes a broader role for the cooperative movement, particularly in adapting to 21st century challenges such as climate change, and the need for sustainable use of natural resources and biodiversity. Co-operative societies in Bangladesh are regulated by The Co-operative Societies (Amendment) Act, 2013, and The Co-operative Societies Rules, 2004 (most recently amended in 2020) (“the Rules”). The Act does not distinguish cooperatives on the basis types of business they undertake. However, the Rules recognize a non-exhaustive list of 29 different types of co-operatives and within the general framework of the Act, special provisions are made for inter alia worker cooperatives, real estate related cooperatives, and cooperative land development banks.

There are 192,020 cooperatives with 11.5 million members. Cooperatives in Bangladesh are present in diverse sectors including agriculture, fisheries, thrift and credit, dairy, handicraft, etc. Nearly half of all the cooperatives are credit cooperatives, followed by housing cooperatives (20%), marketing cooperatives (20%), consumer cooperatives (5%) and shop owner’s cooperatives in Dhaka (5%) (Islam et al., 2014).

Apart from Milk Vita linked dairy cooperatives, there are no large cooperatives in the livestock field. Many government programmes and national and international NGOs have promoted producer groups comprising of 20-40 members. However, they have not been federated into larger entity. LDDP project aims to mobilise 5500 producer groups engaged in livestock. These groups may be federated into cooperatives.

The Department of Cooperative have prepared comprehensive marketing plan to facilitate production, storage, processing, transportation, and marketing of products produced by the members of co-operatives. Cooperatives have the potential to address imperfections in the current marketing system of livestock by pursuing one or combination of the following objectives viz (i) provide services at a lower cost, (ii) offer an alternative market outlet to offset monopoly in the local market (iii) provide new or improved marketing services, and (iv) channel technical information, new practices and new inputs to producers and better coordinate production and marketing. Experts recognise that cooperatives have failed to

organise producers at the grassroot level (Biswas, 2014, pp. 22). The Cooperation Journal Issue of July-December 2014 cites a number of reasons cited for failure is the scarcity of finance, poor understanding of principles of cooperative movement, lack of expertise in marketing and management among cooperative managers, an absence of a apex level co-operative organization to support and coordinate the activities of village cooperatives in matters of procurement, storage, processing, packaging and distribution. These problems persist even today. Without addressing these chronic issues, cooperative movement will stagnate.

### 3.2 Findings from KIIs

The KII was conducted with 37 individuals representing the public agencies, private sector and NGOs/Civil society was conducted in May 2022. The KII questions explored perspectives of respondents about their past experience with partnerships, potential for partnership in the livestock sector, main benefits of partnership, challenges/difficulties faced in partnership, and suggestions on how partnerships could be accelerated in Bangladesh. The responses are summarised in **Annexure II**.

- **Past experiences:** All the respondents reported past experience with government agencies and international donors.
- **Potential partners:** The public agencies favor building closer ties with multilateral donors for accessing funds, local government bodies for implementing projects, private training institutes for building human resources, and farmers organizations and cooperatives for improved service delivery.
  - ❖ The Private sector sees opportunities to collaborate with government entities to augment animal health care facilities and diagnostics services, multilateral donors for funding, microfinance institutions for financing producers and SMEs, and producer organizations to reduce transaction cost of delivery of services.
  - ❖ The NGOs/civil service organizations would like to collaborate with DLS on livestock programs, support private academic and research institutions for accessing new knowledge and management know how, and foster relationship with multilateral donors and private firms to implement ongoing or future projects.
- **Benefits of partnerships:** The public agencies, private sector and NGO/civil society realize that sharing resources and expertise on livestock is a win-win proposition for all of them. The public agencies appreciate the potential of partnership to reduce their risks of failure.

The private sector is looking to the public agencies to make them available research and technology to serve the dairy market better. The NGOs/civil society members expect the public agencies and private companies to provide them financial and technological support. They underline that collaboration with

the government enhances their reputation and credibility in the eyes of the public and decision makers.

- **Challenges/Difficulties in partnerships:** The public agencies and NGOs/civil society members highlight the lack of trust among partners, and absence of mechanism to coordinate various partners as factors hindering mutual collaboration. In the absence of a legal framework, and weak internal capability, the public agencies find it hard to address the demands of partners. The private sector dairy companies highlighted the lack of milk testing instruments at village level which makes it difficult to buy milk based on SNF and fat content. The NGOs/civil society members point out that project implementation suffers due to poor baseline data or manipulation of data resulting in poor project planning/decision making.
- **Open ended suggestions:** The public agency respondents would like to see more 4P oriented interventions, strengthening of market linkages and access to cheaper credit for producers. The private sector representatives called for the creation of platforms for stakeholders to network, share ideas, and identify common goals. The NGOs/civil society members highlighted the need to enforce contracts on price, quantity, quality of products and their time of supply. All the respondents emphasized the importance of capacity development of their personnel in modern livestock and dairy practices.

### 3.3 Accelerating impact of partnership for small producers

There were 17 case studies prepared to understand the impact of partnerships in Bangladesh and other countries. Of the total case studies, 7 were from Bangladesh, 3 from India, 2 from Australia, and 1 each from Nepal, Morocco, Tanzania, East Africa, and Southeast Asia. The main factors accelerating impact in these case studies were examined in detail. In all the case studies reviewed, it is apparent that the public development finance institutions are playing an important role as a catalytic force synergising partners across the economic spectrum and allowing sufficient resources to experiment and innovate. However, the role played by the line departments of national governments are also important. The findings in general are presented in table 2 below (**Annexure III** summarises details of each case study).

**Table 2 Impact factors observed in case studies from Bangladesh**

| S/N | Impact factor                                                                      | Examples                                                                                                                                          |
|-----|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Being alert to broader economic, political and environmental change.               | Many agribusiness companies are setting up outgrowing poultry schemes in anticipation of higher demand for chicken meat in Bangladesh             |
| 2   | Staying ahead of the market through product innovation                             | Green Delta, Brac Bank and Swisscontact have developed microinsurance products for crop and livestock insurance and tested the market.            |
| 3   | Pro-active market positioning in anticipation of policy changes by the Government. | Pran Dairy hubs have pioneered the business model of VMCC and hubs. Pran on its own has set up 106 VMCCs and 7 hubs. Currently, LDDP is promoting |

| S/N | Impact factor          | Examples                                                                                                                                                                                            |
|-----|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                        | VMCC and hub model. Pran is in an advantageous position to benefit from LDDP activities.                                                                                                            |
| 4   | Create scalable models | ACDI-VOCA has created a cadre of 2002 LSPs and trained 248 milk collectors in quality control and logistics. This directly benefits 16 private dairy operators who are scaling up their operations. |

Table 3 Impact factors observed in case studies from abroad

| S/N | Impact factor                                                   | Example                                                                                                                                                                                                                                                                                          |
|-----|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Government funding and support is must for market-oriented R&D. | Meat & Livestock Australia with generous developed Meat Standards Australia. Once adopted by the beef farmers, they could command premium price for their produce.                                                                                                                               |
| 2   | Multi-sectoral collaboration is key to achieve big impact.      | With NABARD's financial assistance for dairy infrastructure, dairy cooperatives and farmer producer companies in India are expanding their milk processing capacity.                                                                                                                             |
| 3   | Work on weak links in the value chain.                          | Tanzania realized that agro-dealers play important role in making available supplies, selling outputs, and disseminating technical information. The IFAD-financed Tanzania Agro-dealer Support program trained 2626 agro dealers in business management and linked them with 8 supply companies. |
| 4   | Finance has the power to unlock agricultural productivity.      | Aceli Africa has created incentives for banks and financial institutions to lend to agribusinesses. For each dollar spent on incentives, it has mobilized 11 times more in bank lending for small agribusinesses.                                                                                |

- *Financial support by the government/public agencies in partnership*
  - ❖ The cooperative milk unions at the grass root level require significant investments to upgrade their infrastructure. The National Dairy Development Board (NDDB) in India has stepped in to collaborate/partner with the milk unions through concessional financing and support the initiatives (Box 7 below).

### Box 7 National Dairy Development Board, India

The National Dairy Development Board was created to promote, finance and support producer-owned and controlled organizations. NDDB's efforts transformed India's rural economy by making dairying a viable and profitable economic activity for millions of milk producers. NDDB provides financial assistance to Dairy Cooperatives for enhancing their infrastructure for milk processing, feed manufacturing, solar applications in dairy plants and other activities like skill development. As on 31st March, 2022, a total outlay of Rs, 15,676 million (USD 191 million) have been approved for infrastructure development. In addition, NDDB has disbursed an aggregate working capital facility of Rs. 1,455 Million (USD 17.8 million) to dairy cooperatives in 2021-22.

(Source: NDDB. <https://www.nddb.coop/services/fps/finance/financialassistance>)

- ❖ The Meat & Livestock Australia (MLA) was a unique initiative as a public limited company to collaborate with stakeholders to invest in research, development and marketing initiatives that contribute to producer profitability, sustainability, and global competitiveness. The MLA also developed an interesting shared financing model to support their R & D (Box 8).

### Box 8 Unique model of MLA for funding research & development corporation in Australia

Meat & Livestock Australia (MLA) was established in 1998 as a public company limited by guarantee. MLA is one of the country's 10 industry-owned 'Rural Research & Development Corporations' – which are independent corporate entities. MLA is primarily funded by Transaction Levies paid on livestock sales by red meat producers. Levies received by MLA are directed into two streams – a) to support marketing activities, and b) to support research & development. Transaction levies are collected, administered and disbursed by the Department of Agriculture. The Australian Government also contributes up to one dollar for each levy dollar MLA invests in eligible R & D programs. MLA also receives additional income via the sale of National Vendor Declaration books and the Livestock Production Assurance Program accreditation fees.

The MLA invested \$205.9 million in a range of research, development and adoption programs. MLA completed or terminated 331 research contracts, worth \$159.0 million. These included 72 MDC contracts, contributing a total value of \$86.9 million. During 2021–22 MLA invested \$104.8 million in marketing, market access and insights to grow demand for Australian red meat and livestock domestically and in international markets.

Source: Meat & Livestock Australia (2022). *Meat & Livestock Australia Annual Report, 2021-22*. [https://www.mla.com.au/globalassets/mla-corporate/about-mla/documents/planning--reporting/new-2021-22\\_mla-annual-report\\_web-final.pdf](https://www.mla.com.au/globalassets/mla-corporate/about-mla/documents/planning--reporting/new-2021-22_mla-annual-report_web-final.pdf)

- *Capacity development support by the government/public agencies:*
  - ❖ The government/public agencies and line departments of the national governments are playing proactive roles as we have observed from an example from Thailand where they supported producers to collaborate with dairy companies and producers to disseminate knowledge of relevant technologies to improve livestock farm productivity (Box 9).

### Box 9 Private, Public and Producer partnership to support dairy sector producers in Thailand

Alltech (<https://www.alltech.com>), a global leader in animal nutrition partnered with the Dairy Farming Promotion Organization of Thailand (DPO) to create a model for nutrition innovation and sustainable dairy farming and provide solutions to the challenges of the smallholder producers on improved production efficiency through establishment of guidelines and procedures. With a presence in Thailand for over 25 years, Alltech has established deep connections within the industry, utilizing global resources and experience to deliver localized solutions to farmers and producers. The partnership aims to enhance production efficiency, milk quality, animal welfare, and economic benefits in Thailand's dairy industry. Alltech (*private sector*) and DPO (*public agency*) will work together to assist farmers and farmer groups (*producers*) in developing appropriate knowledge and utilizing relevant technologies, services, and management practices for sustainable dairy and beef cattle production, which will improve the performance of dairy cows and the quality and quantity of milk they produce.

Source: Alltech partners with the Dairy Farming Promotion Organization of Thailand (22 March 2023). Available at <https://www.feedandadditive.com/alltech-partners-with-the-dairy-farming-promotion-organization-of-thailand/>

- ❖ The Paravets/LSPs as root level cadre play crucial role in last mile service delivery in Bangladesh<sup>2</sup>. However, they are generally operating outside the official system. Himachal Pradesh government in India have taken measures to integrate the paravets within the formal veterinary services system (Box 10 below).

#### Box 10 Mainstreaming 'Paravet' services in Himachal Pradesh, India

Himachal Pradesh, a mountainous state in India recognized the importance of private sector in facilitating training and engaging skilled para-veterinarians (paravets) to boost the livestock development paradigm in the state. They also appreciated the fact that trained paravets need to be registered for efficient monitoring and enacted the H.P Para Veterinary Council Act, 2010 and Rules-2011 to provide for the establishment of Para-veterinary Council in the State and to regulate the practice by para-veterinarians and para-veterinary institutions. As per the Act, the "Para-veterinarians" refer to any personnel qualified in Para-veterinary subject and helps in practice of veterinary medicine and designated as Veterinary Pharmacist, Animal Husbandry Assistant (AHA) or Chief Veterinary Pharmacist.

Within the Indian qualification framework, the private veterinary polytechnics offer two categories of training: i) Level 5 for pharmacists, and AHAs (Entry: 10+2, 18 years ) 280 days of contract program or 2243 hours; and ii) short term Level 3 for Community Animal Health Workers (CAHWs) and A.I. Technicians ( Entry: 8th Grade, 17 years) 45 days of contact program or 355 hours) The Council has 10 office bearers – 5 ex-officio members from animal husbandry related government institutions, and 5 non-official members elected by the registered para-veterinary practitioners. The Council is funded by the registration fees from all the Para-veterinarians registered in the Council; contributions or grant by Central or State Government; and income from fees and fines.

Source: The H.P Para Veterinary Council Act, 2010 and Rules-2011-State Act. The H.P Para Veterinary Council Act, 2010 and Rules-2011-State Act., dated 22.9.2011. [https://upload.indiacode.nic.in/showfile?actid=AC\\_HP\\_154\\_0\\_00003\\_00003\\_1547462133487&type=rule&filename=himachal\\_pradesh\\_para-veterinary\\_council\\_rules\\_2011.pdf](https://upload.indiacode.nic.in/showfile?actid=AC_HP_154_0_00003_00003_1547462133487&type=rule&filename=himachal_pradesh_para-veterinary_council_rules_2011.pdf)

- *Disease control support by the government/public agencies:*

A good example of public-private collaboration is guaranteed through public procurement of FMD vaccine produced by private companies in India. This arrangement helps the country in import substitution and expands the sources of supply (Box 11 below).

#### Box 11 Foot and Mouth Disease (FMD) Control Programme in India

India's ambitious National Animal Disease Control Programme (NACDP) for FMD and Brucellosis is underpinned by a collaborative arrangement with the private sector vaccine manufacturers. NACDP has a financial outlay of Rs. 13,343.00 crore (US\$ 1.6 billion) for five years (2019-20 to 2023-24) and a target of vaccinating 100% cattle, buffalo, sheep, goat and pig population for FMD and 100% bovine female calves of 4-8 months of age for brucellosis. By March 2023, around 240 million cattle and buffaloes in the country have been covered out of a targeted population of 258 million cattle; reaching

<sup>2</sup> The ratio of a qualified veterinarian to animals is 1:170,000 in Bangladesh. Hence, there is greater dependence of producers on paravets/LSPs as last mile service providers. Source: <https://www.thedailystar.net/business/vaccine-scarcity-causes-livestock-deaths-study-142678> accessed on 8th June 2023.

a near universal coverage of over 95% which is well beyond the herd immunity threshold. FMD is endemic in India due to serotypes O, A & Asia1. The NACDP is 100% funded by Government of India which is centrally procuring vaccines against FMD and supplying to States. This programme is combined with providing unique ear-tag numbers to 535 million animals (Cattle, buffalo, sheep, goat, and pig) which will ensure traceability of the animals. According to industry estimates, India's FMD control programme requires 1,000 million doses each year, whereas the current production capacity in the country is around 500 million. The public sector Indian Immunologicals Ltd has capacity of producing 1/3 of national requirements, rest is being supplied by Brilliant Biopharma Pvt Ltd, and Biovet Pvt. Ltd. Government of India's Technology Development Board has also provided loan and equity of Rs. 160 million to M/s Sanvita Biotechnologies for setting up an integrated state-of-the-art facility for manufacturing & formulation of FMD Vaccine for veterinary use, complying with WHO cGMP and adhering to safety norms.

Sources: Vaccinations against Foot & Mouth Disease were completed in around 24 crore cattle and buffaloes across the country, Press Information Bureau, Delhi. Posted On: 17 MAR 2023 5:25PM by PIB Delhi.

Technology Development Board {Department of Science & Technology} Development and Commercialization of Foot-and-Mouth Disease (FMD) Vaccine for Veterinary Use.  
[http://tdb.gov.in/wp-content/uploads/2017/01/Write-up\\_Sanvita.pdf](http://tdb.gov.in/wp-content/uploads/2017/01/Write-up_Sanvita.pdf) (Accessed on 18.4.2023).

### 3.4 Leveraging partnership for benefitting smallholders

Each partnership has its own set of motivating factors influencing its evolution as well as its own unique external environment, the duration of the endeavour, depth, and vigour (Hagelaar et. al. 2002). However, some common triggers, operating conditions and success characteristics are observed in the case studies. Table 4 below highlights the factors that have strong bearing on leveraging partnership for benefitting small holders.

**Table 4 Successful partnership characteristics**

| Triggers for partnership                                                                                                                                                                                | Conducive factors for partnership                                                                                                                                                                                                                                                                                               | Successful partnership characteristics                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Cost reduction and efficiency</li> <li>• Customer service</li> <li>• Marketing advantage (access to new markets)</li> <li>• Profit stability/growth</li> </ul> | <ul style="list-style-type: none"> <li>• Strategic complementarity</li> <li>• Similar corporate culture and values</li> <li>• Mutual respect and bonding of leadership of partner organizations</li> <li>• Transparency and accountability</li> <li>• Symmetry in power</li> <li>• Availability of network platforms</li> </ul> | <ul style="list-style-type: none"> <li>• Continuous communication on operational and financial information</li> <li>• Joint planning</li> <li>• Equitable sharing of benefits/pains</li> <li>• Confidence building activities</li> <li>• Corporate commitment</li> <li>• Sustainability of relationship into the future</li> <li>• Robust grievance redressal mechanism</li> </ul> |

## 4.0 Partnership Implementation Mechanism

The Government of Bangladesh has established various institutions and agencies to promote development of the livestock in the country. They include the Department of Livestock Services (DLS), Bangladesh Livestock Research Institute (BLRI), Bangladesh Agricultural Research Council (BARC), Agricultural Universities and Training institutes specializes on livestock development and offering diploma to prepare a cadre to work as paraprofessionals. Some other Government affiliated agencies like Palli Karma-Sahayak Foundation (PKSF), Bangladesh Rural Development Board (BRDB), Milk Vita etc. has also been in operation to provide support services to livestock sub sector development. In spite of the presence of this robust and vibrant institutional set up in the country, it is facing the challenges on several fronts<sup>3</sup> to bring transformation in livestock development process such as: (a) lack of coherence between policy planning, (b) enabling legal environment, (c) succession of government policy and institutional rigidity and (d) absence of partnerships within the institutional framework. The private sector, being one of the key players in the production and marketing of livestock products, is conspicuously missing in the institutional partnership framework which resulted in the absence of large ticket investments in the sub sector. This calls for the public agencies to widen their approach to develop institutional mechanisms for partnership development.

### 4.1 Institutional mechanism for partnership development

Institutional partnership in the livestock sector encompasses collaboration between individuals, organizations, and communities and enable them sharing of resources, knowledge, and expertise, which are crucial for achieving the desired and sustainable outcomes. As partnerships development needs active participation of two or more organizations/institutions and work together with common goal, there must be systems/mechanisms that will bring them under one umbrella with specific roles and responsibilities. When considering the selection of potential agribusiness partners for LDDP in Bangladesh, the following ideal partnering competencies may be considered. A prospective partnership assessment checklist (Table 5) may be used by the LDDP/DLS to assess their sustainability and performance in the context of Bangladesh.

**Table 5 Prospective Partnership Assessment Checklist**

| Checks Performed on a Prospective Partner                                                                                                                | Score (1 to 10) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| DUE DILIGENCE (Technical, Financial, Environmental, Social & Corporate Governance) successfully undertaken on potential partner company or organization. |                 |
| Potential partner has sufficient additional financial resources to direct towards implementation of partnership.                                         |                 |

<sup>3</sup> Some of the challenges are lack of capital, inadequate availability of inputs and institutional credit, efficient market channels, quality control and certification process, value added livestock products, disease control etc.

| Checks Performed on a Prospective Partner                                                                                                     | Score (1 to 10) |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 1.) Potential partner has sufficient human resources and knowledge of KEY STAKEHOLDERS in the Livestock & Dairy Sectors of Bangladesh.        |                 |
| 2.) The Partnership BUSINESS MODEL and all LEGAL requirements for a partnership with this potential partner have been agreed to in principle. |                 |
| 3.) Confirmation that potential partnership is viewed favorably by management of both parties. Concept has good support from staff.           |                 |
| 4.) Partnership expected to provide significant additional value or impact for the Livestock & Dairy Sectors, via the WB funded LDDP project. |                 |
| 5.) Projected additional costs of partnership formation appear acceptable, relative to the potential gain.                                    |                 |
| 6.) Potential RISKS from partnership formation have been judged by both parties to be sufficiently low or well mitigated.                     |                 |
| 7.) Potential partner office(s) are well located relative to partnership responsibilities.                                                    |                 |
| 8.) Potential partner is willing and able to commence Partnership Setup procedures at the predetermined date.                                 |                 |
| <b>Final Assessment Score</b>                                                                                                                 |                 |
| <b>Scale of scores:</b> Poor (1-3); Moderate (4-6); Good (7-8) and High performing (9-10)                                                     |                 |

It was recognised by the policy makers in Bangladesh that there is a requirement of large ticket investments in developing infrastructures in the areas of mass production of vaccines, animal feeds, breeding, processing, marketing, and exporting high quality livestock products. As the existing institutional framework for partnership development in livestock development process is facing many challenges, a dedicated organizational entity dedicated for this purpose may play an important role in bringing various types of partner organizations (domestic and international) under a common umbrella.

- ***Rationale for a Livestock and Dairy Investment Company***

It was observed that the conventional investors have bypassed SMEs and livestock in Bangladesh. As a result, SMEs in general and the livestock sector in particular is not receiving the required importance and remain under invested. This is more so because servicing small producers is a high value low margin exercise. Bangladesh needs to increase access to credit for small and medium-sized enterprises (SMEs) active in livestock and dairy sector to support the growth of the economy. The government should create programme to support SMEs and provide them with access to credit facilities. According to the SME Foundation<sup>4</sup>, out of the approximately 8.1 million SMEs in the country, only 33% have access to formal credit. Women entrepreneurs get only 6% of the total lending to SMEs. Currently, the financial institutions are extending small ticket loans to producers to acquire

<sup>4</sup> The Business Standard, 30 March 2023

animals, start petty business, or improve animal sheds. However, the SMEs in livestock sector need growth finance<sup>5</sup> and hand holding models. In absence of long-term investments, the livestock businesses in the country (special reference to SMEs) in the country are struggling to finance their expansion plans through internal accruals alone, and phasing out as they are unable to withstand competition. In recent years, impact investment has emerged as an option as it aims to generate three bottom lines (positive social, environmental, and financial returns). Box 12 provides main reasons for suitability to push impact investments in Bangladeshi livestock sector.

### Box 12 Suitability of impact investment in livestock sector

**Meet national challenges** related to limited access to veterinary care, nutrition management and markets, adaptation to climate change etc. This calls for joint efforts of the government and private investments to fill unmet needs.

The COVID 19 and ongoing Ukraine war led to **reduction in foreign support** available for anti-poverty programme and achieving SDG targets for all the developing countries<sup>6</sup>. The slowdown of global economy has negatively impacted investment flow in Bangladesh as potential investors are in doubt about market uncertainties and existing investors are limiting their resource mobilization.

Impact investment is on the rise, which indicates a **change in the culture of investing**. Investments in low-income communities (livestock and agriculture) to meet their needs provide a much higher impact than donations or grants.

Investors can pursue a triple bottom line of “people, planet, profit” while making decent returns which indicates impact investment<sup>7</sup> with **triple bottom line approach**.

Impact investment can be useful complement to other investments and fulfil the need for ‘**patient capital**’<sup>8, 9</sup> in livestock sector development process.

Impact investment is well poised to **address the intersections of sustainability issues** related to the transition to low methane emission economy which has a social impact on people and biodiversity.

Source: Compilation by AFC/SSIL, 2023

- **Proposition of Prani Sampad Bikash Foundation (PSBF)**

**Background:** An investment and partnership ecosystem for livestock is needed to support SMEs, start-ups, incubate them, and share risks and knowledge. Currently,

<sup>5</sup> Growth finance for the SMEs consists of business investment for vertical and horizontal expansion, diversify products, acquire new technology and talent.

<sup>6</sup> United Nations Conference on Trade and Development (UNCTAD) report identified a 42% fall in the global FDI to an estimated USD 859 billion in 2020 from USD 1.5 trillion in 2019.

<sup>7</sup> Research by the Global Impact Investing Network shows that the majority of the estimated US\$ 1.164 trillion worldwide impact investing produces market rate returns (GIIN 2022).

<sup>8</sup> Patient capital is another name for long term capital. With patient capital, the investor is willing to make a financial investment in a business with no expectation of turning a quick profit. Instead, the investor is willing to forgo an immediate return in anticipation of more substantial returns down the road.

<sup>9</sup> A study by Morgan Stanley (2023), which surveyed over 10,000 equity mutual funds over the past seven years, finds that social impact funds on average had lower volatility than comparable non-impact funds.

livestock entities are in functioning out of their silos and lack in visualizing the big picture. As observed by the policy makers and the private sector operators in Bangladeshi livestock sector, one of the key reforms needed is to improve the investment climate for transformation. For this purpose, it is suggested that the government may establish a dedicated agency as *Prani Sampad Bikash Foundation* (PSBF) as a government company under the Companies (Bangladesh) Act, 1994. The purpose of the foundation would be to **‘promote and facilitate investments in commercially viable, model livestock and dairy entities in partnership with public agencies, private sector, producer organisations and cooperatives’**. PSBF will create an ecosystem which is friendly for the growth of SMEs and producer organisation. The vision, mission, and objectives of PSBF is provided in Box 13 below.

### Box 13 Proposed vision, mission, and objectives of PSBF

#### **Vision:**

A vibrant Bangladesh where poverty has been eradicated through inclusive, people-centred, equitable and sustainable development; and all producers live healthy, empowered and humanly dignified life.

#### **Mission:**

To implement policies and action programme focussed on commercially viable entities that promotes socio-economic development of producers and environmental protection.

#### **Objectives:**

- (a) Function as an investment vehicle or fund which invests or co-invests in enterprises, providing the catalytical energy to unleash new dynamism in the livestock and dairy sector.
- (b) Serve as a capacity building organization that facilitates financial, human, and other resources to help entrepreneurs learn and develop.
- (c) Create platforms where investors, entrepreneurs, and other stakeholders in the ecosystem opt to transact business.

(Source: AFC/SSIL, 2023)

- **Ecosystem of resources, delivery and intended recipients:** It is proposed that the PSBF may be provided with an initial corpus of USD 300 million contributed by LDDP, multilateral and bilateral donors, development finance institutions (Asian Development Bank, World Bank etc.). The PSBF may also approach the investors for equity and debt (both junior and senior) funds and may try to source funds as donations from the philanthropic foundations/charities. A detailed indicative ecosystem of funding, delivery and recipients is illustrated in the figure 6 below.

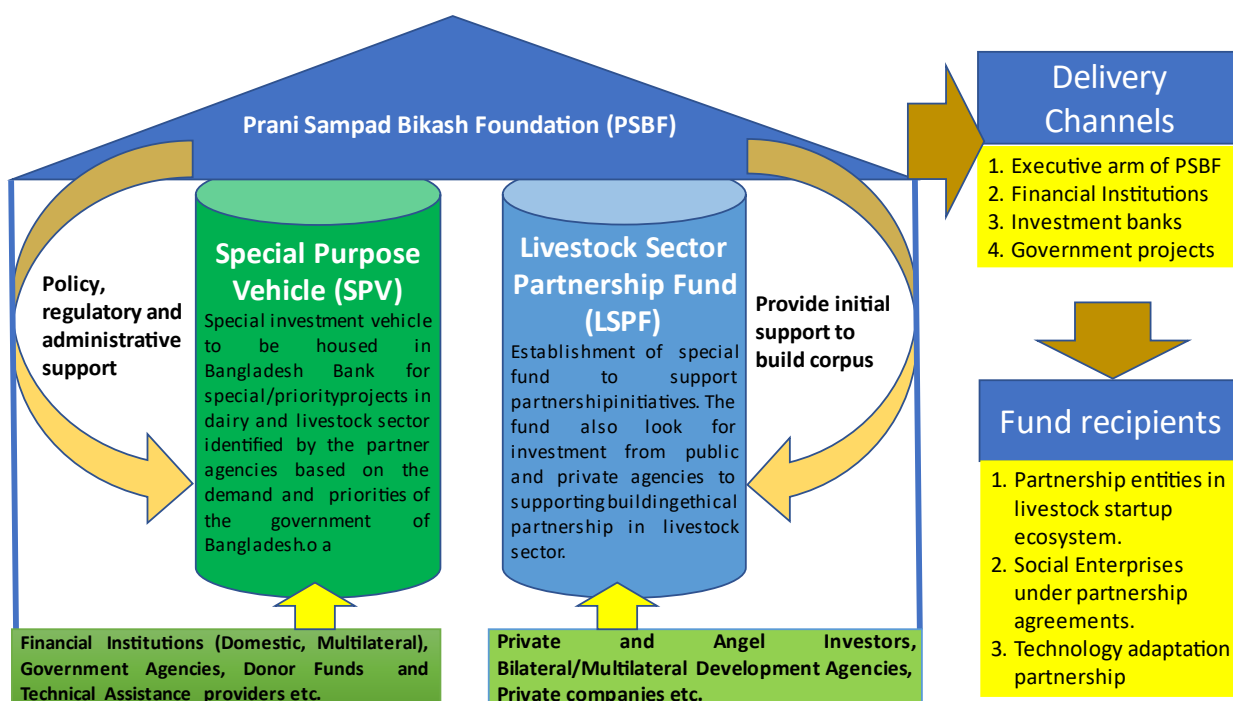


**Figure 6 Proposed PSBF funding ecosystem**

- a) The PSBF may develop range of **special purpose vehicles (SPVs)**<sup>10</sup> with the partner organizations/agencies/companies for funding specific activities require large ticket size investments. The SPVs created need professional management and may park funds with the Bangladesh Bank (as designated bank). The SPVs will be used for fencing funds and ensuring that the funds are used only for limited predefined purposes and should provide comfort to donors because it can only be used for specified purposes.
- b) The other dedicated fund **livestock sector partnership fund (LSPF)** may also be established by the foundation as a general-purpose fund that can be accessed to support projects/initiatives approved by the investment committee. Currently, there is no dedicated fund for investment in livestock and dairy business in Bangladesh<sup>11</sup>. A dedicated partnership development fund (PDF) was established in People's Republic of China (Box 14) with the active support from Asian Development Bank.

#### **Box 14 Partnership development fund in China**

Public-private partnerships (PPPs) are attracting the interest of governments across Asia and the Pacific. The potential to secure private financing is enticing those governments trying to meet a rising, unmet demand for public services in the face of tight budget constraints. Many countries have established project development funds (PDFs) or facilities to strengthen the development stage of a PPP. In June 2015, the Standing Committee of the National People's Congress promoted the exploration of PDFs for PPPs. The PDF would, in cooperation with implementing agencies (IAs), recruit

<sup>10</sup> The special purpose vehicle (SPV) is a financial instrument commonly used to fund large sized projects (as per the agreed standard operating procedures. This is a legal entity that allows multiple investors to pool their capital and make an investment in a single/multiple projects.

<sup>11</sup> Partnership Development Funds (PDFs) provide the specialized resources needed to conduct studies, design and structure a public-private partnership ecosystem.

external advisors with the required skills and experience. As the costs of advisors can be large and often cannot be funded by the normal budget process, the PDF would pay for advisors and other inputs to project development. The PDF would be a revolving fund, with the cost of advisors recovered from successful bidders or from IAs.

(Source: ADB (2016). People's Republic of China: A Model Project Development Fund for Public-Private Partnerships (<https://www.adb.org/sites/default/files/publication/182541/eawp-02.pdf>).

- **Delivery channels:** The PSBF Investment Facilitation Cell will catalyse support from financial institutions, investment banks, government projects, and technical service providers.
- **The recipient** of the funds will be companies, producer organizations, cooperatives, social enterprises, and entities who satisfy the criteria for selection of projects listed in table 6 below.

**Table 6 Operational details of recipients of the facilities**

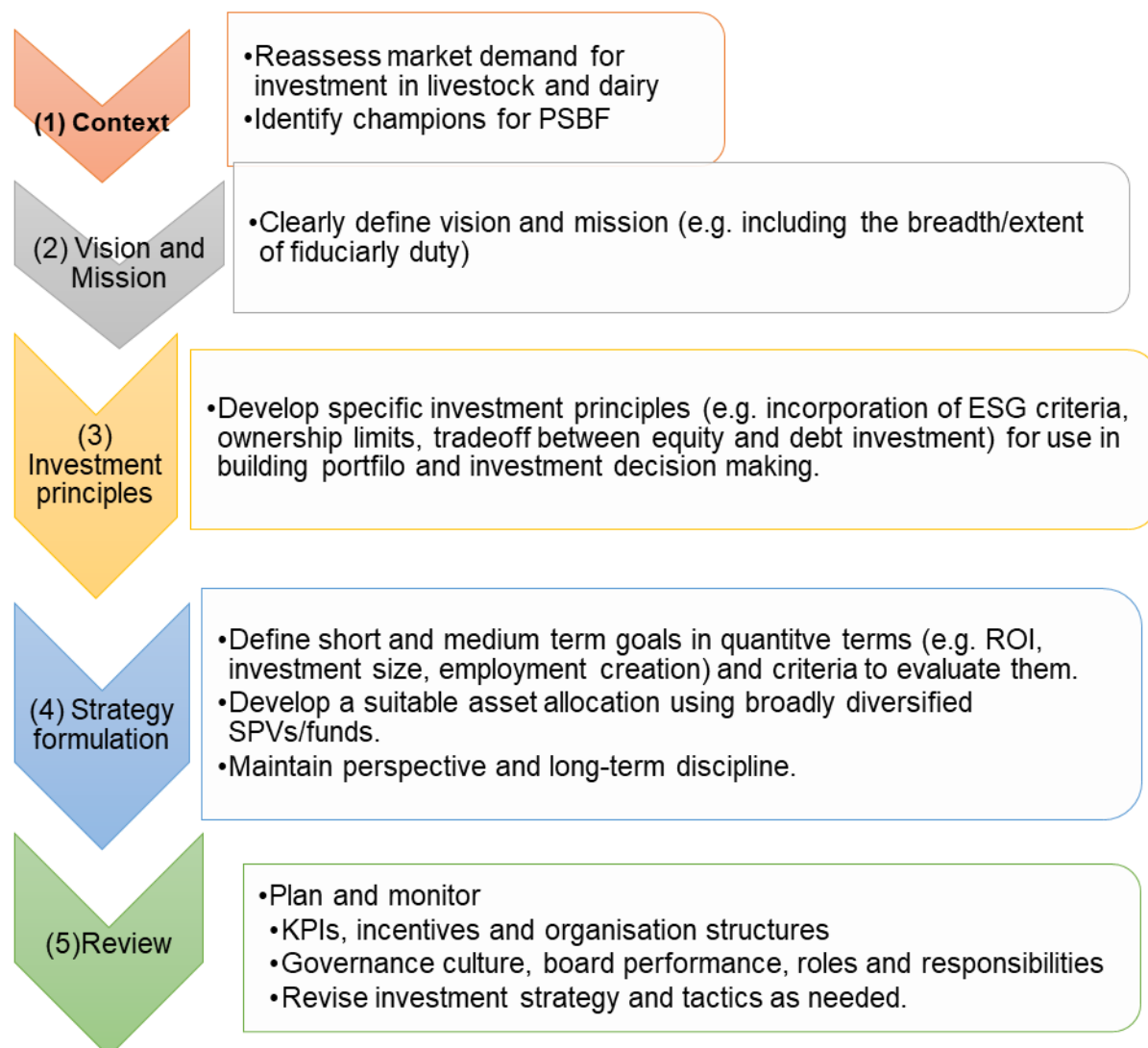
| Criteria for selection of projects                                                                                                                                                                                                                                                                          | Areas of partnership and investment interest                                                                                                                                                                                                                                                                                                                                                                                                                                         | Operational modalities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Benefits producers</li> <li>• In line with national priorities</li> <li>• Commercially viable</li> <li>• Risks of the project are manageable</li> <li>• Economies of scale within reasonable time</li> <li>• Credit worthiness of prospective investees</li> </ul> | <ul style="list-style-type: none"> <li>• Feed and fodder</li> <li>• Veterinary hospitals, clinics, diagnostic labs</li> <li>• Integrated meat processing units</li> <li>• Value-added milk products</li> <li>• Animal by-product utilization</li> <li>• Mass scale vaccine and vet medicine production and distribution</li> <li>• Training and capacity building of professionals and para-professional</li> <li>• Technology providers</li> <li>• Export oriented units</li> </ul> | <ul style="list-style-type: none"> <li>• Public announcement of funding opportunity on company web</li> <li>• Online submission of two-page concept note</li> <li>• Those concept notes are found fit for the next stage, would be invited to submit business plan as per prescribed format</li> <li>• Review of business plan by Investment Facilitation Cell (IFC)</li> <li>• Field visit by members of IFC official</li> <li>• Submission of selected business plans for technical scrutiny and approval by the Investment Committee of PSBF</li> <li>• Signing of investment agreement by Chief Investment Officer, PSBF and investee entity</li> <li>• CEO, PSBF instructs bank to release funds to investee's account.</li> </ul> |

## 4.2 Investment Strategy Development

The investment strategy to develop effective partnership needs a set of principles designed to aid investors achieve their financial and investment goals. The strategy will be able to guide investor's decision-making based on mission, beliefs, risk appetite and availability of capital.

- *Steps in developing strategy:*

The strategy process may broadly be divided in 5 steps which are extremely important and complimentary to each other: *Step 1* starts with a wide survey of the external and internal context in which it will be developed; *Step 2* may be used to finalise PSBF's organisational vision and mission; *Step 3* will provide a more explicit set of investment principles; *Step 4* focused on selecting executable strategies and strategically allocating capital, and *Step 5* is develop periodical monitoring the strategy and adjust as needed (Figure 7).



(Source: Adapted from UNEP (2018) Asset Owner Strategy Guide: How to Craft an Investment Strategy, United Nations Environment Programme, Nairobi)

**Figure 7. Creating an investment strategy**

- *Key players:*

Crafting an investment strategy will require alignment with internal and external stakeholders at different points in the process. Any misalignment, misunderstanding, or conflict among key players can delay or derail the strategy building process. More details on common roles and responsibilities involved in the process are:

- a) Internal stakeholders

- Board: It is critical that the board is involved in the process at all stages to ensure the investment strategy is right for the organisation, and implementable. The board should play a very active role in the process, such as interacting with external experts.
- Investment committee: They should give feedback throughout the project, especially on scenarios, and could have heavy involvement depending on the organisation.
- CEO/CIO/CFO and direct reports: The C-suite need to be on side, and will eventually drive implementation.
- Investors: Investors have a financial and emotional stake in the company. When they invest in a company, they want to see the firm's leadership maintain high level of governance, and achieve triple bottom line returns. The institutional investors in PSBF are likely to be multilateral and bilateral agencies, philanthropic foundations, financial institutions, and banks.

- b) External stakeholders: External stakeholders are those who do not directly work with a company but are affected somehow by the actions and outcomes of the business. For a company like PSBF some of the important external stakeholders are:

- Ministries, departments and agencies of the Government, in particular Prime Minister's Office, Ministry of Finance, Ministry of Fisheries and Livestock, Ministry of Agriculture, Ministry of Local Government, Rural Development and Co-operatives, Planning Commission, Bangladesh Investment Development Authority (BIDA), The Bangladesh Securities and Exchange Commission (BSEC), The Registrar of Joint Stock Companies And Firms etc.
- Multilateral and bilateral agencies, development finance institutions: UNDP, IFAD, World Bank, Asian Development Bank, JICA, USAID, GIZ, Swiss Development Cooperation, CIDA, SIDA, European Union, Islamic Development Bank, The Kuwait Fund for Arab Economic Development, Bill & Melinda Gates Foundation etc.
- Banks and Financial Institutions: Bangladesh Bank (regulatory authority of the banking sector), scheduled banks, private commercial banks, specialised financial institutions (e.g. PKSF), non-banking financial institutions.
- Industry and trade associations viz Federation of Bangladesh Chambers of Commerce and Industry (FBCCI), Foreign Investors' Chambers of Commerce and Industry, American Chamber of Commerce in Bangladesh (AmCham), Bangladesh Dairy Farmers Association (BDFA), Bangladesh Poultry Industries Association, Association of Development Agencies in Bangladesh (ADAB),

Credit and Development Forum (CDF), Consumers Association of Bangladesh (CAB) etc

- Large companies: Aftab Group, Kazi Farms, Paragon, Nourish, AG Agro, Pran Dairy, Brac Aarong Dairy, Akij Dairy, and Bengal Meat etc
- Investment professionals and business service providers: They provide useful perspective on shortcomings of the investment process and suggest ways to overcome them.

### 4.3 Operational Planning

A strategy is as good as its implementation. A number of steps are necessary to establish PSBF and operationalize it. The following steps may be followed to operationalize the proposed foundation:

- Step 1: Create a working committee of 5-7 experts and senior administrators from DLS, MoFL to have dialogue with all the key players, particularly potential investors.
- Step 2: Engage a consultancy company to prepare a feasibility plan for the PSBF.
- Step 3: Request legal department of MoFL to prepare Memorandum of Association and Articles of Association of PSBF.
- Step 4: Hold a one-day public meeting of all stakeholders to discuss the idea of PSBF.
- Step 5: Review and Finalize feasibility plan of PSBF and legal instrument for incorporation.

### 4.4 Risks to PSBF and Mitigation Measures

Risks to PSBF are largely bucketed into the following three categories: corporate risks, market risks and business risks.

#### Corporate risks management

Corporate risks arise from dereliction of governance responsibilities, inability to protect reputation of the key the persons, and not complying with extant laws and regulations.

| Risks             | Mitigation measures                                                                                                                                                                                                                                        |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Board performance | <ul style="list-style-type: none"> <li>• Assign clear role and responsibilities to Board members</li> <li>• Review performance of board members</li> <li>• Onboard members on fixed term of (2-3 years) only</li> </ul>                                    |
| Reputational risk | <ul style="list-style-type: none"> <li>• Maintain high levels of business integrity</li> <li>• Manage social media, feedbacks, and reviews</li> <li>• Ensure data security and privacy</li> <li>• Nurture a staff friendly productive workplace</li> </ul> |
| Legal risk        | <ul style="list-style-type: none"> <li>• Perform all activities within the regulatory frameworks</li> <li>• Ensure regular filing and do not neglect compliance related issues</li> </ul>                                                                  |

### Market risk management

Market risk is the possibility that PSBF will experience losses due to factors that affect the overall performance of investments in the financial markets. PSBF borrowing will be influenced by forex market, movement in indices in foreign bourses, and changes in domestic interest rate and The London Inter-Bank Offered Rate (LIBOR).

| Risks                            | Mitigation measures                                                                                                                                                                                                                                                                                                                 |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Liquidity and interest rate risk | <ul style="list-style-type: none"> <li>• Monitor, measure, and manage - liquidity, and interest rate risks through an all-inclusive dynamic framework.</li> <li>• Assess potential problems through stress testing.</li> <li>• Have a mixed portfolio mix long term and short term debts</li> <li>• Limit cash flow gaps</li> </ul> |
| Currency risk                    | <ul style="list-style-type: none"> <li>• Buy forex hedge</li> <li>• Make loan agreements for borrowing and repaying in domestic currency</li> </ul>                                                                                                                                                                                 |

### Business Risk

Business risk is the sum total of factors that may negatively impact profits of PSBF. Any internal or external factor that threatens PSBF's ability to achieve its financial goals is considered a business risk.

| Risks                       | Mitigation measures                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operational risk management | <ul style="list-style-type: none"> <li>• Deal with frauds diligently and with force</li> <li>• Establish internal audit systems.</li> <li>• Assess and eliminate weak control procedures.</li> <li>• Train the staff at all levels</li> <li>• Red flag top leadership or management decisions that is imposing risk burden without expected gains.</li> </ul>                                                             |
| Equity and Credit risk      | <ul style="list-style-type: none"> <li>• Maintain diverse portfolio</li> <li>• Avoid concentrating bets on few companies or narrow set of activities</li> <li>• Accept credit exposure within the pre-set tolerance parameters.</li> <li>• Make investment decisions based on the credit score, investees reputation, strength of management team, and business track record.</li> <li>• Co-invest with others</li> </ul> |

Risk is inevitable in all businesses. Small investors set the level of risks they can tolerate to achieve desirable performance. Only if the investors believe it can tolerate the risk, both at an emotional and financial level, they invest!

## 5.0 Recommendations

There are several recommendations in the key areas such as institutional mechanisms, productivity, marketing, access to finance, climate change and safe food production for improving partnerships in the livestock and dairy sector in Bangladesh.

### 5.1 Institutional mechanism to develop, implement and regulate partnerships

- Establishment of a new specialized agency may be named as '*Prani Sampad Bikash Foundation*' (PSBF) as a government company under the Companies (Bangladesh) Act, 1994 to provide much needed support to institutionalise the partnerships development in livestock and dairy sector. This apex foundation will support the country to achieve its goal of becoming the net exporters of livestock and dairy products by 2041.
- Create two specialized funds to be managed professionally by the proposed apex foundation PSBF: (a) Special purpose vehicles (SPVs) to invest in livestock and dairy development initiatives by the partners and (b) Livestock sector partnership fund (LSPF) which will support with seed funding, subsidies in developing infrastructures, building capacities of the partners involved in livestock and dairy development projects.
- Both the funds will pool the contributions from ongoing projects, and various other source interested in investing livestock and dairy development initiative of the country including the external donors, domestic and international financial institutions.
- Both the funds will have the provisions to invest in debt and equity instruments (medium and long term) with commercial terms and conditions to meet the expenses of the foundation. The interest rate may however be little below the market rate to attract new partnerships. The debt/equity will be accompanied by technical assistance components as grant to build capacities of investee organisations.
- Once registered as a company, PSBF would be subject to all domestic regulations. The major domestic laws that are applicable to PSBF are the Companies Act, 1994; the Foreign Private Investment (Promotion and Protect) Act, 1980; the Bangladesh Labour Act, 2006; the Bankruptcy Act, 1997; the Competition Act, 2012; the Income Tax Ordinance, 1984; and the Value Added Tax and Supplementary Duty Act, 2012. The investees of PSBF are required to follow all laws and regulations applicable to them. Contracts and partnership agreements with investees will attract provisions of the Contract Act, 1872, and the Partnership Act, 1932.

### 5.2 Partnership development to support improved productivity

Livestock production has increased to almost three times over the last two decades in Bangladesh. Nevertheless, productivity remains low compared to that of neighbouring countries, such as India, Pakistan, and Thailand. In addition, the demand of livestock products and are rapidly increasing due to increased knowledge and education for

better nutrition of the population. Since, from the farm to fork livestock products has to pass through a long supply chain effective partnership development will play an important role to improve the productivity in livestock and dairy sector. Table 7 provides further details on the objectives, features, and agencies to be involved in developing effective partnership in the subsector.

**Table 7 Partnerships for improved productivity**

| <b>S/N</b> | <b>Partnership Objectives</b>                                                                                       | <b>Features of Partnership</b>                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Indicative Agencies</b>                                                                                                                                                                                                                                                       |
|------------|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1</b>   | Extension of fodder production and reduction of feeding cost.<br><br>(Public – Private - Producer Partnership)      | Supply livestock producers with grass, legume, grain, oilseed & forage crop seeds that can optimize livestock productivity on a cost-effective basis.                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>• DLS, DLOs, ULO</li> <li>• Private suppliers of fodder seeds/cuttings; hays, forages, and silages</li> <li>• Producer groups</li> </ul>                                                                                                  |
| <b>2</b>   | R&D to develop better genetic resources, improved nutrition and health.<br>(Public-Private partnership).            | Mobilize funds from government, national and/or international agencies.                                                                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>• Research institutions (BLSRI, BARI etc.)</li> <li>• Universities doing research on livestock production and health.</li> </ul>                                                                                                          |
| <b>3</b>   | Supply of better livestock genetic resource.<br><br>(Public-Private partnership)                                    | Ease access and availability of superior genetic resources through import or domestic production.                                                                                                                                                                                                                                                                                                                                | Government and/or private suppliers of advanced animal genetic resources.                                                                                                                                                                                                        |
| <b>4</b>   | Addressing climate change risks & mitigation and adaptation measures.<br><br>(Public -Private-Producer partnership) | <ul style="list-style-type: none"> <li>• Mitigation measures by public agencies to prevent, reduce or control adverse environmental effects.</li> <li>• Adaptation measures at enterprise level to reduce GHG emission cope with heat stress, flooding and post-disaster management etc.</li> <li>• Promotion and energy security and implementation of adaptive measures to increase productivity at producer level.</li> </ul> | <ul style="list-style-type: none"> <li>• Research Institutions/Universities</li> <li>• Rural Development Academy (RDA), Bogura</li> <li>• Local Government Engineering Department (LGED)</li> <li>• Infrastructure Development Company (IDCOL)</li> <li>• Enterprises</li> </ul> |

| S/N | Partnership Objectives                                                                                                     | Features of Partnership                                                                                                                                                                                                                                                                    | Indicative Agencies                                                                                                                       |
|-----|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 5   | Vaccine <sup>12</sup> and essential medicine production and supply (Public-private-producer partnership)                   | <p>Incentivize private sector for vaccine production and distribution.</p> <p>Explore vaccine and essential vet medicine production by private sector under guaranteed procurement by DLS.</p>                                                                                             | <p>a) Government (DLS) will be the public partner</p> <p>b) Pharmaceutical or Biological companies will be chosen as private partner.</p> |
| 6.  | To recognize the services provided by paravets/LSPs and equip them with more skills. (Public-private-producer partnership) | <ul style="list-style-type: none"> <li>Issue appropriate administrative orders that recognizes the services of paravets/LSPs whether engaged by the government, private, NGOs or otherwise.</li> <li>Upgrade knowledge of paravets/LSPs through well designed bridging courses.</li> </ul> | <ul style="list-style-type: none"> <li>Professional organizations</li> <li>Paravets</li> <li>Training institutions</li> </ul>             |

### 5.3 Partnership development for efficient dairy and livestock marketing

The purpose of marketing partnership is to help businesses grow efficiently and reach their highest potential for return on investment (ROI) by promoting brands, products and services. The importance of marketing is that it makes the customers aware of the products or services, engages them, and helps them make the buying decision. Furthermore, a marketing plan, a part of business plan helps in creating and maintaining demand, relevance, reputation, competition, etc. (Table 8).

**Table 8 Partnership for efficient marketing of livestock products**

| S/N | Partnerships                                                                                                                                                  | Features of Partnership                                                                                                                       | Indicative agencies                                                                                                                                                                                            |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | <p>Promote marketing of value-added milk products like yogurt, cheese, cake, ice cream, pudding, sweetmeats etc.</p> <p>(Private- Producer's partnership)</p> | <ul style="list-style-type: none"> <li>Entrepreneur will have backward linkages with producers and forward linkage with retailers.</li> </ul> | <p>a) Entrepreneur (preferably sweetmeat/ bakery manufacturer).</p> <p>b) Producers</p> <p>c) Union Parishads Upazila Parishad/ Municipality market committees</p> <p>d) Financial Institution (Bank/ NGO)</p> |

<sup>12</sup> Only 10 percent of the vaccines needed for the livestock and poultry animals are locally produced. Source: <https://www.thedailystar.net/business/vaccine-scarcity-causes-livestock-deaths-study-142678> accessed on 8th June 2023.

| S/N | Partnerships                                                                                                          | Features of Partnership                                                                                                                                                                                                  | Indicative agencies                                                                                                                                   |
|-----|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2   | Encourage establishment of new private run veterinary clinics and diagnostic labs<br><br>(Public-Private Partnership) | <ul style="list-style-type: none"> <li>Accelerated license to private entities to set up veterinary diagnostic facilities.</li> </ul>                                                                                    | a) Government will proactively issue trade licenses.<br>b) Entrepreneur<br>c) Bank financing for fixed assets and working capital.                    |
| 3   | Integrated meat production, processing and marketing.<br><br>(Public-Private-Producer Partnership)                    | Establish integrated meat processing units owned, operated and managed by private companies having backward linkage with contract growers for supply of animals to these units.                                          | a) Public partner (DLS/ City Corporation/ Municipality)<br>b) Entrepreneur<br>c) Bank financing for fixed assets and working capital.                 |
| 4   | Processing of hide, skin and other animal by-products and marketing                                                   | <ul style="list-style-type: none"> <li>Establish modern Leather processing industry</li> </ul>                                                                                                                           | a) Ministry of Industry<br>b) Leather Industries<br>c) Export Bureau                                                                                  |
| 5   | Introduction and implementation of livestock micro insurance<br><br>(Public - Private - Producers Partnership)        | <ul style="list-style-type: none"> <li>Will cover animal death, disability and theft</li> <li>Disseminate the importance and process of implementing the livestock policy to PGs and other livestock farmers.</li> </ul> | <ul style="list-style-type: none"> <li>DLS/MoFL</li> <li>Insurance companies</li> <li>Banks</li> <li>PGs and other livestock entrepreneurs</li> </ul> |

#### 5.4 Competency and capacity building partnerships

DLS need to encourage banks, microfinance institutions, business service providers, vocational centres, producer groups, small entrepreneurs to work together to foster mutually beneficial partnerships. This collaboration can help to reduce risks associated with investment, promote market development, and encourage innovation. (Table 9).

**Table 9 Competence building partnerships**

| S/N | Partnerships                                                                                                    | Features of partnerships                                                                                                                                                                                                                                                                                                       | Indicative agencies                                                                                                                                                                         |
|-----|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Capacity development of livestock production related stakeholders.<br><br>(Public-private-producer partnership) | <ul style="list-style-type: none"> <li>Develop service delivery capacity of PGs and other livestock entrepreneurs.</li> <li>Develop capacity of fodder producers, fodder seed producers, livestock traders, meat and milk handlers, marketers, grass root level animal health workers, AI technicians, vaccinators.</li> </ul> | <ul style="list-style-type: none"> <li>DLS training institutes</li> <li>Training institutes of other line Ministries</li> <li>Private sector training organization</li> <li>NGOs</li> </ul> |
| 2.  | Partnership promoting rural entrepreneurship skills (Public-private-                                            | <ul style="list-style-type: none"> <li>Providing market-relevant training to rural youth and women for entrepreneurship endeavors in livestock sector</li> </ul>                                                                                                                                                               | <ul style="list-style-type: none"> <li>Ministry of Local Government, Rural Development and Co-operatives,</li> </ul>                                                                        |

| S/N | Partnerships                                                         | Features of partnerships                                                                                                                                                                                                                                                                                                           | Indicative agencies                                                                                                                                                                                 |
|-----|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | producer partnership)                                                |                                                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>• Training and academic institutions</li> </ul>                                                                                                              |
| 3.  | Management of cooperatives (Public-producer partnership)             | <ul style="list-style-type: none"> <li>• Train Board of Directors in cooperative governance</li> <li>• Preparation of business plans</li> <li>• Train coop staff in effective marketing</li> </ul>                                                                                                                                 | <ul style="list-style-type: none"> <li>• Dept. of Cooperative</li> </ul>                                                                                                                            |
| 4.  | Partnership for promoting food safety (Private-Producer partnership) | <ul style="list-style-type: none"> <li>• Awareness campaign among producers</li> <li>• Enforcement of extant food safety rules</li> <li>• Promotion of Hazard Analysis and Critical Control Point (HACCP) standards in all places handling food items.</li> <li>• Production of graduates in food safety and management</li> </ul> | <ul style="list-style-type: none"> <li>• Food Safety Authority</li> <li>• Consumer organizations/ NGOs</li> <li>• Academic institutes</li> <li>• Media</li> <li>• Producer organizations</li> </ul> |

## 5.5 Partnerships for improving investments and financial services

The primary goal of both financing and investment decisions is to build wealth of capital owners. Investment decisions revolve around how to best allocate capital to maximize their value. Financing decisions revolve around how to pay for investments and expenses. Companies can use existing capital, borrow, or sell equity. Without internally accrued capital or external investment, businesses will find it difficult to grow, and serve more customers (Table 10).

**Table 10 Finance and investment partnerships**

| S/N | Partnerships                                                                                     | Features of Partnerships                                                                                                                                                                                                                                                                                                                                                    | Indicative agencies                                                                                                                                                         |
|-----|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.  | Investment acceleration partnership<br>(Public-Private-Producer partnership)                     | <ul style="list-style-type: none"> <li>• Offering specific input for evaluation of investment opportunities.</li> <li>• Addressing queries about application to govt. schemes and program.</li> <li>• Connecting with strategic partners for investment.</li> <li>• Providing on-ground assistance with district level DLS officials &amp; relevant authorities.</li> </ul> | a) Bangladesh Bank or any designated public agency<br>b) Private investors or commercial banks/Microfinance institutions<br>c) Livestock entrepreneurs and producer groups. |
| 2.  | Innovative partnership platform to access long-term investments.<br>(Public-Private partnership) | <ul style="list-style-type: none"> <li>• Digital platform where both the investors and entrepreneurs negotiate investment opportunities.</li> <li>• Promote innovation by entrepreneurs through</li> </ul>                                                                                                                                                                  | a) Public/Private financial institutions.<br>b) Fintech companies (B2B, B2C, P2P types engaged in lending, equity, insurance,                                               |

| S/N | Partnerships                                                                                                           | Features of Partnerships                                                                                                                                                                                                                                                                                                                                                                                      | Indicative agencies                                                                                                                                                                                                      |
|-----|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                                                                                                                        | <p>pooled investment grants and challenge funds</p> <ul style="list-style-type: none"> <li>• Transparent process of and accessible to all dairy and livestock value chain actors.</li> <li>• Leverage philanthropic capitals and pooled funds.</li> </ul>                                                                                                                                                     | <p>consumer backing etc.).</p> <p>c) Anchor organization/ agency (e.g. venture capitalists, banks, angel investors, P2P lenders, personal investors etc.).</p> <p>d) International development and funding agencies.</p> |
| 3.  | <p>Financial incentive structure and operating procedure.</p> <p>(Public-Private partnership)</p>                      | <ul style="list-style-type: none"> <li>• Assist DLS/Agencies to develop tangible incentive structure for investments in dairy and livestock sector.</li> <li>• Support shared value proposition benefits of potential of investments to all stakeholders</li> <li>• Specific budgetary allocation of private and public sector investment incentive.</li> </ul>                                               | <p>a) DLS, Department of Banking &amp; Finance</p> <p>b) Bangladesh Bank</p> <p>c) Dairy, poultry and livestock trade and industry associations</p>                                                                      |
| 4.  | <p>Promoting financing partnership among value chain actors.</p> <p>(Public-Private-Producer partnership)</p>          | <ul style="list-style-type: none"> <li>• Tailor made financial products (credit, savings, and insurance) for small producers.</li> <li>• Financial products suitable to VMCCs and Milk hubs based on their sizes and operation.</li> <li>• Transparent information system on the cost/benefit ratios for partners/ institutions along the chain to indicate potential on shared value achievement.</li> </ul> | <p>a) DLS, Union Parishads, Market Committees etc.</p> <p>b) Bangladesh Bank/ Financial Institutions.</p> <p>c) Dairy and livestock enterprises.</p> <p>d) Producer groups.</p>                                          |
| 5.  | <p>Financial literacy and accessing capacity.</p> <p>improvement partnership (Public-Private-Producer partnership)</p> | <ul style="list-style-type: none"> <li>• Create data bank on access to finance through digital intervention</li> <li>• Promote financial literacy through media campaigns/ workshops/literacy classes within producer groups.</li> <li>• Funding to develop training and exchange visits program based on demand side requirements.</li> </ul>                                                                | <p>a) Bangladesh Bank, PKSF</p> <p>b) MFIs, commercial banks.</p> <p>c) Civil society organizations,</p> <p>d) Private data companies</p> <p>e) Financial advisors</p> <p>f) Extension workers</p>                       |

## 5.6 Cross-cutting issues

Apart from the above-mentioned core issues related to partnership development paradigm in livestock and dairy subsector, it is also important to build partnership to address the emerging cross cutting issues related sustainability in relation to climate change, voluntary code of ethics, gender mainstreaming etc. need equal attention (Table 11).

**Table 11 Partnerships to address cross cutting areas**

| S/N | Partnerships                                                                                                                     | Features of Partnerships                                                                                                                                                                                                                                                                                                                         | Indicative agencies                                                                                                                                                                                                                |
|-----|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.  | Partnerships for addressing climate change risks and mitigation and adaptation measures<br>(Public-Private-Producer partnership) | <ul style="list-style-type: none"> <li>Mitigation measures by public agencies to prevent, reduce or control adverse environmental effects</li> <li>Adaptation measures at enterprise level to reduce methane emission; cope with heat stress, and flooding due to sea level rise</li> <li>Promoting energy security at producer level</li> </ul> | <ul style="list-style-type: none"> <li>Rural Development Agency, Bogra (RDA), Local Government Engineering Department (LGED), Infrastructure Development Company Ltd. (IDCOL), etc.,</li> <li>Enterprises</li> </ul>               |
| 2.  | Addressing gender issues in livestock and dairy sector<br>(Public-Private partnership)                                           | <ul style="list-style-type: none"> <li>Promote women's participation in employment, benefit sharing and leadership forum</li> <li>Develop monitoring and reporting mechanisms tracking gender mainstreaming</li> </ul>                                                                                                                           | <ul style="list-style-type: none"> <li>Department of Women Affairs, Bangladesh</li> <li>UN Women</li> <li>International organizations</li> <li>Industry associations</li> <li>Companies</li> <li>Producer organizations</li> </ul> |

It is expected that the phased implementation of the above recommendations related to partnership development, Bangladesh would be able to create a favourable environment to bring the agencies, companies, producers and related people to join hands as per the expertise and financial ability to support the growth of livestock and dairy sector. This will in turn help to drive economic growth, reduce poverty, and improve the quality of life for the smallholder livestock farming community and help achieving the vision 2041 of the government in self-sufficiency of livestock products.

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## ANNEX I: Format for Key Informant Interviews

- A) Personal Details
- Name
  - Name of your Company / Organization / Government Department, etc
  - Designation/Job Title
- B) How would you classify your organization (✓ tick box ☐ as appropriate)
- ☐ International NGO
  - ☐ National NGO
  - ☐ United Nations Organization/Agency
  - ☐ International Development Organization/Agency
  - ☐ University/College/Academic Institution
  - ☐ Research Institution/Laboratory/AI Centre
  - ☐ Bank/Financial Institution
  - ☐ Livestock Producer – please specify: dairy/beef/buffalo/goat/sheep/poultry (broiler or layer), duck (meat or eggs)
  - ☐ Livestock Producer Organization (please specify type)
  - ☐ Marketing Organization/Company
  - ☐ Consultancy Organization
  - ☐ Other (please specify)
- C) Have you or your organization/company been engaged in a formal agrobusiness partnership or joint venture of any kind? If so please briefly outline its main objective. Was it a Public-Private Partnership, a Public-Private-Producer Partnership, a Private-Private Partnership, or a Private-Producer Partnership? Did you have a Business Plan in place to guide the progression of the partnership?
- D) Would you recommend that other organizations/companies/producers in Bangladesh research the potential benefits of agrobusiness partnerships?
- E) What do you see as the three main benefits of such partnerships?
- F) What do you see as the three main challenges/difficulties in implementing such partnerships?
- G) Have you any suggestions to encourage partnerships development in the livestock and dairy sector in Bangladesh?
- H) Would you like to make any further comments?

## ANNEX II: Perspective of Kii Respondents

| No | Indicators                   | Public agency                                                                                                                                                                                                                       | Private sector                                                                                                                                                                                                                                                                                                                                               | Civil societies/NGOs                                                                                                                                                                                                                                    |
|----|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Constituents                 | <ul style="list-style-type: none"> <li>Government agencies -3</li> <li>Academia – 2</li> <li>National dairy coop -1</li> <li>Intergovernmental organizations - 5</li> </ul>                                                         | <ul style="list-style-type: none"> <li>Dairy company – 2</li> <li>Academia -1</li> <li>Food company -2</li> <li>Consultant – 2</li> </ul>                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>International NGOs: 5</li> <li>National NGOs: 14</li> </ul>                                                                                                                                                      |
| 2  | No. of respondents           | 11                                                                                                                                                                                                                                  | 7                                                                                                                                                                                                                                                                                                                                                            | 19                                                                                                                                                                                                                                                      |
| 3  | Past experiences             | Established partnerships with various entities such as private enterprises, producer organizations, development banks & cooperatives and carried out activities to increase of producers.                                           | <ul style="list-style-type: none"> <li>Private firms established partnerships with technology providers/suppliers to increase the production of dairy products and from livestock</li> <li>Consulting firms partnered with government entities and international donor agencies to implement the efficient livestock and dairy project activities</li> </ul> | Established few partnerships with government entities and private firms to leverage resources and co-implement livestock projects                                                                                                                       |
| 4  | Potential partners           | <ul style="list-style-type: none"> <li>Multilateral donor agencies</li> <li>Local government bodies</li> <li>Private training institutes</li> <li>Farmer organizations and cooperatives</li> </ul>                                  | <ul style="list-style-type: none"> <li>Government entities (including animal health care facilities)</li> <li>Multilateral donor agencies</li> <li>Microfinance service providers and</li> <li>Producer organizations</li> </ul>                                                                                                                             | <ul style="list-style-type: none"> <li>Government nodal agencies (DLS)</li> <li>Private academic and research institutes</li> <li>Project level partnerships with private firms and multilateral donor agencies</li> </ul>                              |
| 5  | Main benefits of partnership | <ul style="list-style-type: none"> <li>sharing of resources and expertise</li> <li>increasing the access to market, and risk sharing abilities</li> <li>increasing the ownership of the stakeholders through investments</li> </ul> | <ul style="list-style-type: none"> <li>sharing of resources and expertise</li> <li>Support for market research</li> <li>enhancing the technology to meet the dairy market demand</li> <li>uplifting the rural economy through innovation</li> </ul>                                                                                                          | <ul style="list-style-type: none"> <li>sharing of resources, skills and expertise on livestock and dairy production</li> <li>Financial, technological, and institutional cooperation for the implementation of projects at community levels.</li> </ul> |

| No | Indicators                                                     | Public agency                                                                                                                                                                                                                                                                                                                                                                                                                 | Private sector                                                                                                                                                                                                                                                                                                                                                                                                                          | Civil societies/NGOs                                                                                                                                                                                                                                                                                                                                                |
|----|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                | <ul style="list-style-type: none"> <li>protecting farmers from the risk of livestock diseases and natural calamities through insurances</li> </ul>                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>Receive recognition and legitimacy from government</li> </ul>                                                                                                                                                                                                                                                                |
| 6  | <b>Challenges/ Difficulties encountered by partnerships</b>    | <ul style="list-style-type: none"> <li>resource constraints to implement the efficient technologies</li> <li>lack of communication and coordination among partners inducing conflicts and delays the implementation</li> <li>inadequate internal capability to handle demands of partnerships</li> <li>lack of trust among the partners</li> <li>inadequate monitoring and evaluation</li> </ul>                              | <ul style="list-style-type: none"> <li>Lack of instruments in the milk collection centers reduces the procurement of milk from farmers</li> <li>Lack of knowledge and awareness among the farmers reduces the milk production</li> <li>Private firms have regulatory and legal framework challenges in partnering with foreign entities.</li> </ul>                                                                                     | <ul style="list-style-type: none"> <li>Financial constraints to reach the last mile beneficiaries</li> <li>Lack of communication &amp; coordination among partners limits resource allocation, and support.</li> <li>Inefficient project implementation, poor baseline data or manipulation of data resulting in poor project planning/ decision making.</li> </ul> |
| 7  | <b>Suggestions on how to promote partnership in Bangladesh</b> | <ul style="list-style-type: none"> <li>Strengthen the public-private partnerships to develop livestock and dairy sector</li> <li>Establish market linkages to increase the sale of milk products</li> <li>Improve access to institutional low-cost credit</li> <li>Capacity development for government departments, research institutes and universities, and farmers to improve the breeds and feeds of livestock</li> </ul> | <ul style="list-style-type: none"> <li>Create platforms for stakeholders to network, share ideas, and identify common goals</li> <li>Build trust by promoting transparency, accountability, and mutual respect among the partners for successful partnership development</li> <li>Encourage public-private partnerships in the livestock and dairy sectors to improve service delivery, technology adoption, and innovation.</li> </ul> | <ul style="list-style-type: none"> <li>Develop appropriate leadership, transparency and accountability at all levels</li> <li>Develop long term partnership with NGOs to carry out the community level projects</li> <li>Strengthen the market linkage and better price realization of livestock and dairy products</li> <li>Develop 4Ps.</li> </ul>                |

## ANNEX III: Impact Case Studies of Partnerships in Bangladesh and Abroad

| No | Name of project                                                              | Country    | Partnership type                                                        | Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Reference                                                                                                                                                         |
|----|------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | PKSF's Agrosor- . Microenterprise Financing and Credit Enhancement Project   | Bangladesh | 3P<br>(PKSF-SMEs-Producers)                                             | As of December 2022, under the Agrosor project <ul style="list-style-type: none"> <li>• Loan disbursement stood at BDT 312627.6 Mn (US\$ 2922 Mn)</li> <li>• Loan outstanding stood at BDT 218207.9 Mn (US\$ 2039 Mn)</li> <li>• Average loan size stood at BDT 159,912 (US\$ 1,495)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                              | <a href="https://www.adb.org/sites/default/files/linked-documents/51269-002-fa.pdf">https://www.adb.org/sites/default/files/linked-documents/51269-002-fa.pdf</a> |
| 2  | Market infrastructure development project in Charland regions of Bangladesh. | Bangladesh | 3P<br>(LGED Traders-Farmers)                                            | <ul style="list-style-type: none"> <li>• Rural producers were linked through the construction of 432 km connecting roads and markets.</li> <li>• 66 market places were constructed and now managed by market management committees (MMC).</li> <li>• An impact assessment of Market Connecting Roads and Ghats, produced by LGED in 2011 reports a 33% increase in number of buyers and sellers, 44% increase in volume of trades and new investments in the markets and nearby areas. Overall, the income of some 53,000 poor households has increased by 25 per cent due to easy access to affordable credit, higher yield and better prices for their produce.</li> </ul> | <a href="https://www.ifad.org/en/web/operations/-/project/1100001322">https://www.ifad.org/en/web/operations/-/project/1100001322</a>                             |
| 3  | Bangladesh Micro-insurance Market Development Programme (BMMDP)              | Bangladesh | 2P - Private - Producer<br>Private insurance companies, banks-producers | <ul style="list-style-type: none"> <li>• As of December 2022 against a contractual target of 767 Farmers, Brac Bank and GDIC has offered credit and insurance service to 149 farmers/Policies for 797 livestock. The total amount of loan disbursed by Brac Bank as of the same reporting time under this project is BDT106,800,000/.</li> <li>• In total 551,994 livestock were insured and 402, 819 farmers have received risk mitigation (field extension) services promoted by 'Livestock Surokkha' up to December 2022.</li> <li>• Claim settled as % of sum assured for crop and livestock: 0.56%.</li> </ul>                                                          | <a href="https://www.swisscontact.org/en/projects/bmmdp-surokkha">https://www.swisscontact.org/en/projects/bmmdp-surokkha</a>                                     |
| 4  | Grameen Danone reducing malnutrition and creating                            | Bangladesh | 2P<br>Private Food company -                                            | GD has an ecosystem of 3000 families including dairy farmers of surrounding villages, direct employees, distributors, and their related employees. Due to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | CEO, Grameen Danone, Dhaka                                                                                                                                        |

| No | Name of project                                                                  | Country               | Partnership type                                                            | Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Reference                                                                                                                                                                       |
|----|----------------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | employment in Bangladesh.                                                        |                       | milk producers                                                              | accumulated losses, GD paid up capital is almost eroded. It will look to raise fresh round of capital after achieving greater system efficiency, commissioning new plants, and driving higher sales in next couple of years.                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                 |
| 5  | ACDI-VOCA and USAID's 'Feed The Future' livestock & dairy project in Bangladesh. | Bangladesh            | 3P<br>Swiss Development Corporation – Swiss Contact - SMEs- milk collectors | <ul style="list-style-type: none"> <li>3,379 ha of fallow land used for fodder production</li> <li>271,631 cattle vaccinated</li> <li>2002 trained LSPs</li> <li>248 milk collectors trained on quality control and logistics</li> <li>16 partnerships with private players in the sector</li> <li>USD 1,343,089 private funds leveraged</li> <li>USD 3,131,680 made available to livestock farmers/SMEs</li> <li>3000 million tons of improved cattle feed sold to farmers</li> </ul>                         | <a href="https://pdf.usaid.gov/pdf_docs/P A00XRQQ.pdf">https://pdf.usaid.gov/pdf_docs/P A00XRQQ.pdf</a>                                                                         |
| 6  | PRAN Dairy hubs, VMCCs & Processing Plants in Bangladesh                         | Bangladesh            | 2P<br>Private-Producer                                                      | <ul style="list-style-type: none"> <li>There are currently 150,000 listed milk producers, 7 Hubs, 106 VMCCs and 319 workers employed by PRAN Dairy, with plans to add another 100,000 dairy farmers, 3 Milk Hubs and 60 VMCCs by the end of 2024.</li> </ul>                                                                                                                                                                                                                                                   | <a href="https://www.tetrapak.com/insights/cases/articles/Expansion-dairy-hubs-Bangladesh">https://www.tetrapak.com/insights/cases/articles/Expansion-dairy-hubs-Bangladesh</a> |
| 7  | Milk Vita                                                                        | Bangladesh            | 2P Public-Producer<br>State sponsored coop union – producer cooperatives    | Milk Vita collects milk through networks established by its 345 primary co-operative societies. It collects about 350,000L/day liquid milk for processing into pasteurized milk, ghee, ice cream and other value-added products.                                                                                                                                                                                                                                                                               | <a href="https://en.banglapedia.org/index.php/Milk_Vita">https://en.banglapedia.org/index.php/Milk_Vita</a>                                                                     |
| 8  | Hester Bioscience and GALVmed distributing poultry vaccines in India & Nepal.    | North India and Nepal | 2 P Public-Private<br>(Gates Foundation- GALVMed- Hester Bioscience)        | Together Hester and GALVmed established one of the largest poultry vaccination distribution targeting backyard poultry in 3 Indian states. In 2018, Hester/GALVmed collaboration was extended to Odisha, Chhattisgarh, and Jharkhand. 71.43 Mn vaccine doses were delivered benefitting 94.5 Mn households. More than 1000 stockists and retailers currently distributing animal health products to SSPs. Over 1500 veterinary professionals and paraprofessionals are aware and recommending products to SSPs | <a href="https://www.galvmed.org/work/market-development/south-asia-initiative/">https://www.galvmed.org/work/market-development/south-asia-initiative/</a>                     |

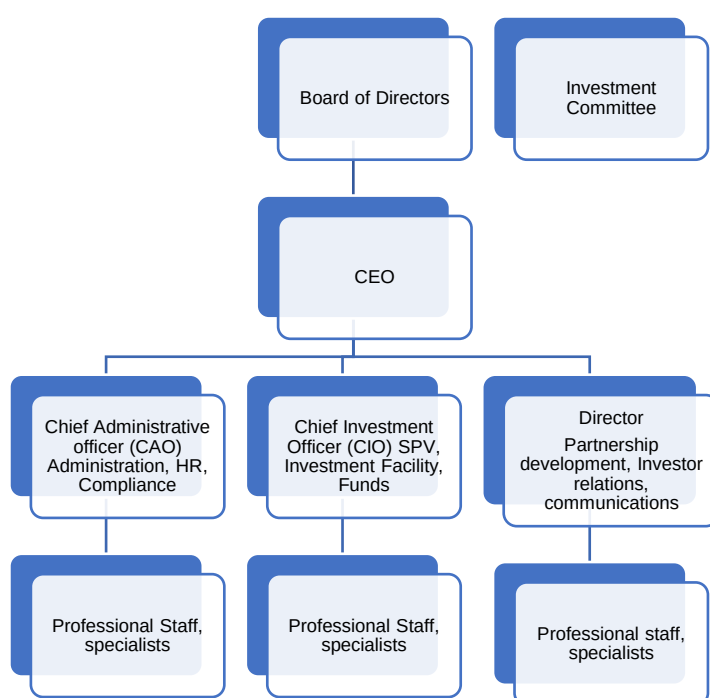
| No | Name of project                                                            | Country                                                                  | Partnership type                                                                                  | Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Reference                                                                                                                                                                                                                                                    |
|----|----------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9  | NABARD financial services for dairy cooperatives & organizations in India. | India                                                                    | 2P - Public-producer organization<br>(Government Bank – Producer organizations)                   | The objectives of the Dairy Processing and Infrastructure scheme are modernization and infrastructure augmentation for milk processing and value addition, and to ensure optimum price realization by the primary producers. It has modernized and expanded Milk Processing capacity of 12.6 million liters per day (MLPD, milk powder processing capacity of 210 million tons per day (MTPD), and other infrastructure facilities during the implementation period (2017-22). During the FY 2021-22, sanctions to the tune of Rs.3640 Mn (USD 44 Mn) were made to 6 milk union cooperatives. | <a href="https://www.nabard.org/content.aspx?id=4">https://www.nabard.org/content.aspx?id=4</a>                                                                                                                                                              |
| 10 | Abattoir, processing & feed milling, Meat Products of India.               | India                                                                    | 3P Public-private-producer<br>(State Government of Kerala – dealers – producers/self-help groups) | <ul style="list-style-type: none"> <li>• 80,000 broiler birds per annum poultry farms (15,000 per cycle?)</li> <li>• 400 sows pig farms</li> <li>• 15 tons/day feed in mash form</li> <li>• 1.5 million liters biogas plant</li> </ul>                                                                                                                                                                                                                                                                                                                                                        | <a href="https://www.facebook.com/MeatProductsofIndia/">https://www.facebook.com/MeatProductsofIndia/</a>                                                                                                                                                    |
| 11 | Rainbow Trout Production Partnership in Rasuwa District of Nepal           | Nepal                                                                    | Public-Private                                                                                    | 7 full time jobs have been created. Annual output from the farm is 5 metric tonne. The annual sale value is USD 75 000 (at approximately \$15 per kg for fresh raw trout).                                                                                                                                                                                                                                                                                                                                                                                                                    | Ms. Yangjin Tamang, CEO, Rainbow Trout Restaurant, Rasua.<br><a href="https://thediplotmat.com/2021/02/rainbow-trout-aquaculture-in-nepal-promise-amid-shocks/">https://thediplotmat.com/2021/02/rainbow-trout-aquaculture-in-nepal-promise-amid-shocks/</a> |
| 12 | CPF Meat marketing (inc global exports) in Thailand.                       | Southeast Asia: Thailand, Cambodia, Vietnam South Asia: India, Sri Lanka | Public-private-producer                                                                           | Distribution is made through various channels, including (a) traditional trade namely wet markets (b) modern trade namely convenient store, supermarket, and wholesaler (c) food service namely hotel, restaurant, food court, and catering service which are distributed through both the Company's channels and channel of partners.                                                                                                                                                                                                                                                        | <a href="https://www.cpfworldwide.com/en/business">https://www.cpfworldwide.com/en/business</a>                                                                                                                                                              |
| 13 | Aceli Africa - Unlocking finance for agricultural SMEs in East Africa.     | East Africa (Kenya, Uganda, Tanzania)                                    | Public-Private-Producer                                                                           | <ul style="list-style-type: none"> <li>• As of March 2023, Aceli has provided incentives to lenders for 836 loans totaling \$95M. The capital leverage ratio (capital mobilized / incentives to lenders) is 11x.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                   | CEO, Aceli;<br><a href="https://aceliafrica.org/partners/">https://aceliafrica.org/partners/</a>                                                                                                                                                             |

| No | Name of project                                                                         | Country   | Partnership type                                                                          | Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Reference                                                                                                                                                                                                                                                             |
|----|-----------------------------------------------------------------------------------------|-----------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                         | Rwanda )  |                                                                                           | <ul style="list-style-type: none"> <li>Increased lending to agricultural businesses through risk-sharing with the participating lenders (receiving financial incentives from Aceli).</li> </ul>                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                       |
| 14 | Meat & Livestock Australia's support of the red meat livestock industries of Australia. | Australia | 3P Public-Private-Producer<br>(Australian Government-Private Company (MLA) – Producers)   | <ul style="list-style-type: none"> <li>MLA's Meat Standards Australia (MSA) beef program delivered \$204 million in additional farm gate returns in 2021–22. The program has returned AU\$1.66 billion since 2011–12.</li> <li>Producers who participated in MLA research adoption programs between 2015 and 2022 received an annual net benefit of AU\$54.6 million up to 30 June 2022</li> </ul>                                                                                  | <a href="http://www.mla.com.au/annualreport">www.mla.com.au/annualreport</a>                                                                                                                                                                                          |
| 15 | Dairy Australia's support & enhancing capacity of the dairy industry of Australia.      | Australia | 3P Public-Private-Producer<br>(Australian Government – Dairy Association – Dairy farmers) | <ul style="list-style-type: none"> <li>Provided 627 extension activities to over 10,000 attendees across Australia, delivered in person by regional teams, online or via a blended delivery mode.</li> <li>Farm business planning program undertaken by 404 farmers in 2021-22.</li> <li>220 farmers and service providers explored investing in intensive housing systems.</li> </ul>                                                                                              | <a href="http://www.dairyaustralia.com.au/annualreport">www.dairyaustralia.com.au/annualreport</a>                                                                                                                                                                    |
| 16 | IFAD supporting red meat producers in Morocco.                                          | Morocco   | 2P Public-producer<br>(IFAD-Govt. of Morocco - beef farmers)                              | <ul style="list-style-type: none"> <li>Preparation of soil and reseeded/planting of fodder shrubs over 3,050 ha</li> <li>Creation, development and improved management of 24 watering points for the cattle</li> <li>Establishment of seed reserves for fodder over 300 ha</li> <li>Formation of 2 sheep and 1 goat producer organizations</li> </ul>                                                                                                                               | <a href="https://www.ifad.org/documents/38714182/39729786/Morocco.pdf">https://www.ifad.org/documents/38714182/39729786/Morocco.pdf</a>                                                                                                                               |
| 17 | Tanzania Agro-dealer Support Program                                                    | Tanzania  | 3P Public-private-producer<br>(IFAD-Government of Tanzania – agro dealers – producers)    | <ul style="list-style-type: none"> <li>Increased number of traders involved in agribusiness</li> <li>2,626 agro-dealers trained in value chain development</li> <li>243 agro-dealers certified in business management skills</li> <li>228 agro-dealers provided access to credits</li> <li>16 technical training involving 8 supply companies organized on product handling and safe use</li> <li>7 associations advocating agro-dealer issues established and supported</li> </ul> | <a href="https://agra.org/wpcontent/uploads/2020/07/End-of-Project-Evaluation-of-the-Agro-Dealer-Development-Project-in-Tanzania.pdf">https://agra.org/wpcontent/uploads/2020/07/End-of-Project-Evaluation-of-the-Agro-Dealer-Development-Project-in-Tanzania.pdf</a> |

## ANNEX IV: Governance Structure and Investment Facility Management in PSBF

- 1. Board of Directors:** The overall policy making decisions of PSBF would be vested with the Board of Directors. The Board will comprise of **seven** members who have a proven outstanding professional or business career record with high-level management capabilities. Three directors shall be from the government; two from the private sector, one from civil society and the CEO is an ex-officio member of the Board. Secretary, MoFL, shall be the Chairman of the Board. While the Board of Directors provide broad policy guidelines, the company management must have autonomy to run routine operations, to sign contracts and deliver services to clients on a commercial basis. Below figure provides the organogram of PSBF.

### Organogram of PSBF



## 2. Investment facility management

**2.1 Investment Committee:** The primary responsibility of the Investment Committee is to oversee the Company's evaluation of proposed investment and portfolio companies on behalf of the Board and report the results of their activities to the Board. A detailed mandate, composition, roles, and responsibility of the Investment Committee is presented in table below as a reference.

| Composition of Investment Committee                                                                 | Role of the Investment Committee                                                                   | Responsibilities and Processes                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a) Committee shall be appointed by the Board of Directors<br>b) Committee shall have seven members. | a) The Investment Committee shall provide assistance to the Board of Directors in fulfilling their | a) The primary responsibility of the Investment Committee is to oversee the Foundation's overall investment strategy and policy, setting asset allocation targets, |

| Composition of Investment Committee                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Role of the Investment Committee                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Responsibilities and Processes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>c) Term for a member will be three years.</p> <p>d) A member can be reinstated after a cooling period of one year.</p> <p>e) No member shall serve more than 6 years in the Board.</p> <p>f) The Managing Director shall be an observer to the Investment Committee meetings.</p> <p>g) The Chair of the Committee shall be a member of the Board of Directors.</p> <p>h) Members of the Committee should have University degree in finance, economics, marketing, veterinary medicine, animal nutrition, or a related field. In addition, they should have a background in project investment and the ability to make sound financial decisions.</p> <p>i) The Investment Committee shall meet as often as may be deemed necessary or appropriate in its judgment, but at least once in every six months to assess the status and performance of investments. Meetings of the committee may be held either in person, video conference or telephonically.</p> | <p>oversight responsibility to the shareholders, co-investors in SPV, and others.</p> <p>b) In discharging its duties, the Committee shall remain free and open communications between the Committee, the independent auditors and management of the Company.</p> <p>c) In executing its assigned role, the Committee is empowered to investigate any matter brought to its attention with full access to all books, records, facilities, and personnel of the Company and the power to retain outside counsel, or other experts for this purpose.</p> <p>d) The Committee, with permission of the Board of Directors, is authorized to appoint sub-committees with a life of not more than 3 months in case of special need.</p> | <p>overseeing portfolio performance, monitoring risk levels in investments, and approving individual transactions.</p> <p>b) The Committee works on behalf of the Board and report the results of their activities to the Board.</p> <p>c) The following shall be the main recurring processes of the Investment Committee in carrying out its responsibilities. The processes are set forth as a guide with the understanding that the Committee may supplement them as appropriate.</p> <ul style="list-style-type: none"> <li>• The Committee shall have the ultimate authority for and responsibility to evaluate and approve investments. The Committee shall review all contemplated investments by examining the financial history of the proposed investee entity, the expected return on investment, the quality of management, the soundness of the business model, the capital requirements, and the relationship between the company, its management and shareholders, and all known affiliates.</li> <li>• The Committee shall not make any investments prohibited under the law of the land.</li> <li>• The Committee shall review and discuss with management the performance of portfolio companies. The Committee shall examine the results of operations, the anticipated additional capital requirements, the return on investment, the level of technical assistance required, budgets, forecasts and variance reports. Where appropriate, the Committee shall recommend the sale, spin-off or</li> </ul> |

| Composition of Investment Committee                           | Role of the Investment Committee | Responsibilities and Processes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| j) The CEO, PSBF shall act as the Secretary to the Committee. |                                  | <p>other disposition of under-performing portfolio entities.</p> <ul style="list-style-type: none"> <li>• The Committee shall review and discuss with management the diversity and risk of the Company's investment portfolio, and, where appropriate, make recommendations respecting the sale or addition of portfolio investments.</li> <li>• The Committee shall review, evaluate and discuss with management all solicited and unsolicited offers to purchase portfolio companies. The Committee shall have the final authority for approving the sale of portfolio investments.</li> <li>• The Committee shall ensure that post-investment, the debt: equity ratio of investee company does not exceed 6:1.</li> </ul> |

**2.2 PSBF Investment Facilitation Cell:** The key objective of the Facilitation Cell is to guide the investors, assess the project proposals and follow up for timely approvals for establishment & operation of the units. The Facilitation Cells will aim to provide focused attention in actualizing the investments on the ground through a "one stop" facilitation process. The various functions carried out by the Investment Facilitation Cell are:

- Assess the project, land and utility assessment for land allotment and approval by government.
- Facilitate and follow up on the project approvals within reasonable timelines.
- Facilitate project approvals within 30 days of receipt by the applications.
- Facilitate deemed approvals for projects for which the clearances are not issued by any authority as per the specified timelines and further follow up on formal clearances.
- Conduct sensitization programs at regular interval to build awareness amongst the investors.
- Invite applications for financial assistance from prospective public agencies, private sector, producers and others for setting up or expansion of livestock and dairy business in Bangladesh.
- The administrative expense of the Investor Facilitation Cell will be met from own earnings.

**2.3 Funding characteristics:** PSBF will invest its resources as equity or debt. It will take an equity position of not more than 60% in any entity. It will stay invested in an entity for 7 years or less. It will provide debt to entities. Debt will be available at a charge of 1% less than the prevailing market rate offered by banks and financial institutions. The

debt is repayable in 5 years or less. Technical and capacity building assistance will be provided to invested entitles. For this purpose, 2% of PSBF gross profit will be earmarked. In addition, grants in aid from donors and public agencies will be sought.