

Report on
STUDY ON LIVELIHOOD CHALLENGES OF BARIND
MARGINALIZED COMMUNITIES AND WAY FORWARD
(GODAGARI UPAZILA, RAJSHAHI)



Submitted to

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List of Abbreviations

GBK	Gram Bikash Kendra
BBS	Bangladesh Bureau of Statistics
BDT/Tk.	Bangladeshi Taka (currency)
BDS	Business Development Services
BMDA	Barind Multipurpose Development Authority
BRAC	Bangladesh Rural Advancement Committee
DAE	Department of Agricultural Extension
DLS	Department of Livestock
DOF	Department of Fisheries
FAO	Food and Agriculture Organization
FGD	Focus Group Discussion
FSS	Food Security Sector
GDP	Gross Domestic Products
IGA	Income Generating Activities
INGO	International Non-Governmental Organization
KII	Key Informants Interview
MT	Metric Ton
NGO	Non-Governmental Organization
NGOAB	Non-Governmental Organization Affairs Bureau
PRA	Participatory Rural Appraisal
SA	Situational Analysis
SWOT	Strengths, Weakness, Opportunity and Threat
UP	Ultra-Poor
VC	Value Chain.

Glossary

Business Development Services (BDS)	BDS comprises a wide array of non-financial services critical to the establishment, survival, productivity, competitiveness and growth of enterprises. BDS can include generic services, such as training, information technology, technical assistance, strategic planning and marketing, as well as subsector-specific services in product development, market access, input supply, equipment sale or leasing, and other sector-related technical assistance and/or training (SEEP Network, 2010).
Casual Work:	Hiring workers on a very short term or occasional & intermittent basis in return for a set wage for an agreed period (day, week etc.) or task
Constraint:	under-performing functions or rules that both shape value chain performance and inhibit more inclusive outcomes for target groups (e.g. a lack of access to inputs is constraining vegetable farmers from improving their productivity).
Livelihoods	A livelihood comprises the capabilities, assets (including material and social resources) and activities required to provide the means of living. A livelihood is sustained when it can last through and recover from various stresses and shocks, and preserve or enhance assets and capabilities, while not undermining the natural resources base (SEEP Network, 2010).
Livelihoods market analysis	The UNHCR's Minimum Criteria for Livelihoods Programming prescribes a livelihoods market analysis as the second step of livelihoods programming. The objective of UNHCR livelihoods market analysis is to determine which markets (or sectors) have the potential to grow and to provide real opportunities for economic activity and self-reliance opportunities for persons of concern.
Market:	A set of arrangements by which buyers and sellers are in contact to exchange goods or services
Market analysis	Market analysis is the process of assessing and understanding the key characteristics of a market so that predictions can be made about how prices, availability and access will perform in future. For this, market analysis is taken to mean a first appraisal of local markets to identify sectors with potential for employment creation. The term, as used in this document, is not to be confused with market assessments conducted by humanitarian organizations implementing cash-based interventions to assess the supply of and demand for certain goods used and procured by the target group locally
Market actor:	Any organisation or individual in the private or public sector, civil society/community groups, social enterprises, representative organisations, academic bodies, etc.
Market system	A market system is a multi-function, multi-player arrangement comprising the core function of exchange by which goods and services are delivered and the supporting functions and rules and regulations (see below) which are performed and shaped by a variety of market players (private and public) (Springfield Centre, 2015)
Market systems development	Market systems development, also known as "Making Markets Work for the Poor" ("M4P"), refers to an approach that seeks to change the way that markets work, so that poor people are included in the benefits of growth and economic development. The aim is to tackle market failures and strengthen the private sector in a way that creates large-scale, lasting benefits for the poor
Push and Pull factors	"Push" strategies often entail working with the target group directly to provide them with the human, financial and social assets they need to be part of market systems, while "pull" strategies usually entail working with other actors in the market system through commercial incentives to facilitate increased and more sustainable participation of the target group in the market
Rapid market appraisals (RMAs)	Rapid market appraisals are market analyses conducted for sectors believed to hold potential for employment creation for refugees, with the aim of quickly coming to understand key features of the market, market trends, relationships among market actors, and any bottlenecks/constraints in these sectors. RMAs also serve to identify suitable sectors for further value-chain analyses, as envisaged in UNHCR's Minimum Criteria for Livelihoods Programming
Refugees	Refugees include all persons who are outside their country of origin or habitual residence

	due to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, as a result of such events, is unable or, owing to such fear, is unwilling to return to it. In this report Refugee generally refers to Burmese people living in the makeshift settlements (Refugee Camps) in Bangladesh.
Rules and regulations of a market system	Rules and regulations of a market system refer to the formal or informal rules and norms that govern a target group's access to markets within that system. These may be related to legal frameworks that govern labour markets, but also to prevailing cultural, social or political norms or attitudes towards refugees
Skill:	Ability to carry out a manual or mental activity, acquired through learning and practice. The term "skills" is used as an overarching term for the knowledge, competence and experience needed to perform a specific task or job.
Supporting functions of the market system	The supporting functions of a market system are the services that the target group needs in order to gain access to markets. These include various types of training, credit and other financial services, business development services (see above), information, social capital and moral support Supporting functions: a range of context- and sector-specific functions that inform, support and shape the quality of the core function and its ability to develop, learn and grow
Value chain	The value chain describes the full range of activities that are required to bring a product or service from conception, through the intermediary phases of production, to delivery to the final consumer, and (for physical goods) final disposal after use

Executive summary

Gram Bikash Kendra (GBK) is implementing a pilot project at Godagari upazila in Rajshahi district focused on agriculture with the financial support from Japan International Cooperation Foundation-JICF. GBK would like to conduct the study to assess the overall livelihood situation, cope up mechanism of Barind Marginalized Community people of Godagari Upazila, Rajshahi and way forwards. Therefore, Matrix did this study on behalf of GBK during February-March 2023 to identify potential IGAs, livelihood challenge factors, immediate coping mechanism, and recommendations, along with the ethnic and entire populations.

Both primary and secondary information were collected and followed the mixed approach, combining qualitative and quantitative for the study. Primary information was collected through participatory methods mainly FGDs, KII, seasonality mapping, service mapping, Venn diagram, market mapping, group discussions, and local market observation. There were 8 FGDs, 20 KII, 4 Venn diagram, 4 seasonality mapping, and few market observations were conducted in the project areas.

Seven sequential interrelated processes were followed for the evaluation process, such as 1) desk review; 2) prepared details of the methodologies, work plan and tools; 3) briefing, meetings with the GBK; 4) field data collection, including: a) KIIs, b) FGDs, c) observation, d) market analysis, e) seasonality analysis, and livelihoods options analysis; 5) data analysis and draft report; 6) presenting the preliminary findings to GBK; and 7) final report submission.

- Inception phase: Kick-off meeting, document review, survey questions finalization, data collection instruments preparation, details of methodology and inception report submission
- Field exercise phase – team orientation, field plan, data collection (FGDs, IDIs KIIs and case studies,
- Data analysis phase: data cleaning, synchronizing, curing, database development, template preparation, analysis and triangulation;
- Reporting phase: draft report and presentation to GBK project team; and final report with recommendation.

Findings of the Study

The study team interviewed 143 respondents through KII, FGD and mini workshop with project personnel, beneficiaries, DAE, DLS, BMDA and Union parishad representatives. Among the 143 respondents 58% male and 42% female, all are above 18 years of age and found marginal, poor and extreme poor farmers, living in the study areas.

The areas revealed 21% of total households were extreme poor in the reference year while 45% were poor, middle and rich make up 24% percent and 10% respectively of the total households. The extreme poor and poor households do not own cultivable land, but the poor households reported to have access to 25-50 decimal of land. They also engage in share cropping of 30-50 decimal of land. Middle and rich households cultivated more land and were able to produce more crops thus ensuring more income.

90 percent of crop producers reported paddy crops as their main crop, followed by vegetables (50 percent), oil seeds (30 percent), fruits (40 percent), maize (20 percent) and few pulses and farmers do not typically use improved seed varieties or chemicals. Timely irrigation and access to irrigation is the great challenge for farming both crops and vegetables. Share cropping is a common feature of the Barind region, whereby larger landholders lease out part or all of their holdings, usually to landless or small farmers.

Only 20 percent of the FGD participants owned animals. Among those most owned poultry (70 percent), small ruminants (40 percent) and cattle (40 percent). The major challenges faced by livestock producers were difficulties in good quality breed, accessing feed, veterinary services and veterinary inputs. Respondents used their standard channels to sell their products and buy the goods from nearby market, few percent reported that farm-gate prices were lower than usual market price. During harvesting season (especially for vegetables) traders visited their lands and purchased from farm-gate.

It reveals that expenditure pattern of households across the wealth groups mainly poor and extreme poor together. FGD respondents earn BDT217,400 per year in average and spend approximately BDT203,000; where food expenditure highest (37%) followed by grocery market (day shopping), agricultural activities child education and few others.

Similarly, 80% income generated from agricultural farming (field crops, vegetables and fruits), rest coming from day labourer, small trade and others. Extreme Poor and Poor households relied on market purchase of food, labour exchange and food assistance. While the middle households relied on their own production of crops and vegetables. The main income sources were labour exchange, crop and livestock sales, loan, and remittance.

Present Livelihood Options of the study areas

Majority having only single options, this made them vulnerable and irregular income thus they remain hard core poor and vulnerable especially ethnic peoples. However, the team calculated agriculture highest income option followed by vegetables, tomato, fruits, homestead gardening, chicken rearing, day labour, goat, dairy, handicrafts and others.

Day labour (off farm and on farm, transportation, loading, unloading etc.) work. Small business which is basically vendor type with goods of around Tk.2500-5000 they sell in neighbouring villages. Tomato production usually sold to the market traders and having good potential for processing.

Numbers of constraints are noticeable in the areas like lack of cultivable land, even lack of irrigation facilities and access, lack of training, lack of finance, lack of skills, lack of market, lack of assets, diseases and sicknesses, and disasters. Of them, lack of cultivable land and who have land having lack of irrigation facilities, training, lack of finance and marketing are found the highest drawback for operation of livelihoods options. Due to lack of cultivable land, inadequate finance, no access to market, and no technical knowhow most households are dependent on seasonal labour and poorer households mostly rely on unskilled work i.e. cannot start any long time IGAs

Awareness on gender specific issues, economic support, engagement with IGA, assets/ inputs support, IGA specific training and skill development, access to market, access to financial inclusion, inclusiveness of the ethnic peoples in decision making process, and value chain specific skill development and market access

Selection of Potential IGAs

In order to identification and selection of potential IGAs / livelihoods options considering some selected criteria tomato production and processing ranked high potential IGAs, which has good demand, outreach, processing possibilities, women participation, employment creation and family nutrition as well. Year round and processing variety cultivation having good profit and market demand. In this case group effort and linkage with processors, external wholesale market traders are required. After tomato, vegetable cultivation ranked second highest, followed by chicken rearing, goat rearing, beef fattening, dairy (both fresh and semi-processed), nokshi kantha, handicraft (including tapestry, embroidery, cap making, fishing net, knitting) tailoring, petty business (small trade), and mechanics (mobile phone, electrical work, house repairing etc.). Homestead gardening also good market potential after mitigating family nutrition. Homestead is a great place for household food access, diet, and nutrition.

IGA Specific Recommendation – The Way forward

Situational Analysis

As communities analyse their own strengths, weaknesses and opportunities for change, a situational analysis (SA) can play a transformational role through increasing the awareness of all stakeholders as actors of change. SA provides a critical understanding of a wide array of interrelated factors—including contextual vulnerabilities, societal gender and cultural norms related to economic strengthening, livelihoods, and food security (ES/L/FS). The analysis of these interrelated factors through SA helps to inform a more context-specific approach to the design of livelihood programs.

Shifting from farmer production to value chain approaches

Market based value chain strengthening is required to improve livelihoods of the targeted communities. This means that both field agents and farmers/beneficiaries (targeted community) need a range of skills that will support upgrades in organization, productivity and business acumen. A value chain approach can increase gender equality, women's empowerment and social cohesion. A gender-sensitive value chain approach can help reduce food insecurity, as women's participation, enhance skills, bargaining power, market integration and reduce gender gap in the community. This approach is gaining favour with donors, companies and

development teams, as the principles of the approach can be applied to a broad range of products, locations and types of farmers.

Ensure value chain finance

To meet their production needs, farmers require capital through-out the year to support their farming system. For any given product, such as tomato, vegetables, paddy, maize, farmers will need finance to buy seeds, fertilizer, agro-chemicals, equipment and pay laborers to plough, plant, weed and harvest their crops. After harvest, farmers must pay for operations to maintain quality or add value to primary goods through aggregation, drying, grading and some crops need additional fermenting, curing and milling in the post-harvest phase in preparation for sale; funds are then needed to transport produce to market.

Homestead or Kitchen Gardening

During field survey and KII with the DAE representative noted that homestead gardening would be the one of the most preferable IGA for all SAFE beneficiaries, they can use their homestead land to produce diversified seasonal vegetables for their own consumption, contribute to nutritional fulfilment, and earning from surplus. Additionally, they can use roof as vertical integration of the vegetables. Year-round cultivation is possible as per proper production planning, which can support by the project team and build their capacity to produce (training on home gardening plan and production).

Introduce and implement Ultra Poor Graduation Model

The Graduation Approach is modelled as a method of enabling the ultra-poor to build commercialization of IGA and improve their lives. The graduation program first identifies the ultra-poor within a community in and later intensively works with these families to improve business-oriented skills. The graduation approach households are provided a productive asset (such as a tomato farming, vegetable cultivation, cow or goats rearing) with which they will develop their enterprise. Overall, the program aims to improve the incomes of the ultra-poor and hopes to see positive changes in income, school attendance of children, food security, health, and increased assets among the ultra-poor.

Business management and accounting skill development: The beneficiaries need Business management and accounting skill development so that they can run their businesses properly.

IGA specific skills development: The beneficiaries need IGA-specific skills development training so that they can operate easily.

Market linkage: The participants are heavily dependent on the local traders for both inputs and outputs. So, for effective IGA functionality/implementing agency (GBK) should create functional market linkage both in input and output market actors.

Access to Financial Services: GBK should provide financial support or linkage with financial institutes (NGOs) with their beneficiaries so that the IGAs can sustain in the long run.

Promotional initiatives for market development: Every IGA need promotional activities locally and regionally

Appropriate irrigation support to the marginal and poor farmers: Implementing projects on irrigation and conservation of rain water in the Barind Region can be introduced, in order to increase crop production and promote minor irrigation facilities through solar energy driven dug wells.

Ensure necessary extension services for the value chain actors

All government services (e.g. DAE, DLS, DoF, BMDA and others) and private sector service providers should be available locally. The participants can facilitate good network for enabling environment with public service providers, financial service providers, embedded services providers e.g. inputs retailer, market actors, and create few new like paravet for livestock services, health workers etc.

Conclusion

The study based on rapid participatory qualitative analysis, supporting by limited quantitative primary information. It also carried out secondary information sources as desk study during February – march 2023. The “Study on livelihood challenges of Barind marginalized communities and way forward” depending on

existing SAFE project beneficiaries voice and their learning. The finding is primary information basis of the situational analysis.

Considering market demand, quick income contribution, income potential, inclusion of women, nutrition, food security, employment generation opportunity, risk on disaster, sustainability and UP criteria tomato cultivation, commercial vegetable farming, Homestead vegetable gardening along with few fruit trees around homestead areas chicken/poultry, cattle rearing (milking cow and beef fattening), the handicraft are the potential IGAs/ Livelihood options

Start with any livelihoods as IGA it requires to conduct market analysis (gendered value chain analysis) to find out its opportunities, constraints, demand supply gap, technical capabilities especially for women markets, service provision, value chain mapping, cross cutting issues, and others. Based on skill and willingness of the targeted participants IGA would be selected. Then appropriate capacity development plan has to be developed. Simultaneously (time bound) basic need support (consumption support/ stipend to be provided to compensate their additional time effort, opportunity cost, inputs support for nursing IGA, apart from regular income until new income/fruit comes. Group approach of the IGA and capacity building process is effective for the community participants especially ethnic and marginal farmers. Based on IGA type beneficiary group formation, providing training, home visit, observation, mentoring and coaching will help to achieve the initiative successful.

Whatever facts and figure represented in this report simply a sample survey not a census, perception, knowledge and practices absolutely individual issues, it may be differed from one person to another person. Though number of samples are small one answer affects to statistical analysis remarkably, however entire facts would be remained with GBK it is their property and responsibility to utilize as per project objectives, and logframe.

1. Introduction

1.1. Overview of the GBK:

Gram Bikash Kendra-GBK is a non-government development organization working for the betterment of socio-economically marginalized people since 1993. GBK is working in 09 districts (Dinajpur, Thakurgaon, Rangpur, Nilphamari, Naogaon, Joypurhat, Gaibandha, Naogaon, Rajshahi) approximately with 150,000 excluded and vulnerable households. Among them plain land ethnic, Dalit community people, children, adolescents, youth, women marginalized farmers and differently abled people are in main focus.

In Rajshahi district GBK has started development intervention at Godagari upazila from the year 2020 with support of the development partner Japan International Cooperation Foundation-JICF. In Rajshahi Barind region farmers are using underground water for agriculture production which is progressing to make the area desert in the upcoming days. Due to the challenge of water scarcity production is decreasing and production cost is increasing day by day. Community people are not getting proper nutrition in their daily meal. Considering those overall challenges and changing trend of the livelihood pattern, GBK would like to put high importance on the insights of overall livelihood scenario of the *Barind* upazilas. GBK focused on the study-based work to reach in the core challenges of the community people. And, already GBK conducted several studies in the livelihood situation of the ethnic people of Dinajpur District with CARE Bangladesh, SHED, PKSf and other prominent organizations.

GBK is implementing a pilot project at Godagari upazila in Rajshahi district focused on agriculture with the financial support from Japan International Cooperation Foundation-JICF. GBK would like to conduct the study to assess the overall livelihood situation, cope up mechanism of Barind Marginalized Community people of Godagari Upazila, Rajshahi and way forwards.

1.2. Project Background

In 2020 GBK has started development intervention at Godagari upazila in Rajshahi district supported by Japan International Cooperation Foundation-JICF. Traditionally, in Barind region farmers are using underground water for agriculture production which declining water table and causing desert day by day results high production cost and reduce yield. Additionally, community people are vulnerable to proper meal daily. Considering many challenges and changing trends of the livelihood pattern, GBK is putting high importance on the insights of overall livelihood scenario of the Barind upazilas.

Bangladesh is a land of multicultural and ethnic diversity country of South Asia. There are 149.8¹million total populations of which 114.7² lives in rural areas among which Bengali community people are the major in number. Along with this more over 50 ethnic community people are living in the country. Which is approximately 1.5 million and 1.8% of the total population represents the total population of the country. The ethnic communities in Bangladesh mostly live in the Chattogram hill districts- Rangamati, Khagrachari, Bandarban, mid of the country Mymensingh, Sirajganj, Sylhet and south west in Khulna district. In the plain land the ethnic people living mainly in Rajshahi, Natore, Naogaon, Joypurhat, Rangpur, Dinajpur, Thakurgaon, Panchgarh district.

Rajshahi district is known as *Barind* region district. Mainly the land of Godagari has all the characteristics of *Barind* land. It's having the land sliding and comparing to other areas of the

¹ Bangladesh Census Result at a glance, Bangladesh Bureau of Statistics 2011, Population and Housing Census 2011 Vol-1, Page xiii

² Bangladesh Census Result at a glance, Bangladesh Bureau of Statistics 2011, Population and Housing Census 2011 Vol-1, Page xiii

country the water scarcity is high in this area. As per the geographical location and the land criteria of the country has own agricultural pattern.

Last 20 years back due to water challenge only one season crop (rice) has been cultivated. However presently the Barind Multipurpose Development Authority (BMDA) is an autonomous organization under Ministry of Agriculture of Govt. is working to ensure irrigation water to the farmer along with various other development activities, which lead the farmers of these area to start round the year agriculture opportunities. However, compering to the other reasons still there is a gap on the knowledge level and uses of agro modern technologies and availability of quality seedlings. Due to this reason the agriculture production cost is still high and farmers are not able to make profit from it.

In this area farmers are facing challenge to get quality vegetable seed and seedlings which hampered to make optimum profit from agriculture. Due to not having proper knowledge on year-round vegetable cultivation farmers mainly cultivating paddy and few farmers are doing vegetable cultivation for their own consumption. Moreover, farmers could cultivate year-round vegetable including high value vegetable. In the area as farmers still having the typical mindset on agriculture and have less opportunity to motivate and learn to shift their existing agriculture practice. Also, the uses of chemical and pesticide are too high which is also a health concern.

More over comparing to the Bengali farmers the ethnic farmers lead a poor life. They are compelled to sell their labor at a very low price mainly at the lean period. In addition, they dig soil, carry loads or engage themselves in similar works of day laborers and they are accustomed to hard work. Traditionally, the ethnic people are mainly involved in agriculture. Although, scientific side of their knowledge about cultivation and managing their land has not been developed yet. Vast majority of the plain land ethnic people have lost their land properties, and influencing them to earn their livelihood depending on the mercy and availability of work in the fields on others land owner.

Rajshahi is the northern-western division of Bangladesh with 8 districts known as highly ethnic populated plain land districts.

Ethnic people speak their own language at home (Santal in 'HOR', Oraon in 'SADRI') and each of different ethnic group has their own language. Children face problems in Government Primary Schools in communicating with teachers and other students. Still ethnic community children are not getting opportunity to learn in their mother language. Ethnic Community students are starting their study and lagging behind from their childhood level due to the communication problem.

Ethnic people have glorious history of their own traditional culture and heritage. Their main festivals are BAHA, SAHARAI, KARAM, FAGUA etc. But observing these festivals are decreasing. Ethnic people have their own folk songs, traditional dance forms and traditional dresses. But there are a very few ethnic folk artists are coming from the new generation as there is no scope to take it as profession.

North West Ethnic communities face livelihood crisis due to lack of education, alternative employment opportunities. Most of the Ethnic people are surviving on agriculture day labor. Having no other job scope during the lean period ethnic people must sell their labor in advance, sell their domestic animals or mortgage their land or migrate to survive this period. In these period takes fewer meals and reduces quality of food.

Along with this more than 80% of the Bangladesh population is potentially exposed to floods, earthquakes and draughts, and more than 70% to cyclones. On average the country experiences severe tropical cyclone every three years, and about 25% of the land mass in inundated Bangladesh

is one of the worst sufferers of climate change. The north-west part of Bangladesh has improved a lot in the last few years in terms of both poverty and employment but the adverse impacts of climate change are putting our progress at risk. Considering the socio-economic situation, deprivation of diversified development interventions particularly income generating activities, lack of own land, land cases, lack of education, lack of participation in different platforms & committees, and other various reasons plain land ethnic people are suffering to lead the minimum standard of livelihood. Still malnutrition, early child marriage, drop out from primary level school, alcoholism, lack of savings, lack of modern agriculture practice are common phenomena which hinders livelihood enhancements of the plain land ethnic people. Apart from this geographically the north-west region is situated in the draught prone area with flood, cold waves and hit waves calamities. Almost every year low income people suffer from different natural calamities and comparing to the Bengali people the Ethnic people became more vulnerable from the situation.

Although Government and non-government organizations have undertaken different development programmes on education, infrastructural development, rural electrification, health facilities however a big number of ethnic people are still not under coverage. Thus, the plain land ethnic people struggling within the poverty cycle which became barrier for sustainable solution to overcome from their livelihood challenges.

1.3. Rationale of the study

Through the study GBK has identified the livelihood challenge factors, immediate coping mechanism, and recommendations, along with the ethnic and entire populations. There were limited studies on socio economic, agriculture and income generating activities of Barind areas; however, this study will exclusively concentrate on the Godagari upazila of Rajshahi District. GBK is hopeful that the study will open a new dimension and play vital role to understand the factors of livelihood challenges of Barind, its trend and way forwards. GBK focused on the study-based work to reach in the core challenges of the community people. It will be focused on various aspects of livelihood options such as- different income generating activities (main income source with secondary options), housing, electricity, entrepreneurship, primary and higher education, vocational education, family planning, health and sanitation, access to land and other basic services, agriculture-crop production, livestock rearing & fish culture, nutrition, governance and participation in traditional as well as political structure, service (government and non-government), traditional structure and its function, access to finance.

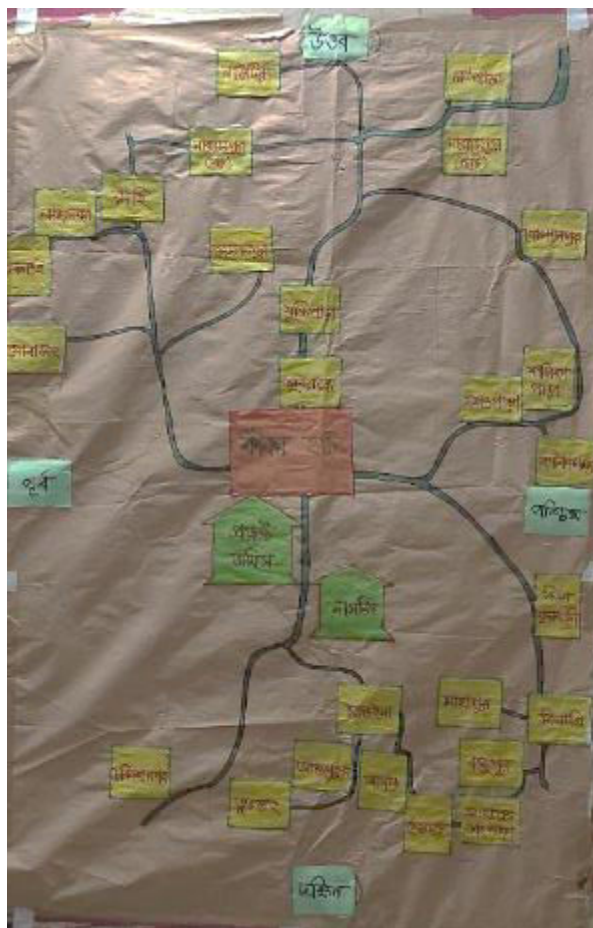
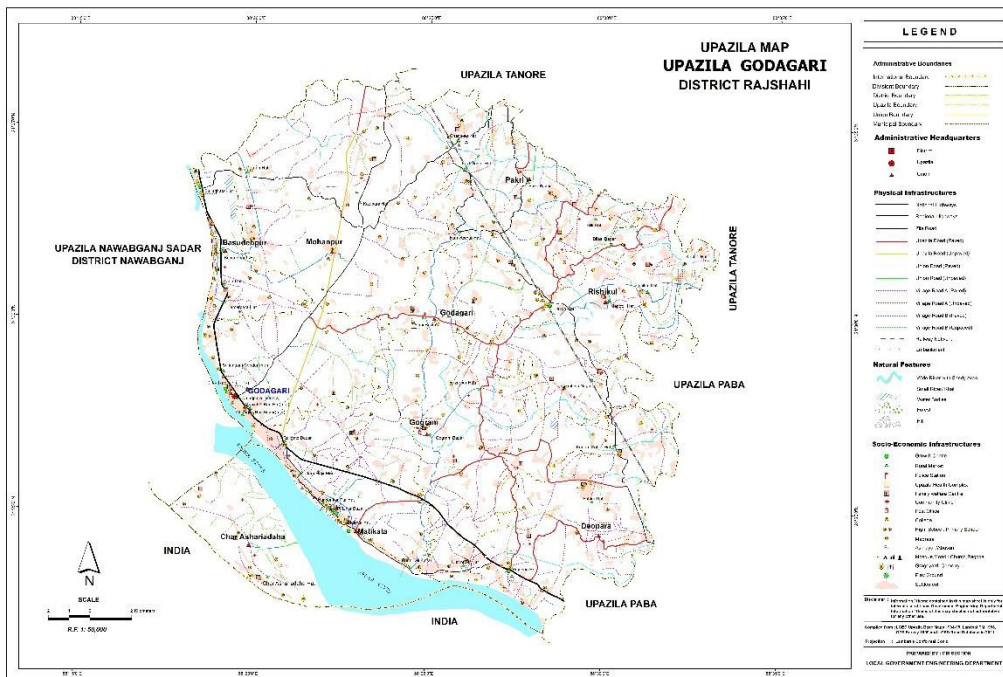
1.4. Objectives of the study

As per provided ToR the objectives of the study are:

- To identify the overview on the dimensions of current livelihood pattern of the Barind Marginalized people of Godagari upazila, Rajshahi district;
- To access the main livelihood variables which influences both positively and negatively at the standardization process of the Barind Marginalized people's livelihoods and cope up in the present development trend;
- To identify the hazard of climate change and its effect on livelihood (mainly agriculture, ecology, social, economic, water scarcity, women's health and hygiene, education and culture) of Barind Marginalized people sufferings and cope up mechanism of livelihoods.
- To assess the existing interventions of government and nongovernment to overcome from livelihood crisis.

1.5. Geographic Location of the Study:

The study was conducted in the Godagari Upazila under Rajshahi district



Map 1: Location map of the study in Godagari Upazila under Rajshahi District in Bangladesh

2. Methodology of the study

2.1. Conceptual Understanding of the Study Methodology:

Both primary and secondary information were collected and followed the mixed approach, combining qualitative and quantitative for the study. Primary information was collected through participatory methods mainly FGDs, KII, seasonality mapping, service mapping, venn diagram, market mapping, group discussions, and local market observation. Necessary questionnaire, checklist, guideline was used for data collection. There were 8 FGDs, 20 KII, 4 Venn diagram, 4 seasonality mapping, and few market observations were conducted in the project areas. There was few quantitative information relevant to the livelihood's options/IGA and value chains collected and analysed. Pertinent secondary information was also collected and reviewed/ cross checked with different sources. Study team followed Sustainable Livelihood Framework (SLF) to identify livelihood, patterns, livelihood challenges, livelihood variables. Besides SLF, the study will follow social mapping, livelihood mapping, hazard analysis especially climate changes and its effect on livelihood, IGA and Value chain analysis. There was a mini workshop with project staffs to identify the potential livelihoods option/ IGAs

Seven sequential interrelated processes were followed for the evaluation process, such as 1) desk review; 2) prepared details of the methodologies, work plan and tools; 3) briefing, meetings with the GBK; 4) field data collection, including: a) KIIs, b) FGDs, c) observation, d) market analysis, e) seasonality analysis, and livelihoods options analysis; 5) data analysis and draft report; 6) presenting the preliminary findings to GBK; and 7) final report submission.

- Inception phase: Kick-off meeting, document review, survey questions finalization, data collection instruments preparation, details of methodology and inception report submission
- Field exercise phase – team orientation, field plan, data collection (FGDs, IDIs KIIs and case studies,
- Data analysis phase: data cleaning, synchronizing, curing, database development, template preparation, analysis and triangulation;
- Reporting phase: draft report and presentation to GBK project team; and final report with recommendation.

- The evaluation team followed mixed methods i.e., quantitative and qualitative from primary and secondary sources.
- Qualitative information collected through PRA methods (KII, FGD, case study and observation).
- Secondary document reviewed and triangulated as supplementary to the primary information

Table 1: Phases of the study

Phase -1	Phase -2	Phase -3	Phase -4
Inception	Identification of livelihoods options, challenges, constraints, opportunities, skill matrix, service provision matrix,		Analysis and reporting
<ul style="list-style-type: none"> • Secondary review • Inception report • Work plan 	<ul style="list-style-type: none"> • KII, FGDs • Identification of livelihoods options, potential IGAs 	<ul style="list-style-type: none"> • Livelihoods mappings challenges, constraints and opportunities • KII, FGD, social mapping, vulnerability mapping • Skill mapping and service provisions 	<ul style="list-style-type: none"> • Data analysis and reporting • Presentation – validation workshop • Final report

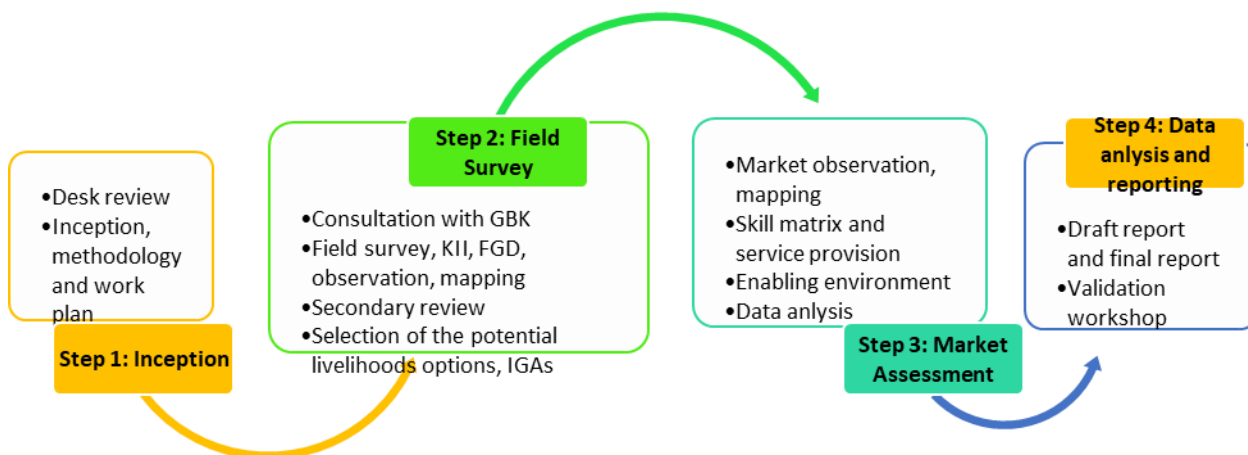


Figure 1: Steps of the study

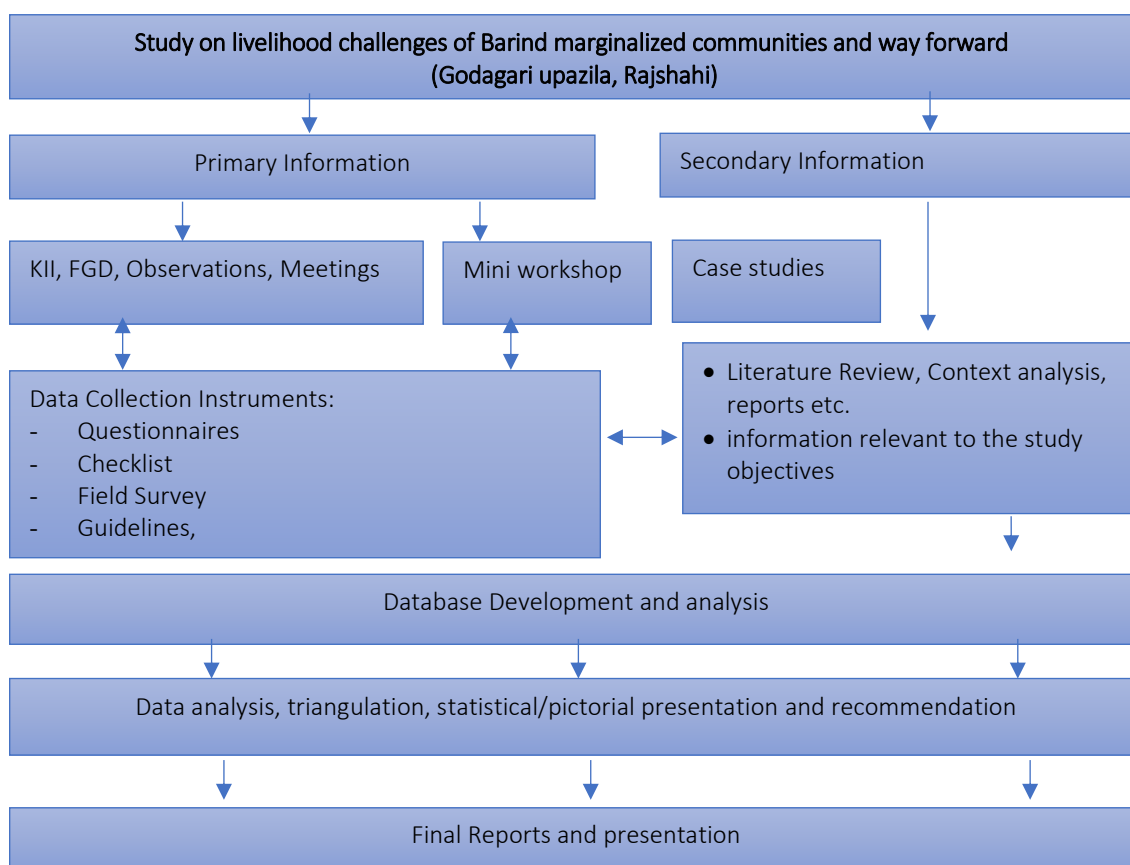


Figure 2: Flow chart of the Study on livelihood challenges of Barind marginalized communities and way forward

The **first step** of the assessment was review of secondary documents to extract existing information on locational context, livelihoods of the SAFE beneficiaries, agricultural scenarios and market dynamics of the study areas. Accordingly, data collection instrument and guideline also prepared for the study.

The **second and third steps** were collected primary data, qualitative and few quantitative, through PRA methods (mini workshop, identification of potential IGAs, market assessment through FGD, KII, checklist, different mapping, observation and small group meetings) using semi-structured questionnaire.

The **fourth step** was database development in a formatted template (both qualitative and quantitative) for analysis. Necessary triangulations were conducted with different sources of information as per identified IGAs/ livelihood options and market systems. Based on the data collected from different sources as well as methods, wherever possible tables were prepared and analysed. FGDs, KIIs, and observation notes were taken in the field and commonalities (in opinions/comments) were identified first and differences were also noted, captured for report writing.

FGD, KII, Observation, Venn Diagram and mapping

The purposive sample design was used for data collection. This was finalized in consultation with the project team of SAFE/GBK. Focus Group Discussions (FGDs) and Key Informant Interviews (KII), the two key methods used for data collection, provided primary data and information to have a precise IGA feasibility, livelihoods options, market system analysis and way forward for the betterment of the targeted communalities (including ethnic people) in the Godagari upazila.

Twelve FGD respondents mainly included project beneficiaries, local farmers, ethnic communities, market traders'/business persons, while 30 KII interviews were government officials (DAE, DLS, DOF, DSS, and BMDA), input traders, local service providers, market actors/traders, NGO representatives and Union Parishad Chairmen, and project staffs

Table 2: Number of FGD will be conducted during survey period

Sl. No.	Type of informants	Number of KIIs
1	Ethnic community	4
2	Bengali/mixed community	4
Total		8
Mini workshop		1

Table 3: Number of KII will be conducted during survey period

Sl. No.	Type of informants	Number of KIIs
1	Ethnic civil society representative	5
2	Govt. service providers (Upazila/Union Parishad) (DAE, DLS, DoF, BMDA, DMD, UP Chairman and others)	10
3	Local Service provider	2
5	Project staff	2
6	NGO workers	2
7	Market actors	10
Total		31

2.2. Identification of livelihoods options

Two steps of the potential livelihoods options and IGA selection were followed through a formatted checklist.

Initially a mini workshop were conducted with all of the project staffs and DAE representative to identify the potential IGAs & ranking, local context, value chain dynamics, and probable

recommendations of the future projections. The study team did a participatory group work for A check list will be followed to identify the appropriate livelihoods option considering their skills, service provision, and market potentiality. The study team was used a checklist, different mappings, with different criterias.

In second step, from the list of options the study team discussed with local communities, project beneficiaries, key informants with guided instruments, and tools (venn digrams, livelihoods options checklist, ranking of the IGAs, value chain mapping, constraints, opportunities, service provisions, probable solutions, and opinions).

Indepth analysis of identified Livelihoods option / IGA and their value chain analysis

With the potential IGA/livelihoods options, the team analysed its constraints, challenges, opportunities and market options through KII, FGDs using set of tools and methods e.g. IGA selection criteria, seasonality mapping, social mapping, ven diagram, available service mapping, skill matrix, political structure, access to finance and few others.

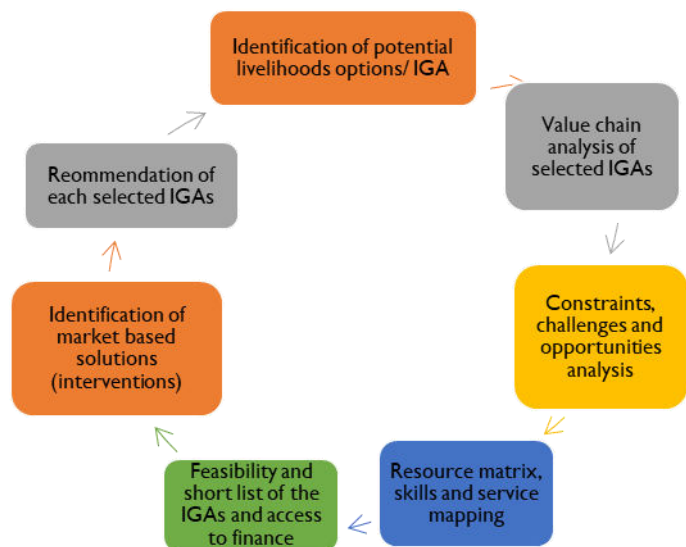


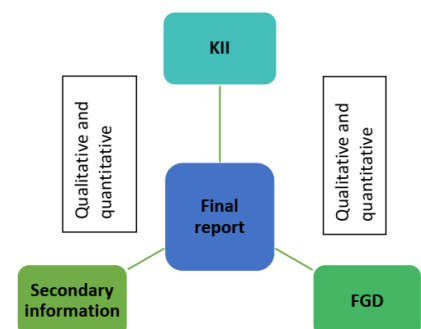
Figure 3: Steps of IGA/ Livelihoods option selection

2.3. Data Analysis and reporting

Both quantitative and qualitative data were analysed and triangulated adequately used various sources and points of data gathering and then synthesize for evaluation conclusion. Multiple data sources, cohesion and consistency was the main checkpoints for triangulation.

Data collected from all individual sources were entered into a set template to prepare a summarized database. Data were analysed for the identification of most potential IGAs, IGA related value chain analysis, SWOT analysis, resource mapping, cost benefit analysis etc.

Triangulation of findings was also made for cross checking and find relevancies, the effectiveness of the IGAs. Recommendation and intervention plan were also shown in the report. A brief discussion on activities, outputs and impacts of the interventions were also included in the report. The triangulation of data was done based on similar findings and information as collected from different respondents. The information was compared with the findings of a literature review for triangulation of similar information and validation of collected data.



Draft report and Sharing

Draft report was prepared on the basis of field data and secondary review, that shared with GBK and relevant stakeholders and based on their feedback draft report would be reviewed and finalized final report. Based on the draft and comments, suggestion a presentation was prepared for validation workshop.

Validation workshop:

A validation workshop at regional level was conducted after draft report submission. Workshop feedback and participants suggestions were incorporated in final report.

2.4. Finalization of the Report:

Incorporation of draft report and validation workshop feedback the team prepared final report and submitted to GBK.

2.5. Quality assurance

Written instruction on data collection was supplied to the study team members and consultants. Following steps were taken into consideration for the quality control and ethical practices for the study:

- Training and orientation were provided to understand data collection methods, quality parameters, and overall guideline for field data collection.
- The utmost efforts were given to select skilled and experienced enumerators, Research Associates and Field Supervisors to oversee data collection and provide guidance and feedback to team members.
- The survey team met every afternoon/evening for rechecking and learning to sharing the field information and making a conclusion.
- During field-work, the supervisors diligently checked for completeness, relevancy, quality and consistency of the information returned/submitted on a daily basis.

Study Findings

3. Findings of the Study

The term “sustainable livelihood” is used here to refer to an income-generating activity that results in a positive return on investments sufficient to provide an income and fund the further investments necessary to continue that activity. Therefore, to achieve economic inclusion in a sustainable way, interventions should be based on a thorough analysis of the existing demand for labour, products and services, and of market systems in which targeted community could make a living.

Field survey information (both quantitative and qualitative), secondary review, and livelihoods options are discussed in this chapter. Detail tabular distribution and relevant charts/figures arose from findings are placed with the respective running text and paragraphs.

3.1. Demographic information:

The study was conducted from February – March 2023 at Godagari upazila in Rajshahi District. The study team interviewed 143 respondents through KII, FGD and mini workshop with project personnel, beneficiaries, DAE, DLS, BMDA and Union Parishad representatives. Among the 143 respondents 58% male and 42% female, all are above 18 years of age and found marginal, poor and extreme poor farmers, living in the study areas.

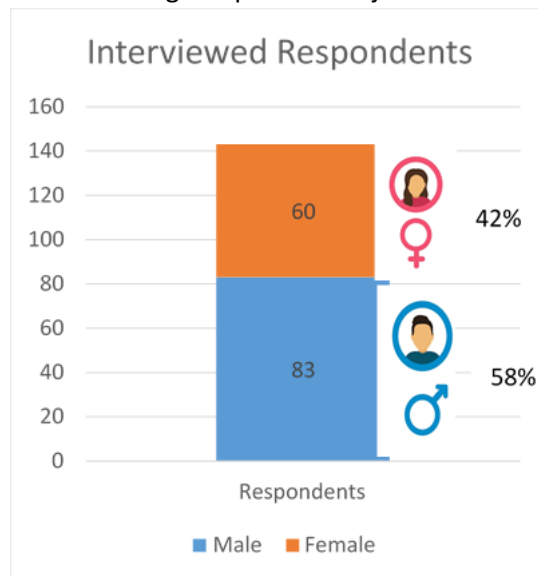


Figure 4: Sex distribution of the study respondents

3.2. The context of the study area:

Agriculture was once the basis of the socio-economic structure of Bangladesh, but in the last forty years the rain-fed agricultural subsystem has undergone transformation. In recent decades, technological modernization, farm mechanization, irrigation and the introduction of high yielding variety (HYV) has worked to make the sector intensive production, higher cropping intensity, commercialization of agriculture – transforming Bangladesh from the “basket case” of the seventies into an economy that is self-sufficient in food.

The agriculture sector is playing an important role in increasing productivity, ensuring sustainable food security and creating employment opportunities. According to the provisional calculation of BBS, the contribution of agriculture to the GDP in FY 2021-22 is about 11.50 percent. Despite declining arable land, meeting the food and nutrition needs of the growing population, climate change, and the impact of the COVID-19, crop production continues to grow. At this time, Bangladesh has risen from the fourth place to the third place in rice production in the world, as a result of which the foundation of food security in the country has been strengthened.

Although the Bangladeshi economy continues to be agriculture-based, this formerly firm foundation is undergoing immense changes and shifts. The reasons for this could be demographic pressures and the division and fragmentation of farmland, which is causing landlessness and a higher rate of migration to the cities.

The Barind region, a water-stressed area in northwest Bangladesh, had an underdeveloped agricultural economy and high levels of poverty, and BMDA working on these issues and marked good contribution on revitalized the area with enhanced groundwater irrigation and farming systems in north western part in Bangladesh.

The North-Western part of Bangladesh has been experiencing extreme hot weather and frequent drought conditions compare to the other parts of the country. Erratic rainfall pattern creates devastating and repeated droughts in this region and affects agriculture by substantial damage and crop losses. Especially, the high Barind Tract suffers from frequent drought situation due to irregular rainfall. The entire Barind region and its surrounding areas have very severe water scarcity during Kharif and Rabi season. The ground water scarcity reveals that water level is declining gradually year-by-year, which creates the draught intensity higher. As the low availability and dispersion of surface water sources for irrigation, withdrawal of ground water turns into the alternative source. Installing deep and shallow tubewells became traditional and mostly practiced irrigation process in this region since last two decades. Over exploitation of groundwater for irrigation purpose during summer season, accelerates ground water level fall rapidly in such a way that in some points are not achievable for full replenishing during rainy season. As consequences, local livelihoods influenced very much with the climatic conditions and seasonality.

Farmers' choice of drought adaptation measures depends on several determinants that include their socioeconomic, demographic, and agricultural characteristics. This study aimed to investigate the presence of dependency or association between the adaptation strategies implemented by farmers' own initiative and their determinants in the Barind Tract of Bangladesh.

The way a household copes with and withstands economic shocks depends on the options available, in terms of capabilities, assets (including both material and social resources), skills and activities. A livelihood strategy is the way those options are arranged and selected in these findings. Comprehending the driving factors of each livelihood strategy is crucial to improve the response mechanisms related to poverty and food security in Godagari upazila. This study is aims to measure empirically the outcomes of different livelihoods strategies in terms of household resilience to food insecurity in the specific context of Barind tract especially Godagari upazila.

In order to understand the key determinants of each livelihood strategy and compare different livelihood strategies, we used and updated the resilience analysis framework developed by Alinovi et al. (2008).

In terms of access to basic services, for example, access to credit is much more relevant to farmers and large-holders than it is to others. Access to water is more relevant to farmer in the study areas, while access to skill development institutions, political will, access to inputs, physical networks is relevant to entrepreneurs and wage-employees. The social safety-net programs also important. Livelihood strategies are the combination of activities that people choose to undertake in order to achieve their livelihood goals. They include productive activities, investment strategies and reproductive choices. Assets which people can rely upon play a crucial role in the livelihood's framework. Those with more assets are more likely to have greater livelihood options with which to pursue their goals and reduce poverty. Traditionally, five categories of assets or capitals (i.e., human,

social, natural, physical, and financial) are identified, although subsequent adaptations have added others.

Table 4: Distribution of farming categories in Godagari Upazila

Description	Amount (ha)	Percentage
Total Farmer Family	54365	
Landless	12220	22.48
Marginal Farmer	25209	46.37
Small Farmer	7945	14.61
Medium Farmer	6971	12.82
Large Farmer	2020	3.72
Total Land	47563	
Cultivated land	41199	86.62
Total crop land	97643	
Net crop land	41199	42.2%
Single cropland	3491	8.5%
Double crop land	18972	46.0%
Thrice cropland	18358	44.6%
More than three crop land	378	0.9%

Source: DAE, Godagari, Rajshahi

Agriculture is working as one of the driving forces of the economy of Bangladesh as a result of the adoption of favourable agricultural policies and strategies by the government. Although food security is likely to be disrupted due to global corona disaster, food grains production and supply system may be disrupted, but Bangladesh did not have to face such problems due to timely decision of the government. The government is working tirelessly to build sustainable, safe and profitable agricultural systems to ensure food security. The government has been making all out efforts for the overall development of the agriculture sector in the light of Vision 2041, 8th Five Year Plan, National Agricultural Policy 2018, Sustainable Development Goals, Deltaplan-2100 and other planning documents. At present, the government has adopted short, medium- and long-term action plans to meet the future needs of the growing population, based on the agriculture sector's achievements in various emergencies, including the impact of COVID-19.

3.2.1. Crops produces by the study respondents

A total of 90 percent of crop producers reported paddy crops as their main crop, followed by vegetables (50 percent), oil seeds (30 percent), fruits (40 percent), maize (20 percent) and few pulses. Improvements in rainfed cropping techniques and irrigation facilities from BMDA have also increased the scope for cultivation of winter crops, and Kharif-1 Season. Seed priming permits improved crop establishment, ultimately leading to higher yields and diversification of the

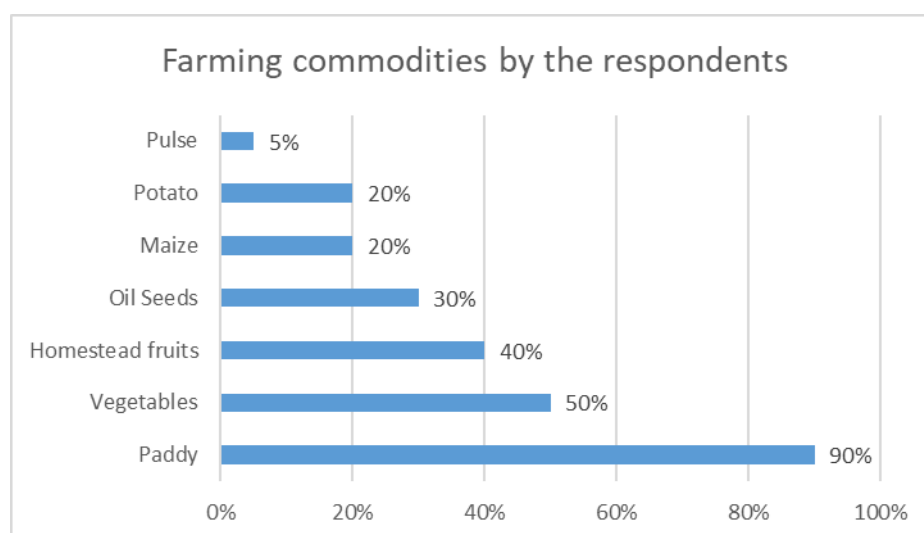


Figure 5: Farming commodities by the respondents

farming system in the locality. Different types of fruits are producing the farmers.

Accessing inputs such as seeds, fertilizers was not mentioned as a particular challenge. This was expected since most farmers do not typically use improved seed varieties or chemicals.

However, timely irrigation and access to irrigation is the great challenge for farming both crops and vegetables. Large and influential farmers getting opportunity to get water more than marginal and landless sharecropper. Few of the FGD participants mentioned that they are not getting such benefits all the time.

Share cropping is a common feature of the Barind region, whereby larger landholders lease out part or all of their holdings, usually to landless or small farmers. Various forms of sharecropping arrangements apply. The land owners rarely supply inputs, apart from sometimes certain proportions of seed; thus, tenant farmers usually decide on input levels, which are often well below optimum levels due to their limited capital available to purchase them. The harvest is shared in either proportion agreed-to beforehand or on the basis of a fixed amount going to the landlord, irrespective of seasonal yield. In the latter case, the tenant suffers most in drought or otherwise low-yield seasons. In addition to grain, there is also a sharing of the straw, which results in its almost complete removal from the field for animal feed, fuel or building material. In this system there is little incentive for either the landlord or the tenant to consider the longer-term sustainability of the production system, such as through build-up of soil organic matter, but just to get the maximum return on a year-to-year basis. The landless are occupied mainly as agricultural labourers, as sharecroppers or in other labouring jobs such as in public works or menial work in towns and cities. They usually live on a day-to-day subsistence basis. There is an increasing trend for larger farmers to also become involved in agricultural business enterprises, such as retail of agricultural inputs (seeds, fertilizers, agro-chemicals, etc.)

Some of cropping pattern are given below

- Boro-fallow-t. aman
- Potato-fallow/boro-t. aman
- Vegetables – Boro – t aman
- Tomato-fallow-t. aus/aman

3.2.2. Livestock

Because the rural population was underrepresented only 20 percent of the FGD participants owned animals. Among those most owned poultry (70 percent), small ruminants (40 percent) and cattle (40 percent). The major challenges faced by livestock producers were difficulties in good quality breed, accessing feed, veterinary services and veterinary inputs. Whereas insufficient income, higher mortality, and diseases were the main challenge reported for accessing feed, livestock producers also faced difficulties in accessing veterinary services and inputs. However, livestock providing their cash income during the family necessity.



3.2.3. Food supply and markets

Respondents used their standard channels to sell their products and buy the goods from nearby market, few percent reported that farm-gate prices were lower than usual market price. During harvesting season (especially for vegetables) traders visited their lands and purchased from farm-gate.

3.2.4. Wealth Breakdown of Households

The study team exercised wealth ranking tools and Venn diagram as well during the FGDs and summarized in Table 6 of wealth characteristics of households in the study areas. Most of FGD participants were from the community and mixed group. Wealth is primarily determined by the area of land a household is able to cultivate, access to land, ownership of livestock and productive assets. Along with these FGDs, Key Informant Interview (KII) with the people with good knowledge in the areas revealed 21% of total households were extreme poor in the reference year while 45% were poor. People belong to middle and rich make up 24% percent and 10% respectively of the total households in the study areas. The extreme poor and poor households do not own cultivable land, but the poor households reported to have access to 25-50 decimal of land. They also engage in share cropping of 30-50 decimal of land. Middle and rich households cultivated more land and were able to produce more crops thus ensuring more income. Important productive assets for households belong to poor and extreme groups included tools for agriculture work and 3-5 fruit trees. Although, livestock was also identified as important asset supporting livelihood, the poorer households did not own of this asset, so they mostly relied on wage labour. Households of middle wealth groups have livestock, fruit trees, timber trees, and bicycle, while the rich households have increasing numbers of livestock, fruit trees, timber trees and farm machineries.



Wealth Breakdown of Households

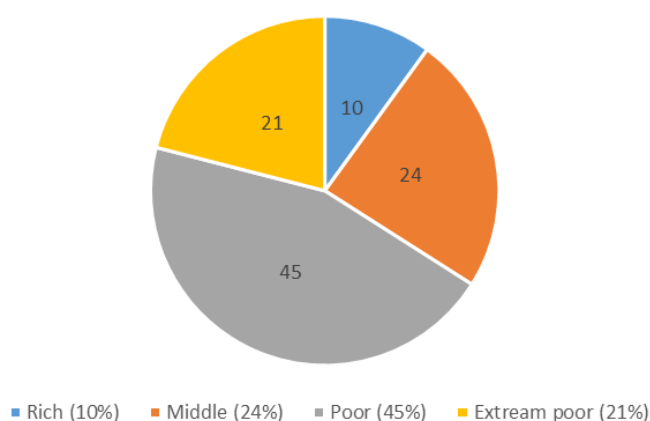


Figure 6: Wealth analysis in the study area

Table 5: Wealth distribution of the survey area

Wealth Group	%	HH Size	Land (decimal)	Farming	Livestock	Others
Rich	10	5	300+	Land holder	Numbers of cattle's, chickens	Mechanized farming, Large business
Middle	24	5	130-150	Farmers	Own cow and poultry	Farming, vegetable trading
Poor	45	6	25-50	Share cropping	Poultry and own cow	Farming, vegetable trading
Extreme poor	21	5	0-10	Share cropping and labour	Poultry and shared cow	Day labour, share cropping,

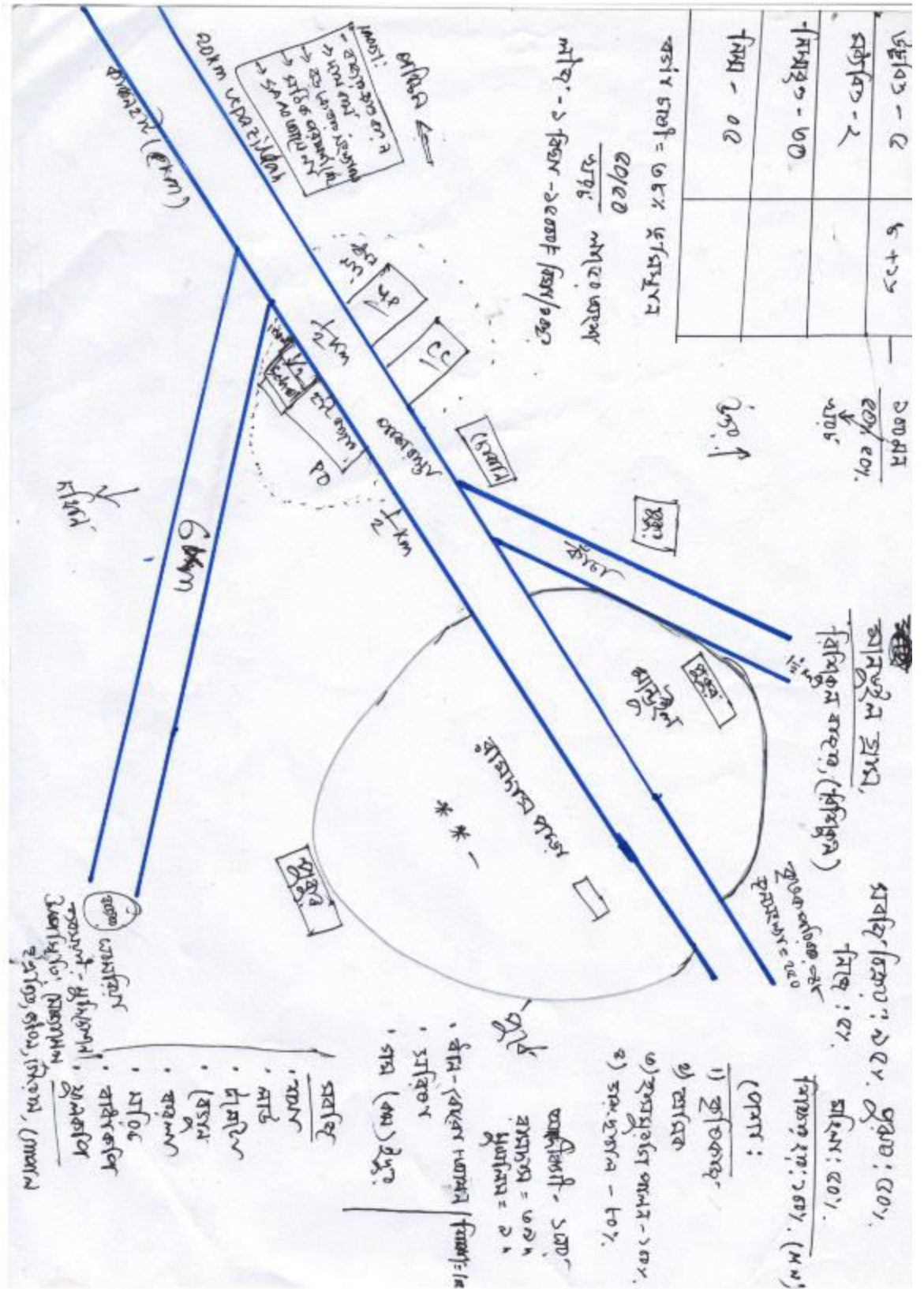


Figure 7: Venn Diagram for service mapping, wealth mapping of the study area

3.2.5. Households expenditure and income pattern:

Table 6 shows expenditure pattern of households across the wealth groups mainly poor and extreme poor together. FGD respondents spent BDT203,000 per year in average and earn approximately BDT217,400; where food expenditure highest (37%) followed by grocery market (day shopping), agricultural activities child education and few others.

Similarly, most (80%) income generated from agricultural farming (field crops, vegetables and fruits), rest coming from day laborer, small trade and others.

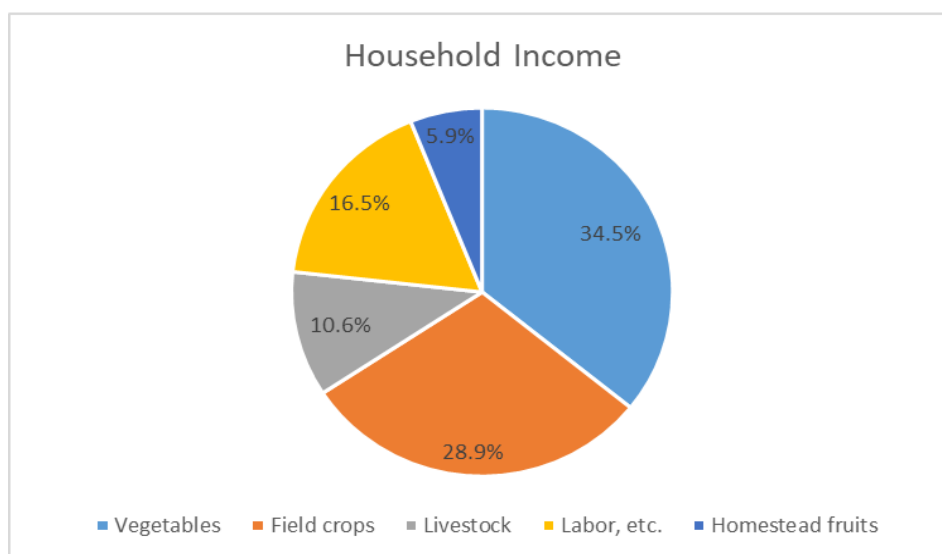
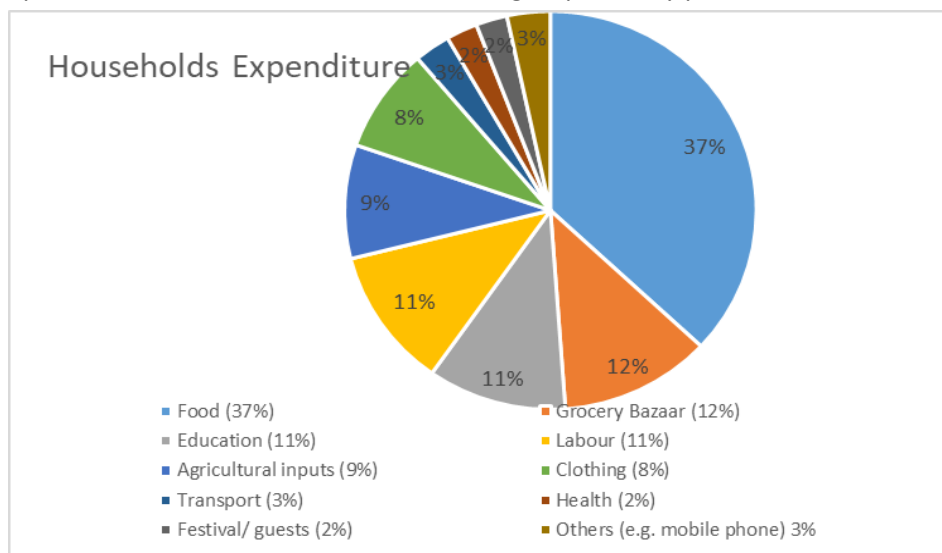


Figure 8: Household income and Expenditure

Table 6: Comparative household expenditure and income of the study respondents

Item of the description	Amount (BDT)	% of share
Food	75,000	37%
Clothing	17,250	8%
Grocery Bazaar	24,150	12%
Health	5,025	2%
Education	22,175	11%
Transport	5,750	3%
Agricultural inputs	18,750	9%
Labour	23,000	11%
Festival/ guests	5,000	2%
Others (e.g. mobile phone)	6,900	3%
Total	203,000	100%
Yearly income (BDT)		

Item of the description	Amount (BDT)	% of share
Field crops	62,750	28.9%
Vegetables	75,100	34.5%
Homestead fruits	12,800	5.9%
Livestock	22,950	10.6%
Labor, etc.	35,800	16.5%
Small trade	8,000	3.7%
Total	217,400	100%
Savings	14,400	

3.2.6. Sources of Food Income

Households across the wealth groups mainly obtained their food from a range of sources available to them. Extreme Poor and Poor households relied on market purchase of food, labour exchange and food assistance. while the middle households relied on their own production of crops and vegetables. The main income sources were labour exchange, crop and livestock sales, loan, and remittance.

3.3. Present Livelihood Options of the study areas

The study team conducted 8 FGDs with SAFE beneficiaries (mostly marginal, poor, and ethnic community) women and men separately in the study areas and found there were 16 various livelihoods practices in the study areas.

Table 7: Present Livelihoods options in the study areas

Agriculture - crops	75%
Tomato production	65%
Vegetable production	60%
Chicken rearing	35%
Day Labour (off farm + on farm)	28%
Auto driver/ Rickshaw pulling	13%
Small business	12%
Dairy	12%
Goat Rearing	10%
Handicrafts	5%
Auto driver	4%
others	4%
Pig/Oyster	3%
Mechanics	2%

The study team observed some of respondents having multiple livelihoods options,

majority having only single options, this made them vulnerable and irregular income thus they remain hard core poor and vulnerable especially ethnic peoples. However the team calculated agriculture highest income option followed by vegetables, tomato, fruits, homestead gardening, chicken rearing, day labour, goat, dairy, handicrafts and others shown in Table 7

Day labour (off farm and on farm, transportation, loading, unloading etc.) work. Small business which is basically vendor type with goods of around Tk.2500-5000 they sell in neighbouring villages. Tomato production usually sold to the market traders and having good potential for processing.

Numbers of livelihoods options are found during the survey most are involved in single work like agriculture farming or chicken rearing or beef fattening or goat rearing or home gardening, or such works. From the respondents, agriculture farming, rickshaw pulling, auto rickshaw pulling, occupations are mostly done by males. Chicken rearing, tailoring, kitchen gardening, handicrafts are mostly by the females. A very few of the respondents are involved in two occupations like agricultural farming and home gardening and that is basically a rare case.

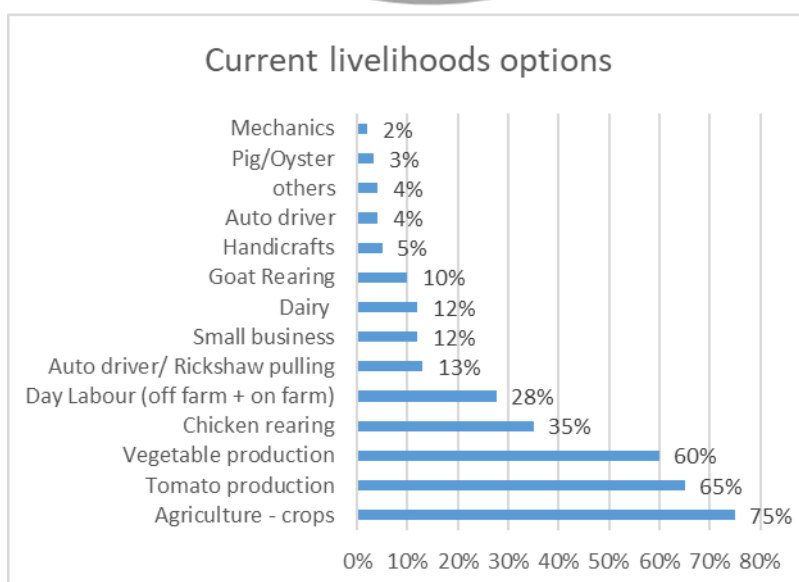
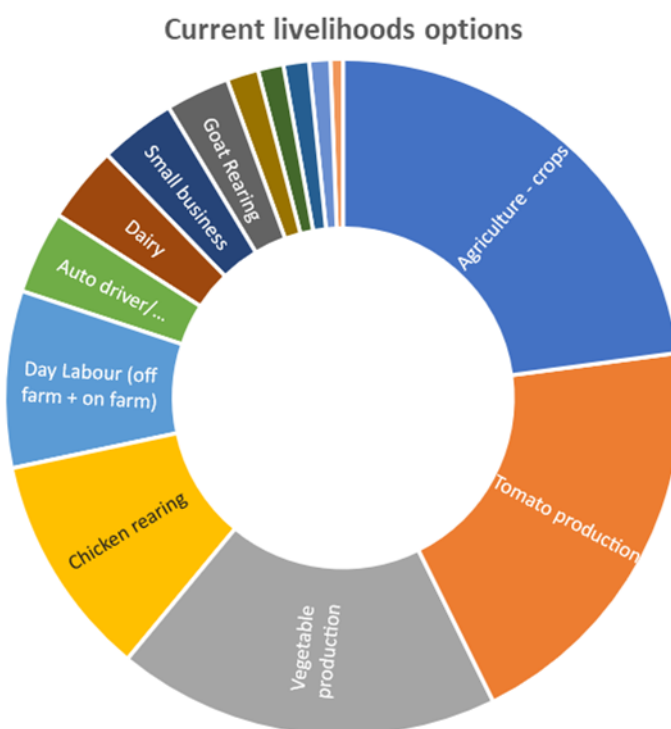
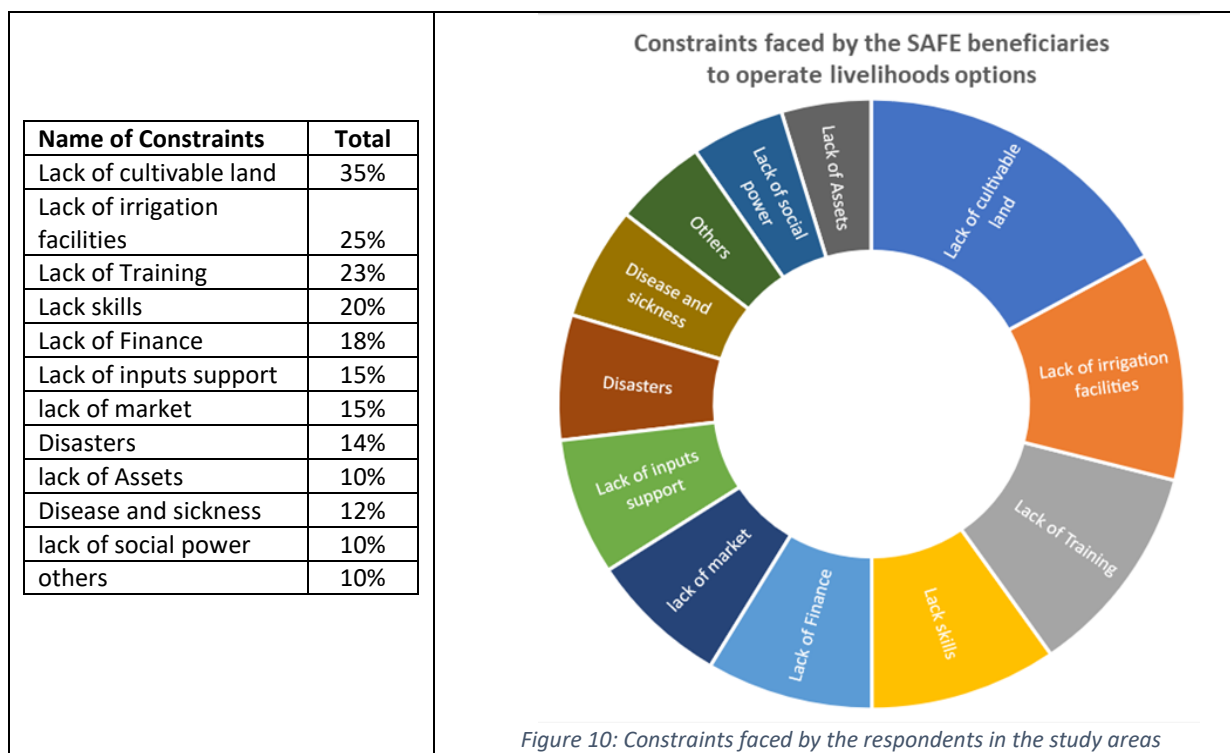


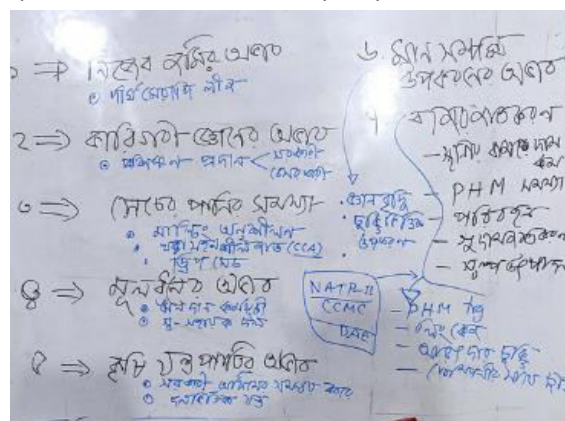
Figure 9: Current livelihoods options in the study areas

3.4. Constraints of the livelihood options by the marginal and poor farming communities

Numbers of constraints are noticeable in the areas like lack of cultivable land, even lack of irrigation facilities and access, lack of training, lack of finance, lack of skills, lack of market, lack of assets, diseases and sicknesses, and disasters. Of them, lack of cultivable land and who have land having lack of irrigation facilities, training, lack of finance and marketing are found the highest drawback for operation of livelihoods options.



Due to lack of cultivable land, inadequate finance, no access to market, and no technical knowhow most households are dependent on seasonal labour and poorer households mostly rely on unskilled work i.e. cannot start any long time IGAs. These constraints acute for women headed families and ethnic families. Additionally, Lack of technical knowledge of vegetable growers, post-harvest management, absence of storage, limited access to market, farm machineries, and poor transportation especially the ultra-poor and marginal ones, on cultivation technique, fertilizer management and disease management forces them to remain at low productive level. Inadequate supply and unavailability of premium quality seeds, inputs are hampering the productivity of ultra-poor and marginal farmers.



Women, herself consider as burden as they are not recognized by the society with scanty of livelihoods options because they are not involved in income generation. Their social participation is less acceptable or even not at all in many cases. Additionally, there are some specific issues for

women participants such as women does not have the skill specific IGAs, limited social participation and in decision making process, lack of market access for women and especially for ethnic peoples.

Table 8: Barrier faced by the women

Barrier for women	% of the respondents
No IGA options	35%
Limited Social participation	25%
Lack of Skill development (training)	30%
No participation in decision making	30%
Disaster	16%
Limited mobility to go out	12%
Less Marketing access	24%
Food insecurity	15%
Malnutrition (less food for women)	10%
No social recognition	25%

3.5. Ways to Overcome Barriers

Where there is problem, there is solution. Some recommendations were noted during the FGDs. IGA or Income Generation Activity is the most important issue to overcome above barriers, among few others mentioned in Table below

Awareness on gender specific issues, economic support, engagement with IGA, assets/ inputs support, IGA specific training and skill development, access to market, access to financial inclusion, inclusiveness of the ethnic peoples in decision making process, and value chain specific skill development and market access

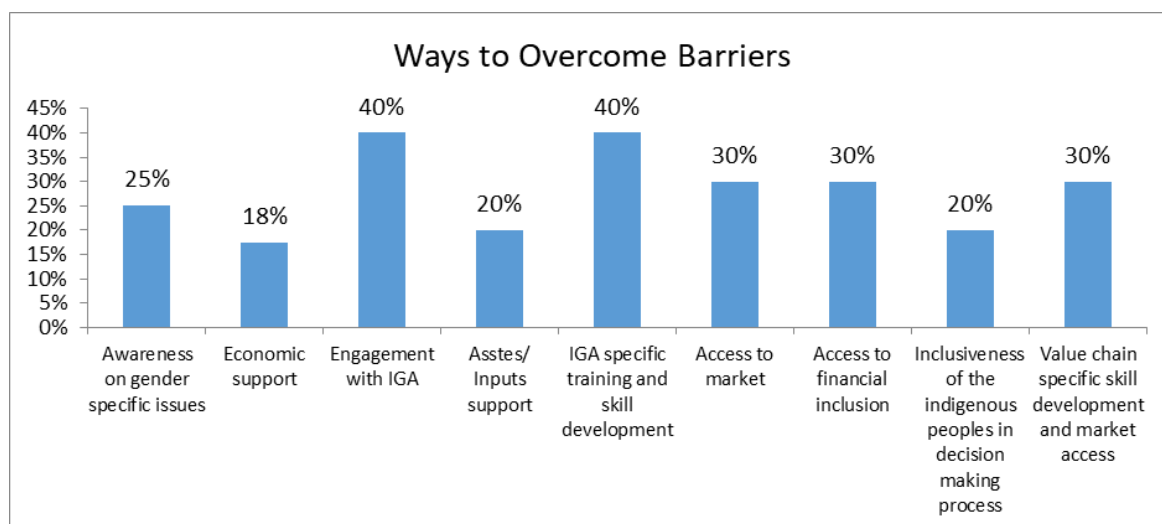


Figure 11: Ways to overcome barriers

3.6. Selection of Potential IGAs

In order to identification and selection of potential IGAs / livelihoods options in the study areas (Godagari), the team used check list and exercised in a mini workshop with project staffs, government official (DAE, DLS). There were some criteria includes current market trends, possible employment opportunities, market demand, outreach, skills of the local community, their involvement, growth potentials, support services, aspirations, business enabling environment, and women priority. The team also assessed opportunities, constraints, SWOT of the selected IGAs to determine feasibility. Same checklist also exercised with local community during FGDs. It was good that FGD participants are fairly homogeneous group with similar skill sets and backgrounds, and a significant proportion of the is already engaged in income-generating activities (IGAs) in farming, livestock rearing, trading, that helped to team for market analysis and financial assessment.

Considering national and international context the research team selected some of IGA assessment criteria for identification of potential IGAs and ranked in consultation with GBK team. The study team conducted a mini workshop with SAFE staff and GBK team. Weightage was assigned against the selected criteria/checklist for the ranking of potential IGAs for further in-depth analysis. Primarily, a desk review was conducted with the given necessary information to select IGA and methodology for the selection of IGA. As a first step, data and profiles collected from different sources, e.g. DAE, DLS. BBS, NGOs and other organizations working in the study areas. Indispensable to collect complementary information directly from the local community people, farmers, market actors through FGD, KII, observation, different market maps, seasonality mapping, service mapping, checklist fill-up, questionnaires, interviews were conducted and that attributed to the assessment. However, in consultation with GBK, the team set 10 criteria for the selection of potential IGAs as follows:

Table 9: Selection criteria of the IGAs

Criteria	SL	IGA/ Value Chain Selection Criteria	Score
Gender-related criteria (20%)	1	Inclusivity of Women	20
		1. High share of women's participation/employment	
		2. Opportunities for women to participate fully in the VC	
		3. Low barriers of entry for women	
		4. Considered socially appropriate for women	
Market demand (40%)	2	Market demand	20
		1. Strong effective demand for product	
		2. Demand is increasing – unmet demand	
		3. Further value addition or processing potential	
	3	Partnership potential	10
		1. Partnership potential with private sectors actors	
		2. Input/output market, service providers and financial service potential	
4	Beneficiary outreach	10	
	1. Number of producers/beneficiaries, potential to engage market actors		
Impact Potential (20%)	5	Income potential for farmers	10
		1. Potential for rapid growth	
		2. Number of beneficiaries (producers) who would benefit	
	6	Potential for employment generation	10
		1. Potential for employment	
7	Nutritional Impact	5	
	Nutrition for women		
	Nutrition for child		

Criteria	SL	IGA/ Value Chain Selection Criteria	Score
	8	Availability of Business Development Services (BDS)	5
		1.Linkages with government services, and favorable policies 2. Existing programs that can provide synergy and complementary activities.	
	9	Environmental sustainability	5
		1. Environment friendly and suitable for climatic situation	
	10	Scope of intervention by the project for scale up	5
1.Opportunity for the project to work with the VC to scale up over time			
		Total	100
		Rank	

As per the field information, relevant interviews, meetings, FGDs, market observation, and consultation with the SAFE/GBK team following Table 10 and Table 11 has shown potential IGAs and its rank as per selected criteria. The criteria are shown in above Table 9.

Finally, tomato production and processing ranked high potential IGAs in the study areas, which has god demand, outreach, processing possibilities, women participation, employment creation and family nutrition as well. Year round and processing variety cultivation having good profit and market demand. In this case group effort and linkage with processors, external wholesale market traders are required. After tomato, vegetable cultivation ranked second highest, followed by chicken rearing, goat rearing, beef fattening, dairy (both fresh and semi-processed), pigeon, nokshi kantha, handicraft (including tapestry, embroidery, cap making, fishing net, knitting) tailoring, petty business (small trade), food processing, tea stall with snacks, mechanics (mobile phone, electrical work, house repairing etc.), barbershop, ranked 2nd to 16th respectively.

Homestead gardening also good market potential after mitigating family nutrition. Homestead is a great place for household food access, diet, and nutrition.

Table 10: Potential IGA score and rank

	Name of IGAs	Market Demand	Outreach and partnership	Gender-Women participation	Impact - Income and employment	Environments	Inputs and services	Other - Cross cutting - nutrition	Total Score (out of 700)	Rank
1	Tomato production	90	75	75	95	80	80	70	565	1
2	Vegetable farming	90	80	70	90	80	80	70	560	2
3	Chicken/ Duck rearing	85	90	90	85	85	85	30	550	3
4	Beef fattening	80	60	90	80	85	60	30	485	5
5	Goat rearing	80	70	85	80	80	70	30	495	4
6	Dairy	80	60	70	70	65	65	75	485	5
7	Pigeon	80	55	85	75	65	80	35	475	7
8	Tailoring	65	50	100	70	95	65	0	445	8
9	Nakshi kantha	60	60	95	65	90	70	0	440	9
10	Handicrafts	70	60	85	70	85	65	0	435	10
11	Small Trade	70	50	60	80	90	65	0	415	11
12	Pig rearing	50	50	75	90	65	70	15	415	11
13	Auto Driver	80	60	0	95	70	60	10	375	13
14	Oyster Shell	40	30	80	45	75	40	40	350	14

Table 11: Selected IGAs

Name of IGA		Rank
Tomato cultivation		1
Vegetable farming and trading		2
Chicken/ Duck rearing trading		3
Beef fattening		4
Goat rearing		5
Dairy		6
Pigeon		7
Tailoring		8
Nakshi kantha		9
Handicraft		10
Small Business (petty business)		12
Tea Stall		15
Pig rearing		16
Auto Driver		17
Mechanic		18

Picture Source: From Google download

3.6.1. Justification of the livelihood's options

Table 17: Justification of Livelihood Options

	Homestead gardening	Tomato and vegetable production	Poultry	Cattle Rearing	Handicraft	Goat	Small Bus	Rice and Farming
Market demand	Very good in market potential, access to market, quick win	Ready market demand, easy to access to market, quick win	Very good in market potential, quick win,	Very good in market potential, access to market	Very good in market potential, access to market	Good in market potential, access to market	Ready market and expanding with population	Traditional market
Impact Potential	Short duration income, easy to start, minimum inputs Women employment Family nutrition Regular in food security	Short duration income, easy to start, year round production minimum inputs	Family nutrition Regular in food security	Long time impact	Women engagement in the IGA	Women engagement in the IGA easier to maintain	In house business	Provide food security
Cross cutting	Environment friendly Full family can work	Environment friendly	Women empowerment		Environment friendly	Link with government safety net program	Employment creation	Environment friendly
Pattern of income	Moderate to high daily/ weekly seasonal income	high income potential seasonal income Processing potentiality	High to moderate daily income from egg sales, depending on stage in laying cycle	Small daily income from milk sales Offspring would be assets Use of dung reduces TUP members' fuel costs	Moderate to high daily/weekly	Lump sums of cash income at time of sale of kids	Regular income	Food storage for a season
Investment needs	Low investment required	Low investment required	Low Investment required Successful TUP can manage from savings	Medium Initial investment required	Low investment required	Medium investment costs Main investment of TUP is time and labour rather than cash	Investment required	Land required
Level of technical difficulty	Medium-high skill	Medium-high skill	Lack of proper daily management can greatly affect	Low skill required • Cows are easy to manage;	Technical skill required	Low-medium skill Management is not complex but lack of	Market access required	Inherent technology

	Homestead gardening	Tomato and vegetable production	Poultry	Cattle Rearing	Handicraft	Goat	Small Bus	Rice and Farming
			profitability	lack of proper daily management is not likely to greatly affect profitability		adequate care attention to goats can affect profitability		
Time and labour intensity	Part-time work Allows time for other part time work	Labour intensive and create new employment	Part-time work • Strict scheduling • Male headed members are useful for selling eggs in market and collecting feed	2-3 hours work per day, allowing much time for other work Largely home based	Full time employment	2-3 hours direct workper day, but goats need supervision Largely home based	Full time work	Seasonal agri work
Social externalities and other problems	Land required	Land required	Smell of poultry may disturb proximate neighbours	As cows multiply, TUP lack space to accommodate them, particularly if living in others' houses	In-house business Market access required	Goats are prone to destroy others' property, causing tension and quarrels with neighbours	Political influence, local elites may be threat	Ensure food security

3.7. Different IGA/ Livelihood options/ value chain / market Actors

The Value Chain method is a systems approach that seeks to understand the needs of connected “core chain actors” (i.e., those who buy and sell products from farmers, traders, processors, wholesalers, and retailers, as well as consumers) and to identify the key business development services—such as input suppliers, advisory services, and financial services—that support the competitiveness and efficiency of value chain operations.

A **value chain** is a set of connected activities that work together to add value to a product while linking buyers, sellers, and markets. An **agricultural value chain** can be defined as the goods, services, and processes involved in an agricultural product moving from the farm to the final customer. This value chain is shown in few figures below.

The Value chain actors and context:

Marketing

There is a significant difference between the price what the consumers pay and the price what farmers get (as mentioned below Table 12). This means that farmers of the country are not getting the price at which products are sold in the market. The difference between market price at which consumer buy the agro-products and farmers’ price at which farmers sell their products to the intermediaries caused by the improper infrastructure of marketing system, lack of market information, improper transportation system and market governance. Decrease in profitability of farmers due to getting low price for their products lead to unwillingness among farmers to invest in this sector. To reduce the impact of intermediaries from the market, steps should be taken by the growers with the help of respective authorities from the government. A group approach, collective collection and sales, appropriate market & extension services can be established at the local level of the country. The collective and cooperative will perform as marketers for the farmers ensuring fair price for farmers and consumers and that must be controlled and monitored by the farmers/traders of local area. Proper management, capital requirement, marketing orientation programs and other activities must be considered as major issues in this system.

Market Actors	Brinjal	Pumpkin	Tomato	Bitter gourd
Farmers	15	9	18	15
Faria	18	11	20	17
Aratdar	20	12	23	23
Dhaka Paiker	26	17	26	26
Dhaka Aratdar	28	18	30	30
WS/Dhaka Paiker	30	21	34	34
Retailer	35	25	40	40

Inputs Supplier / Retailer:

Inputs Supplier / Retailer are providing inputs to the producers / farmers. Traditionally local inputs retailers are the agent of inputs supplying large companies and sale on behalf of them as an independent business owner. Input retailers are the main key service providers for producer/ farmers and have direct linkage with them.

Farmer:

Farmers are the producers of the vegetables Producers are the main key value chain actors in the market system. They produce different types of vegetables and bring their products to sell in their local market nearby their village areas or some time sold direct from the field. The amount and types

of vegetables differ from season to season. The producers usually farmer who farming e.g. land preparation, intercultural operations, seed sowing, transplanted, seed bed preparation, fertilizer & pesticide application, irrigation, timely harvesting and who after harvesting the produce performed the role of a seller in the market. The farmer sells 90% of their product to the local wholesaler/Faria and the remaining 10% for their own consumption or local retail market to retailers. Farmers are lack of modern knowledge on good agricultural practices, dealing with poor quality inputs and application knowledge, limited access to market. Farmers are lack of post-harvest management infrastructures causing wastages and poor quality of the produces and sold at a lower price to the market.

Aggregators / Paikers/ Bepari:

They are the market actors; collect produces direct from farmers locally as an individual owner. Sometime they work as agent of the large wholesalers, or processing companies. They have no fixed business premises. Bepari had no permanent shop. Usually they provide market information to the producers.

Local Aratders purchases their products from the farmers/baparis Basically, they fixed the price paid to the farmer at spot bargaining. Sometime very occasional Faria visited farmers' field and purchase direct for the field. They deal with the paiker or outside wholesaler. Local wholesaler sends their product lot to the different division mainly Dhaka, according to the market demand and market price. They also sell their product to the local market, but a little amount. They make a market margin of 15% to 25%. Usually local faria and traders' lack of knowledge about post-harvest management, no cool chain facilities, no grading sorting, and packaging facilities always rely on irregular labor and transportation system in the market; some of them have no knowledge about additives for increasing shelf life and transportation. Due to small volume handling less power in the market to bargain for price and quality. Local traders are lack of post-harvest management infrastructures causing wastages and poor quality of the produces and sold at a lower price to wholesaler in the market.

Faria:

A small trader who deals in products within three or four local markets and handles a small volume of products. A faria purchases products from farmers and sells them to either a bepari or direct to consumers. They are usually landless laborers or small farmers with no full-time work.

Bepari: A professional trader who purchases agricultural products from farmers or farias in the local market or village. This group handles a larger volume of products than Farias. Beparis sell their products to Aratdars.

Aratdar:

Aratdar is a commission agent in a large market. The Aratdar are licensed traders. The Aratdar are relatively big traders and then handled relatively larger volume of products than that done by the other traders like Bepari, Paikers, and aggregators. They had fixed business premises. Most of the Aratdar are independently organized and self-financed. They employed both labors and other staff on daily wage and salary basis for performing various functions. The assessment team could not find any women aratdar in the market. An Aratdar serves as a fixed commission agent with a fixed establishment. They operate between the Bepari and retailers, charging a fixed commission for providing storage facilities.

Local wholesaler/Faria:

Local wholesaler purchases their product from the farmer. Basically, they fixed the price paid to the farmer at spot bargaining. Sometime very occasional Faria visited farmers field and purchase direct

for the field. They deal with the paiker or outside wholesaler. Local wholesaler sends their product lot to the different division mainly Dhaka, according to the market demand and market price. They also sell their product to the local market, but a little amount. They make a market margin of 15% to 25%. Usually local faria and traders lack of knowledge about post-harvest management, no cool chain facilities, no grading sorting, and packaging facilities always rely on irregular labor in the market, some of them have no knowledge about additives for increasing shelf life and transportation. Due to small volume handling less power in the market to bargain for price and quality. Local traders are lack of post-harvest management infrastructures causing wastages and poor quality of the produces and sold at a lower price to wholesaler in the market.

Wholesaler

The wholesalers are both licensed and non-licensed traders. They were relatively medium traders like Bepari and they handled relatively larger volume of produces than that done by other traders. They are independently organized. Many Wholesaler have own fixed premises are not. Wholesaler usually sale produces to the retailer.

- **Divisional wholesaler:** Divisional wholesaler collects their product from local wholesalers. They deal with a large amount of vegetable. Actually, they act like a divisional distributor mainly from Dhaka. They sell their product to the regional wholesaler. They serve as a fixed commission agent. They also sell their product to the local retailer. They make a margin about 5% to 10%. Similar like other traders wholesalers do not have sales platform, everyday changing markets and locations, lack of knowledge on post-harvest management, no cool chain facilities, no grading sorting, and packaging facilities always rely on irregular labor in the market, no transport facilities, sharing transport with few others wholesalers, limited volume to bargain with next level actors in Dhaka city. Wholesalers are lack of post-harvest management infrastructures, poor transportation causing wastages and poor quality of the produces and sold at a lower Aratdars at large city level market.
- **Regional wholesaler / Dhaka Level:** Regional wholesaler collect product from the divisional wholesaler. Sometimes they collect their product from local wholesalers. They make a market margin about 5% to 10%. Wholesalers do not have sales platform even own space, immediately sold to the retailer, everyday changing markets and locations, no long time or formal relationship with the buyers, lack of knowledge on post-harvest management, no cool chain facilities, no grading sorting, storing and packaging facilities always rely on irregular labor in the market made always in risk. Wholesalers are lack of post-harvest management infrastructures causes high wastage.
- **Retailer:** Retailer is an end connector to market. They are directly linked to the consumer. They purchase their product from the wholesaler and sell to the consumer and make a market margin about 15% to 20%. Most of retailer have own space to sale product in the selective markets (in Dhaka North City Corporation have 300plus retail market). Retailers continuously putting water, with others making the product visibly good which dangerous for safe, though they lack of knowledge on post-harvest management, no cool chain facilities, no packaging facilities, no storage facilities. Retailers are lack of post-harvest management infrastructures causing wastages and poor quality of the produces.
- **Super Market/Shops:** During these days' super shops are getting popularization and in increasing trend, e.g. Agora, Shwapno, Mina Bazar, UniMart, Prince Bazar etc, those have multiple outlets in different locations, at their own brand. Agora Shwapno have own procurement channel vegetables collection points down to the farmers. Apart from this they have selected suppliers to sold fresh produces to the outlets. The super marketers have 32

member's association even Shwapno have 135 outlets, Agora 12, however they are selling 4-5% products to the market especially Dhaka.

Market Channels

Marketing channels and market actors vary widely with the types of produce and production locations.

There are five intermediaries in the major distribution channel:

Faria: A small trader who deals in products within three or four local markets and handles a small volume of products. A faria purchases products from farmers and sells them to either a bepari or direct to consumers. They are usually landless laborers or small farmers with no full-time work.

Bepari: A professional trader who purchases agricultural products from farmers or farias in the local market or village. This group handles a larger volume of products than Farias. Beparis sell their products to Aratdars.

Aratdar: An Aratdar serves as a fixed commission agent with a fixed establishment. They operate between the Bepari and retailers, charging a fixed commission for providing storage facilities.

Retailer: Retailers are the last link of marketing channel. They purchase products from Beparis through the Aratdars and sell them direct to consumers.

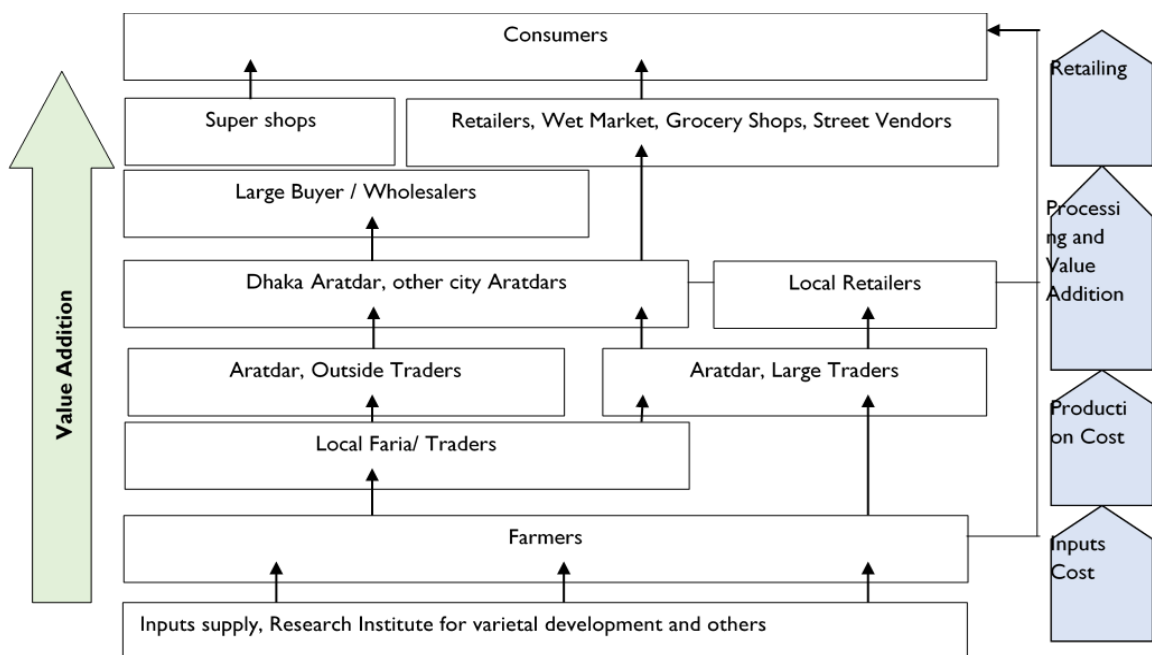


Figure 12: Typical agro-VC map

Seasonal Effects in the agricultural based value chain

Vegetable trading is every day and year-round business. Both supply and consumption remain highest during the winter session (November to February) as the price decreases due to the

availability of different varieties of vegetables. During the summer season, supply of vegetables decreases and price also becomes relatively higher. Demand for seasonal vegetables remains high throughout the year.

SWOT analysis of Vegetables and crop cultivation

Strengths <ul style="list-style-type: none"> • Have traditional skills and technologies • Improved and high yielding seeds and other good quality inputs are available in the market • Some of them have capacity to invest in this purpose if get favourable business environment. • Previous knowledge on vegetable trading 	Weakness <ul style="list-style-type: none"> • Irrigation facilities and substandard quality of the inputs • Fragile supply system in the vegetable market • Inadequate skill on proper business management and accounting. • Lack of Knowledge on GAP • Poor quality of Inputs and application • Absence of Extension services • Poor post harvest management and packaging • Inappropriate transportation
Opportunities <ul style="list-style-type: none"> • Huge unmet market demand over Bangladesh and for export • Low investment and immediate return of investment. • Possibility to develop supply chain with the nearest markets to strengthen supply chain. 	Threats <ul style="list-style-type: none"> • Perishable in nature if any unsold possibly to rotten • Pest and diseases • Natural calamities and disaster

Figure 13 SWOT analysis for Vegetable Trading

Constraints and commercially viable solutions/ intervention along with value chain

Table 13: Summary of Constraints and Opportunities in crops and vegetables

Stage of VC	Constraints	Opportunities	Probable interventions
Pre-production	Absence of business-oriented crop planning (business plan) for commercial vegetable (tomato) production	Pre-planning and effective supply chain management	Training and capacity building on business planning as per market demand
Inputs supply	Poor quality Inputs and its application Unavailability (and also timely delivery at retail point) of good quality inputs	High Demand of good quality inputs Agro-input Companies	Strengthen linkage between input suppliers and farmers with extension services Facilitate to improve distribution channel of reputed agro input companies Facilitate and linkage to get good quality commercial varieties of seed, good quality fertilizer, pesticides (linkage with input supplying companies)
Production	Lack of knowledge on modern crop cultivation practices	Agro-Inputs companies	Facilitate producers and VC actors on capacity building and training on modern farming practices (GAP) through private sector enterprises
	Inadequate extension services	Modern Agricultural Practices	Facilitate and capacity building selected VC producers, and VC actors on GAP

Table 13: Summary of Constraints and Opportunities in crops and vegetables

Stage of VC	Constraints	Opportunities	Probable interventions
		Good quality of inputs, good farming practices	Facilitate and linkage building with agro inputs retailers, and output traders (supermarkets) Strengthen linkages with DAE
	Pest infestation in high quality vegetable production	Agro-Inputs companies	Training on disease and pest management through private sector players/actors
Harvest and Post-Harvest	Poor knowledge and practices on harvesting and post-harvesting management results highwastage and lower income	Appropriate post-harvest management Processors, exporters and super shops involvement	Training and capacity building on post-harvest management through private sector enterprises (e.g. processors, exporters, super shops, large traders)
	Poor packaging and unavailability of packaging material (Plastic crates)	Proper packaging from farmers field to the end market	Facilitate and training of proper packaging and linkage with packaging materials providers
	Lack of processing industries in the study area to add value to the products	Value addition	Linkage with the processing industries for sales and marketing
	Inadequate cool chain management from farm field to the end market	Fresh vegetable fruits to the market at a premium price	Facilitate to raise awareness and capacity building on cool chain management
Processing	Lack of modern machineries Product formula Poor transport facility	Low cost modern machineries Value addition Product diversification	Facilitate to form contract farming with processors, aggregators and processors Product diversification
Access to Market	Poor market infrastructure and inadequate space for local producers and post-harvest management activities		Market Infrastructures development
	Lack of Market information	High market demand Export possibilities	Provide regular market information through ICT
	Absence of contract farming	Effective supply chain and trustworthy relationship	Facilitate to start formal contract farming with processors, large scale buyers and exporter
	No direct market linkage with market actors to get profitable price	Effective supply chain and trustworthy relationship	Facilitate linkage among the large scale traders, processors and supermarkets
	Lack of fair price	Win-win business relationship	Facilitate to get appropriate market information through ICT and other buyers
Access to Finance	Lack of access to finance restricts targeted farmers to apply agro-inputs in appropriate time and quantity.	Processing companies Agro inputs companies Contract Farming	Facilitate to easy access to finance with MFI, NGOs and Banks
	Inadequate access to finance for traders and Post-harvest management	Financial transaction through financial institute	Facilitate and advocacy on access to loan for traders with financial institutes
	Absence of institutional financing in perishable product business for the VC actors	Intuitional financial business models and tools	Advocacy and linkage with the relevant financing institutes

Table 13: Summary of Constraints and Opportunities in crops and vegetables

Stage of VC	Constraints	Opportunities	Probable interventions
Organization and management	Inadequate market monitoring system	Market information cell	Strengthen market monitoring system by DAM and Hortex together
	Weak producers group coordination with market committees	Strengthen producer groups	Facilitate to strengthen relationship trust, and connect with VC actors and market committees
	No formal contract among the VC actors	Effective supply chain through contract farming business model	Facilitate to form contract farming production system with Large scale VC actors with good relationship, contact, and trust
	Lack of relationship, trust, contract and contact among VC actors	Effective supply chain through contract farming business model	Facilitate to strengthen relationship trust, and connect with VC actors and market committees
Consumers	Lack of awareness on safe food gap in domestic market	Safe food demand	GAP Standards and branding
ICT	Limited availability of farmer friendly ICT tools and Channels Farmers' lack of knowledge about ICT tools and Channels	Tracking and use of ICT tools in production, marketing and sales	Facilitate to introduce ICT apps and tools
Infrastructure	Transportation cost is high	Proper packaging and transportation facilities through private sector enterprises	Facilitate to use cool van, and group transportation system by private sectors
	No Cold Storage facilities	Cold storage business	Facilitate to establish multipurpose cold storages through private sector enterprises
	Insufficient space and equipment's for washing, sorting, grading etc.	Fresh and good quality product in the market	Facilitate to advocacy with the market committees to allocate more space in the market
Regulatory	Lack of product standard	Introduce compliances	Facilitate to advocate for the selected product quality specifications
	No quality control and Quality assurance policy	Export of the selected products	Establish QA/QC cell in the DAE
	No quality certification agency	GAP certification by Hortex	GAP and other quality compliances certification system to be established

Risk Impacting Farmers and other actors during the strengthening of vegetable VC

Table 14: Risk Impacting Farmers and other actors during the strengthening of vegetable VC

RISK	Input Suppliers	Farmers	Buyers/ traders	Processors	Distributors
Weather Related Risks	Demand for inputs repayment for inputs on credit	Planting decisions Yield and quality, Income decline	Availability, price, quality of products Logistic costs	Availability, price, quality of products Logistic costs	Availability, price, quality of products logistic costs
Natural Disasters	Demand for inputs in this and subsequent	Yield and quality farm asset loss and income decline	Availability, price, quality of products logistic costs	Availability, price, quality of products Logistic costs	Availability, price, quality of products Logistic costs Cost to

Table 14: Risk Impacting Farmers and other actors during the strengthening of vegetable VC

RISK	Input Suppliers	Farmers	Buyers/ traders	Processors	Distributors
	year Repayment for inputs on credit				develop new supply sources
Market Related Risks	Demand for inputs Repayment for inputs on credit	Planting decisions Input use Yield and quality Income decline	Availability, price, quality of products	Availability, price, quality of products	Availability, price, quality of products
Logistics Related Risks	Demand for inputs in current and subsequent year (or season)	Input access and use yield and quality post- harvest losses Income decline	Availability, price, quality of products Availability and price of other products Operating costs	Availability, price, quality of products Availability and price of other products Operating costs	Availability, price, quality of products Availability and price of other products Operating costs
Management and Operational Risks	Demand for inputs in current and future years	Inappropriate planting decisions and input use reduced yield and quality	Availability, price, quality of products Operating costs Product rejections	Availability, price, quality,	Availability, price, quality of products Operating costs Loss of brand reputation

The Way Forward

4. IGA Specific Recommendation – The Way forward

Introduction:

As per the survey, the team found most of the respondents and participants have experience on agriculture, trading, livestock rearing, tailoring, and small businesses. Participants from the community is eager to use their own skills, if they get a small chance. It can be life changing opportunities for them. On the basis of field information, FGDs, KIIs, and observation following the potential intervention can take into consideration for IGA i.e. livelihood options in the study areas (Godagai).

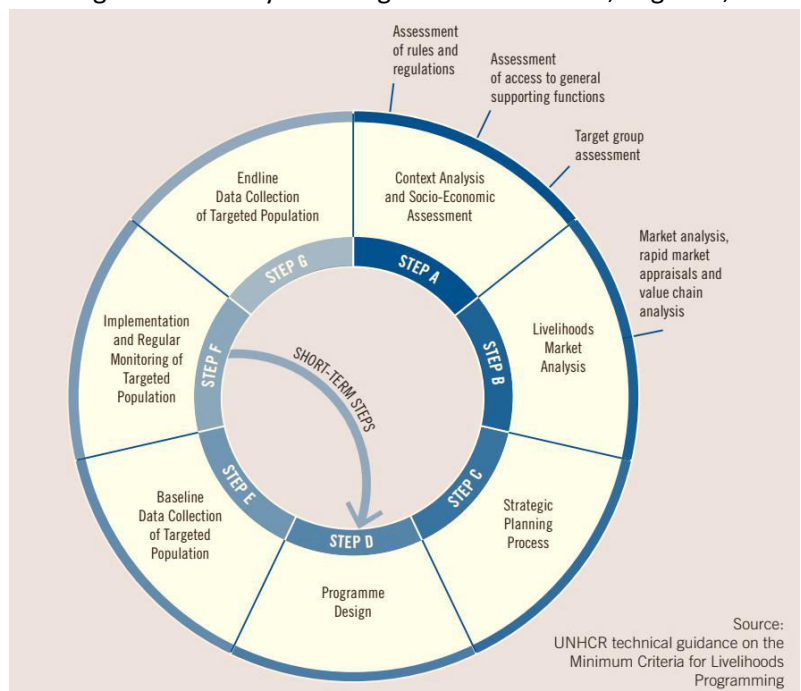
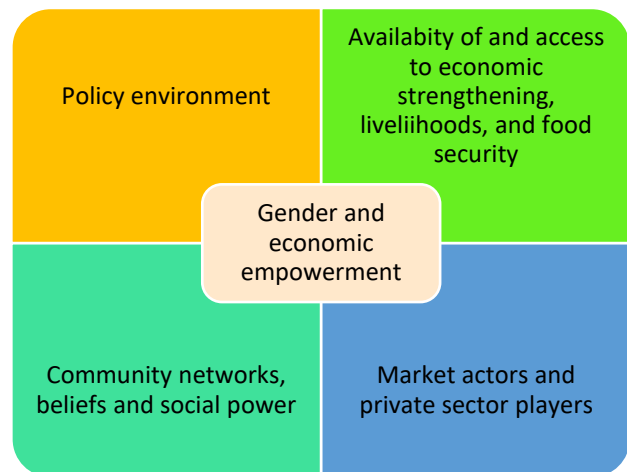
4.1.1. Situational Analysis

As communities analyse their own strengths, weaknesses and opportunities for change, a situational analysis (SA) can play a transformational role through increasing the awareness of all stakeholders as actors of change. From the national level to the community level, a SA provides a critical understanding of a wide array of interrelated factors—including contextual vulnerabilities, societal gender and cultural norms related to economic strengthening, livelihoods, and food security (ES/L/FS). The analysis of these interrelated factors through SA helps to inform a more context-specific approach to the design of livelihood programs.

The SA is the starting point for program design; its results inform decisions on customizing SAFE’s approach to specific local communities especially ethnic peoples in the study areas. Furthermore, the SA also is intended to support the development of national capacity and the policymaking processes.

The SA is divided into several sections viz. target community and targeted beneficiaries, regional, and the national level analysis, and it includes five primary components: 1) policy environment, 2) availability of and access to ES/L/FS, 3) community networks and cultural beliefs, 4) market actors and private-sector players, and 5) gender.

Developing a preliminary list of government, private-sector and civil society actors that provide or are relevant to ES/L/FS services in the catchment area¹ is a critical first step in this process. Strengthen relationship of SAFE stakeholders and beneficiaries and initiatives that offer opportunities for synergy with the drivers of the change makers, donors, and SAFE project learning, activities and outcomes.



4.1.2. Shifting from farmer production to value chain approaches

Development projects and extension teams can no longer simply assist farmers to produce more, modern advisory services need to identify the commercial goals of farmers and help them to realize those ambitions of social and economic empowerment. This means that both field agents and farmers/beneficiaries (targeted community) need a range of skills that will support upgrades in organization, productivity and business acumen. Project implementation needs to make the roles and responsibilities on both sides (supply side and demand side) of an upgrading strategy clear from the outset. The advisory services need to fully understand the farmers and the farmers should play a lead role in their transformation on market-based solution like value chain strengthening. Agricultural services should plan around commercial gains both for producers, and market actors, so that all parties are investing at a level, that will lead to sustainable outcomes.

The Value Chain method is a systems approach that seeks to understand the needs of connected “core chain actors” (i.e., those who buy and sell products from farmers, traders, processors, wholesalers, and retailers, as well as consumers) and to identify the key business development services—such as input suppliers, advisory services, and financial services—that support the competitiveness and efficiency of value chain operations.

A value chain approach can increase gender equality, women’s empowerment and social cohesion. A gender-sensitive value chain approach can help reduce food insecurity, as women’s participation, enhance skills, bargaining power, market integration and reduce gender gap in the community. It can strength value chain efficiency as value chains are highly dependent on strong linkages and positive collaboration among actors, and women are important stakeholders all along value chains, though they are often invisible or overlooked. It can shift gender relations, increase or decrease women’s access to and control over income and/or lead to shifts in the balance of decision-making power at household and community levels given changes in men’s productive roles and earning capacity.

This approach is gaining favour with donors, companies and development teams, as the principles of the approach can be applied to a broad range of products, locations and types of farmers. The approach can be used for vulnerable farmers who are seeking basic market linkages with a local informal buyer and support more sophisticated producer organizations selling high quality produce to many formal buyers. The value chain approach involves more than solving specific farmer-based problems. It builds the capacity among business partners to address common constraints and builds relationships between individual actors, organizations, and firms that connect informal and formal worlds. When the value chain approach is offered to smallholder farmers, the process seeks to:

- identify markets that farmers can access and supply;
- identify value chain partners to support market access for smallholder farmers;
- enable value chain partners to become more competitive within a target value chain;

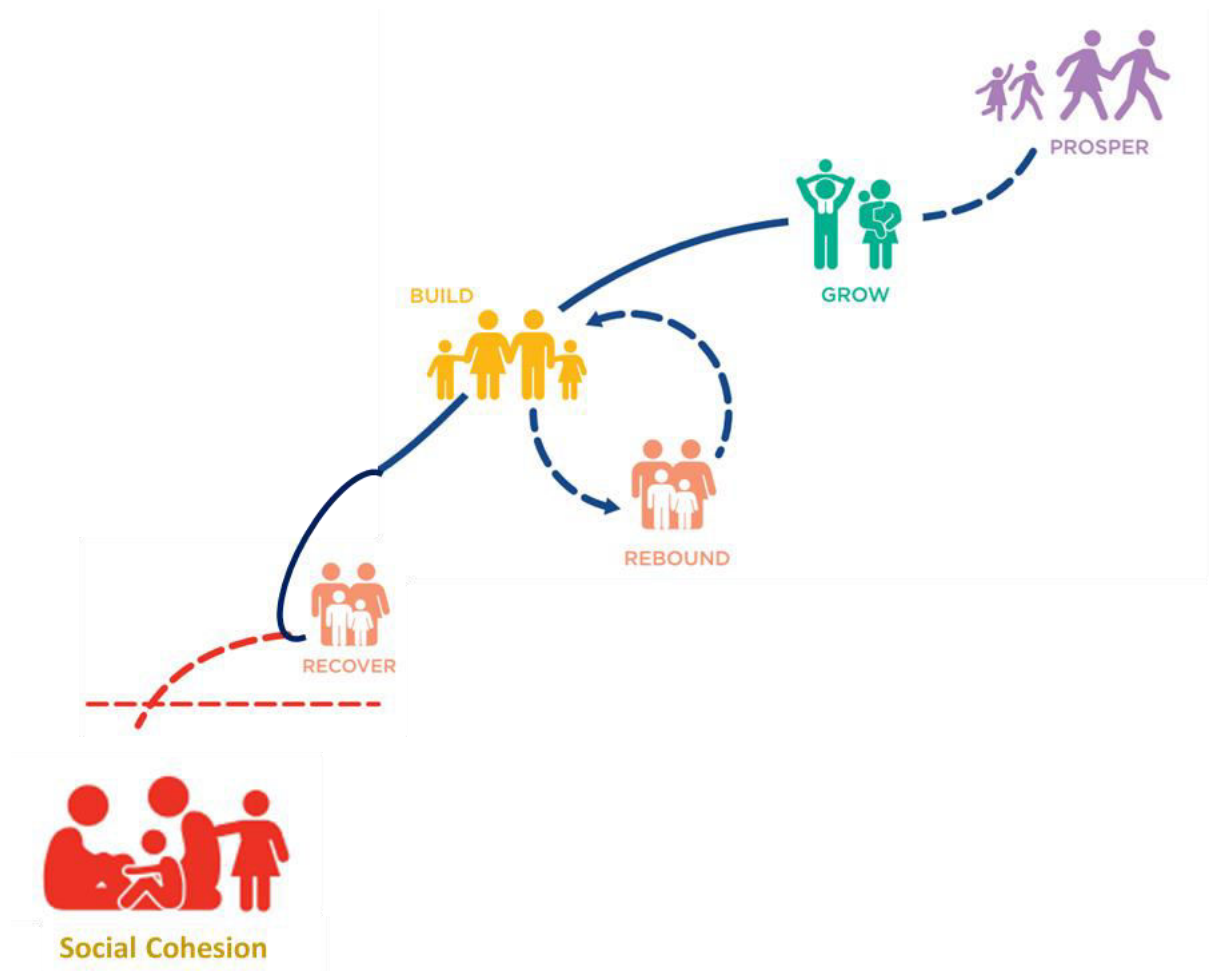


Figure 14: Steps of Value chain approach for SAFE beneficiaries:

Steps of Value chain approach for SAFE beneficiaries

Seeking stability: SAFE beneficiaries seems fragile and vulnerable to the community as they are land less, poor and less power to the community. Therefore, need strong social cohesion, bonding and stress recovery strength. Forming producer group, these groups are provided with technical assistance, skill development, technologies, linkage to produce more. These farmers are then helped to identify the first level of market, which is typically a local buyer in the nearby market or a trader. The intervention is regarded as a livelihood strategy, because it aims to assist farmers in adopting more sustainable production methods, promotes crop/enterprise diversification and support in other areas, such as savings and loans, as well as water and sanitation to stabilize farming families and build their resilience. This is essentially a **Livelihood strategy**, it supports farmers in achieving basic livelihood outcomes, e.g. productive activities, investment strategies and reproductive choices, **Figure 14**.

FROM MARKET LINKAGE TO VALUE CHAINS

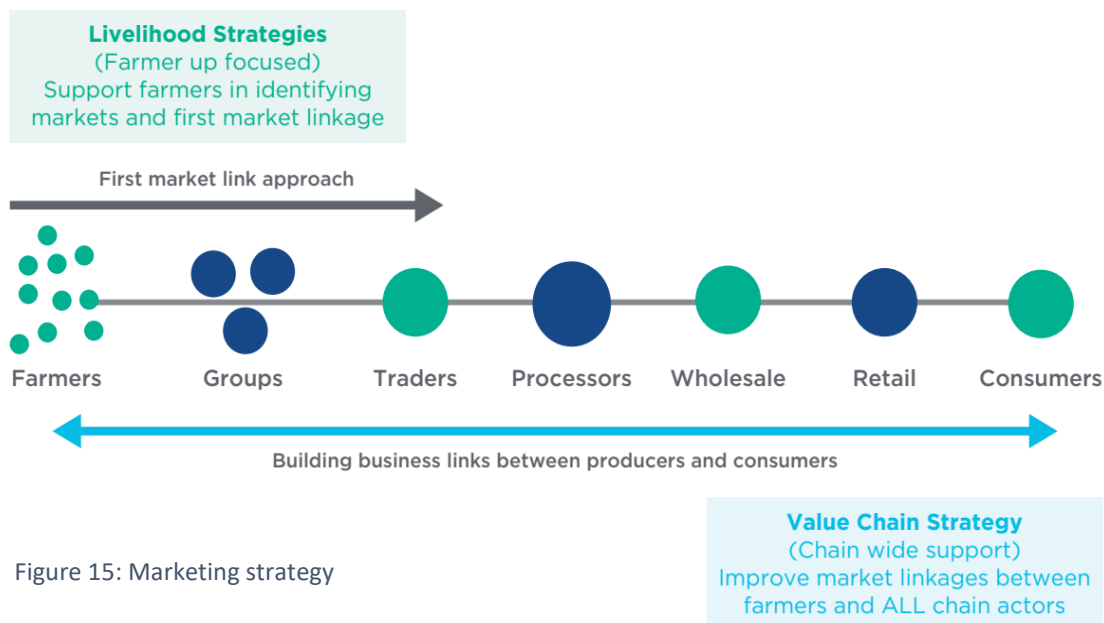


Figure 15: Marketing strategy

Seeking better business relations: Value chain upgrading is a much broader approach that identifies relationships between market actors that link producers with processors, wholesaler, retailer and/or consumers. This network brings together interested business partners, identify bottlenecks in the market system and find ways to improve their competitive advantage. Farmers are often a weak link in the chain and therefore value chain strategies will assist farmers, but this work is done with the ambition of improving roles and business relationships so that outcomes are developed within a more sustainable business framework.

BASIC THREE LEVELS OF A VALUE CHAIN

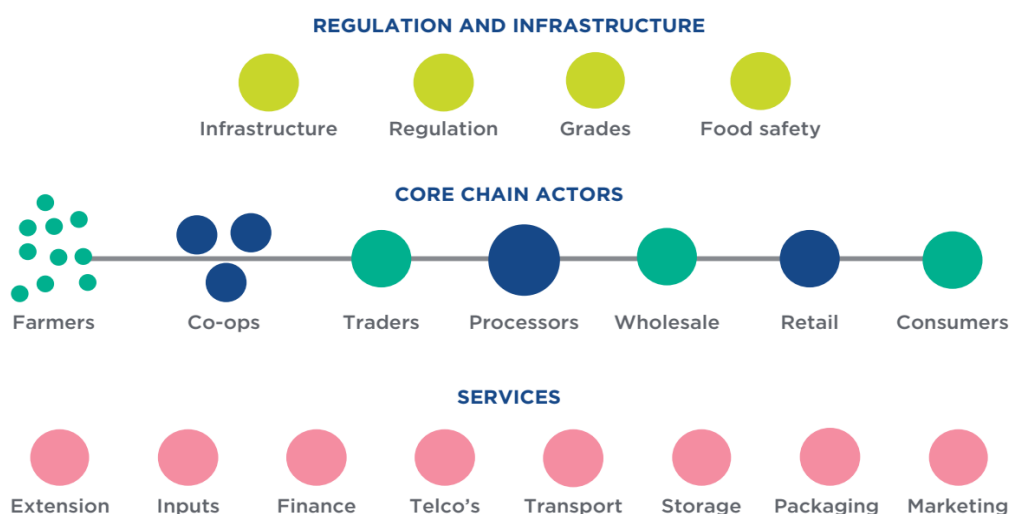


Figure 16: The Value Chain Structure with its three levels of actors

Market linkage to value chains

A **value chain** is a set of connected activities that work together to add value to a product while linking buyers, sellers, and markets. An **agricultural value chain** can be defined as the goods, services, and processes involved in an agricultural product moving from the farm to the final customer. This value chain is shown in Figure 15.

Value chain actors refer to the individuals, companies, organizations, and associations with a market chain or value chain that are involved in regulating, producing, buying, selling and providing services that enable products to move from farmers to markets where they are purchased by consumers. Depending on their position within the chain, or association with the chain, all the actors are seeking to capture market share, deliver maximum value and increase profit margins. Gender dynamics within the local context will affect male and female actors' ability to capture market share, deliver maximum value and increase and benefit from profit margins.

All market-based projects begin with some form of diagnostic or scoping assessment to determine the market demand and structure of a specific product(s). Based on the results from this analysis, the development team set up meetings to bring together likeminded actors along a market chain to explore prospects for developing improved production, sales and business linkages. The value chain process includes several actors from the core chain, as well as business development services (BDS), and as required regulatory agencies. Value chains can include inclusive business model where a lead firms in the chain seeks to change their business strategy to support long-term trading links with low income smallholder farmers.

The role of the value chain team, is to identify specific markets and build business relationships between key actors, such as farmer organizations with their buyers and develop links to services so that farmers can access the necessary inputs and finance to sustain and scale their business operations. Value chain agents (VC agents) may start a project by selecting a product(s) and linking farmers with first order buyers. However, as farmers build their capacity, the VC agents will work to improve chain-wide systems-level operations including gender biases, so that more people benefit from the upgrading process and that more durable trading relationships are established.

This is an example cited from the newly updated ILO guide on Value Chain Development for Decent Work (ILO, 2016b). If the aim is to better connect the target group to markets, then out grower schemes can be a good way to do so. Out grower schemes are systems that link unorganized small producer groups to domestic and international buyers. While buyers make profit from a guaranteed supply for sometimes pre-agreed prices, small producers benefit through

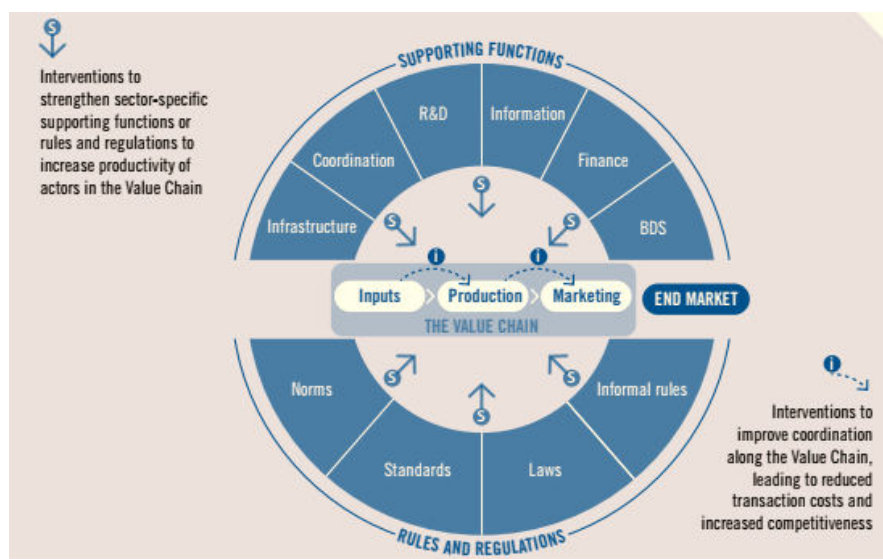
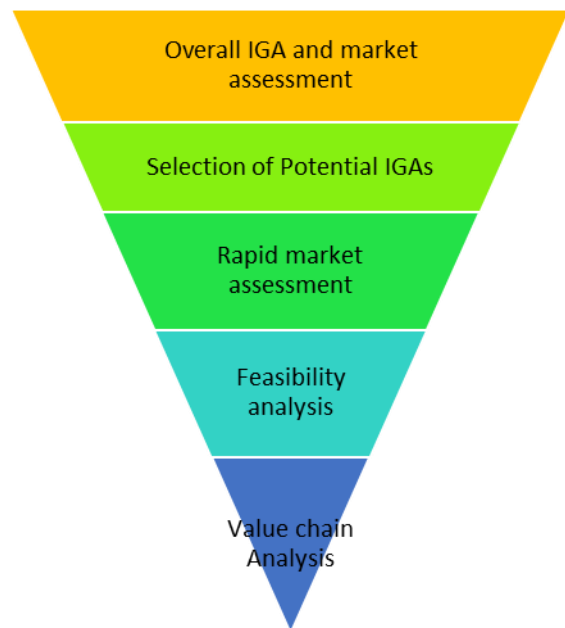


Figure 17: Value chain dynamics

improved access to markets, often accompanied by technical and financial support and/or pre-financed inputs from the buyer. For an example of an out-grower scheme in practice (Figure 16).

Supporting functions are all the elements people need to be part of that market for IGA. These can include information about markets, training, coaching, finance and any other forms of support. Rules and regulations influence the way markets work. Next to formal rules, these also include informal rules and prevailing social and cultural norms. “Demand” and “supply” in the middle of the figure denote the core function of the market, referring here to demand and supply of refugees’ products, services or labour.

What is proposed here, then, is not a new approach, but rather a framework for applying market systems assessments that makes it possible to identify feasible IGAs with potential economic opportunities for the target community while at the same time also paving the way for demand-side market interventions. In doing so, the framework should ultimately enable project teams to design targeted push and pull interventions that respond to local market realities and challenges.



4.1.3. Ensure value chain finance

To meet their production needs, farmers require capital through-out the year to support their farming system. As shown in Figure 14, for any given product, such as tomato, vegetables, paddy, maize, farmers will need finance to buy seeds, fertilizer, agro-chemicals, equipment and pay laborers to plough, plant, weed and harvest their crops. After harvest, farmers must pay for operations to maintain quality or add value to primary goods through aggregation, drying, grading and some crops need additional fermenting, curing and milling in the post-harvest phase in preparation for sale; funds are then needed to transport produce to market.

Farmers typically grow several crops in a year, Figure 15, shows the seasonal calendar for main harvest followed by a second harvest. For each of these seasons, farmers will need money to start a new crop and they may need additional financing to plant the second crop before they receive income from the first crop. It is common to find that farmers deal with a relay of cash outlays and revenue throughout the year and when working in farmer groups, they may face considerable delays between the time they harvest their crops and receive the full value of their sales. Balancing the books with a focus on use of high quality inputs, takes considerable organization, management skills and access to services.

As indicated in Figure 14, financing needs in producing and selling agricultural goods to a consumer do not end with farmers, all along the value chain, there are other actors including input suppliers, traders, processors, wholesalers and retailers who also need access to some form of finance to buy and sell produce, pay for transport and storage, buy equipment for processing and pay their workers

in processing, marketing and selling agriculture products. For value chains to operate both efficiently and competitively, the actors need to have finances to maintain the quality and flow of goods.

Therefore, participants need to easy access for financial inclusion all the way through

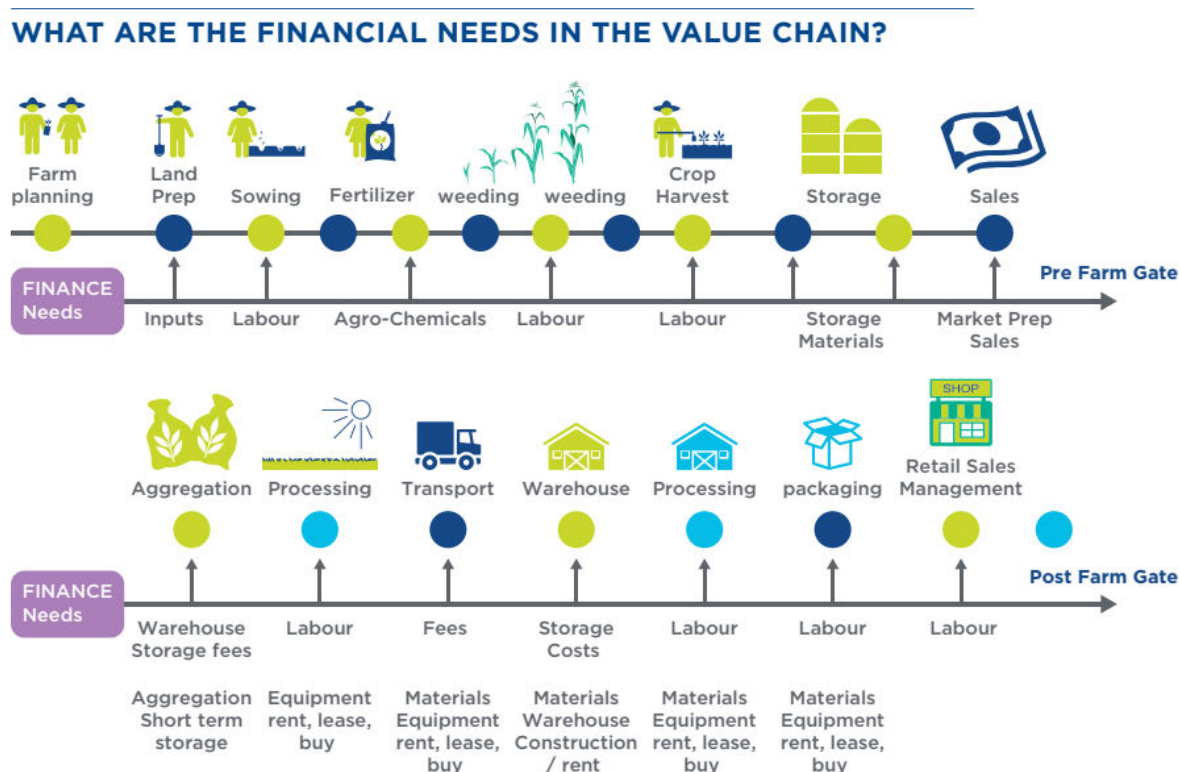


Figure 18: Financial needs all along the value chain

4.1.4. Homestead or Kitchen Gardening

During field survey and KII with the DAE representative noted that homestead gardening would be the one of the most preferable IGA for all SAFE beneficiaries, they can use their homestead land to produce diversified seasonal vegetables for their own consumption, contribute to nutritional fulfilment, and earning from surplus. Additionally, they can use roof as vertical integration of the vegetables. Year-round cultivation is possible as per proper production planning, which can support by the project team and build their capacity to produce (training on home gardening plan and production). Project can support for initial inputs and production technologies as evidenced from Kalikapur model and DAE's Nutrition and homestead gardening model. Furthermore, families can put some of fruit trees for long time planning.

A study by AVRDC with BRAC (2013) shown that In addition to regularly consuming the vegetables produced in homestead gardens, around surplus vegetables (20-25%) sold to the market. By generating extra income, they were able to purchase other high value foods such as milk and eggs for their family, and some of them were able to buy books, pencils and pens for their children. In most of the cases, the women farmers share 35- 50% of their total harvest with their neighbours, which builds up their confidence in the society and establishes good neighbourhood relationships.



Figure 19: Homestead gardening

Constraints of homestead gardening

Lack of land may be constraints but they are living in home this place would enough to start homestead gardening, which faces up to 33% limitation. Lack of training 28%, scarcity of inputs (19%), no knowledge and skill (13%), lack of marketing (3%) and other (4%) are some other barriers which are also notified according to the respondents in the areas.

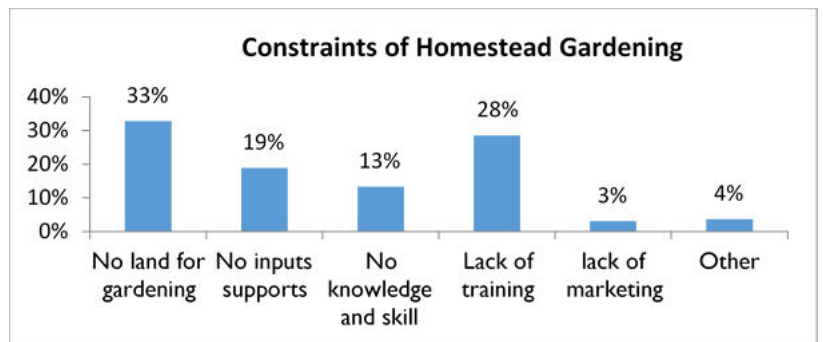


Figure 20: Constraints of Kitchen Gardening

4.1.5. Introduce and implement Ultra Poor Graduation Model

The Graduation Approach is modelled as a method of enabling the ultra-poor to build commercialization of IGA and improve their lives. The graduation program first identifies the ultra-poor within a community in and later intensively works with these families to improve business-oriented skills. The graduation approach households are provided a productive asset (such as a tomato farming, vegetable cultivation, cow or goats rearing) with which they will develop their enterprise. Overall, the program aims to improve the incomes of the ultra-poor and hopes to see positive changes in income, school attendance of children, food security, health, and increased assets among the ultra-poor.

Graduation programme requires a detailed process of analysis internal and external, based on program objective, mission, capacities and strengths as well as a keen understanding of the local context and social and economic conditions of the target group of the ultra-poor. Graduation programming is comprehensive, multi-faceted and resource dependent. Among other considerations, this end goal may include increased income or consumption for ultra-poor households, enhanced food security, inclusion of marginalised groups, buffering of a household against unforeseen shocks, recovery in the aftermath of a disaster or some combination thereof. During the initial stages of programme planning, identifying this goal requires establishing common understanding and prioritised objectives amongst stakeholders, and conducting contextual analysis of poverty and vulnerabilities of the target population, including assessment of existing programmes providing services. Context analysis is the first step of the ultra-poor graduation planning followed by feasibility study, market assessment, appropriate program design, set theory of change management. However, following this section is adopted from BRAC PROPEL Toolkit for putting a snapshot to design a ultra-poor graduation model in Ukhiya and Teknaf upazila.

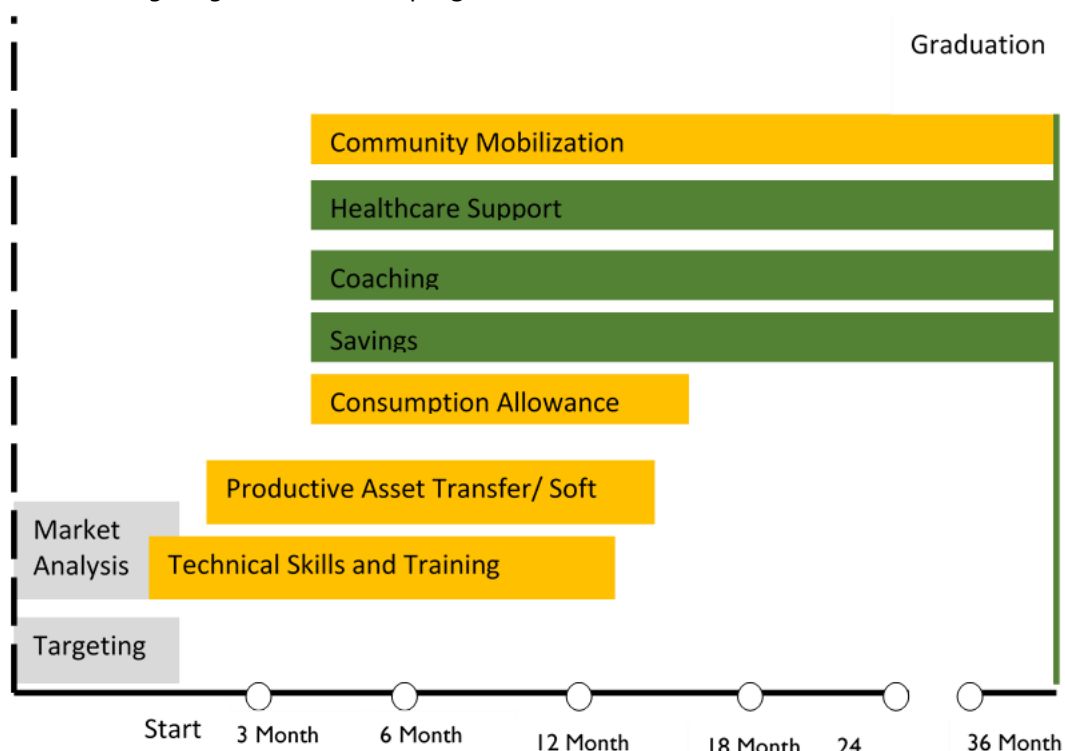
Graduation Approach Combines elements of social protection, livelihood development and access to finance to help the ultra-poor move into sustainable livelihoods.

The Graduation approach adds real value to the livelihoods improvements efforts to build more secure, sustainable and resilient livelihoods. It represents a holistic effort to address the wide spectrum of resource deficits that keep the ultra-poor trapped in poverty and vulnerability. Graduation programmes are not a “magic bullet” for addressing the fundamental drivers of poverty and vulnerability. Graduation is not a substitute for core social protection functions, and may only be suitable and practicable for ultra-poor households that have the capacity for economic self-sufficiency. Moreover, while Graduation is a particularly promising ladder from poverty, there are other approaches that also provide necessary skills for gainful employment, access to finance and access to mainstream development programmes. Identifying the appropriate approach may require several tools for tackling poverty that are context-specific and needs dependent.

Graduation interventions are delivered within a specified time frame, one that is long-term enough to seed sustainable progress at the household level while short-term enough to limit dependence.

Graduation programmes are cognizant of the multidimensional nature of poverty and insecurity that the ultra-poor face, and present a composite set of carefully sequenced interventions that address these multiple dimensions of poverty. The approach simultaneously focuses on enhancing the household’s financial capital, skills and social capital. Careful piloting, problem solving, impact assessing and lesson learning increases cost effectiveness, programme impacts and the likelihood of achieving scaled up operations. Graduation programmes may differ in the specific components offered (for example, some may not offer health support or social integration). Local contexts as

discussed above will ultimately determine the precise composition of each component, programme duration and other specifics. Hence the project should follow a general overview of the steps followed in BRAC's *Targeting the Ultra-Poor* programme.



The Graduation Program Time Line

Source: BRAC

Figure 21: Graduation model by BRAC

Key elements for success in planning for a graduation programme

- Identify the specific roles and responsibilities of key stakeholders to guarantee commitment from the highest levels of leadership.
- Determine the role of a Graduation programme in relation to other services.
- Commit sufficient resources to planning and developing the program
- Assess organisational capacity to execute, including external supports through partnerships and technical assistance/advisory services.
- Develop monitoring and evaluation priorities and a relevant research agenda.
- Conduct a thorough context analysis to ensure local relevance and feasibility.
- Consider adaptations to suit the needs of the target population.

To start with new IGA, compensating opportunity cost, or emergency support provide stipend / basic need support considering to avoid creating dependence from donations.

The graduation model has 4 main pillar i.e. Social protection, Livelihoods, Financial inclusion and the Social empowerment. Following are captured the graduation criteria and the sample indicators for graduation.

Table 16: Pillars of graduation model

Pillar	Graduation criteria
Social protection	- Family members are healthy and food secure

Pillar	Graduation criteria
	<ul style="list-style-type: none"> - Household has access to required basic services (health, safety nets, safe water sources). - Household has income to meet basic consumption needs
Livelihoods Promotion	<ul style="list-style-type: none"> - Household demonstrates increased asset accumulation and continuous engagement in profitable and diverse livelihoods. - Multiple sources of income that exceed regular household expenditures
Financial Inclusion	<ul style="list-style-type: none"> - Household demonstrates significant increase in savings - Household accesses and regularly participates in local savings mechanism - Household has access to borrowing mechanism
Social Empowerment	<ul style="list-style-type: none"> - Household members are part of and participate in community activities, groups, organizations - Children are educated - Family members including children have confidence and hope for the future - Women and girls have equal voice and decision-making rights to male members of the household

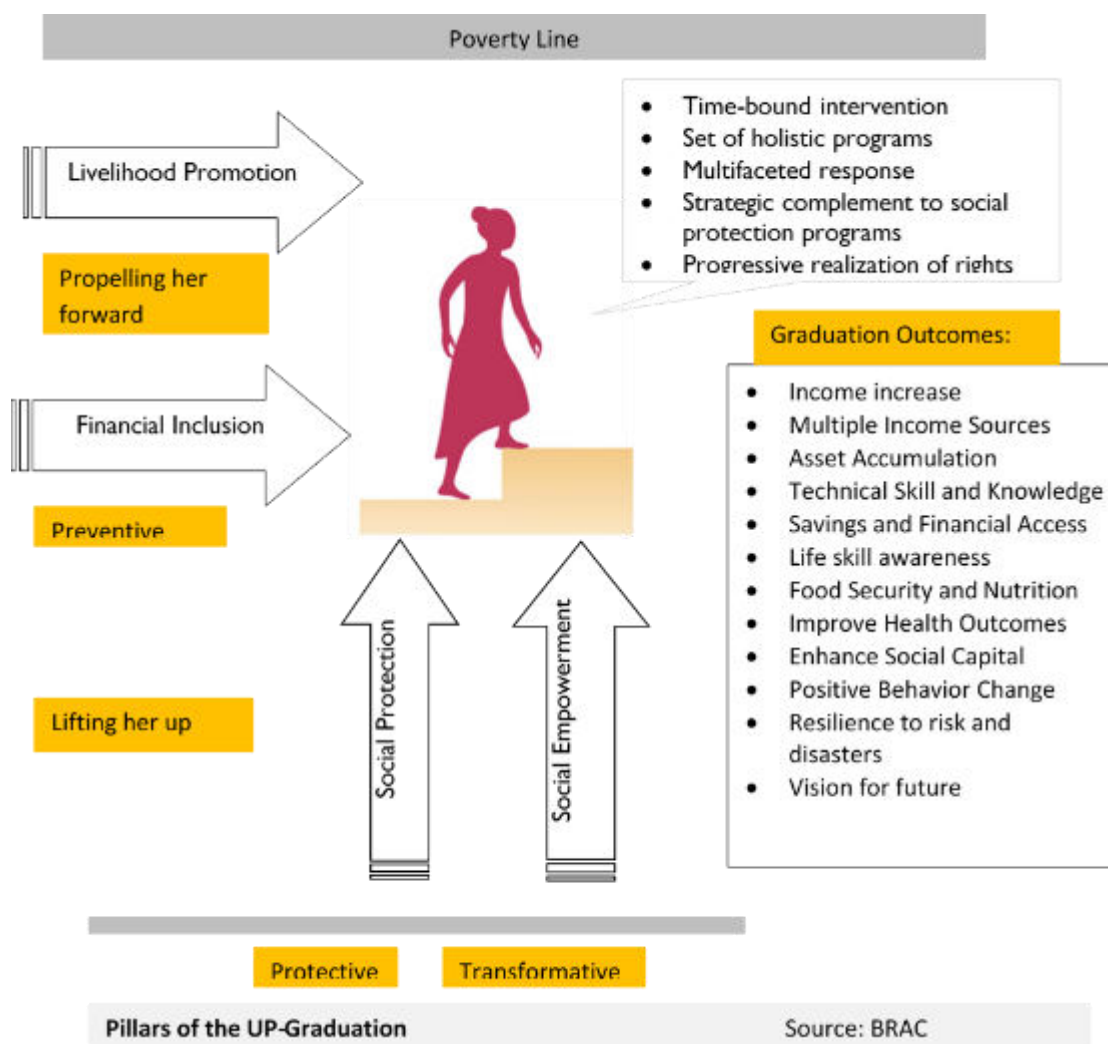


Figure 22: Pillar of graduation model

The following considerations take into consideration for intervention design and preparing ToC visioning UP graduation approach

- **Integration of four core Graduation pillars:**

Graduation must include interventions integrated across four core pillars - social protection, livelihoods promotion, financial inclusion, and social empowerment, with household coaching as a cross-cutting intervention.

- **Assessment of the local context prior to implementation:**

Graduation should be adapted to the local context based on assessments that have been conducted before implementation. The assessments must be recent with an ultra-poor and child-focused lens and address the context, vulnerabilities, markets and livelihoods, gender and social inclusion, and existing stakeholders and services.

- **Rigorous targeting:**

Graduation adopts rigorous (multi-step with verification) and transparent targeting to reach ultra-poor households with vulnerable children, living under \$1.90 USD per day (contextually adjusted). The targeting process should engage local stakeholders including the government (where relevant) and the community.

- **Time-bound approach:**

Graduation is time-bound and lasts for an implementation period of 18-24 months after participants have been selected.

- **Clear exit strategy with linkages to services, markets and community support:**

Graduation has a clear exit strategy where households link to social protection services, markets, financial services, and community resources so that families continue to progress after the program ends.

- **Well-defined and measurable Graduation criteria:**

The Graduation approach should have clearly defined and measurable Graduation criteria related to livelihoods, savings, food and nutrition security, social empowerment, and child well-being.

- **Strong monitoring and adaptive learning framework:**

The Graduation approach should have a monitoring framework that measures household progress in regular intervals (at least monthly) and incorporate an adaptive learning process.

- **Inclusive household coaching for participants:**

Critical to the success of the Graduation approach is the coaching component, which involves regular check-ins by frontline staff. Coaching deepens a participant's learning, helps them resolve challenges, manage livelihoods effectively, and adopt positive behavior.

- **Staffing:**

Effective implementation requires dedicated staffs that are specifically trained in Graduation implementation. Graduation staffing includes three layers of field staff for implementation: facilitator, program officer and area program manager.

- **Gender:**

Each intervention within the Graduation approach must apply a gender equality lens

According to the group discussion during design workshop and presentation the following is summarized information put into the following table below.

Strength of draft minimum standard	Challenges	Overcoming
<ul style="list-style-type: none"> ○ Specific ○ Inclusive ○ Contextual ○ Involve Govt/Service providers ○ Time specific ○ Clear Strategy ○ Gender focus ○ Staff intensive ○ Coaching ○ Measurable standards ○ Benchmark 	<ul style="list-style-type: none"> ○ Linking to services specially women ○ Inclusion of PWD ○ Inclusion of ethnic people ○ Quality staffing ○ Inclusion of DRR Crisis context ○ 24 months -60 months project ○ Market access ○ Local leaders ○ Gender equality ○ Mobility 	<ul style="list-style-type: none"> ○ Introduction ○ Coordination ○ Separate strategy for person with disability and ethnic people ○ Strengthening recruitment ○ Build capacity promotion ○ Good planning for cross owner ○ Strong linkages ○ Specific coaching ○ Community change agent ○ Local front-line staff

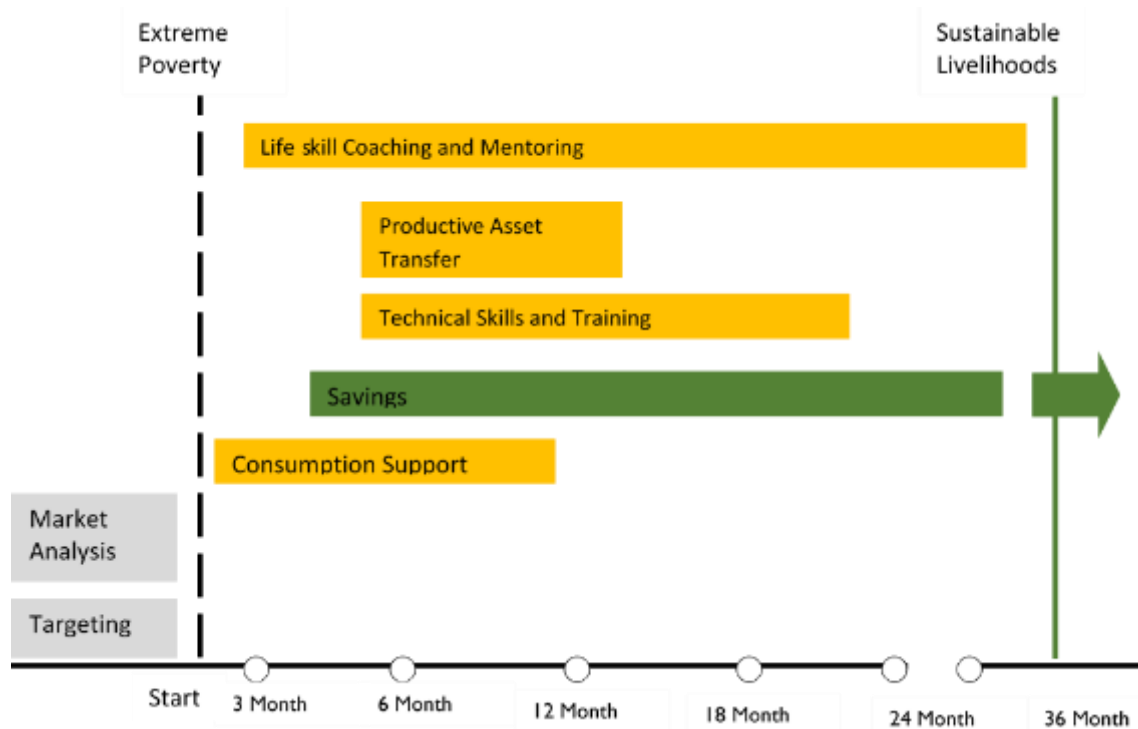


Figure 23: The Graduation into Sustainable Livelihoods Approach

The graduation approach is comprised of the following steps:

Context Analysis:

Appropriate Contextual assessment will provide primary information target locations, vulnerability of the UP, targeting criteria, well-Being of the community, access to the services etc. which have already been conducted.

Targeting/Participant Selection

The success of the approach is strongly dependent on careful participant selection to ensure that the most vulnerable as mentioned in this report in Ukhiya and Teknaf. Triangulation with the contextual analysis, participatory wealth ranking and home visits followed for appropriate beneficiary selection.

Enterprise Selection and Market Analysis

The selection of commercially viable economic activities for ultra-poor households is critical to a household's success in increasing income levels. The chosen livelihoods must be economically viable and varied to ensure participants are not in competition with one another, or in danger of saturating fledgling local markets. Careful market studies and value chain analyses to be conducted to limit risks, and ensure steady earnings as well as future expanded economic opportunities.

Productive Assets to Start Enterprises

Once a menu of viable enterprises has been established, Graduation programmes ensure that participant households have the means to kick-start these enterprises. In Graduation programmes, doing so is accomplished through the following means:

1. Grants of productive assets:

The most vulnerable poor households often need a one-time grant to kick-start their economic enterprises. While small in value (to reduce possibilities of elite capture), these represent a significant investment for participant households, often beyond what they could have saved over a long term to acquire for themselves.

2. Cash transfers for productive assets:

Rather than physically procuring and distributing assets to participants, some Graduation programmes transfer asset-equivalent value in cash to households. Whether this cash is effectively utilised to purchase the assets required for the new enterprise often correlate to the effectiveness of the programme's training and hands-on coaching component.

3. Soft loans for productive assets:

Though the target beneficiaries they may possess some basic capacities or productive assets, new enterprise activity can be jump-started through soft loans. Hence link with the micro-Finance institute or NGO that provide loan to the UP.

Consumption Support:

This component of the Graduation approach acts as a basic safety net provisioning for the household, since the first condition for survival and taking on new economic activities is ensuring that the food deficit gap is met. The Graduation approach therefore provides a minimum level of consumption support for a time-bound period so that ultra-poor households have some degree of smoothed consumption until incomes from the new economic activities start kicking-in.

Home Visits/Life Skills Coaching:

Participants receive programme-long handholding in the form of household visits. The home visits are often the first regular, supportive point of contact that participant households enjoy from anyone outside of immediate family. In BRAC's Graduation programme, life skills coaching includes basic cash flow management guidance, messaging on social issues, helping participants learn to write and sign their names, psychosocial counselling and continuous encouragement and support of participants.

Technical Skills Training:

In conjunction with the life skills coaching, participants receive highly focused in-classroom training and refresher sessions based on how to manage their transferred asset and operate a successful business. Lessons may also include financial literacy and numeracy, business planning and management, basic business skills to promote employment readiness and vocational and entrepreneurship training for both youth and urban ultra-poor.

Savings and Financial Education:

Even the ultra-poor can save, especially when they start receiving a consumption allowance. Regular savings creates a culture of discipline that is essential for financial management for their businesses as well as planning for the future. More importantly, saving allows a participant to start envisioning a different future and seeding hope for a better life, which is critical to the upward trajectory of ultra-poor households.

Health Services:

The ultra-poor often do not have access to adequate healthcare, especially WASH issues in Teknaf and Ukhiya. They lack the information, capacities and financial resources required to visit health care providers when necessary.

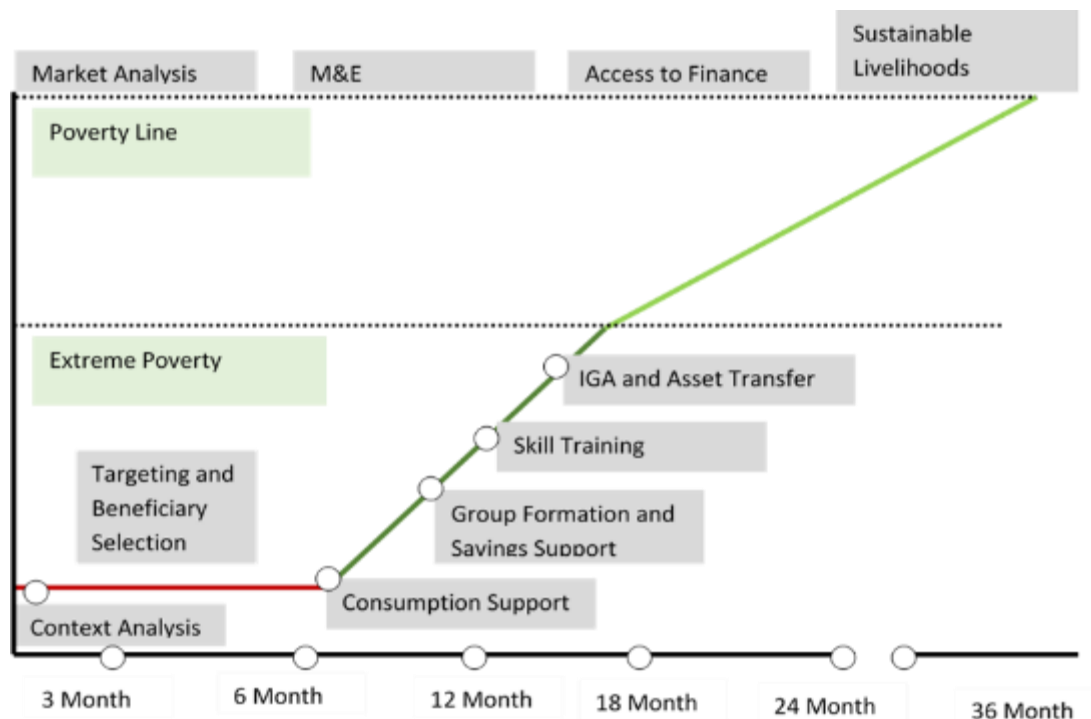


Figure 24: Tentative Time Line of Graduation Model Source: CGAP – Ford Foundation

Social Integration:

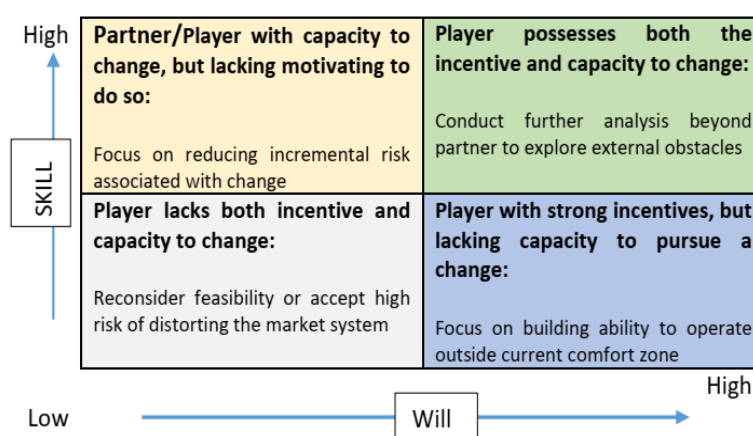
The ultra-poor are often ostracized and stigmatized in their own communities, and do not benefit from a sense of belonging and support of peer networks. Social integration and support can increase confidence and decrease vulnerability. Some Graduation programmes mobilize the community to integrate the ultra-poor by setting up village poverty reduction committees to hear grievances and support the ultra-poor.

4.1.6. Find appropriate partner for IGA implementation:

In order to identify the right partners for any given intervention, it is helpful to assess the potential organizations using an institutional mapping tool.

High will, low skill: These organizations (partners for IGA Implementation) already have a strong incentive to deliver services, but need support to develop their capacity further.

Low will, high skill: For these organizations, support should focus on increasing incentives to deliver certain services. This might in some cases involve sharing of risks, for instance through guarantee schemes or voucher systems.



Low will, low skill: If the organization lacks both incentive and capacity to deliver certain services, then ideally practitioners should not work with them.

High will, high skill: These organizations are ideal partners. However, if they possess both incentives and capacity to deliver a certain service but are not doing so yet, practitioners need to ask why that is the case. If certain outside factors, such as the regulatory environment, are holding the organization back, practitioners need to respond accordingly and, if possible tackle the outside factors.

4.1.7. Other intervention to considered for the improvement of livelihoods

Business management and accounting skill development: The beneficiaries need Business management and accounting skill development so that they can run their businesses properly. These skills are needed for those beneficiaries who will be assigned to an IGA that involves trading.

IGA specific skills development: The beneficiaries need IGA-specific skills development training so that they can operate easily.

Market linkage: The participants are heavily dependent on the local traders for both inputs and outputs. So, for effective IGA functionality/implementing agency (GBK) should create functional market linkage both in input and output market actors.

Access to Financial Services: GBK should provide financial support or linkage with financial institutes (NGOs) with their beneficiaries so that the IGAs can sustain in the long run.

Promotional initiatives for market development: Every IGA need promotional activities locally and regionally

Appropriate irrigation support to the marginal and poor farmers: Implementing projects on irrigation and conservation of rain water in the Barind Region can be introduced, in order to increase crop production and promote minor irrigation facilities through solar energy driven dug wells.

Ensure necessary extension services for the value chain actors

All government services (e.g. DAE, DLS, DoF, BMDA and others) should be available locally but inadequacy found due to inadequate number of officers, staffs, remoteness to work and scanty of logistics facilities. Adequate private sector services do not exist at this moment. Therefore, the project can support for their livelihoods improvement mainly capacity building on new IGAs, access to finance, access to market, access health and food security issues. The participants can facilitate good network for enabling environment with public service providers, financial service providers, embedded services providers e.g. inputs retailer, market actors, and create few new like paravet for livestock services, health workers etc.

Table 17: Recommendation and potential interventions for GBK team

Interventions/ Recommendations	Strategy for implementation
• Selection of appropriate beneficiaries to engage in IGA implementation with their willingness	Partnering with PO
• Categorization, group formation, mobilization and management	Partnering with PO
• Selection of short-term IGAs as per beneficiary category	PO (Partner Organization)
• Assessment of support (financial and operational)	Third party assessment
• Assessment of asset transfer or voucher system and seed money to invest in IGAs	Third party assessment
• Asset transfer / voucher provision to the beneficiaries	Partnering with PO
• IGA specific training and capacity building for the beneficiaries	PO and third-party training provider
• Regular counselling and mentoring	PO
• Linkage between the traders both for inputs, raw materials and outputs	PO
• Linkage with the camp traders and different stakeholders	PO
• M&E (with effective follow-up)	GBK and Third-party MEL
• Advocacy or Influencing initiative on unscrupulous toll payment system	GBK with PO
• Capacity building of project team on support to IGA development, market linkage facilitation and M&E	GBK

Conclusion

5. Conclusion

The study based on rapid participatory qualitative analysis, supporting by limited quantitative primary information. It also carried out secondary information sources as desk study during February – march 2023. The “Study on livelihood challenges of Barind marginalized communities and way forward” depending on existing SAFE project beneficiaries voice and their learning. The finding is primary information basis of the situational analysis. The findings and information are only the sample basis not the census so there may be information gap therefore it is suggested that appropriate intervention design needs to be undertaken the project implementing organization based on field situation, appropriate log frame, change management.

Despite the worthy successes in reducing ultra-poverty in Bangladesh through scaling up innovative initiatives by development agencies in the last two decades, eradication of extreme poverty remains a challenge. Graduation approach that combines promotional and safety net elements of social protection programs with a time bound exit strategy has been found to have significant effects on sustainable livelihood developments. This study is a quick look local scenario with generic livelihood options, food security gender issues and risks faced by the community in Godagari upazila under Rajshahi district evidence from sampled FGD respondents. However, further rigorous study is required before intervention starts.

Considering market demand, quick income contribution, income potential, inclusion of women, nutrition, food security, employment generation opportunity, risk on disaster, sustainability and UP criteria tomato cultivation, commercial vegetable farming, Homestead vegetable gardening alongwith few fruit trees around homestead areas scored highest rank among others. The second highest potential option is chicken/poultry, third is cattle rearing (milking cow and beef fattening), the handicraft is fourth livelihood option as mentioned below:

- Tomato
- Vegetable farming
- Chicken/ Duck rearing
- Beef fattening
- Goat rearing
- Dairy
- Pigeon
- Tailoring
- Nakshi kantha
- Handicrafts
- Small Trade
- Pig rearing
- Auto Driver
- Oyster Shell

Start with any livelihoods as IGA it requires to conduct market analysis (gendered value chain analysis) to find out its opportunities, constraints, demand supply gap, technical capabilities especially for women markets, service provision, value chain mapping, cross cutting issues, and others. Based on skill and willingness of the targeted participants IGA would be selected. Then appropriate capacity development plan has to be developed. Simultaneously (time bound) basic need support (consumption support/ stipend to be provided to compensate their additional time effort, opportunity cost, inputs support for nursing IGA, apart from regular income until new income/fruit comes. Group approach of the IGA and capacity building process is effective for the community participants especially ethnic and marginal farmers. Based on IGA type beneficiary group formation, providing training, home visit, observation, mentoring and coaching will help to achieve the initiative successful.

Selected IGAs will provide regular income, food security and improve livelihoods of the implementing families. It will contribute to improving their nutritional requirement. Many of the

respondents have inherent skills and willingness. Such skills they can be utilize effectively. These initiatives will create a huge synergy for their income and nurturing their skills and knowledge.

More analysis would be required to better understand the complexities of IGA market integration, including fiscal incentives, market dynamics, skills development, market linkage, and business enabling environment.

Whatever facts and figure represented in this report simply a sample survey not a census, perception, knowledge and practices absolutely individual issues, it may be differed from one person to another person. Though number of samples are small one answer affects to statistical analysis remarkably, however entire facts would be remained with GBK it is their property and responsibility to utilize as per project objectives, and logframe.

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List of Annexure

Annexure I: Data Collection Instruments and questionnaires

Annexure II: List of Participants

Annexure III: KII and FGD summary