



Internal change Monitoring and Evaluation Report

‘People led Conservation of biodiversity in Haor areas in Netrakona’

Project Duration 1st April 2022 to 31 March 2025



Conducted by
Saulbinus Lamin



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Abbreviation/Glossary

BARCIK=Bangladesh resource centre for indigenous knowledge

CBOs=Community based organizations

DC=Deputy Commissioner

FGD=Focus group discussion

NGO=Non-governmental organization

PLD=People led development

PVS=Participatory Varietals selection

UNO=Upazilla Nirbahi Officer

UP=Union Parishod



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Executive Summary

This report presents the findings of the evaluation for the project titled "**People-Led Conservation of Biodiversity in Haor Areas in Netrakona,**" funded by the Japan Fund for Global Environment. Designed as a three-year initiative, the project aimed to implement key activities in Madan sub-district of Netrakona. BARCIK commenced implementation in April 2022, and the project concluded in March 2025.

The evaluation employed a comprehensive methodology, including a review of existing project documents and annual reports, consultations with BARCIK staff and community members, discussions with youth groups, interviews with key stakeholders, field visits, and focus group discussions. The assessment of project outputs primarily relied on previous activity progress reports, online resources, news portals, and participant interviews. The objective was to evaluate the project's contribution to enhancing the capacity of Haor communities particularly farmers, women, and youth—to adapt to climate-related disasters, promote biodiversity conservation, and improve livelihoods. Additionally, the evaluation examined BARCIK's role in facilitating community empowerment through capacity-building initiatives, self-driven actions, and advocacy campaigns.

Through this project, BARCIK conducted eight experimental research programs over two seasons in areas facing challenges such as hilly terrain, early floods, hailstorms, and rice diseases. A year-long research initiative with 20 families was undertaken to improve food and nutritional security. In order to support climate-resilient agriculture, the project established four community seed banks for climate-tolerant seeds and four tree nurseries, increasing local access to resilient crops and saplings. Capacity development programs enhanced community skills in climate-smart agriculture, energy conservation, and biodiversity preservation.

The project facilitated the formation of 30 community-based organizations, including farmers' groups and youth organizations, with 711 members, promoting unity and knowledge-sharing. The re-excavation of a canal embankment enabled rice cultivation on 400 hectares, benefiting 200 families and facilitating winter crop production, which helped reduce flood-related losses. Climate-resilient crop varieties were identified and promoted, expanding cultivation to 730 acres and benefiting 1,243 farmers. Additionally, innovative methods such as sack and tower cultivation enabled families to adapt to sand, drought, and flood-prone conditions.

BARCIK distributed 30 types of seeds to 1,888 farmers, stored 134 kg of seeds, and strengthened the community-based seed exchange system. Women's involvement in seed banks and food production increased, enhancing their empowerment and resilience against climate challenges. Tree plantation initiatives resulted in 2,008 saplings being planted, reducing soil erosion and improving local biodiversity. Four nurseries produced 16,762 seedlings, generating income and improving access to climate-adapted saplings. Expanded home gardening and tree planting, particularly of Koroch and Hijal species, contributed to stabilizing homesteads in flood-prone areas.

Youth engagement played a significant role in the project, with climate camps and action plans fostering environmental protection and sustainable agricultural practices. BARCIK's interventions strengthened climate-resilient farming, diversified food production, reinforced seed systems, and empowered marginalized communities, particularly women, contributing to sustainable, climate-adaptive livelihoods in the Haor region.

The project facilitated dialogues bringing together government officials, service organizations, journalists, and community leaders to address critical challenges in the Haor areas, fostering collaboration for long-term development. As a result, local government authorities initiated projects such as raising earthen roads, paving 700 meters of Haor road in Uchitpur, and repairing one kilometer of dirt road in Kalmakanda. Additionally, 131 border-area farmers received grain seeds, and successful almond and banana cultivation on sandy land was supported. Two children's education centers were established in Guchchagram, and a project proposal was submitted for hill slope excavation and dam renovation.

The Member of Parliament initiated the construction of a rubber dam, enabling the cultivation of 1,500 acres of previously fallow land in Rangchati Union. The Upazila Agriculture Department launched research to identify suitable crops for sandy areas. Communities became more informed about government services, leading to increased participation in safety net programs and local development initiatives. Farmer organizations ensured the availability of BR 88-89 seeds, allowing 55-60% of Haor land to be cultivated with disease-resistant rice varieties.

Project-formed committees contributed to improved disaster management and increased youth participation in environmental and income-generating activities. Strengthened links with local government institutions led to greater access to services and technical support for communities. Two Upazila People's Organization Management Committees were established, facilitating dialogues where farmers could address critical issues such as irrigation, flooding, and human-wildlife conflicts. Additionally, increased networking among farmers enabled knowledge exchange, access to agricultural inputs, and the strengthening of adaptation strategies.

The achievements, challenges, and success stories from the project were captured by both local and national media, disseminating its impact to a wider audience. The outcomes of this initiative demonstrate a promising and scalable model that can be replicated in other areas, expanding its impact and ensuring broader regional benefits.

CHAPTER ONE: INTRODUCTION

1.1 Few words about BARCIK

BARCIK is non-governmental and non-profitable organization. It was founded in 1997 as a development organization. In 2001 the organization for the first time started to work in the field areas of two different agro-ecological zones of Bangladesh namely Netrakona and Sathira districts. In course of time, it has expanded its working areas and today it works in 12 agro-ecological zones focusing on and prioritizing the experience, knowledge and understanding of the nature dependent occupational groups such as farmers, weavers, fishermen, potters, indigenous communities Kobiraj, non-timber forests products users etc. Besides, considering the needs and demands of communities in its working areas BARCIK also today starts to work on promoting the rights of youths, adolescents, senior citizens and differently able people for accelerating their development process. BARCIK adopts PLD (people led development) approach to facilitate the development activities in Bangladesh.

BARCIK has been active in delivering development program in Bangladesh for the last 20 years and gained wide experience in working close to the communities for assisting them improving their life and livelihood status. Over the years, the organization has developed healthy working relationship with relevant government of Bangladesh, civil society organizations, CBOs, development organizations, youth groups, senior citizens, women, students, teachers, journalists and different occupational groups in its working areas in Bangladesh. The main focus areas of the organization include: Agro-biodiversity, food security, gender, climate change, environment, pluralism and interdependent relationship among all life forms as well as capacity development.

1.2. Project background

The project titled 'People led Conservation of biodiversity in Haor areas in Netrakona' has been facilitated in two ecological areas of Bangladesh, namely Madanupazila and Kalmakanda (sub-districts) in Netrakona district, the flood plain and wetland ecological area. The major agricultural crops in Madan Upazila are rice, jute, wheat, pulses, spices, vegetables, mustard, grain, maize, potato etc. Typical examples of climate change induced hazards occurring in the upazila include increase of flash floods and seasonal floods. Flash flood often damage the crops of the smallholders while seasonal floods which last for longer period of times create problems in day to day life of the people living in those areas. The climate change has increased the severity of the ecological crisis of the project area due to manmade disaster. On the other hand, Kalmakanda sub-district of Netrakona district is located in the north-eastern part of Bangladesh and is also vulnerable to disasters. The sub-district is closely situated to the Maghalayan hills and Cherrapunji-the rainiest place on earth. The land pattern of Netrakona is mainly plain and wet but some bordering areas are parts of hillock. In the monsoon, most of the plain and wetland get inundated under water and flash flood occurs every year in this area. The project dealt with these issues in order to conserve the rich biodiversity of the areas and strengthen the peoples led adaptations and local nature based technological solutions for resilience building and sustainable natural resource management.

However, Netrakona is also the part of the Haor Wetlands, which occupy one-sixth of Bangladesh in the northern-east. Haors are bowl-shaped depressions between the natural levees of a river, subject to monsoon flooding. The basin supports a large variety of wetland bio-diversity and works as natural reservoir as it plays a key role in basin water resources by regulating water flows of the Meghna River system. Also, the haors are noted sanctuaries of both permanent and migratory birds. With the recession of floodwater, a large variety of small fishes, oysters, water snails and

bivalves, and pasture spread over the surface attracting a large number of migratory birds. During the dry season, most of the water drains out, leaving beels either overgrown with aquatic vegetation or exposing rich alluvial soils, cultivated for rice. Excessive cold and heat, caused by climate change, affect crops.

BARCIK developed an area-specific action plans which gave guideline to the stakeholders to address climate induced disaster and increase their resilience. The staff members conducted several village consultations and awareness meeting with the community to understand the climatic condition as well as to aware the communities on the negative impact of climate change. Based on the consultations and meetings BARCIK formulated e area specific action plans. Since both flood plain and wetland ecology exist in the area, the local communities have been facilitated to improve ecological condition of the project site according the strategy of the local area specific plan. The peoples to people awareness and information sharing approach followed where stakeholders were the main actors of the project to implement project related activities. However through this project BARCIK developed the capacity of the stakeholders by providing trainings and consultations on related issues, assisted the communities to practice eco-friendly farming and facilitated them to conduct campaigns to address the concern authority to take actions and steps in solving their problems. BARCIK also linked and connected them with different public and private agencies, service delivery institutions and different government departments so that they have access to services, entitlements and facilities that could contribute in improving their livelihoods.

The project's objective, as established in the original project document of April 2022, was 'To enable people in the region to learn about, conserve and regain rice, vegetables and other varieties adapted to the various weather conditions caused by climate change. Also, through solidarity among people, to be able to protect their safe and secure livelihoods'. The desirable outcomes of the project was 'Farmers themselves will be able to acquire and use the skills to select seeds adapted to their climate and region. It will also enable people to unite and access government services through group activities'. Based on the objective and outcomes the expected results were defined as follows: (a) Increased knowledge of stakeholders about climate change, biodiversity management, disaster risk reduction; (b) Strengthened capacity of stakeholders to address climatic stresses, social inequality and biodiversity depletion.

In order to achieve the objectives and desirable outcomes BARCIK has categorized 3 components of activities which are seen as follow:

- a) Promoting understanding of climate change adaptation agriculture by communities: Organize communities to raise awareness on biodiversity conservation and adaptation to climate change, Groups are formed in each village, union and upazila to meet to discuss local issues and share achievements, Development of materials on biodiversity conservation and adaptation to climate change Prepare training manual for use in activities, capacity building training on biodiversity conservation and adaptation to climate change. Improve community resilience through knowledge and skills acquisition and sharing among farmers in target communities on biodiversity conservation and climate change adaptation, developing and implementing action plans in biodiversity conservation and climate change adaptation agriculture, Develop annual village-level action plans in two upazilas for crop production, biodiversity conservation, afforestation, disaster risk reduction and adaptation strategies, livelihood enhancement, etc., Pilot cultivation and variety selection of Amon rice varieties Cultivation and growth observation of several varieties of Ammon rice will be carried out with farmers

at the pilot farm (rented), and varieties that can be grown by each farmer will be selected. Rabi (vegetable) variety trial cultivation and variety selection, Establishment of seed banks, Plant saplings suitable for the local natural environment

- b) Improved access to government services: Installation of awareness-raising billboards (The billboards aim to draw the attention of non-project communities to biodiversity conservation, agriculture and measures to adapt to climate change, resilience building, etc. dialogue with government at union, upazila and district levels Development and facilitation of 2 area specific “Peoples’ Plan of Action on Adaptation and Mitigation Strategies” with specific community examples, Facilitation of 2 area specific “Peoples’ Plan of Action on Adaptation and Mitigation Strategies” with specific community examples and Joint initiative to contribute to reduce the livelihood vulnerability of the female and disabled people and physically challenged families.
- c) Advocacy and networking at regional (Haor area) and national levels: Experience sharing with NGOs in Netrokona, Habigonj and Sunamgonj districts, dialogue on biodiversity, climate change adaptation and resilience building in Haor, Discussions on the action plan set out in activities 1-4 with the participation of relevant organizations from across the country. Monitoring and evaluation (in Madan upazila), Biodiversity festivals, Mass media campaigns

1.3 Objective of the Evaluation:

The objective of this evaluation is to assess the efficiency and effectiveness of the implementation of the project. The project’s objective was to develop the capacity of the stakeholders so that they could themselves address the climatic induced disaster, reduce risks and practice organic farming through biodiversity management. The project also aims to contribute in improving the livelihood of the stakeholders through linking and connecting them with service delivery agencies so that they could have access to services and entitlements. In addition, the project also aims at linking and connecting the communities with different government and non-government agencies and institutions so that they could develop good relationships, avail access to different services and facilities and solve their problems with the supports from the agencies

1.4 The task

The main tasks of the evaluation are based on the following areas

- Reviewing the progress based on objectives and results of the project
- Reviewing the contribution of the project in helping the communities to adapt to climate induced disasters, biodiversity management and practicing livelihood sustainability.
- Assessing the activities which played important role in ensuring the sustainable use of natural resources, climate change adaptation and mitigation, organic farming, applied research to find appropriate and suitable crops, agro-biodiversity conservation, and environmental conservation
- Assessing the perception of the communities on climate change, diversity and sustainable livelihoods.

-Assessing the relationship, and joint actions of the communities with other communities, community organizations, groups, networks, local government and government bodies.

-Assessing the understanding of BARCIK staffs on climate change, diversity and sustainable livelihoods.

CHAPTER TWO: THE METHODOLOGY

The methodology employed in this evaluation is comprehensive and multifaceted, ensuring a strong collection of information regarding the changes contributed by the project including constraints, limitations and challenges. The approach is divided into two main categories: primary and secondary data collection.

2.1 Primary information

Primary data has been collected through focus group discussions, structured meetings and interviews with various stakeholders, community leaders, youths and women and farmers. In addition to general interviews, key informant interviews were conducted with individuals who possess knowledge and understanding on the project objectives.

2.2 Secondary information

Secondary data were collected through reviewing literatures. This involved analyzing a wide range of sources, including project proposals, reports, newspapers. Secondary information was also extracted from reports published by BARCIK. Websites and online resources (news portal) were utilized to access relevant documents and reports. Once the data was collected, a systematic analysis was conducted to identify patterns, themes, and correlations within the information gathered. This involved qualitative analysis techniques to interpret the insights from focus groups and interviews, as well as quantitative methods where applicable.

2.3 Field visits

As part of primary information collection the evaluator had a meeting with the community at the cluster village (Gucchagram) located in Govindasree union, conducted 2 FGDs with farmers and women groups at Chandringa village and Taranagar village of Lengura Kalmanda, interviewed one farmer who started nursery and conducted sharing session with the adolescent girl's organization. There had been one briefing session with the staffs of the project at Modan of Netrakona where regional coordinator, field facilitator and community facilitators participated. Applying these methods and tools the evaluator gathered information to understand, learn and know the opinions, experience, exercises, feelings, perceptions and different situations of the people involved in the project. During these visits, the opinions of BARCIK's officials and authorities with regard to the impact, relevance and efficiency of the project were obtained; and some valuable conclusions were drawn from direct observation at these events;

Upon discussion with BARCIK, the evaluation adopted a participatory method with an emphasis on "Appreciative Inquiry" approach. However, this was not meant to overlook the key challenges and limitations faced by the project, because a comprehensive learning approach cannot remain limited to portraying the successes only. The internal evaluation therefore, tried to highlight the results of the project that have positive energy and strength with their causes and effects. This evaluation has emphasized on the qualitative aspects of change. This means that the process was heavily reliant on information, opinion and views of the beneficiaries and key stakeholders of the project. This has enabled the evaluator to dig deeper into the causes and effects of the change and thus explain the issues with sufficient clarity and details.

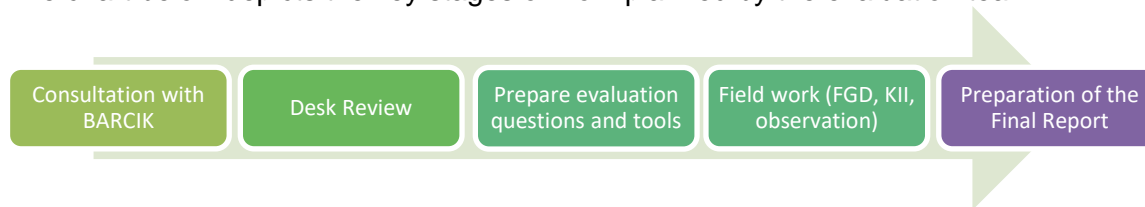
The internal evaluation covered the performance of the project during January 2022 to April 2025.

2.4 The Process of Evaluation

Upon confirmation and signing of agreement, the evaluator had an introductory meeting with BARCIK Executive Director, director and regional coordinator and other project staffs. This was useful in learning about the expectations of BARCIK and planning of the fieldwork for data collection. Following the meeting, the evaluator received all the information and literature that it needed for the assignment. A mutually convenient time plan for the work was also agreed. The following gives a list of main evaluation activities:

- Conduct desk review of relevant literature;
- Prepare evaluation questions and tools;
- Conduct field assessment using participatory approach (FGDs with group members);
- Preparation of evaluation report.

The chart below depicts the key stages of work planned by the evaluation team



CHAPTER THREE: THE FINDINGS

The findings are being discussed based on the results of the tree components: 1) Promoting understanding of climate change adaptation agriculture by communities, 2) Improved access to government services and 3) Advocacy and networking at regional (Haor area) and national levels. In addition, the evaluator did make an effort to analyze the contribution and impacts of the project in enabling the communities adapting to climate disaster, mitigation initiatives, biodiversity conservation and livelihood improvement.

3.1 Promoting understanding of climate change adaptation agriculture by communities

BARCIK Conducted (7) experimental research programs over two seasons in two areas facing unique challenges hilly terrain, early floods, hailstorms, and rice disease. BARCIK also initiated a year-long research program with 20 families to enhance food and nutritional security. Through the project BARCIK has been able to facilitate the establishment of 4 community seed banks for climate-tolerant seeds and 4 tree nurseries to provide local tree saplings. On the other hand, the capacity development initiatives taken by BARCIK through the project enhanced skills of the communities to practice climate-resilient agriculture, energy saving, and seed and biodiversity conservation practices. This also enhanced climate-resilient agricultural practices, sustainable crop cultivation, and biodiversity conservation through community-led efforts and research. Over again, the interactions such as discussions, fairs, and promotional activities to strengthen local climate resilience have sharpened the knowledge of farmers which speeds their empowerment process.



A part from this, the project contributed to forming 30 organizations, including farmers' groups, youth organizations, indigenous community groups, and a handicraft group, comprising 711 members (497 women, 214 men, 178 youths, and 110 indigenous individuals). BARCIK regularly coordinates these groups at Union, Upazila, and district levels to foster unity and knowledge exchange. Meanwhile the re-excavation of canal embankment in Kalmanda has contributed to bringing about 400 hectares of land under rice cultivation. Through which about 200 farmer families of Chandringa village have been benefited enabling them to produce food and use their fallow lands. This re-excavation has contributed to increasing the cultivation of Boro rice in Boro season as well including other winter crops. The project has contributed to generating the following changes in the working areas:

- Identified crops suitable for addressing challenges like early floods, hailstorms, and diseases.
- Expanded cultivation of these crops to 730 acres, benefiting 1,243 farmers and reducing crop loss risks.
- Promoted BR 84, 88, and 89 varieties over BR 28-29, reducing risks of early floods and diseases. Preliminary results show these varieties can be harvested 10-15 days earlier, mitigating natural calamity risks. It is recommended to cultivate BRR1 Dhan 88 and 89, as these rice varieties share similar characteristics with BRR1 Dhan 28 and 29 but offer better resistance to diseases and pests. As a result, their cultivation has increased in the area, benefiting farmers. However, they are still not fully effective in mitigating the risk of early floods.
- Farmers' capacity to manage early flood risks has improved. The cultivation of diversified Rabi crops is playing a significant role in reducing this risk. Consequently, efforts are being made to expand Rabi crop cultivation among farmers in haor areas.



- Supported 20 marginal families with tools and inputs to produce winter crops including other diverse crops year-round.



- Innovative methods (e.g., sack and tower cultivation) helped families adapt to sand, drought, and flood conditions reducing their loss as well as enabling them to cope with the climate change situation.
- Distributed 30 types of seeds to 1,888 farmers and stored 134 kg of 30 varieties.
- Strengthened seed exchange, promoting crop diversity and production.
- Increased women's involvement in seed bank, enhancing empowerment and climate resilience.
 - Planted 2,008 saplings (925 sand-friendly and 1,083 water-tolerant) to reduce erosion and enhance biodiversity.
- Operated 4 nurseries producing 16,762 seedlings, selling 10,118 for BDT 200,780.
- Increased availability of diverse, climate-adapted saplings (e.g., hijol, karach, fruit, and medicinal trees).
- Women's involvement in seed banks and food production increased their recognition and contribution to climate adaptation.
- Fostered their empowerment and active participation in addressing climate challenges.
- Tree planting reduced soil erosion, improved local environments, and provided nutritional and economic benefits.
- Community interest in tree planting grew, supporting biodiversity and sustainable practices.



- Organized a climate camp to involve youth in environmental protection and agricultural activities in the Haor area.
- Have an action plan to implement their development activities collaborating with other actors

BARCIK's initiatives have enhanced climate-resilient agriculture, diversified household food production, strengthened local seed systems, and empowered communities, particularly women. These efforts contribute to building sustainable, climate-friendly infrastructure and practices in the Haor area. It also collectively strengthened community-level climate resilience, increased agricultural productivity, and empowered marginalized groups to address climate challenges effectively.

3.1.1 Field observation

During interactions with villagers from Chandradiga village, MIKRAKA women's organization at Taranagar, Lengura Union of Kalmakanda sub-district, climate-displaced communities at the cluster village (Gucchagram), farmers at Icchapara village and adolescent girl organization named 'Sobuj Ahoban Kishori Songathan' Khalasipara of Govindashree Union of Madan sub-district, the evaluator observed significant improvements in the communities' knowledge and capacities as well as their access to government services and increased communication with the government departments and other development organizations. They have advanced in areas such as climate change awareness, risk reduction strategies, applied research for suitable crop varieties, seed conservation and management, income-generating initiatives, access to government services, and vermicompost preparation compared to the past.

The indigenous communities in Chandradiga Village highlighted the benefits of canal renovation. They described it as a blessing, enabling them to farm crops on lands that previously remained fallow due to sand deposition. By cultivating winter crops and vegetables alongside Boro rice the only crop traditionally grown in haor areas they have reduced losses caused by flash floods. Farmers also adopted adaptive techniques, such as sack farming and elevating crop beds, to mitigate sand deposition. Their success to cope with the climate change situation has inspired other farmers and people in their areas. These people take advice and seeds from the target groups and practice the adaptation in their own areas. This way, the result of the action research has extended in other areas without any development cost. However, Before BARCIK's intervention, they only cultivated Boro rice and frequently incurred significant losses due to floods.

Being facilitated by BARCIK these communities have their own action plan which they formulate to address their problems.

In Govindashree Union, farmers reported diversifying their crops by growing vegetables, maize, peanuts, and jute, often using mixed cropping techniques. This approach allows them to harvest crops before flash floods, thereby reducing losses. Through applied research, farmers identified Malshira rice as a highly suitable variety for the area. Many farmers in Kalmakanda and Madan sub-districts now conserve and exchange Malshira rice seeds. Encouraged by BARCIK's technical support, these farmers are making better use of their lands by integrating winter vegetable cultivation with Boro rice farming. Diversification has reduced their reliance on a single crop and provided them with multiple farming options, mitigating risks from floods. The farmers mentioned that the cultivation of Robi (winter) crops and BR 88 has increased in their lands that helps them to reduce due to being able to harvest crops before the flash floods. The conservation of Robi crop seeds and exchange among the farmers has increased as well.

In the cluster village, the displaced communities are now growing vegetables around their homes and planting Koroch and Hijal trees to stabilize their homesteads though they face challenges this year due to their homestead have experienced erosion during the floods. They demanded to construct a protection wall to protect their homestead and they have already communicated with the authorities to serve their purposes. But since after 5 August there have been changes in political scenario of Bangladesh that is how the process to build a protection wall has not advanced yet. However, they recalled that the land was once barren, with no greenery. Today, the village is adorned with climate-resilient trees, which not only enhance its aesthetics but also provide shade, nutrition, and reduce dependency on market-bought vegetables. The trees shield homes from scorching summer heat, improving living conditions. The evaluator has found the green shape of the cluster village as well.

The adolescent girls organization (Sobuj Ahoban Kishori Songathan') at Govindashree union, demonstrated a strong understanding of climate change, biodiversity conservation as well as tree plantation including awareness in health areas. After receiving practical training, they organized meetings they took initiative to plant trees and discussed the importance of biodiversity and environment with their fellow brothers and sisters in their areas. They comparatively have had clear idea on health and nutrition issues including the importance to be united through their association to assert their issues and concerns older farmers to promote organic farming practices over chemical-based systems, contributing to healthier ecosystems. Women's groups, such as those in Buyahati Village, have also embraced homestead gardening.

3.1.2 Comments

- The levels of understanding and articulation among the communities are not the same leading some of them still do not benefit from the capacity development initiatives of BARCIK.
- The renovation of the canal though benefited the villagers of Chandradinga yet it is uncertain due to the frequent floods and landslides in the upstream.
- The communities still need capacity development to be able to cope with the changed situation and to enhance their skills
- The target groups need to be explored in income generating activities and livelihoods supports as well as strong connectivity with other actors to address their problems.
- Many families in the haor region struggle to meet their basic needs, including housing, food, healthcare, education, and entertainment. Due to the area's geographical and

socioeconomic conditions, children, adolescents, and women are particularly deprived of essential services such as safe water, housing, education, nutrition, social security, and recreation. Climate change-induced natural disasters have further worsened the situation. Therefore, addressing social issues alongside food production is crucial.

- Applied research on year-round vegetable cultivation at the homestead level has proven to be an effective strategy for ensuring family nutritional security. As a result, 20 families successfully met their nutritional needs throughout the year, inspiring many others to adopt similar practices.
- Women and youths require right based and skill trainings which could equip them with knowledge and understanding to mobilize the communities.
- Strong collaboration with the local government and administration is needed.

3.2 Improved access to government services

BARCIK organized dialogues and these dialogues brought together government officials, representatives from public and private service organizations, journalists, community leaders, men, and women. The dialogues focused on critical issues of Haor areas which impact the community and fostering collaboration for sustainable development. As a result of this, local government initiated a project to raise earthen roads by dredging nearby rivers, improving the Haor village communication system. Government paved 700 meters of Haor road in Uchitpur. 131 border-area farmers received four types of grain seeds (Boro rice, maize, almond, and onion) from the Upazila Agriculture Department. Farmers successfully cultivated almonds and bananas on sandy land with additional support. On the other hand, one kilometer of dirt road in Kalmakanda (Betgara to Hatiber) was repaired under local government initiative. Two children's education centers were established in Guchchagram, Haor, by the upazila administration. Kalmakanda Upazila Administration submitted a project proposal to the ministry for excavating hill slopes and renovating slope dams. Upon informing the Member of Parliament for Kalmakanda-Durgapur, an initiative was taken to construct a rubber dam in the border area, potentially bringing 1,500 acres of Rangchati Union's fallow cropland under cultivation. The Upazila Agriculture Department began action research to identify suitable crops for sandy land, aiming to cultivate unused land in borderbelt areas.

Communities are now better informed about government services, which has enabled greater involvement and collaboration between the public and government institutions. This has created opportunities for communities to provide suggestions and recommendations to address local challenges by engaging with relevant government departments and institutions. The participation of marginalized groups in various government safety net and development programs has also grown. This year, continuous communication by farmer organizations ensured the availability of BR 88-89 seed varieties in the Haor area. Consequently, farmers were able to cultivate this disease-resistant, particularly blast-resistant variety on approximately 55-60% of their land. This outcome aligns with the priority outlined in this year's action plan.

Through the project some committees were formed with the objective to address development issues of the areas. As a result of the committees' initiatives disaster management responses through Union Disaster Management Committees has improved. Youths have been invited to participate in the plantation programs and other environment related activities of the local administration. They also participated in the income generating and capacity enhancement related training arranged by the government department equipping them with capacity and skills to get involved in income generating activities. The communication and linkage with the local

government departments and administration has increased resulting in the increased services and facilities received by the communities from those public institutions. The participation of communities in local development process has enhanced enabling them to receive services as well as technical and knowledge supports that accelerates their empowerment. Through the project BARCIK has been able to form two Upazila People's Organization Management Committees to facilitate different development related activities and interactions (meetings, dialogues etc.). These meetings allow farmers to present challenges such as water shortages, irrigation issues and land damage from landslides, early floods, and wildlife conflicts. The outcomes of this efforts include:

- Strengthened relations and communication between farmers of Madan and Kalmakanda with government officials.
- Farmers gaining confidence to address community challenges with local and upazila administrations.
- Collaboration with the Upazila Agriculture and Livestock Resources Departments to vaccinate livestock and bring fallow land under cultivation.
- Expanded cultivation of disease-resistant Boro rice (BR 88 and 89) in the area.
- Establishment of two children's centers for education in underprivileged communities.
- Renovation of the canal in Kalmakanda's Chandradinga village to protect agricultural land from landslides and sand deposition.
- Proper implementation of ongoing activities, aligning with community priorities and farmer demands.

These initiatives are improving access to resources, enhancing livelihoods, and fostering resilience among farming communities in the working areas.

3.2.1 Field observation

During the field visits and extensive interactions with various stakeholders and community members, including farmers, women, youths, adolescent girls, and organizational staff, the evaluator observed several noteworthy initiatives undertaken by the communities to adapt to climate change-induced disasters. These initiatives were made possible with the support and facilitation of government departments and included activities such as large-scale tree plantation drives, the cultivation of resilient rice varieties like BR 88 and BR 89, canal renovation projects, participation in government-organized training programs, and livestock vaccination campaigns.

The communities in Chandradinga village highlighted specific support they received from government institutions. Some community members reported being provided with submersible water pumps, allowances, and agricultural inputs such as seeds, fertilizers, and other essential materials by the agriculture department. This assistance has enabled them to adopt climate-resilient practices and improve their agricultural productivity. Similarly, farmers from Govindashree Union noted the significant strides they have made in building and maintaining strong relationships with government officials, which have granted them better access to vital services and entitlements. These services include regular allowances, hands-on training sessions, agricultural inputs, and livestock vaccination programs, all of which have contributed significantly to improving their overall livelihood and resilience against climate-related challenges.

The communities also expressed their growing confidence in interacting with government officials. They mentioned that some members now feel empowered to approach key administrative figures, such as the Deputy Commissioner (DC), the Upazila Nirbahi Officer (UNO), agricultural officers,

and other government representatives, to voice their concerns, present their problems, and advocate for necessary actions. This newfound courage and capacity to network with influential institutions were unanimously attributed to the interventions and consistent support of BARCIK.

Youths, in particular, have demonstrated their proactive engagement in addressing social and infrastructural issues within their communities. They have organized and executed campaigns on critical topics such as preventing eve-teasing, repairing roads, reducing school dropouts, and addressing other local challenges. Through these campaigns, they have successfully drawn the attention of relevant authorities, who have responded positively to their efforts. For example, as part of their campaign efforts, the youths initiated a tree plantation drive that resulted in the planting of numerous trees across their locality, including along the roadsides in Madan. These trees are now visible markers of their contribution to environmental sustainability and community development.

3.2.2 Comments

- The rate and number of services received by the communities is not huge. They even do not remember what services they received.
- The youths and educated people comparatively have enhanced their access and network with the government departments and the other still dependent on these youths and educated people.
- Vaccination activity has not been performed very well in remote areas of the working areas depriving the community from these services
- The communities still require more capacity development on networking and advocacy

3.3 Advocacy and networking at regional (Haor area) and national levels

Regional People's Organization Management Committee was formed in the Netrakona area, comprising representatives from people's organizations in Kalmakanda and Madan regions. This committee convenes annually to discuss and address key issues affecting the farming communities in these areas. At the district level, the Public Organization Coordination Committee facilitated improved communication and information sharing among farmers in the region, significantly enhancing collaboration between Kalmakanda and Madan. Several critical issues and proposals emerged during these meetings. Through advocacy and networking initiatives the farmers in both Madan and Kalmanda have been able to visit and interact with other farmers from their perspective areas enabling them to share knowledge, experiences and even agriculture inputs (Seeds, fertilizers etc.) with each other. The networking among farmers opens opportunity for the farmers of both areas to address their different climate change related problems learning and even replicating the success of other farmers in other areas when addressing such problems. This enhance their resilience and equips them with aspiration and hopes to make their own development.

However, through the advocacy and networking the farmers of both areas proposed to establish government establish safe food corners in local markets to ensure farmers receive fair prices for crops grown without chemical fertilizers. The farmer networks also recommended to declare a complete ban on using chemical fertilizers in water bodies, alongside legal actions against individuals responsible for contaminating water through harmful fishing practices. The networking committee emphasized on prioritizing proactive farmer organizations in accessing government agricultural services and subsidies. However, the Upazila Agriculture Department is actively supporting farmers in Haor and borderbelt regions by providing seeds and other inputs for

cultivating advanced, water-tolerant crops as alternatives to rice. Participating farmers from Haor, borderbelt, and plain areas decided to establish a district-level Farmers' Union to collectively advocate for their rights and address common challenges.

Furthermore, the project has ensured huge media coverage capturing the issues and problems of the target communities in Madan and Kalmakanda areas. More than **120 reports** were published across various media outlets, including www.barciknews.com, highlighting the project's initiatives, success of farmers and the impacts of the project on their life and livelihoods.. These reports covered: the adverse effects of early floods and sand deposition on local livelihoods and initiatives undertaken to mitigate these challenges and improve resilience. Several of these reports have been attached as examples, demonstrating the project's role in raising awareness and addressing key issues affecting the farming community. By fostering collaboration among farmers and advocating for systemic changes, these efforts aim to strengthen the agricultural sector and ensure the sustainability of livelihoods in the region.

3.3.1 Field observation

During the interactions with the communities with the target groups in both Madan and Kalmakanda the evaluator found that the farmers particularly have benefited from each other through exposure visits as they access agriculture inputs from other farmers of other areas. They also have been able to sharpen their skills in adapting to change through increased sharing and interaction with other farmers under their own networks. The advocacy and networking initiative under the project benefited the target groups. Through this networking and advocacy the relationship of the target groups with both the government and private agencies has increased enabling the communities to access services and entitlements to improve their livelihoods. Their relationship with the UP (Union Parishod), Upazilla administrations, district administration, agriculture offices, water development boards, women and children department, youth department, UP and Upazilla health complex has also increased. This resulted in their access to different services and participation in government run training and capacity building. The communities at Gucchagram (Cluster village) village mentioned that due to their good relationship and connectivity with the government departments they have been able to access services (agriculture inputs). The villagers of the village mentioned that their negotiating capacity has increased due to being able to be connected with those government and private agencies. Their confidence level also has increased believing that they are able to communicate and negotiate for services and facilities. The villagers at Chandradiga village of Kalmanda mentioned that today journalists and government officials visited their areas and witnessed the problems the target groups. They marked these as achievements of the projects. Some of the leaders among the indigenous people of Chandradiga village mentioned that UNO and even DC (Deputy Commissioner) know them. The youths from both Madan and Kalmanda mentioned that they involved in the government departments' campaign works (Tree plantation, rally, human chain and other programs) and this has been possible due to the network and advocacy initiatives under this project. The mentionable things that have been observed during the field works was the increased confidence of the communities (Farmers, women, youths) to communicate with the government and private departments for services, facilities and advices. This is the result advocacy and networking initiative taken under the project that increased the confidence of the target groups.

3.3.2 Comments

- The networking among farmers has been good but wider network with other occupational groups is not much visible.
- Networking with other occupational groups in both local and national level is important to ensure long term impact of the project
- The target groups (Due to low level of literacy) still require the facilitation of BARCIK in the issue of advocacy and networking
- The target groups also require to enhance their communication and interaction skills to enable them negotiating for their rights with national level government departments.

CHAPTER-4: EFFECTIVENESS AND IMPACT

The evaluation primarily assessed the capacity of target groups to reduce vulnerabilities to climate-induced disasters. Additionally, it explored the project's effectiveness and impact on their lives and livelihoods. Performance indicators were identified based on project objectives and activities to evaluate the outcomes within the complexities and limitations of the assessment.

4.1 Awareness in the Community

The project successfully raised awareness about climate change adaptation, biodiversity conservation, and disaster risk reduction. Target groups were informed about their rights and access to services from government and non-government organizations. Activities such as community meetings, training, and campaigns provided platforms for knowledge exchange. Focus group discussions (FGDs) revealed significant improvements in awareness among farmers, youth, and women, empowering them to claim rights, access services, and address environmental issues.

4.2 Formation of Groups and Organizations

The project facilitated the formation of 32 groups and organizations, starting in 2018. These groups provided opportunities for collective action, enabling members to access government safety net programs and services. However, some groups, particularly adolescent girls' groups, remain in the early stages and need further support to strengthen their advocacy efforts.

4.3 Climate Change Adaptation

The project addressed challenges faced by haor communities, who rely on a single annual crop. Climate-induced disasters such as flash floods and pest outbreaks exacerbate poverty and marginalization. Through interventions, farmers adopted winter crops, organic farming, and crop rotation, reducing dependence on Boro rice. Homestead gardening and seed conservation practices diversified livelihoods and minimized losses. Capacity-building initiatives increased community knowledge on climate adaptation and risk reduction, enabling proactive measures during disasters. Youths also engaged in tree plantation and awareness campaigns, promoting sustainable agriculture practices.

4.4 Biodiversity Conservation

Before the project, biodiversity conservation was minimal. Following intervention, communities began planting local and haor-friendly trees, practicing organic farming, and conserving seeds. Participatory Varietal Selection (PVS) helped restore local crop varieties. Tree plantations and seed conservation initiatives enhanced biodiversity. Although the project's contributions were modest, it successfully mobilized communities toward sustainable practices.

4.5 Livelihood Improvement

The project improved livelihoods by forming community organizations that connected grassroots groups with public and private service providers. Farmers gained access to seeds, equipment, and training from government departments. Alternative livelihood options such as winter crops, homestead gardening, and skill training for women and youth reduced dependence on Boro rice and provided additional income. Improved access to healthcare further supported livelihood enhancements, while collective actions addressed socio-economic challenges.

4.6 Gender Focus of the Project

The project prioritized women and adolescent girls, forming dedicated organizations to promote empowerment and rights advocacy. Income-generating activities such as vegetable cultivation and tailoring strengthened women's economic independence. Training on climate change, agroecology, and entitlements equipped women with the knowledge to actively participate in community development and advocate for their rights. The project created an enabling environment for women to lead and contribute to resilience-building efforts.

4.7 Strengths and weaknesses of the project:

The strength and weakness analysis are accomplished among different stages of the project evaluation to get the profound impression regarding project and its impact on the project beneficiaries. However Different stakeholders are selected mainly for triangulation of the views and opinions at staff, service providers and community level.

4.8 Strength of the project

- **Active Youth and Adolescent Involvement**
The active participation of youth and adolescent girls' organizations in project implementation has been commendable. The project has effectively collaborated with NGOs such as Caritas and World Vision and engaged government institutions, including Union Parishads, Upazila administrations, and youth and women's departments, in joint activities. These collaborations have streamlined project implementation and strengthened the networking of target groups with various stakeholders.
- **Relevance to Community Needs**
Haor communities have limited access to essential services, highlighting the necessity of the project. BARCIK has appropriately identified and addressed this demand. The project theme is highly relevant to the needs of the community and the local context.
- **People-Led Development Approach**
The project is being implemented using a people-led development approach, ensuring active participation of Haor communities in decision-making processes. This approach is a significant strength, as it prioritizes community perspectives, making interventions more responsive, community-driven, and sustainable in the long term.
- **Commitment of Implementing Organization and Staff**
The dedication of BARCIK and its project staff is evident in their efforts to bring about positive changes in the lives and livelihoods of Haor communities. Their commitment is reflected in their ongoing learning and adaptation to improve project outcomes.
- **Empowering Community Development**
Through activities such as tree planting, homestead gardening using sacks, and campaigns, the project has created opportunities for farmers, youth, adolescent girls, and women to actively participate in their development. These initiatives encourage problem-solving and foster a positive mindset, empowering the youth to act as change agents and contribute to the development of their communities.

4.9 Weaknesses of the Project

- **Limited Functionality of Some Organizations**

A few organizations formed under the project were found to be less functional, with members lacking clarity in their roles and responsibilities.

- **Low Literacy Levels**

The low literacy rates among some target groups hinder their ability to understand critical concepts such as climate change adaptation, disaster risk reduction, and biodiversity conservation.

- **Insufficient Skill Development and Income Generation Opportunities**

The project offers limited opportunities for skill development and income generation for Haor communities. This gap restricts the capacity of community members to access better economic opportunities and improve their livelihoods.

4.10 Constraints Faced by the Project

- **Environmental Challenges**

Hilly sands and flash floods frequently damage crops, rendering the land unsuitable for cultivation and exacerbating the economic vulnerabilities of Haor communities. Cold injuries also result in significant agricultural losses, further marginalizing farmers.

- **Remoteness of Project Areas**

The remote locations of the working areas pose challenges for staff members in visiting and covering project sites efficiently.

- **Geographical Uncertainty**

The unpredictable nature of the Haor region creates uncertainty for communities. For example, while the renovation of the canal at Chandradiga has provided benefits, there is no assurance that these advantages will persist in the future.

- **Barriers to Accessing Services**

The poor educational status of some Haor residents, particularly in cluster villages, limits their ability to access government and non-government services. Many feel hesitant to communicate their needs effectively and struggle to explain their problems to service providers.

CHAPTER 5: RECOMMENDATION AND CONCLUSION

5.1 Recommendation

- Further strengthening the facilitation capacity of target groups is essential to enhance their resilience by equipping them with adaptive strategies to cope with climate change impacts.
- Capacity development on thematic issues, including a rights-based approach, is crucial for farmers and youths to empower them in decision-making, resource management, and advocacy.
- Establishing strong networks and connectivity with other occupational groups, government agencies, and civil society organizations will enhance collaboration and access to resources.
- Women require targeted skill development and livelihood support to improve their economic status, ensuring greater financial independence and social empowerment.
- Strengthening collaboration with local elected bodies and government administrations will enable better policy alignment and support mechanisms for the target groups.
- Creating more spaces for learning and experience-sharing is necessary to encourage farmers and youths in innovating, exchanging knowledge, and adopting best practices.
- Initiatives should be taken to further develop the capacity of project facilitators through continuous training,
- Project continuation is essential to further enhance community skills, experience, and competence, ensuring their long-term ability to address climate change challenges effectively.

5.2 Conclusion

Despite some constraints and challenges the project has successfully achieved its objectives by enhancing the confidence of communities to adapt to climate change disasters and improve their livelihoods. Farmers in the target areas have diversified their practices, cultivating winter crops alongside Boro rice to minimize risks and losses. Action research facilitated by BARCIK has helped identify locally suitable rice varieties, such as Malshira, which yield well under local climatic conditions. The cultivation of Robi (winter) crops, including peanuts, maize, sweet gourd, potatoes, and onions, has increased significantly, enabling farmers to harvest before flash floods occur. Haor communities have also adopted adaptive methods such as sack cultivation, elevated seed beds, seed conservation, and exchange. These practices have reduced losses, maximized land use, and enhanced resilience.

Additionally, the project has strengthened the communities' networks and linkages with government institutions and private organizations. This has facilitated better access to services and resources, fostering collaborative relationships that benefit their agricultural practices and livelihoods. An evaluation of the program's major components: capacity development, problem-solving initiatives, and implementation processes provide evidence that the project has positively impacted the lives and livelihoods of Haor communities. It has improved their access to public and private services and natural resources, contributing to overall livelihood enhancement. BARCIK's success in implementing the project can be attributed to its skilled and motivated staff. The results achieved through this initiative are promising and can be replicated in other areas, scaling the impact to cover a broader region.

Annex



Meeting participants



Interview



Field visit



Meeting with Adolescent girls in Madan



Meeting Women organization at Taranagar, Kalmakanda



Taking care of planted trees



Safe food Fair where the farmers displayed their produced foods



Adaptation to climate change farming vegetable using sacks known as sack cultivation method



Sack cultivation Method



Adolescent girls sharing their thoughts



Vegetable cultivation by farmers



Honorable guests participating in Hoar Summit held in Dhaka



A poster produce to describe the importance and types of medicinal plants

Attendance list

BARCIK Kalmakanda Resource Centre
Peoples Led Conservation of Biodiversity in Hapir areas in Netrakona

শিরোনাম/Title: Program on Conservation of Biodiversity in Hapir areas in Netrakona
কোড নং/Code No: তারিখ/Date: 21/11/24
স্থান/Venue: Chandradinga উপজেলা/Upazila: Kalmakanda, জেলা/Dist: Netrakona

Attendance Sheet

Sl.	অংশগ্রহণকারীর নাম Name of Participants	পেশা occupation	গ্রাম/এলাকা Village/Area	লিঙ্গ/sex		স্বাক্ষর Signature
				মহিলা Female	পুরুষ Male	
01	Namsilachisik	Teacher	chandradinga	✓		
02	nureja Akter	Farmer	Bagher	✓		
03	Rohim Akter	"	"	✓		
04	Hidayat Hossain	Farmer	chandradinga		✓	
05	parimol Rema	"	"		✓	
06	Benuka Hossain	"	"	✓		
07	prejapati Hossain	"	"	✓		
08	Sabina Rema	"	"	✓		
09	jibon Hossain	"	"		✓	
10	Razzak mia	"	"		✓	
11	Dawan chisim	"	Kodamtola		✓	
12	Agnesheri Hossain	"	"		✓	
13	Arifuddin Hossain	"	"		✓	
14	Bapon Hossain	"	"		✓	
15	Arma Sabra	"	"	✓		

(Female: 07, Male: 08, Youth:, Disabled:) = Total: 15 persons

বারসিক BARCIK

Gunjas Rema

Farmers who participated in the a meeting held in Govindshree, Madan

1. Minara Akter
2. Habil Mia
3. Ruhul Amin
4. Zakir Hossain
5. Tamanna Islam
6. Anita Akter
7. Pinu Akter
8. Somaiya Akter
9. Tuli Akter
10. Ilma Akter
11. Faria Akter
12. Diti Akter

Adolescent girls participanting FGD held at Gobindashree, Madan

1. Kona Akter
2. Firoza Akter
3. Sabina

4. **Rahima**
5. **Babul Mia**
6. **Abul Mia**
7. **Rekha Akter**
8. **Kalpana Akter**
9. **Josna Akter**
10. **Farida Akter**
11. **Yasin Mia**
12. **Moula Mia**
13. **Hena Akter**
14. **Shahid Mia**



