



Rural Development and Cooperatives
Ministry of LGRD & Cooperatives



Entrepreneurship and Advocacy to Facilitate the Systemic Inclusion of the Chars

Institutionalising M4C's Market Facilitation for the Chars in the Private and Public Sector



In collaboration with Opportunities Unlimited



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Abbreviations and Acronyms

AI	Artificial Insemination
BARD	Bangladesh Academy for Rural Development
BARI	Bangladesh Agricultural Research Institute
BBS	Bangladesh Bureau of Statistics
BCAS	Bangladesh Centre for Advanced Studies
BWDB	Bangladesh Water Development Board
CDRC	Char Development Research Centre
CIWM	Centre for Irrigation and Water Management
CLP	Char Livelihoods Project
DAE	Department of Agricultural Extension
DAM	Department of Agricultural Marketing
DLS	Department of Livestock Services
DPHE	Department of Public Health Engineering
EGIS	Environment and GIS Support Project for Water Sector Planning
GIS	Geographic Information Systems
GOB	Government Of Bangladesh
LGRDC	Ministry of Local Government, Rural Development and Cooperatives
LGED	Local Government Engineering Department
MOU	Memorandum of Understanding
MSD	Market System Development
M4C	Making Markets Work for the Jamuna, Padma and Teesta Chars
NCA	National Char Alliance
RDA	Rural Development Academy
RDCD	Rural Development and Cooperatives Division
REB	Rural Electrification Board

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1. Introduction: Why Focus on Entrepreneurship and Advocacy for the Chars

1.1 Markets for the Chars: In Need of Entrepreneurship and Advocacy

The Making Markets Work for the Jamuna, Padma, and Teesta Chars (or 'M4C') Project is jointly funded by the Embassy of Switzerland in Bangladesh and the Government of Bangladesh Ministry of Local Government, Rural Development and Cooperatives (LGRD). 'Chars' are riverine islands that form when major rivers (such as the Jamuna, Padma and Teesta mentioned above) continuously change course and deposit sediments. Chars are new lands that grow and shrink. Despite this vulnerability, and even though the chars are typically poorly connected to the mainland and poorly developed in terms of infrastructure, historically, they have been an important refuge for poor farming households having lost their land elsewhere.

It is important not to underestimate the scale of the Bangladesh Chars. There are about 2,042 chars spread out across 30 districts, mostly in the northern parts of the country.¹ According to data from the Environment and GIS Support Project for Water Sector Planning, 5% of Bangladesh' total land area (approximately 7,200 km²) are Chars, home to 6.5 million people (around 4% of the Bangladeshi population).² These figures are likely to have increased due to rapid population growth and the formation of new Chars.

Historically, the Chars have been associated with poverty exacerbated by poor access to markets and services. In response to these needs, the Chars Livelihoods Programme (CLP), preceding the M4C project, implemented a livelihoods approach with a focus on assets transfers. Based on lessons learned from the Katalyst project, which demonstrated that it was possible to make (maize) markets work for the chars, M4C adopted a more systemic Market System Development (MSD) approach.³ M4C engaged private and public market actors to 'become invested' in the chars, i.e., increase their knowledge of and investments in services and infrastructure in the chars and, through this, stimulate systemic inclusion. The chars are not only poorly connected but also mostly 'unknown' to many market actors. CLP had been a frontrunner in addressing this, but more was needed. M4C paired this MSD strategy with direct capacity development to jumpstart the development process, making it a 'hybrid' MSD approach, appropriate for the shallow, even 'stressed' market conditions in the Chars, caused by the risk of flooding.⁴

M4C has been active in six char districts, covering an estimated 127 char relevant unions and 15% of the char population⁵. Starting operations in 2012, by 2022 M4C has impacted 145,000 char households.⁶ M4C will complete its third and final phase by June 2024. Figure 1 shows where M4C was active during each implementation phase.

¹ Bangladesh Centre for Advanced Studies (2013), *Mapping and Assessment of Charland Resources in Bangladesh*, Dhaka.

² Environmental and GIS Support Project (2000), *Riverine Chars in Bangladesh: Environmental Dynamics and Management Issues*, Dhaka: University Press Limited. The Environment and GIS Support Project for Water Sector Planning (EGIS) is a project that was launched by the government of Bangladesh in 1996 based on the Flood Action Plan.

³ Bekkers, H & N. Sen (2011), Bangladesh: Changing Markets in Favour of the Poor, Bern: SDC Asia Brief, December 2011.

⁴ Bekkers, H & D. Hirst (2023), *Going Hybrid: Knowing When to Step In and When to Step Out to Address Climate, Conflict and Social Inclusion*, BEAM Exchange.

⁵ Making Markets Work for the Jamuna, Padma, Teesta Chars (2020), *Project Document Phase III*, Dhaka.

⁶ Making Markets Work for the Jamuna, Padma and Teesta Chars (2022), *M4C Brochure*, Dhaka.

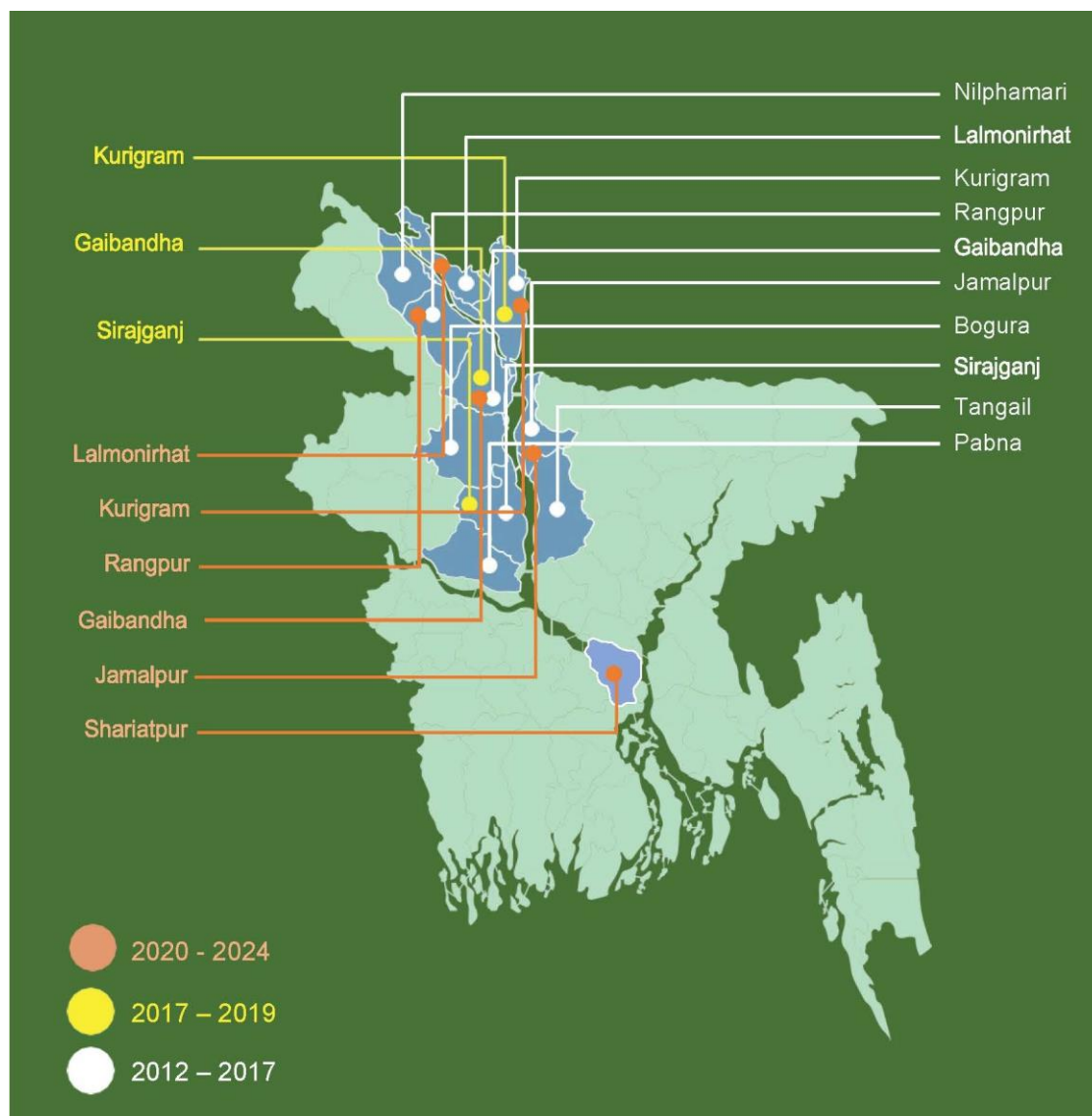


Figure 1: M4C Activity Areas During Different Implementation Phases

While M4C was implementing this hybrid MSD approach, it became apparent that stimulating inclusive and local entrepreneurship in the Chars and continued advocacy for the Chars would be important to further the systemic inclusion of the Chars in the long run. In the Chars, in which M4C had been active, a clear business case for systemic inclusion had been demonstrated. However, continued efforts would be needed to drive this inclusion process into new still unknown Chars not yet opened by M4C supported activities. This realisation has shaped M4C’s anchoring and institutionalisation strategy which has two distinct objectives: (1) to make sustained effort for future char development (CDRC was established with this purpose) and (2) as already mentioned, continue effort to expand in new char areas. The both objectives will achieve through their mandate- Influencing GoB’s rural development policy/strategy through inputs from the M4C’s success and failure and providing information and training to interested groups (public and private).

1.2 M4C’s Growing Focus on Entrepreneurship and Public Anchoring

M4C’s strategy has evolved in response to the lessons it learned from implementing the project as well as due to and changes in funding. Over time M4C incorporated a new approach

focusing on entrepreneurship (to stimulate private investment in new business models) and advocacy (to influence public sector priorities and investment) alongside its more traditional sectoral approach.

- In Phase 1 (2012 – 2016), M4C adopted a sectoral focus common to many MSD projects. In ten districts, the following sectors were selected: maize, chili, jute, onion, groundnut, and mustard (all cash crops), handicrafts (another income-earning opportunity), and transportation and financial services. Within these, the focus was on developing sustainable business models and public service delivery models to improve access to agricultural inputs, information, and services, as well as output markets. M4C partnered with private and public sector market actors to test and scale these models. At the same time, M4C worked directly with producer groups and traders' associations to strengthen their capacity to investment in sustainable business models.
- In Phase 2 (2016 – 2020), M4C had to reduce its geographical focus and sectoral ambitions due to a reduction in funding.
 - First, it was decided to drop the sectoral focus, which is more suitable for mature markets, and instead focus on three crosscutting marketsinput markets, output markets and financial servicesessential to stimulate commercial activity in a range of economic sectors. This approach is also more suitable in shallow markets in which each commercial activity is too small to support investment in specialised service providers⁷. The systemic inclusion of the chars is more about getting the basics in place, for instance establishing the first agro-input retailer or the first seedling producer in a Char. This new strategy was applied in three districts with a high poverty incidence. Livestock and microfinance were added as areas of work within the three crosscutting markets. Support to producer groups was replaced with support for more systemic contract farming.
 - Secondly, it was decided to anchor M4C's experiences in the Rural Development Academy (RDA). RDA is a national institute dedicated to (action) research and training for rural development, resorting under the Rural Development and Cooperatives Division (RDCD) of the Ministry of Local Government, Rural Development and Cooperatives (LGRD). Within RDA, M4C collaborated with the Chars Development Research Centre (CDRC), focused, as the name suggests, on the chars. RDA had established a separate centre for the chars in 2012, in the wake of CLP, when the value of development activities focused on the chars had been clearly demonstrated. M4C's strategic intent was to help CDRC develop the institutional capacity to continuously engage private and public market actors, facilitate investment in the chars, and become one of the drivers of the continued growth of the existing chars and systemic inclusion of new chars.

In Phase 3 (2020 – 2024), is M4C's last phase, the CDRC anchoring strategy took centre stage. As a sign of growing Government of Bangladesh (GoB) ownership of the chars agenda, their M4C project support, in the form of CDRC funding, increased. In Phase 1, GoB activities had not significantly contributed to the project budget (0.09%); As of Phase 2, GoB activities constituted 15% of the project budget; in Phase 3 CDRC activities constituted 25% of the M4C budget. In addition to action research, CDRC was given the responsibility to identify key market interventions and implement these. Also, CDRC was to become the main advocate for the

⁷ Hakemulder, R, &Himel, F, B. (2019). *Making Markets Work for the Jamuna, Padma and Teesta Chars (M4C): An Experience in Thin Market Systems Development*.

chars in engaging other public sector organisations. Box 1 describes M4C's five strategic intervention areas in Phase 3.

Box 1: The Five M4C Strategic Intervention Areas

1. Access to agricultural inputs and services (to support improved farm productivity)
2. Access to output markets and agro processing (so that local production can be sold in the most rewarding markets, with processing adding to market value and marketability)
3. Access to finance (to support productive investment in farming, other economic activities, and household needs)
4. Anchoring and institutionalisation to mobilise public investment in research, extension services and infrastructure (to facilitate business and investment, access to markets and service, improve the quality of lives of people living in the chars) and institutionalise the learnings of M4C [driven mainly by the GoB fund under its Action Research, Training, and Revolving Fund' initiatives].
5. Engaging agro-startups and capacity development of local entrepreneurs through innovative or disruptive business models. Piloting initiatives beyond agriculture.

As the focus of Phase 3 and these five strategic intervention areas suggest, M4C implemented two distinct exit strategies to further the systemic inclusion of the chars, namely:

- A private sector-led exit strategy centred around private sector partners continuing to deepen their product and service delivery activities in the chars, making the chars a key part of their business model. This is the 'rolling exit' one would expect from an MSD project: market actors plotting out their own course of action when development support comes to an end, thereby building off, adapting, and expanding the business models and innovations developed with support from a market facilitator such as M4C. Key questions here were:
 - Would private sector actors be able to explore new, unknown chars and take forward their lessons learned and business models for chars, which were made accessible with the help of M4C and CDRC to new chars?
 - Would private sector actors be able to support local entrepreneurship and engage with a public organisation in these new chars to provide critical services essential for systemic inclusion, such as retailing, finance, storage, and infrastructure?
- A public sector-led exit strategy centred around CDRC replicating M4C's facilitation and capacity development role in other char districts with its own funds *and* taking on a public coordination and advocacy role to keep the Chars high on the agenda of other public sector institutions. Key questions here are:
 - Would CDRC be able to develop the institutional capacity to play three related yet distinct roles like research, facilitation, and advocacy and be relevant nationwide?
 - Would other public organisations be able to support the public sector exit strategy?

During Phase 3, it became more urgent to find answers to these questions.

1.3 Preparing for the Exit

In developed chars, opened with M4C and CDRC support, a real transformation was visible. Here, the systemic development efforts were paying off: the exit strategies have worked. Box 2 provides insight in how private and public actors have become more active in the M4C

working area and how this has impacted livelihoods. It is important to note that the same systems approach that stimulates commercialisation is equally relevant for resilience and climate preparedness. For instance, access to more suitable crop varieties, better storage, and better services connections can help improve yields and returns, but can also help to protect these, and the inhabitants that depend on them, from harm and loss due to extreme weather events and flooding.

Box 2 M4C Impact: Signs of Transformation in the chars in which Systemic Inclusion has taken place:

1. Number of input retailers increased to 1,575 in 2023 from 72 in 2012.
2. Agro-input private sector partners have reported a growth in sales since 2012. showing much increased agricultural activity (from almost zero sales to CHF 3.9 million additional annual sales in 2023) in the char region.
3. Since 2012, M4C involved and supported more than 3 thousand service providers, who provided service to nearly 200,000 marking a notable growth of approximately 300%. This substantial expansion not only underscores the escalating prominence of service providers but also reflects their dedication to positively impacting the lives of a significantly larger segment of the community.
4. As of 2023, M4C’s MFI partners, agro-startups and CDRC have disbursed loan amount of CHF 7 million to more than 28,000 char farmers and the entrepreneurs over last nine years. This trend underscores the evolving emphasis on tailored financial solutions, effectively bolstering the economic pursuits of char farmers. Furthermore, this growth pattern gains additional momentum in the latter half of each year, coinciding with heightened agricultural activities, thus further amplifying the cumulative impact of these initiatives.

At the same time, it became apparent that private sector activity did not easily expand beyond the districts in which M4C support had helped them create a foothold. For markets to work, market actors at various levels and in various functions need to be able to link up to form a system to trade with each other. In the chars, these market actors (such as retailers, processors, and service providers, see a more detailed list in Box 7 below) are much less developed than on the mainland— there are gaps in the system, which prevent market activity, or economic inclusion, to spread. This phenomenon is also visible on the mainland. Commercial horticulture, maize, and fish cultivation first took hold in small geographical clusters. Agribusinesses tended to flock to these clusters, because they found it easier to, effectively, ‘cannibalise’ each other’s (trained) distributors and clients than to open green fields. In the chars, with a weaker infrastructure and more ‘system gaps’ (less well-trained retailers, etc.), this is even more pronounced. Quotations from two agribusinesses conform this.

Box 3 illustrates that larger, more established ‘national’ agribusinesses may have the resources to develop new char markets but may not be interested to do so. They can prioritise ‘easier’ markets to develop.

Box 3: A National agribusiness stating the need to work with a market facilitator.

“We are deepening our activities in the areas where the project has supported us in piloting and promoting our products. We are increasing the number of retailers and connecting them with our distributors so that they can easily and consistently get the products they require. However, going to new chars in a new district requires significant investment in logistics and human resource. We need a partnership with projects like M4C to get into these areas. They can support us to understand the business potential in the area and we can be confident of the return on our investments before we start expanding.”

Hossain, Sakhawat, Senior Market Development Manager at Petrochem (Bangladesh) Limited (2023), *personal communication*, Dhaka, April 2023

Box 4 illustrates that smaller, regional companies may want to prioritise the chars, but lack the resources to do so effectively.

Box 4: A Regional Agribusiness Stating the Need to Work with a Market Facilitator

“Our products are primarily distributed in the northern districts and a few districts in the Southeast of the country. We want to expand our activities and take our products to more smallholder farmers. However, going to new areas requires investments in promotion and awareness, developing networks of distributors and retailers. These are large commitments and return on investment are slow at the initial stage. As a small company focusing on regional markets, we do not have the funds available to make such investments. Hence, partnership support from the M4C project in business development is very crucial for the expansion of our business.”

Ali, Based, Regional Manager, United Seeds Store Ltd. (2023), *personal communication*, Bogura, March 2023

In the Char districts in which it had been active, M4C had responded to these issues by shifting away from more conventional light-touch MSD to the identification of new distributors, sub-distributors, retailers, and small traders in the Chars. The expansion in entrepreneurship that followed, combined with introducing agribusinesses to these Chars, provides the fundament under the successful exit strategy described above.

However as stated by the national market actor(s), while all this stimulated an increase in agribusiness activity in the M4C working areas, it did not automatically result into agribusiness expanding beyond the (limited) M4C working areas, into new chars in new districts. This suggests there is a continued need for support to: 1) understand the market potential of new char areas and communicate this, make the chars more ‘known’; 2) identify local entrepreneurs and support their initial investment to establish a proper business; 3) stimulate public investment in support of private sector activity; and 4) enable other stakeholders to build off this market intelligence and investment to deepening the systemic inclusion of the Chars. The question is: Who will drive this?

About the public sector exit strategy, this paper will show that CDRC is becoming a dynamic, leading national centre about the chars. Since the CDRC is not a big centre, with limited human and financial resources, M4C has encouraged the CDRC to develop formal relations with other public institutions and agencies to jointly develop activities for the Chars.

Box 5 and 6 below illustrates CDRC’s relevance for mobilising public institutions and agencies in the Chars, but also that CDRC’s resourcing remains essential to drive public sector engagement.

Box 5: District Livestock Officer of DLS on the Collaboration with CDRC

“Our department have resource constraints. We do not have enough staff to cover large areas and therefore most of the time Char location remain out of our service reach. Through the collaboration with CDRC we are now being able to reach to these locations with our services. CDRC has great understanding of the char demographics and helps us by accumulating target households in groups and then we can easily conduct our capacity building sessions with these groups. This collaboration has made it easier for us to execute our mandate.”

Latif, Dr Abdul (2023), ex-DLO, Gaibandha *personal communication*, Bogura, July 2023

Box 6: Chief Scientist of BARI on the Collaboration with CDRC

“BARI has worked on number of new crop varieties innovative agricultural practices that can greatly help the smallholder farmers in improving their farm productivity, also in the Chars. However, we struggled to test these crop varieties and practices in these locations due to resource limitations. The collaboration with CDRC has made it possible. They now help us run trials in the Chars. We are also learning about Char demographics from them. Both help us do more relevant research for the Chars.”

Kadir, Dr Monjurul (2023) in-charge of Regional Research Centre at Jamalpur, *personal communication*, Bogura, July 2023

M4C's anchoring and institutionalisation strategy has created the kernel of a nationally relevant expertise centre for the Chars. However, to implement action research, also for solutions that can be commercially replicated, and coordinate effort with private, public and civic stakeholders, CDRC's institutional capacity to drive this will be essential. The question is: How will this development be moving forward?

1.4 The Way Forward: Institutionalising the M4C Legacy

M4C's legacy is that it has created an 'architecture' for the systemic inclusion of the Chars. On the public side, CDRC enjoys the support from its 'parent', RDA, to become the leading centre in Bangladesh for the Chars. Public institutions and agencies appreciate its help in operating in the Chars. On the private sector side, many agribusinesses have learned that they can operate commercially, at least in certain chars. Also, local entrepreneurship is being supported and shows to be viable. The private and public market actors are in place to reduce the system gaps referred to above. Will they have sufficient incentive, capacity, and energy ('ICE') to make this architecture expand to new, unknown chars?

Figure 2 contains a theory of change for the systemic inclusion of the chars. It is not exactly the project theory of change but has been developed to portray the trajectory of systemic inclusion. As such it also illustrates M4C's anchoring and institutionalisation strategy. In red it shows the importance of the public sector, ideally coordinated by CDRC, to create an enabling environment for more business activity in the chars, through investment in infrastructure, entrepreneurship and information on the chars. Secondly, in green it shows the importance of innovation and entrepreneurship, i.e., new, disruptive business models to create business activity also in new chars. New, disruptive business models emerge from having a progressive vision on char inclusion, new technology to support Char inclusion, and 'patient' capital to afford upfront investment in Char inclusion. They help to overcome the system gaps referred to above. The more these 'forces' are at work, the easier it will be for other markets actors (in blue) to follow.

In Phase 3, M4C focused on strengthening CDRC's institutional capacity, critical for mobilising the 'red forces' in the theory of change. Also, it started to focus on introducing new, often ICT-based 'disruptive' business models to the Chars, to unleash more 'green forces'. M4C wondered whether such models, with their focus on serving many clients in an efficient, low-cost manner, could further the systemic inclusion of new Chars. This could be achieved by integrating local entrepreneurship into expanding service platforms, or finding ways to include char households directly, without the need for intermediaries. Importantly, these disruptive innovators often attract 'patient' commercial capital, which they can pass on as services and loans to char farmers. This may also enable them to invest upfront in entrepreneurship and services to open new chars. Furthermore, their models often require rapid scaling to become efficient. Therefore, they may have more 'appetite' to open new markets than conventional businesses. Finally, they often place more emphasis on development values such as inclusion. All this can drive the systemic inclusion of chars forward.

This paper explains the rationale for this strategy and examines how strong these public and private drives of the systemic inclusion of (new) chars have become.

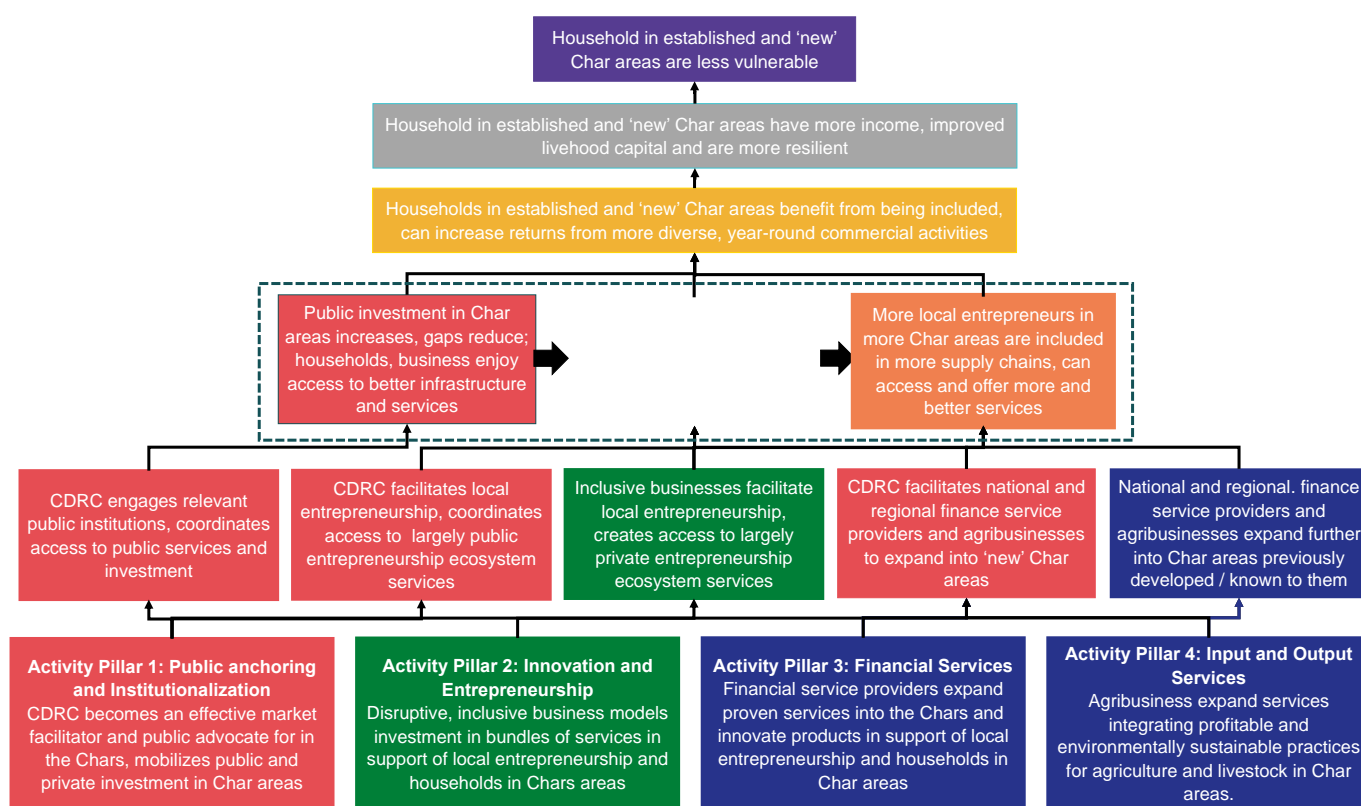


Figure 2: Theory of Change for the Long-term Systemic Inclusion of the Chars

1.5 How to Read This Paper

This paper is structured as follows:

- Chapter 1 explained why in the shallow, even stressed markets of the Chars (poorly developed, prone to recurring crises such as flooding), a continued focus on local entrepreneurship, inclusive, disruptive business models and advocacy is justified. The context is too extreme, systems are too early in their life cycle with too many functional gaps, to assume that systemic inclusion will be an autonomous process.
- Chapter 2 illustrates what market functions and infrastructure is missing in the Chars.
- Chapter 3 describes how CDRC has strengthened its institutional capacity and how it has stepped up in terms of its public coordination and advocacy role.
- Chapter 4 describes how CDRC has stepped in, in terms of support for local entrepreneurship and business facilitation.
- Chapter 5 describes how new, disruptive business models are operating in the Chars.
- Chapter 6 draws conclusions.

2 What Are the System Gaps that Entrepreneurship and Advocacy Should Fill?

2.1 Infrastructure Gaps

The Chars can be divided in those that are relatively permanent (but still subject to erosion) and those that are seasonal (submerging when the rivers are high). Seasonal Chars are uninhabited but are often very important for the livelihoods of those living in the Chars. Here many farmers have most of their land. The permanent Chars are inhabited, have unpaved roads (often not in good condition due to seasonal floods and inadequate investment in infrastructure) and small markets with a few shops. In comparison, mainland shops are typically much better stocked and serve as wholesalers for Char retailers.

Over the years Local Government Engineering Department (LGED), Bangladesh Water Development Board (BWDB), Department of Public Health Engineering (DPHE), Rural Electrification Board (REB), Ministry of Agriculture and many NGOs have invested in improving the infrastructure in the Chars by building roads, bridges, culverts, embankments and other flood protection measures. They also have invested in water supply and sanitation facilities, electrification, storage facilities and more. While this has brought improvements to specific locations, overall, the infrastructure that should support the systemic inclusion of the chars leaves much to be desired, as the image below illustrates.

2.2 'Missing' Services and Market Linkages

In addition to poor infrastructure, char households also have very limited access to essential services such as healthcare, education, banking, and extension services. Local government is absent, and there is no police presence on the chars.

Also, to enable char households to increase farm productivity, diversify and commercialise their livelihoods, they need better access to a range of services and market linkages. Often these are absent or are poorly developed, as the following images illustrate. For comparison also images of better developed mainland shops are included.



Image 2 (M4C, 2011): A small input shop in a Char area near Rangpur. Shelves are not very organized, very few input products on the shelf, no information on display.



Image 3 (Islam, R, 2023): A poultry input shop in Gaibandha. Even though the shop has a signboard, there are no poultry products on display and there are broken appliances on the shelf. The shop is also used as a business center that provides document printing and copying services.



Image 4 (Islam, R, 2023): A newly opened veterinary service provider's shop in Shariatpur on the mainland. A diverse range of veterinary products are on display, the shop has a signboard so that the farmers can easily find the shop and there are leaflets of different products available on the desk.



Image 5 (Khan, R, 2022): A relatively better organised input shop in Rangpur. There is a diverse range of agricultural inputs on the shelf. The owner is serving a farmer and there are several decks of leaflets that he has collected from different input companies.

Box 7 contains a list of ‘missing’ market functions in the Chars. This list is not exhaustive but illustrates the system gaps Char household are confronted with. Some of these gaps can be addressed with public investment (e.g., in storage), while others require local entrepreneurship and national business models stimulating these.

Box 7: Examples of Missing Market Functions the Chars: System Gaps for Entrepreneurship and Public and Private Investment to Fill

1. **Well-stocked agricultural input shops or registered retailers of national agribusiness input companies.** The availability of good quality agricultural inputs like seeds, fertilisers, pesticides, and machinery or mechanisation services is essential for increasing agricultural productivity. However, the Chars continue to lack adequate access to these inputs, and the few available inputs are often of poor quality, leading to low crop yields and poor-quality produce. This is primarily because large and established agribusinesses do not consider the Chars as a profitable and viable market and considered the distribution in the Chars too expensive.
2. **Nurseries, seedling growers and sellers.** This requires advanced agricultural knowledge and significant investment. The absence of nurseries and seedling growers and sellers has several implications. Firstly, it restricts Char households’ abilities to diversify their crop production, which in turn reduces their options to increase their income and food security. Secondly, it restricts the introduction of new crop varieties and technologies that could improve crop yields and quality. Thirdly, it increases the dependence on poor-quality seeds and seedlings, which can result in low crop yields, crop failures and loss of income. **Last but not the least,** The char farmers either miss the cultivation or very often too late to sow seed, during summer season (due to heavy rainfall and flush floods) and sometimes in the winter (due to cold wave) and in general for a crop that occupy the land for long time. The nurseries are one of the means to address such issues.
3. **Poultry hatcheries.** This requires advanced knowledge, specialised machineries and investment and there is not many entrepreneurs in chars with all these resources. Poultry is one of the main sources of protein for households in the Chars, and raising poultry can create a significant source of income.

Absence of a hatchery function means that poultry as viable livelihood activity is less feasible for Char households. Cost of production goes up and access to good-quality chicks is more limited.

4. **Artificial Insemination (AI) services.** Without access to AI services, Char households are forced to rely on natural breeding, which can result in lower-quality offspring that are less productive. This can lead to lower incomes and a lower standard of living for households who rely on livestock for their livelihoods.
5. **Weak and difficult reach of extension and other relevant public sector services.** Public institutions and agencies such as BARI, DAE and DLS have limited field staffs. Typically, they have a field presence (except BARI) at the Upazila level, from which they need to serve a large catchment area. As a result, remote locations such as the Chars remain out of their reach. Without access to these services, farmers have to rely on their own knowledge. New crop varieties and practices, relevant to deal with the conditions in the Chars and the effects of climate change, do not reach them. If they face issues with their cultivation due to the weather condition in Chars, they have limited opportunities to consult with experts to find a solution.
6. **Appropriate transport and logistics services.** The difficult terrains and absence of paved roads hinder transport and logistics services. Without reliable transport and logistics, farmers in the Chars are forced to sell their crops at low prices to seasonal middlemen who have the means to transport them to the main markets. This results in decreased income for farmers and limited economic growth in the Chars. Additionally, lack of appropriate transport services makes it difficult for Char households to access inputs such as fertilisers and seeds, making it harder for them to increase their crop yields and increase their income.
7. **Short term storage services.** The absence of short-term storage services in the Chars means that households have limited options for selling their produce later, when prices may be higher. This leads to income instability and lower profits for the farmers. Additionally, the lack of storage services also contributes to post-harvest losses due to spoilage and damage to crops during transportation.
8. **Low-cost or solar irrigation services.** Char households lack access to appropriate irrigation services due to the high cost of diesel or electric-powered irrigation. This limits their ability to grow high-value crops and diversify their livelihood options. Low-cost or solar irrigation services can be a potential solution to this problem. Solar-powered irrigation systems are affordable, reliable, and require minimal maintenance. They can help households access water for irrigation without incurring high energy costs. **To commercialise this initiative, M4C is exploring partnership opportunities with Super Star Renewable Energy Limited. Besides one existing agro-input partner of M4C, who is planning to demonstrate the low-cost solar irrigation system in the char area soon.**
9. **Large-scale traders from high-value national markets or institutional buyers.** The output market in the Chars is fragmented and marred by distrust between farmers and traders. The absence of a trusted intermediary who can bridge this gap and provide access to larger and more profitable markets hinders the farmers' ability to fetch better prices for their produce.
10. **Low-cost formal sources of credit.** The absence of formal sources of credit is a major impediment to investment and entrepreneurship. Farmers have to rely on informal credit sources which often charge exorbitant interest rates, trapping them in a cycle of debt.

3 Strengthening the Char Development Research Centre's Institutional Capacity

3.1 CDRC's Focus on Research and Development

The Rural Development Academy (RDA) and the centres that operate under its wings such as CDRC are 'research and development' institutes.⁸ Their primary aim is to action research to find solutions for development issues. The 'actionable' insight obtained, such as appropriate practices and technologies are then used to provide technical assistance to development stakeholders.

Operating as a centre under the RDA umbrella, CDRC has a national mandate to advocate for the chars, also toward other public institutions and agencies. However, CDRC's research and development focus did not make it fully explore the potential of this advocacy role, nor that of market system facilitation more broadly. Most research and development organisations are focused on their own development research and solutions, sometimes at the expense of solutions offered by other market system actors. In other words, they sometimes may act more like solutions providers than system facilitators. CDRC's initial focus on three areas of work reflect some of these tendencies:

- Firstly, CDRC focused on research to identify appropriate technologies for the Chars. This included studying the unique challenges faced by Char households and identifying solutions for these. For this, CDRC collaborated with other specialised centres within RDA, sharing resources and coordinating activities to address the specific needs of the Chars.
- In addition, CDRC undertook research to understand the social challenges associated with living in the Chars, such as access to education, healthcare, and finance, including their gender dimensions. In doing so, CDRC contributed to a deeper understanding of Char livelihoods development, which informed policymakers and stakeholders across various public agencies.
- Finally, CDRC promoted good practices in agriculture (e.g., seed treatment, Trichoderma composting), livestock (e.g., artificial insemination, small farm management), and community empowerment. Leveraging resources from other RDA centres, CDRC facilitated capacity development, community engagement and inclusive decision-making processes involving Char households and other development stakeholders.

While this made CDRC an essential 'force' for Char development, there are three areas in which CDRC was falling short:

- Despite its collaboration with different centres within RDA and relevant public agencies, CDRC lacked an inclusive and long-term collaboration strategy to ensure sustainable access to the services it was promoting. CDRC was focused on conducting 'activities' for which it sought short-term engagements with different agencies and institutes to utilise available technical resources. To ensure long-term access it had to start thinking more as a facilitator, focus on 'mechanisms' instead of 'activities', and develop long-term partnerships in support of these mechanisms.

⁸ Note that RDA and CDRC will be used interchangeably in this paper. CDRC is an RDA centre and as such does not represent an independent legal entity. RDA allocates resources to CDRC and approves its agenda. RDA approves of CDRC becoming a leading a leading centre for the development of the Chars.

- CDRC’s focus and capacity development on good practices for livelihood activities was not complemented with efforts to develop a functional market system to help sustain, improve, and reward commercial activities. Sustainable economic growth requires not just skill development but also the presence of vibrant markets that offer access to the necessary products and services to increase productivity and thrive economically. CDRC was not focused on establishing market linkages and creating an enabling environment for entrepreneurship and business development in the chars.
- CDRC did not prioritise fundraising and building up its institutional capacity to effectively expand activities to more Char areas. This included focusing on long-term financial sustainability, documenting internal processes, and building resilience to ensure continuity even during leadership transitions.

Thus, for CDRC to anchor M4C’s facilitation and advocacy work, it would have to broaden its focus toward systems and sustainability, in relation to the services it offered, its own organisation, and the partnerships through which it operated.⁹ In Phase 3, M4C and CDRC collaborated to achieve this broadening and strengthen its institutional capacity to do so. The remainder of this chapter discusses this institutional strengthening process and the advocacy activities emerging from this. In the next chapter the CDRCs growing expertise in entrepreneurship development and business facilitation is discussed.

3.2 Strengthening CDRC’s Capacity to Deliver

In-depth contextual understanding is a great starting point for effective system facilitation and advocacy. CDRC and M4C have worked together to strengthen CDRC’ institutional capacity to use its knowledge and insight to advocate for and facilitate public and private investment in the Chars. For this reason, early in Phase 3 M4C and CDRC conducted a workshop to discuss how to strengthen CDRC’s institutional capacity and sustainability. Table 1 lists the areas for improvement that were identified, as well as CDRC’s response.

Table 1: Strengthening CDRC’s Institutional Capacity and Sustainability

Areas identified for improvement	Action taken
Lack of a clearly articulated vision and strategic intent: The collaboration with M4C made CDRC (and RDA) more aware of the potential of making CDRC a leading centre on the Chars by collaborating with public and private partners. To do so, it would need a clear vision and strategy to communicate and guide its activities.	Through the planning workshops and several discussion sessions within RDA and the Ministry (facilitated by M4C), CDRC has been able to develop a clear vision and strategy for the future, giving it a clear sense of purpose.
Lack of a clearly defined and fully worked out organogram: To fulfil this more strategic and more ambitious mandate, CDRC would need to draw up a more developed organogram, defining (more) clear roles and responsibilities.	CDRC has developed an organogram with 33 clearly positions. This organogram has been approved by the Board of Governors of RDA but has yet to be fully implemented. CDRC indicated that it now has the sustainable funding mechanism to complement the organogram, see below.
Lack of human resources: CDRC would need need more human resources, both technical and administrative, to implement a more ambitious and broader agenda centred around action research	CDRC indicated that it now has the sustainable funding mechanism to complement the organogram, fund these positions, see below.

⁹ M4C team (2023), *personal communication*, Dhaka & Bogura, February and March 2023; Making Markets Work for the Jamuna, Padma, Teesta Chars (2020), *Institutionalisation of Char Development Strategy*, Dhaka; Making Markets Work for the Jamuna, Padma, Teesta Chars (2020), *Project Document Phase III*, Dhaka.

but also including support for entrepreneurs, business facilitation and advocacy.

Lack of a sustainable funding mechanism: CDRC's funding mechanism was not sustainable. CDRC needed to identify a revenue generation model to that would allow it to support adequate human resources and activities. To achieve this, CDRC could learn another successful CDRC centre, able to attract significant external funding. CDRC could also start providing more consultancy-type services.

Several initiatives have been taken in this regard. RDA and CDRC leadership is actively engaging with Ministry of LGED to ensure more fundings for their activities. CDRC has also developed project proposals. Perhaps most importantly, the returns on several revolving funds can provide CDRC with a stable basis for core staff and activity funding, independent of external funding.

Need for better project management: Better project management can help allocate scarce resources to essential activities. An example of such a project is to implement an entrepreneurship ecosystem in a new Char (see next chapter).

To improve management, an annual planning process is now conducted at the beginning of the year. This includes specific Annual Performance Agreements, defining the annual target in terms how many projects CDRC (staff) will pursue and how it will allocate resources.

Need for strong stakeholder engagement: Effective stakeholder engagement is essential for CDRC to overcome funding and resource limitations and maximise its impact. This includes engagement with public stakeholders to explore opportunities for additional funding and resources. This also includes establishing strong collaborations with organisations such as I the National Char Alliance (NCA) to create more policy influence.¹⁰

CDRC has identified four key areas for improvement, in part mentioned above:

1. A clear strategy and vision to guide its activities and maintain focus.
2. Recruitment of dedicated human resources for the centre and investing in their capacity building to foster institutional learning, facilitate implementation, and support CDRC's overall development.
3. Integrating different services in RDA and other public agencies to leverage available capacities for the Chars.
4. Developing partnerships with public, private and civic organisations (such as NCA) to create awareness about the Chars, influence decisions and policies relevant for the Chars, and introducing to the Chars (thereby leveraging their resources for the Chars).

The diagnostic of how to strengthen CDRC's institutional capacity was followed by developing a comprehensive agenda for a more strategic and ambitious CDRC with a broader agenda that includes research, facilitation, networking, and advocacy and, overall, more focus on management and communications. Both the 'organisational framework' for CDRC summarised in Table 1 as well as this vision of what CDRC should strive to be, summarised in Table 2, have internalised in the CDRC. At its core, CDRC, as part of RDA remains a research and development organisation, but all aspects of the CDRC agenda have been taking forward, as Table 2 demonstrates.

Table 2: CDR's Eight Key Thematic Activity Areas

Thematic Area	Execution / Example of Progress

¹⁰ The National Char Alliance (NCA) is a macro level advocacy platform comprising of 50 INGOs and NGOs, business organizations, journalists, researchers and academicians. It works with different stakeholders e.g., Government of Bangladesh, Local Government, policy makers, donors and civil society to facilitate issues with an aim to eradicate extreme poverty and catalyse sustainable change in the life of Char dwellers

Management process	<ul style="list-style-type: none"> ▪ M4C supported the first Annual Planning meeting in 2021; CDRC actively participated to develop an operational plan and an organogram to implement this plan (as mentioned above). ▪ Twenty positions have been filled; there are plans to recruit more to fill the positions as they progress. ▪ In terms of project management, an annual planning cycle is in place but CDRC is yet to start conducting regular implementation/review meetings. ▪ See next chapter for entrepreneurship support and business facilitation.
Revenue generation	<ul style="list-style-type: none"> ▪ CDRC has developed three sustainable sources of revenue to finance its operations going forward. Currently all three sources (revolving funds) are generating revenues which are being reinvested. Firstly, RDA has allocated a revolving fund of BDT 50 million (approximately CHF 415,000) for microfinance activities. The returns are reinvested or utilised for CDRC field operations. Secondly, RDA co-invests in facilities such as storage and solar irrigation systems. The returns from these contribute to CDRC's overall funding as additional investment in its microfinance operation. Thirdly, a revolving fund of BDT 10 million (approximately CHF 83,000) is allocated for microfinance operation, which CDRC will receive through the partnership with United Commercial Bank Limited under its CSR activities. ▪ RDA seems committed to make CDRC its next centre of excellence, comparable to the Centre for Irrigation and Water Management (CIWM). This centre has been able to attract external funding. For example, the CIWM creates revenue by providing consultancy to public sector agencies and receives funding from World Bank and JICA to expand their activities in new areas. CDRC has shown interest on enhancing its fund-raising capacity with few potential institutes and donors (PKSF, GIZ, World Bank, etc.) interested in Char development. ▪ In a recent field event, the LGRDC ministry has praised CDRC's commendable work in target locations, and the minister has pledged BDT 100 million (approximately CHF 835,000).
Char relevant infrastructure	<ul style="list-style-type: none"> ▪ CDRC has developed a portable storage facility model suitable for the Chars as it can be moved in the case of flooding. Six have already been installed, creating opportunities for local entrepreneurship, reducing system gaps, and making the Chars more prepared or climate change. ▪ In a similar vein, CDRC has tested mobile solar irrigation systems. ▪ CDRC has developed pontoons/floating mooring points and successfully lobbied with the Bangladesh Water Development Board to adopt the model, install them in larger numbers. ▪ CDRC, with active support of M4C, has shared a list of 100 Char locations with the Promoting Resilience of Vulnerable through Access to Infrastructure, Improved Skills and Information (PROVATI³)¹¹ project for physical market establishment.
Public Sector Advocacy	<ul style="list-style-type: none"> ▪ CDRC has successfully established a formal collaboration with BARI. ▪ CDRC is in the process of establishing a collaboration with DLS and DAM.
Partnership with Private Sector	<ul style="list-style-type: none"> ▪ CDRC has successfully established a partnership with United seeds and United Commercial Bank for introducing or expanding the reach of their products and services into the Chars. ▪ CDRC is in discussion with other private sector partners for the same.

¹¹ [Promoting Resilience of Vulnerable through Access to Infrastructure, Improved Skills and Information \(PROVATI³\)](#) is Government of Bangladesh endorsed project. The goal of the project is to facilitate 'sustainable livelihoods' for poor households and smallholders in selected Upazilas of the Brahmaputra-Teesta flood plain area of six North-central districts of Bangladesh. The development objective is to 'enhance resilience of communities' of 25 selected flood-prone Upazilas through resilient infrastructure development and building adaptive capacity at community level. The project implementation will be led by the Local Government Engineering Department (LGED) of the Ministry of Local Government Rural Development and Cooperatives (LGRDC).

Policy Influencing	<ul style="list-style-type: none"> CDRC has established strong network with NCA to bring char development agenda on the discussion table among different char related advocacy groups. However, they have not yet got any tangible headway in this space.
Action research	<ul style="list-style-type: none"> Upon successful establishment of solar irrigation system in 3 locations, now CDRC is focusing on finding a low-cost solution that can enable more entrepreneurs in Chars to establish these affordable solar irrigation systems. And they are working with a private sector company (SSG) on this solution. Pontoons and portable storage are other examples of action research with a strong focus on improving infrastructure and finding local commercial solutions to provide essential market functions relevant for improving commercial activity and climate change preparedness.
Website / Char database	<ul style="list-style-type: none"> CDRC has yet to develop this.

3.3 CDRC's Emerging Advocacy Strategy

CDRC has taken initiative to create a more systemic advocacy strategy, including public and private market actors and focused on longer-term coalitions than short-term activities. These activities have not yet been articulated in a strategy. The overview below is based on interactions with CDRC staff (see Annex 1 for an overview of key informant interviews).

1. **High-level policy advocacy:** CDRC collaborates with the NCA to promote the Char development agenda in policy and national budget discussions. Through its collaboration with the NCA, CDRC can disseminate research findings and lesson learned to policy makers and ensure the inclusion of Char-related development initiatives in plans, policies and budgets. As a result, in May 2023, RDA together with NCA organised a national level discussion event to urge the government for a provision of a special allocation in national budget for Char development.^{12 13}

CDRC has been successful in showcasing the impact of the project's work in the Chars to secure Government of Bangladesh's buy-in for scaling up these activities in new Chars. This was reflected in a ministerial visit to Gaibandha and Kurigram in 2023. During the visit Mr. Swapan Bhattacharjee, Honourable State Minister of Ministry of Local Government, Rural Development & Cooperatives mentioned that there will be increased budget allocated for this project focusing on Char development and increased social safety for Char households, and at least 30,000 hectares of Char lands will be brought under this project in next 5 years.¹⁴

2. **Advocacy for infrastructure investment:** CDRC engages with the Local Government Engineering Department, Ministry of Local Government, Rural Development and Cooperatives (LGED/LGRDC) to include more Char-specific infrastructure development activities in their annual work plans and budgets. As explained above, addressing infrastructure gaps are important to facilitate more inclusive market activity. CDRC and M4C have shared the example of two pontoons they established to BWDB Gaibandha office to show them how these can make the landing easier for people travelling with they produce on boats from Chars. As a result of that advocacy the BWDB office invited CDRC to provide input in their upcoming annual activity plan so that they can integrate Char areas where such infrastructural improvement is needed.¹⁵

¹² <https://www.tbsnews.net/economy/budget/experts-term-char-peoples-social-security-allocation-inadequate-264808>

¹³ <https://businesspostbd.com/news/2023-05-17/govt-urged-to-allocate-special-budget-for-char-development-2023-05-17>

¹⁴ <https://www.youtube.com/watch?v=5P-Zug761cQ>

¹⁵ M4C (2023), *personal communication*, Dhaka and Bogura, February and March 2023.

3. **Expanding and formalising public sector partnerships:** CDRC already actively collaborates with other institutions under the RDA umbrella (such as Livestock Research Center, Centre for Livelihoods and Social Innovation, Centre for Community Development, Centre for Irrigation and Water Management, etc.). It also actively seeks to build off the activities of other public agencies such as Department of Agricultural Extension (DAE) and Department of Agricultural Marketing (DAM) to mobilise agricultural inputs and services (such as storage, irrigation, and mechanisation) for the chars. This amplifies its outreach and effectiveness, helps to go beyond capacity to develop and address actual system gaps. CDRC has focused on strengthening its partnership with agriculture-focused public extension agencies and research institutions (including DAE, but also the Department of Livestock Services (DLS) and the Bangladesh Agricultural Research Institute (BARI) by developing formal Memorandums of Understanding (MOUs). These include commitments to share resources and work on joint activities, fostering a more coordinated and effective approach to Char development.
4. **Expanding partnership with private sector actors:** CDRC has commenced developing its own partnerships with the national private sector actors (e.g., United Seeds, Pumpkin Plus), as discussed above. Parallely, they are also working with they are working with regional entrepreneurs (nursery owners, storage owners, hatchery owners, solar irrigation provider, compost providers, etc.)
5. **Facilitating public-private collaboration and coordination:** CDRC has started organising dissemination events such as agribusiness fairs and agri-input ‘meets’ and to bring together public (DAE, DAM, BARI) and private actors to stimulate collaboration, coordination, and private investment in the Chars. These events provide a platform for stakeholders to come together, exchange knowledge and ideas, and explore business opportunities for sustainable Char development.
6. **Promoting financial inclusion to stimulate market development:** CDRC has been actively promoting collaboration between local Microfinance Institutions (MFIs) and agri-input companies. This initiative aims to facilitate smallholders to access finance to enable them to invest in sufficient good quality agricultural inputs and services for a productive agriculture cycle.
7. **Promoting market system facilitation:** CDRC provides training and awareness programs for institutions such as the Bangladesh Academy for Rural Development (BARD), RDA, and the Rural Development and Cooperatives Division (RDCR). These initiatives aim to instil market system facilitation in their work and promote sustainable Char development practices.
8. **Media engagement:** CDRC utilises various media channels (national and regional) to disseminate success stories, evidence of impact, and research findings related to the Chars. This proactive approach helps raise awareness, inform the public, and showcase the importance of Char development initiatives.

As this list of activities suggests, CDRC is engaging a wide range of actors, stimulating collaboration, investment, and access to services through a variety of channels. The results of all this work are not being actively monitored, hence specific information on outcomes is often not available.

After discussing CDRC’s entrepreneurship support and business facilitation in the Chapter follow concluding statements on CDRC’s potential as a driver of the ongoing systemic inclusion of the Chars.

4. Stimulating Entrepreneurship in the Chars

4.1 Creating Entrepreneurship Ecosystems for the Chars

In addition to a broad range of advocacy activities, stimulating inclusive and local entrepreneurship can be critical for the roll out of a systemic approach in shallow, even stressed markets such as the Chars. Without such entrepreneurship, going beyond the more conservative market development efforts by companies described in Chapter 1 (Box 3 and 4), early market systems cannot form.

To stimulate inclusive and local entrepreneurship a typical light-touch market systems development approach may not be enough. New entrepreneurship typically requires a bundle of services and activities; such as screening, training, coaching, peer learning, start-up capital, embedding (so that entrepreneurs have access to critical inputs, services and markets) and technical troubleshooting support, that goes beyond what most individual market actors can provide. There is a need for an entrepreneurship ecosystem (also referred to as hubs, incubators, and accelerators).

An entrepreneurship ecosystem coordinates different activities and services to make sure they 'add up' in a manner that generates commercially sustainable business models. An ecosystem benefits from being connected to many (commercial) market actors, but the ecosystem system service itself may require additional public, civic or venture capital investment.¹⁶ For this reason, M4C pursued two tracks to create entrepreneurship ecosystems in which local entrepreneurs in the Chars can start and grow their business and, through this, help form market systems attractive for more conservative agribusiness to latch onto, thereby furthering the systemic inclusion of the Chars.

One entrepreneurship track has been pursued in partnership with the CDRC. This track focuses on making relatively 'traditional' development services such as access to training and micro-finance more entrepreneurship focused. This is relevant, because M4C covered only a small portion of the Chars, whereas the CDRC has a national mandate. Therefore, this track can use public funds and services to drive the systemic inclusion of the Chars forward.

The second entrepreneurship track is pursued in partnership with 'disruptive' innovators such as iFarmer, WeGro Pumpkin Plus, mPower, biniyog.io, and Agrigate Network. This track focuses on providing Char farmers with a bundle of services such as access to finance, access to quality inputs and agricultural advisory services, and aggregation services. This is relevant because these disruptive innovators attract commercial investment, which they can pass on as services and loans to Char farmers. Therefore, this track can use commercial investment to drive the systemic inclusion of the Chars forward.

Track two will be discussed in the next chapter. Below follows CDRC's work on entrepreneurship and business facilitation.

¹⁶ In the case of starts-ups with an extremely high growth potential this is not necessary. Angel investors obtain an equity stake into each start-up in return for services delivered. The profits from the winners in the portfolio cover the entrepreneurship ecosystem costs for all. In Fiji, the Fiji Chamber of Commerce started the "Fiji Enterprise Engine" in which the Chamber made its facilities and networks available, young entrepreneur paid for training and coaching services, and business plans were funded by banks on commercial terms. This is a model that works when young entrepreneurs are able to develop bankable proposals with limited support.

4.2 CDRC's Emerging Entrepreneurship Ecosystem

As explained above, CDRC understands the context of the Chars, but had to learn market system facilitation. Understanding sustainable development as the interplay between many market actors, each being facilitated to improve business models and service delivery for more inclusive outcomes is different from a traditional focus on direct training and service delivery.

Through the collaboration with M4C CDRC developed a growing appreciation of market system facilitation as being key to the systemic inclusion of the Chars. In Phase 3, M4C took deliberate steps to involve CDRC in the planning and delivery of activities, creating a practical learning process for CDRC to assume a leading role.

This process has not been fully documented. Box 8 summarises the key components. Box 9 and Box 10 below illustrate how the CDRC-led entrepreneurship ecosystem works in an established Char area in Gaibandha. Further below will be discussed how CDRC led the facilitation process in a new Char area in Shariatpur.

Box 8: CDRC's Entrepreneurship Ecosystem Development Process*

1. **Assessment of economic context:** When a geographic location is identified that has growth potential but is constrained by various factors, CDRC conducts an assessment to understand the economic context of the location, key economic activities, how people participate in those activities, and the key factors restricting the growth of those activities.
2. **Identifying system gaps (missing support functions):** Based on the assessment, CDRC identifies the key system gaps (constraints) that prevent economic activity to expand. CDRC then identifies public and private market actors that have the potential to address these gaps.
3. **Developing strategic Interventions:** CDRC develops a series of strategic interventions that either focus on supporting existing market actors to expand investments and services or enabling new actors to invest in a new business model. At this stage, CDRC typically engages large input companies or buyers who currently are not serving the Chars but have an incentive to expand their supply chain or distribution network into the Chars. CDRC helps them understand the growth potential and supports them to expand into the Chars by linking them to local entrepreneurs. CDRC also engages public institutions and agencies to create a more enabling environment for all these efforts.
4. **Engaging private sector actors:** CDRC engages private sector actors to invest in strengthening the capacity of local entrepreneurs. This is key for stimulating local growth entrepreneurship.
5. **Accessing technical public resources:** Another key step is to utilise the different technical resources within the RDA to support local entrepreneurship. RDA offers various training programs, conducts research and provides consultancy services on rural development issues, and works closely with government agencies, NGOs, and international organisations to promote sustainable rural development in Bangladesh. CDRC links entrepreneurs to the capacity building activities and resources available in RDA.
6. **Expanding microcredit:** CDRC has a small microcredit fund to support local enterprises accessing services provided by RDA. However, in the entrepreneurship ecosystem development process, CDRC is expanding its coverage by engaging other local micro-finance institutions to provide access to credit to selected local entrepreneurs. CDRC is also increasing its financing capacity by reinvesting the earnings from microcredit activities.
7. **Coordination among different centres:** One of the key roles that CDRC has taken on is coordinating among different centres within RDA and developing an integrated system so that all these support activities can contribute to a shared objective – developing more entrepreneurs in the Chars that are crucial for the economic development of the chars.

* The steps in the process here are developed based on the several detail conversations with the CDRC executive team during the filed visit in Bogura and Shariatpur and an analysis of how the activities are implemented at the enterprise and household level.

Box 9: How CDRC and RDA Supported the Establishment of Local Storage and Warehouse Credit Receipt System

As part of their agricultural development efforts, RDA recognised the need for a storage facility in Fulchari Bazar, Gaibandha. To establish this facility, RDA collaborated with a local entrepreneur through a public-private partnership. The future owner of the storage facility contributed 30% of the total cost, while RDA funded for the remaining 70%, which they collected from their public-private partnership initiative¹⁷. The storage facility was designed with insulated roofing and walls that could be dismantled in the event of floods or other natural disasters, ensuring the safety of stored crops.

However, after its construction, the storage facility did not see the expected level of usage by local farmers. In order to understand the reasons behind this, M4C and CDRC conducted an assessment, engaging in discussions with farmers. Through these interactions, they understood the challenge faced by farmers in the area: they needed funds immediately after harvest to finance the next cultivation cycle despite the fact that prices were low then. Farmers were unable to afford storing their crops until market prices increased.

To address this issue, M4C presented the idea of implementing a warehouse credit system to the CDRC leadership. Under this system, farmers would have the opportunity to access a loan based on the market value of their crops. They could store their crops for a designated period, during which neither the storage owner nor the farmers could sell the stored crops. Once market prices rose, farmers could sell their crops, repay the loan amount along with interest and the storage costs, thereby enabling them to earn more from their produce.

CDRC leadership was convinced of the idea and proposed that to RDA. Recognising the merit of this proposal, RDA allocated BDT 10,000,000 (CHF 85,000) toward the implementation of the warehouse credit system, which would be managed by CDRC. Additionally, CDRC provided support to the storage facility owner in terms of capacity building, ensuring that he possessed the necessary skills to commercially manage the storage facility

This example demonstrates how M4C CDRC have identified a constraint and through its advocacy have been able to secure a fund that enable the local entrepreneur to offer a commercially sustainable solution for this ecosystem thereby improving the system around Char farmers.

Akter, Nasima, Owner of the portable storage (2023), *personal communication*, Fulchari Bazar, Gaibandha, March 2023

Box 10: How CDRC Supported the Establishment of a Local Livestock Service

In May 2022, a training program was organised on livestock husbandry, artificial insemination, and farm management. The training program included technical content developed by experts from RDA. Participants also gained hands-on experience at the RDA farm/artificial insemination centre.

During the training, one participant named Md Sultan Mahmud expressed a strong interest in starting his own livestock artificial insemination service in Fulchari Char, Gabandha. At the time farmers in the area had to travel to the mainland to visit the Department of Livestock office for such services, and a return trip would take an entire day meaning a missed workday. Recognising Sultan's enthusiasm and potential, CDRC took action to support his entrepreneurial aspirations.

CDRC provided Sultan with a loan under their microcredit program, which enabled him to purchase a liquid nitrogen container to transport semen from the Department of Livestock to Fulchari Char. CDRC also facilitated that Sultan developed a relationship with RDA's artificial insemination centre. This allowed him to regularly purchase quality semen from the centre and sell it in the chars.

¹⁷ The initiative is the result of Government of Bangladesh' increased emphasis on [public private partnership](#) to facilitate the development of core sector public infrastructure and services vital for the people of Bangladesh since 2010. Under that initiative, RDA has allocated a fund to invest in facilities relevant to the agricultural development.

Sultan quickly gained popularity in Fulchari Char. He expanded his service coverage by investing in multiple containers to store and transport the semen efficiently. Furthermore, Sultan utilised some funds from his father to establish an input shop, complementing his AI service in Fulchari Char.

This example demonstrates how CDRC's training and adequate follow-up support can enable individuals like Sultan to become an entrepreneur. Gaining access to microcredit, technical expertise and market linkages, Sultan was able to establish a successful business that meets the needs of the local farmers and contributes to the economic growth of the Fulchari Char community.

Mahmud, Sultan & Ali, Md. Haider (2023), *personal communication*, Fulchari Bazar, Gaibandha, March 20

4.2.1 CDRC's Entrepreneurship Ecosystem Approach in a New Char Area

In the last quarter 2022, CDRC was entrusted with the responsibility to implement the field activities as a co-facilitator in newly selected Char areas in Shariatpur district, offering them an opportunity to test the entire market/ecosystem development process from scratch.

At the start CDRC conducted a rapid market assessment in the new Char area. The new Char area's demographic and key economic activities closely resembled those of the Chars in which CDRC previously had worked together with M4C. This enabled a smooth execution of the assessment—CDRC could work with familiar constraints and solutions. The economic activities that were prioritised and interventions that followed from the assessment were identical to the once implemented in the Char areas in collaboration with M4C. CDRC did not introduce any new business models. Thus, working in Shariatpur did not 'test' how creatively CDRC would respond to a different Char area with different demographic characters and economic activities that requires different solutions. Also, CDRC did not develop a clearly articulated vision and strategy document for the new area. This probably worked against developing a fresh perspective.¹⁸

In Shariatpur, CDRC formed strategic collaborations with local development organisations, government line agencies, and various stakeholders. Together, they identified local entrepreneurs with the potential to 'fill' system gaps and included them in capacity development initiatives under RDA. CDRC also facilitated connections between these local entrepreneurs and private sector actors to kickstart their business activities. Furthermore, CDRC expanded its microcredit operations into the new area, providing essential financial support to these entrepreneurs. The collaboration with local institutes, government institutions, agencies, and NGOs proved to be a valuable strategic move to identify local entrepreneurs to work with. For engaging larger agribusiness, CDRC could fall back on existing overarching agreements between private sector actors and M4C, expanding their scope to the new Char area.

CDRC began implementing the strategies and activities for Shariatpur in late 2022. It is too early to assess their effectiveness and relevance for functional market system development and sustained growth. Ongoing monitoring is essential to understanding the challenges and dynamics of the stakeholders involved.

CDRC developed a specific organogram for its work in this new Char area and independently conducted a recruitment process. Furthermore, CDRC adopted the same robust reporting mechanism already in place for other M4C co-facilitators to ensure regular monitoring, timely identification of gaps and challenges, and alignment with project goals. During discussions with CDRC's field team, it became evident that they recognised the importance of a facilitation process to empower the market actors involved and enable them to take ownership of their new business models. They also emphasised the importance of continuous monitoring to identify any gaps in implementation, allowing for timely course corrections. However, since the

¹⁸ It is good practice that assessments culminate in vision and strategy development, with different evidence leading to different conclusions in terms of focus and feasible solutions.

planned activities are still in their initial stages, no situations have arisen thus far that necessitated adjustments to the agreed upon action plans.

The funding for the activities in the new Char area was derived from the M4C project budget. CDRC did not (must) seek additional funding sources for their planned activities. CDRC took independent responsibility for budgeting the activities in the new location and developed a budget aligned with the strategic direction derived from the rapid market assessment.

4.3 Institutionalising Entrepreneurship Ecosystem Support and Market Facilitation in CDRC

The signs of institutional strengthening, the internalisation of broader agenda, and the emerging advocacy agenda described in Chapter 3, combined with the entrepreneurship ecosystem support and market facilitation process described in this chapter suggests that CDRC has the potential to become a promising hub for the systemic inclusion of the Chars.

To capitalise on this potential the following areas are essential:

1. **Continued emphasis on sustainable funding models:** CDRC's current funding model provides a basis for managing the centre. However, ideally more sustainable funding sources and more project funding can be mobilised to enable the centre to operate at scale commensurate with its mandate: to foster development in and, ideally, the systemic inclusion of the Chars. This mandate is relevant for bringing prosperity to the Chars, but also to create resilience in the face of more extreme weather patterns.
2. **Management and documentation:** Investing in robust documentation and internal processes will strengthen CDRC's institutional capacity and ensure continuity. Key strategies such as the advocacy strategy in the previous chapter and the market facilitation strategy outlined above have not been documented.
3. **Human resources and technical skills:** For an organisation with a national mandate CDRC's staffing is modest. Facilitation is human resource intensive and required strong technical skills to analyse context-specific constraints and come up with customised solutions that can sustain. CDRC should continue to invest herein.
4. **Adaptability:** CDRC must demonstrate adaptability to diverse contexts and in terms of business models. This includes collaborating with stakeholders, understanding local contexts, and accommodating different demographics and economic activities.

5 Innovative Business Models for the Systemic Inclusion of the Chars

In Bangladesh several companies have emerged with ‘disruptive’ business models that deviate from the more established agricultural input producers and distributors, wholesalers and micro-finance institution typically found in rural Bangladesh.¹⁹ While each of them has a different business model, compared to the more established agribusinesses, they share a focus on shortening supply chains and bundling services. Both can be relevant to overcome system gaps in the Chars—they either fill them by supporting local entrepreneurship or leapfrog past them when dealing directly with Char households.

M4C has entered partnerships with four companies with an innovative business model, namely iFarmer (18 month), Agrigate (12 months), Pumpkin Plus (12 months) and WeGro (recently signed) and is in talks with two more, namely Biniyog and Truvalu.

5.1 Agrigate

Agrigate offers various services to farmers and rural entrepreneurs, including input sourcing, output sales, financial and advisory services. Agrigate is owned by a feed mill. It forms groups and distributes the inputs required to cultivate the crops that it is interested in buying back, such as maize and sorghum (but there is no sell back obligation for farmers). For this purpose, Agrigate establishes one-stop service points providing quality products and extension services, ensure procurement of agricultural produce, provide business development and financial literacy training.

The one-stop service is implemented in partnership with local agricultural entrepreneurs (called ‘innovation partners’) who have capacity to serve Agrigate’s farmer groups. The selected innovation partners will receive additional capacity building from Agrigate’s pool of agricultural experts. They will run this one-stop service centres as a business which will be the platform for buying and selling agricultural inputs and produces. Agrigate also employs trained agricultural extension expert who provides regular advisory services to these farmers.

These one-stop shops and their clients will be integrated into a digital platform. For this they have started issuing each farmer a digital farmer card and are working on developing a blockchain²⁰ backed supply chain management system. This will allow them to provide a range of services to farmers. The digital record will provide insight into what farmers need (e.g, inputs, videos with technical advice for the crops they are cultivating), and what they can produce. Also, farmers will build up a digital track record that can help with accessing finance. The platform will be managed by Agrigate. It’s ambition is to crowd other service providers onto this platform.

Under the partnership with M4C, Agrigate will establish 6 Agrigate one-stop service points. So far, they have established one Agrigate service point, from which they are working with 400

¹⁹ These disruptive business models secure investments from local and international investors. Bangladesh’s start-up ecosystem is thriving, as established corporate investors and venture capital companies are investing in industries such as healthcare, finance, logistics, services, ‘AgriTech’ and ‘EdTech’. In 2021, the Start-up Bangladesh Limited invested BDT 100 crores in start-ups. According to the Bangladesh Start-up Funding Report 2021, Bangladeshi start-ups raised more than USD 380M in disclosed investments in 2021. In Q1 2022, 12+ Bangladeshi start-ups raised more than USD 57 million in disclosed funding. In Q1 2023, 14 Bangladeshi start-ups raised more than USD 35 million in disclosed investments. This shows the strength of these disruptive business models and their capacity to expand and grow.

²⁰ A blockchain is a decentralised, distributed and public digital ledger that is used to record transactions across many computers so that the record cannot be altered retroactively without the alteration of all subsequent blocks and the consensus of the network. Using blockchain, businesses could pinpoint inefficiencies within their supply chains quickly, as well as locate items in real time and see how products perform from a quality-control perspective as they travel from manufacturers to retailers.

maize farmers. They also have established a storage facility to ensure higher off-take from the farmers and working on including mechanisation services in the service portfolio. On the input sourcing side, they plan to invest in importing the inputs required by the farmers on their platform. They also aim to build a network of 2,000 retailers across Bangladesh by July 2024. They are already working 150 retailers in Rangpur and Dinajpur.

It is important to note that while Agrigate’s business model is not limited to the Chars, they recognise the value of including the Chars. In their view, the best maize in Bangladesh is grown in the Chars. Maize can be stored, which is suitable for cultivation in distant areas with a weaker infrastructure. Being a first mover in the Chars means less competition from other agribusinesses. Agrigate recognises that establishing sufficient one-stop shops in the Chars will be a challenge. For this reason, they are planning to introduce mobile input kiosks built into electrically powered vehicles. At this moment they are in talks with an electrical vehicle manufacturer to develop a vehicle that is suitable for the chars (i.e., they fit on the typically narrow ferries that connect chars). Their intention is to work a business model that is lucrative for the manufacturer (opens a new market for them) and for the future local entrepreneurs operating these. As more of these linkages come into place, Agrigate will be able to sell more inputs into the chars and source maize from the chars.

Box 11 communicates the vision of the Agrigate co-founder for the Chars.

Box 11: Agrigate Co-founder and Managing Director on Scaling Up One-Stop Service Points

“Our mutual interest to expand our network has brought us to partner with M4C and focus on the Chars. M4C brings its knowledge on the Chars and its demographic, which is crucial for the business model and also adds value to our brand as a start-up. Most importantly, it leaves a tested and reliable business model with us that we will build on to expand not only in the areas that we have worked together but also in the new areas in future. We will also include additional services such as mechanisation, and storage, as per the need of the Char community.”

Riasat, Munazzel (2023), *personal communication*, Dhaka, February 2023

5.2 iFarmer

iFarmer started out by providing access to finance to char households. Selected households could obtain a loan that allowed them to purchase cattle as well as the necessary feed and inputs to fatten it, then sell it after four to six months and repay the loan. Such a loan product, which covered the costs of inputs and allowed farmers to sell before settling their debt, was new for the Chars and for Bangladesh as a whole. It made commercial cattle fattening much more feasible for small farmers (like with many rewarding but capital-intensive agricultural activities, the main constraint had always been the upfront investment).

Given the fact that iFarmer prefinanced inputs, a logical evolution of the model was to establish iFarmer Centres. iFarmer wants these to be managed by knowledgeable individuals with a strong local network and service orientation, for instance farmers trained in the past as local service providers. Finding the right individuals informs the pace of expansion. Since 2022, a total 100 iFarmer Centres have been established, twelve of which are inside the Chars. Another 37 centres are planned by 2024, three of which should be in the Chars. The establishment of new centres is funded by iFarmer. iFarmers ambition is to reach one million farmers through 2,200 iFarmer Centres. The Chars are included in their target area but represent a small percentage of the total number of districts targeted.

Box 12 communicates the vision of the iFarmer co-founder for the Chars.

Box 12: The iFarmer Co-founder and CEO on Scaling Up iFarmer Centres

“Setting up iFarmer Centres was a logical consequence of our service bundling strategy. Also we were looking for a critical mass of customers so that these services become economically viable for the farmers. Working with M4C helped us to get access to a large number of farmers who can be our potential customers, and the collaboration allowed us to test the business model. Now we are confident on the model and we are expanding the iFarmer Centres in other Chars and mainland too.”

Ifaz, Fahad (2023), *personal communication*, Dhaka, February 2023

In an iFarmer Centre, a farmer can obtain inputs and information on inputs. This helps iFarmer manage its financial risks: adding services increase the likelihood that appropriate inputs are appropriately applied, which in turn increases the likelihood of good yield while reducing risks and thus increases the ability to pay back the outstanding loan. iFarmer maintains a record of all its clients. In addition to finance and advice on what inputs to buy, the farmer will receive text messages on good agricultural practices (“it is now time to...”), disease outbreaks and weather events. Locally trained para-veterinarians and ‘sprayer men’ are onboarded with the initiative of providing advisory services catered to farmers needs in the iFarmer centres.

The intention is that IFarmer Centres become local hubs. There are early signs that more traditional agribusinesses like to make use of these hubs to market their products. The iFarmer Centres are used for information dissemination to the local farmers.



Image 6 (Islam, R, 2023): iFarmer Centre in Rajarhat, Kurigram. Farmers visit the Centre to buy inputs, access services such as advice on cultivation or cattle health management, livestock vaccination, etc., repay the loan, or consult with agricultural specialists on specific days. National agricultural companies utilise these centres to display and promote their products.

The iFarmer service bundle is expanding. Farmers can opt to sell their cattle (not crops) at an iFarmer Centre, with iFarmer taking care of sales to larger buyers. In 2022, iFarmer started a pilot offering micro-insurance. Further expansion, such as rental of agricultural machinery is under consideration. iFarmer employs trained agriculturalists as extension officers to visit iFarmer Centres and provide advisory and capacity development to the farmers that are subscribing to iFarmer services.

iFarmer’s business model for the Chars is still evolving. Like Agrigate, most revenues are generated from wholesaling. The limitation of the livestock financing model is that livestock from the Chars needs to travel too long to offer premium quality meat upon arrival in Bangladesh’ main market, Dhaka. In the Chars there is a clear demand for inputs and services, and therefore iFarmer Centres as such will be viable, but how to ensure sufficient margins on the services flowing through the centres requires more thought. Thus far, iFarmer has 4,000

registered clients in the Chars that fall within the M4C coverage districts and provided loans to 1,800 farmers.

Box 13 illustrates the impact of iFarmer's loan product on a livestock farmer.

Box 13: Farmer Who Took Two iFarmer Livestock Loans

"I have a small shop in the Rajarhat bazar. After talking to iFarmer Centre I learned about the livestock loan they offer. The loan is not like other loans available from other NGOs, because they ask for instalment payments. But here (iFarmer) the loans are for 5 to 6 months and I pay after I sell the cow. I can also get advices on cow rearing and buy medicines from here—everything from one shop."

Islam, Jewel (2023), *personal communication*, Kurigram, February 2023

5.3 Pumpkin Plus

Pumpkin Plus promotes innovative cultivation techniques, including sandbar cropping and compost usage in the Chars.²¹ Under the M4C partnership Pumpkin Plus will introduce sandbar cropping technology in the M4C project areas.

Pumpkin Plus' business model involves regional and local agricultural entrepreneurs. The cropping technology is developed by Pumpkin Plus and the required inputs are sourced from their private sector and commercial partners, i.e., national input companies, regional distributors and suppliers. The selected farmer groups receive training on how to grow pumpkin in sandbars. They also receive the required inputs from Pumpkin Plus on credit. The agreement is that the farmers are obliged to pay back the input cost after harvest (but not the harvest, i.e., pumpkins). Pumpkin Plus is exploring buying back the produce from the farmers and selling in bulk to institutional buyers or large traders. The company plans to export pumpkins to Southeast Asia, the Middle East, and a few European countries, targeting the Bangladesh diaspora market. This opportunity is still in the development stage.

Pumpkin Plus has started its activities within M4C target areas in early 2022. They are working with two farmer groups in Rangpur and Gaibandha, involving 300 farmers in total. It has established linkages with national-level buyers.

Contrary to Agrigate and iFarmer, Pumpkin Plus primarily generates revenue from selling inputs. Earnings from pumpkin wholesaling in high-value markets are not yet significant. Farmers mostly sell pumpkins in the local market.

Box 14 illustrates how Pumpkin Plus benefits from the collaboration with M4C in the Chars.

Box 14: Director Field Operations on Expanding the Pumpkin Plus Business Model

"We were promoting our solution among the Char communities in the North. Our partnership with M4C has allowed us to work with more farmers who also have access to other essential services like irrigation through other M4C interventions. This experience will help us expand our coverage faster, not only in this Char, but also in new Chars that we plan to take our solution to."

Rahman, Mizanur (2023), *personal communications*, Rangpur, February 2023

5.4 WeGro

WeGro is a new agri-fintech company that connects individual and institutional financiers with farmers in Bangladesh, primarily financing livestock projects. They currently work with around

²¹ Sandbar cropping is a method where farmers dig holes in sandy land and fill these with manure, compost, and pumpkin seeds. Pits are dug in the sandbars and are lined with manure and compost. Jute sacks are used in locations where ground water is very poor. This technique is adapted to the sandbars of Char lands to grow pumpkin, squash and watermelon.

1,000 farmers in 18 zones across the country. M4C's partnership with WeGro aims to improve access to finance for livestock farmers in the Chars. For this WeGro intends improve the capacity of local entrepreneurs, such as traders and input suppliers, to offer relevant services to farmers. They consider this cost-effective and sustainable as local entrepreneurs understand the local context, which makes it easier for them to select farmers to financing.

The WeGro business model includes onboarding farmers into their database, assessing their capacity and motivation to invest, financing them for new livestock, linking them with input suppliers, providing them with advisory services through their field team, and, when the time comes to sell the livestock, linking them with traders in high-value markets. The partnership also includes financing for local small traders who are willing to buy animals from the area and take them to regional markets.

Under the M4C partnership, WeGro has started onboarding farmers in Bogura and Jamalpur. A unique aspect of this partnership is that M4C's cost-sharing support is not based on WeGro's business activities but rather a percentage of their total investment in the target locations. WeGro has planned to make an investment worth BDT10,000,000 (approximately CHF80,000). M4C has agreed to support them with 6% of the total finance provided to farmers. So far, they have disbursed loans to 125 farmers through their Bogura office.

In addition to this, WeGro is working on identifying other opportunities to work with Char farmers to maximize the return on their investment. They have identified cage or net fishing as a potentially profitable economic activity. They are developing a business model to promote this to their target households in Bogura and Jamalpur Chars.

Box 15 reflects WeGro's expansion plan for the Chars.

Box 15: Chief Operating Officer of WeGro Ltd. on Their Expansion Plan and Growth Trajectory

"We aim to achieve an exponential growth, however we would like to achieve that by deepening our customer base in the locations we are in, instead of increasing the location base with a few customers in each location. M4C has supported us to expand our network in the Chars and linked us with a network of local service providers. We have started to see an increase in farmers being onboarded in both locations. We aim to expand to other Chars where we can find reasonably big number of farmers with similar livelihood activities.

Rahman, Md Alvi (2023), *personal communication*, Dhaka, February 2023

5.5 Other Possible Models

Entrepreneurship ecosystems is a very dynamic development field, driven by two areas of innovation in financial services:

1. **Direct access to impact investment funds:** There is an increasing appetite amongst financial asset managers in economies around the world to diversify their portfolio and find ways to invest capital in SMEs in emerging economies. The global supply chain for such funds is still forming, but it is not unthinkable that SMEs in the Chars, relevant in the fight against climate change, or dealing with its consequences, become attractive to invest in. Char entrepreneurs are still relatively small, and suitable investors that can work with them may not be established yet, but the key point here is that the disruptive business models described above are the beginning of a much larger wave.
2. **Embedding business development services into financial products:** The principle of embedding of services into agricultural supply chains, which made market system development programmes such as Katalyst very successful, is slowly gaining traction in financial supply chains. Banks are learning that there is much more they can do to

segment SME clients, understand their specific business development challenges, and find cost-effective ways that help them overcome these.

At this stage, no evidence was found that either of these innovations in financial services has already been applied at any scale in the Chars, but this could change in the years to come.

6. Conclusions

M4C's work in the Chars clearly has established a pathway for the anchoring and institutionalization of market facilitation, supported by local entrepreneurship development, in turn by supported by 'enabling' investments in infrastructure and public services – all working in tandem to further the systemic inclusion of the Chars. This paper showcased successful business models in agri-input retailing, cash crop production, livestock fattening, storage, financial services and (embedded) information services. It also contained the voices of Char households, Char entrepreneurs, disruptive innovators, and big and small agribusinesses all expressing an interest to move forward with investing in (their business in) the Chars. This paper also contained indications that policy makers have become more aware of the potential the Chars hold and that they want to invest more as well.

6.1 Lessons Learned

This paper also contains a number of lessons learned:

1. **The Chars hold a lot of diverse potential, significantly more than perhaps was assumed in the early days of CLP asset transfers.** The thinking on how to develop Chars has made great strides since then. This is one of M4C's lasting contributions; it has shifted the needle and, at the same time, raised the bar, from
2. **The Chars are big, and to date the scale of activities does not do justice to either their scale or potential.** The Chars have a tremendous appetite for investment from a wide range of actors, public and private. In this context it is concerning that one driver of change is winding down, while funding for its likely successor is in place to cover the basics, but not to justice of the size of the Chars. No single organisation or budget will be able to uplift all Chars, but an organization adequately muscular to initiate and coordinate may be important, see below.
3. **The Chars require coordinated development efforts that transcend the boundaries and specialisms of most development actors.** Assets transfers do no justice to what is possible in the Chars. The opposite, a 'nearly invisible' hand that nudges mostly established agribusinesses to expand their distribution networks is too hands-off. There is a need for investment in infrastructure (including utilities), investment in (ecosystems that help establish) entrepreneurs (including training and access to start-up loans or grants), and in market intelligence and knowledge of working business models to make the Chars and how to operate in them less 'unknown'. As this reduces system gaps, and Char areas become more business friendly, harbour less risks and require less costs to expand into, then more market actors will follow the first movers into the Chars.
4. **The Chars require pathfinders to lead the way.** In shallow markets plagued with system gaps and perceived to be high risk and costly to develop, market actors with better options may show little interest to lead—they will follow. Nonetheless, this paper has identified pathfinders and pathfinder partnerships that want to open up the Chars.
 - ✓ A market facilitator with an appetite for risk such as M4C and hopefully hereafter CDRC, has demonstrated to be such a pathfinder. CDRC can influence infrastructure planning and can identify potential entrepreneurs for training or for a public-private investment deal. It can also introduce these entrepreneurs to other market actors in need of local connections. As this paper shows, nearly all market

actors seek connections with local entrepreneurs in one form or another to make inroad into the Chars,

- ✓ Disruptive, inclusive, 'value-driven' businesses can act as pathfinder for the Chars. Their expansion into the Chars is still relatively recent and modest, but as they experiment with business models and bundle services, they are likely to overcome many system gaps. As mentioned, while they all can move forward independently of M4C or CRDC, they all expressed a comfort working with a market facilitator.
 - ✓ Regional companies can be pathfinders too, but in partnership with, not independently of, a market facilitator. In less attractive regional markets, national lead firms often do to take the lead. Regional development becomes the business of regional (lead) businesses.
 - ✓ Innovation in financial services for SMEs when it reaches the Chars.
5. **Operating in shallow markets such as the Chars requires an emphasis on documentation of innovative practices and lessons learned.** M4Cs' MSD practice evolved from that of Katalyst. A growing emphasis on entrepreneurship ecosystems, disruptive business models and financial services represents further learning, as does system facilitation through public institutions such as RDA and CDRC. Thus, working in the Chars represents significant potential for learning. This learning should be researched and documented, also to increase the effectiveness of the implementation process. It is concerning that this does not appear to be happening consistently.

6.2 What is Needed to Move Forward

The following building blocks appear to be important to truly anchor and institutionalise M4Cs legacy.

1. **Market intelligence on new Chars, identifying the system gaps that need to be addressed and the opportunities new Chars offer.** All stakeholders engaged for this paper seemed to appreciate information that gives them some insight in a new Char area. A market intelligence report should include a few Chars at a time, a geographical area that can be overseen.
2. **Developing strategic plans for the Chars to create concerted, synergetic efforts from all interested stakeholders.** Based on the Chars market intelligence reports, all public and private stakeholders could be convened to discuss what needs to happen and invite commitments from parties. For instance, if RDA agrees to fund a warehouse, a financial service provider can offer credit against warehouse receipts; if CDRC offers to train up a number of dynamic young service providers, the likes of Agrigate or iFarmer may want to help that person set up a local service centre. Disjointed efforts (a mooring point in one Char, a training on seedling production the next one, and a storage facility on the one next to that) may not be effective as in each Chars too many system gaps remain unaddressed. Concerted efforts may be perceived to reduce risks and costs more. Stakeholders who are not interested in participating can step out; others continue to meet as an investment committee.
3. **An institution or institutions who can convene these investment committees.** A neutral body such as CDRC would be best placed to convene public and private stakeholders. Alternatively, a committee, association or similar can be formed to do the same.
4. **Capital and human resources to take lead and learn.** If CDRC can continue to develop its financial base, expand its staff, do justice to all aspects of its strategic

mandate (research facilitation, advocacy), and implement all these with adequate rigor and pace, it can take lead. Alternatively,

6.3 Where To From Here?

The transformation in established Chars demonstrates the validity of pursuing the systemic inclusion of the Chars, to strengthen livelihoods, increase prosperity, increase resilience, decrease vulnerability. What this paper demonstrates is that to get to this point of inclusion, one needs drivers, pathfinders, first movers to open up the Chars for others to follow. This process can and should continue. The pace, scale and quality of the process depends on coordination, management, knowledge management and resourcing of this process.

M4C did a commendable job manoeuvring the pieces of the puzzle in place. Adhering to true facilitation principles, M4C now should take a step back to led others, in particular RDA and CDRC, take the lead. CDRC needs to be seen as the main initiator of new activities, agreements, MoU, whereas M4C should disappear into the background. If felt necessary a business model for CDRC could be further elaborated, with more clarity on what to deliver against all aspects of its mandate (strategy), how to deliver this, and how to get missing processes and capacity on place to do so. Ideally, CDRC can learn to lead a team that includes M4C's capacity.

Further capitalisation of CDRC through revolving funds and specific support for CDCRC, for knowledge management (in the form of a learning partner developing and recording the outcomes of advocacy, facilitation and action research, capturing working models, lessons learned, impact, supporting market intelligence) can be considered.

Annex 1: Assessment Script

Name	Designation	Location
Awal, Abdul	Team Leader, M4C	Dhaka
Islam, Md. Tawhidul	Senior Manager, M4C	Dhaka
Kabir, Sujayet	Knowledge Management and Innovation Coordinator, M4C	Dhaka
Ahmed, Tahrima Trishna	Senior Officer, Public Sector Engagement, M4C	Dhaka
Rabiul Hasan	Intervention Area Manager, M4C	Dhaka
Datta, Utpal Kumar	Manager, Public Sector Engagement, M4C	Bogura
Rizvi, Md Khurshid Iqbal	Director General (Additional Secretary), RDA	Bogura
Pramanik, Dr Abdul Majid	Joint Director, RDA and Project Director, CDRC	Bogura
Zakaria, Dr A K M	Ex Director, RDA; Founder and Ex Project Director, CDRC and Advisor, United Commercial Bank Limited	Bogura
Haque, Mojaherul	Consultant, Anchoring and Institutionalization, CDRC	Bogura
Khan, Md Anisul Wahab	Project Director, PROVATI ³ , LGED	Dhaka
Latif, Dr Abdul	Ex District Livestock Officer, DLS	Gaibandha
Kadir, Dr Monjurul	Chief Scientific Officer, BARI	Jamalpur
Tanzin, Mashrufa	Faculty Member, RDA	Bogura
Sultana, Rebeka	Faculty Member, RDA	Bogura
Islam, Muhammad Riazul	Protocol Officer and Faculty Member, RDA	Bogura
Talukdar, Fakhar Uddin	Faculty Member, RDA	Bogura
Parvin, Momtaz	Field Admin, CDRC	Bogura
Rahman, Md Hafizur	Field Officer, SKS	Gaibandha
Gupta, Chandranath	Field Officer, SKS	Gaibandha
Ifaz, Fahad	Co-Founder & CEO, iFarmer	Dhaka
Roy, Kallol Kumar	Head of Farmer Financing Operations, iFarmer	Dhaka
Ananya, Archi	Impact and Partnership Manager, iFarmer	Dhaka
Julfiker, Md Forhad	Vice President – Field Operations, iFarmer	Dhaka
Raiasat, Munazzeel	Co-Founder & Managing Director, Agrigate	Dhaka
Islam, Muhammad Ashraf	Head of Agriculture, Agrigate	Dhaka
Kabir, Khan Muhammad Nafiul	Assistant General Manager, Agrigate	Dhaka
Mirza, Aszad	Head of Business, WeGro	Dhaka
Rahman, Md Alvi	COO, WeGro	Dhaka
Alam, Muhammad Saeedul	Co-Founder, COO, Biniyog.io	Dhaka
Anwar, Minhaz	Chief Storyteller, Better Stories	Gaibandha
Rahman, Mizanur	Head of Field Operations, Pumpkin Plus	Rangpur
Bilkis, Rokhsana	Field officer, Pumpkin Plus	Rangpur
Islam, Md Saidul	Entrepreneur, iFarmer center	Kurigram
Islam, Jewel	Livestock farmer	Kurigram
Islam, Johurul	Livestock farmer	Kurigram
Haque, Enamul	Solar irrigation entrepreneur	Rangpur
Hossain, Monowar	Entrepreneur, Ma Agro Poultry Hatchery	Gaibandha
Firoz, Shah	Farmer and seedling nursery entrepreneur	Gaibandha
Chandra, Sufal	Farmer and solar irrigation entrepreneur	Gaibandha
Matin, Abdul	Grain trader	Gaibandha
Ali, Md Haidar	Agro-input retailer	Gaibandha
Mahmud, Md Sultan	Artificial insemination service provider	Gaibandha
Rahman, Hafizur	Entrepreneur, Nabik Poultry Hatchery and Organizer, Gaibandha Uddokta Forum	Gaibandha
Akter, Nasima	Entrepreneur, Portable storage	Gaibandha
Ali, Md Haidar	Grain trader	Gaibandha
Talukdar, Md Dulal Hossain	Veterinary service provider and animal trader	Bogura
Uddin, Md Belal	DD, DAE	Gaibandha
Bostami, Bayezid	Senior Marketing Officer, DAM	Dhaka
Hossain, Md Shah Mowazzem	District Agriculture Marketing Officer, DAM	Gaibandha
Hossain, Sakhawat	Senior Manager – Market Development, Petrochem (Bangladesh) Limited	Dhaka
Based, Abdul	Regional Manager, United Seed Store	Bogura
Sheikh Mohammad Juglul	Field Coordinator, CDRC	Shariatpur
Islam, MD Rashedul	Field Supervisor, CDRC	Shariatpur
Bepari, Md Ibrahim	Seedling trader	Shariatpur
Begum, Nargis	Tailoring shop entrepreneur	Shariatpur

Kabir, Masud	AI service provider and livestock input retailer	Shariatpur
Bepari, Abdur Rahman	Agri-input retailer	Shariatpur
Pramanik, Jahangir	Tricho-compost producer	Shariatpur

Methodology Note

Our methodology involved several steps to gather information for this knowledge product.

First, we conducted a literature review of project documents, published reports, and various assessments to understand the project legacy since 2012, the roles of different stakeholders, and the project's results and achievements. This helped us to build a comprehensive picture of the Chars and the surrounding market.

Next, we engaged in several rounds of discussions with M4C leadership and implementation staff to better understand their strategy, interventions, and partnerships. We also had extensive discussions with RDA / CDRC leadership to understand their roles and responsibilities in the project, how they have evolved, and their vision for future.

We then followed selected interventions to see how the model worked in reality. This involved interviewing service providers in chars who received support through project interventions under different key components such as input, finance, output, and capacity development. We sought to understand how the support impacted their business and how they are operating it now.

Additionally, we interviewed selected new service providers in chars who are providing a new service to char dwellers that were missing in the past. We sought to understand how these new services are impacting beneficiaries and if there are more enterprises showing interest in entering the same space.

Finally, we interviewed selected beneficiaries who have been impacted due to their improved access to resources or linkages that are crucial for their economic growth.

We also engaged with different government agencies that have been strategic allies of the project, such as the Department of Agricultural Extension, Department of Agricultural Marketing, Department of Livestock and Local Government Engineering Development. This helped us to understand how the project activities complemented their mandate, how CDRC has played the advocacy role and the potential for ongoing collaboration in the future.

Overall, our methodology involved a thorough and multi-faceted approach to gather information from various stakeholders to understand and reflect on the M4C project's impact.