

International Aid Withdrawal as a Systemic Livelihood Shock: Socioeconomic Consequences in Rural Bangladesh

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Abstract

International aid has supported rural livelihoods, essential services, and climate resilience in Bangladesh. However, recent donor withdrawal has disrupted development interventions, while its community-level consequences remain insufficiently examined, particularly in climate-exposed rural areas. This study investigates how aid cuts affect livelihoods, service access, social vulnerability, and climate-response capacity across four districts. Using a qualitative design, data were collected in Kurigram, Sunamganj, Khulna, and Rajshahi through 12 focus group discussions and eight key informant interviews with farmers, women, youth, former beneficiaries, local officials, NGO

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personnel, community leaders, and former project staff. The data were transcribed, translated where necessary, and analysed thematically using Braun and Clarke's six-phase approach, with triangulation and participant validation. The findings show that aid withdrawal functioned as a systemic livelihood shock, disrupting agricultural production, income, healthcare, education, nutrition, women's economic activities, and disaster preparedness. These effects were most severe where local institutions and markets could not replace withdrawn support. The study contributes a community-level framework for understanding donor exit. It implies that aid transitions should be gradual, institutionally prepared, and designed to protect essential services and adaptive capacity. The study concludes that poorly managed withdrawal can deepen existing rural and climate-related vulnerabilities.

Key Words: Aid withdrawal, rural livelihoods, donor exit, climate vulnerability, basic services, gendered impacts, coping strategies, local institutional capacity

INTRODUCTION

Rural development remains central to Bangladesh's social and economic transformation. Rural livelihoods are sustained not only by agriculture, fisheries, livestock, and non-farm employment, but also by the institutions that connect low-income households to productive resources, essential services, and mechanisms of social protection. In recent decades, rural Bangladesh has experienced substantial changes, including the expansion of high-value agriculture, livelihood diversification, labour migration, and rural non-farm employment. These transformations have created new economic opportunities, but they have not eliminated persistent inequalities across regions, socioeconomic classes, and ecological zones (Abbasi et al. 2024; Rudra et al. 2022). Small farmers, landless labourers, women, older people, and households living in environmentally fragile areas continue to face restricted access to finance, productive assets, health care, education, safe water, and formal risk protection.

International donors and donor-supported nongovernmental organizations have played an important role in addressing these institutional and service gaps. Across rural Bangladesh, development interventions have provided agricultural inputs, livestock assets, technical training, microcredit, health outreach, educational assistance, nutrition support, disaster preparedness, and community-based organizational platforms.

Such interventions have often become embedded in local livelihood systems by enabling vulnerable households to diversify their income sources, improve access to basic services, strengthen collective support arrangements, and manage seasonal or climate-related risks (Rahman and Akter 2020). Donor-supported programs therefore operate not merely as temporary projects, but as components of the practical infrastructure through which many rural households organize production, consumption, care, and risk management.

The sustainability of these arrangements becomes uncertain when international assistance is reduced or withdrawn before viable domestic alternatives are established. Donor exit is frequently understood as a normal stage of development transition in which governments, civil society organizations, markets, and local communities progressively assume responsibility for activities previously supported by external actors. From this perspective, declining aid may encourage local ownership, institutional autonomy, and financial self-reliance. However, this expectation rests on the assumption that local institutions possess sufficient administrative capacity, financial resources, and service-delivery infrastructure to replace donor-supported functions. That assumption is problematic in contexts where public institutions remain under-resourced, access to formal credit is limited, basic services are unevenly distributed, and markets do not provide affordable protection against livelihood and environmental risks (Bermeo 2017). Under such conditions, aid withdrawal may not produce self-reliance. Instead, it may transfer the financial and social costs of development transition to households that are least able to absorb them.

This problem is especially acute in climate-exposed areas of rural Bangladesh. Flooding, river erosion, salinity intrusion, cyclones, storms, heat stress, and other environmental hazards repeatedly disrupt agricultural production, housing, employment, health, and access to essential services. These pressures are particularly severe in char, riverine, coastal, and other ecologically fragile areas. Existing research shows that rural households commonly respond to disasters and livelihood disruptions by borrowing money, selling productive assets, reducing consumption, changing occupations, or sending household members elsewhere for work (Mondal et al. 2020; Uddin et al. 2021). Although these strategies may help households survive immediate crises, they can also undermine longer-term resilience by increasing debt, depleting productive resources, interrupting education, and weakening future income-generating capacity. When donor-supported agricultural extension, health outreach, water and sanitation services, nutrition programs, and disaster-preparedness initiatives are

simultaneously reduced, environmental vulnerability and socioeconomic insecurity may become mutually reinforcing.

Despite the significance of this problem, existing scholarship provides only a fragmented understanding of the community-level consequences of aid withdrawal. Studies of rural development have examined livelihood diversification, agricultural modernization, migration, credit access, and poverty reduction. Research on nongovernmental organizations has investigated financial sustainability, donor dependency, organizational adaptation, and local ownership. A separate body of scholarship has analysed climate vulnerability, disaster recovery, gendered adaptation, and community resilience. These literatures offer important insights, but they generally examine livelihood support, service provision, organizational sustainability, and climate adaptation as separate domains. Aid reduction is also frequently analysed from the institutional perspective of donors, governments, or NGOs rather than through the everyday experiences of rural households.

Consequently, insufficient attention has been paid to how the simultaneous withdrawal of livelihood inputs, basic services, community institutions, and disaster-support mechanisms affects household economies and social relations. Existing research does not adequately explain how aid cuts move across interconnected areas of rural life—for example, how the loss of agricultural assistance may reduce income, increase borrowing, undermine food security, interrupt children's education, intensify women's unpaid care work, and diminish household capacity to prepare for subsequent environmental shocks. Nor does it sufficiently identify how these consequences vary among small farmers, landless labourers, women, children, older people, and households located in different climate-exposed environments. This constitutes an important empirical and conceptual gap in the literature on aid transition and rural resilience.

This study addresses that gap by examining the socioeconomic consequences of international aid cuts in four climate-exposed rural districts of Bangladesh. Drawing on qualitative evidence from focus group discussions and key informant interviews, it investigates how aid withdrawal is experienced and interpreted by rural households, community members, and local stakeholders. The study is guided by three questions: How does the withdrawal of donor-supported programs affect rural livelihoods, access to essential services, and household well-being? Which social groups are most severely affected, and through what mechanisms? How do rural households and communities cope when support for production, social services, and disaster preparedness is reduced?

To answer these questions, the study conceptualizes abrupt aid withdrawal as a systemic livelihood shock rather than merely a decline in project funding. A systemic livelihood shock occurs when the reduction of external support simultaneously disrupts productive activities, basic services, local institutions, social relations, and mechanisms of environmental risk management. This conceptualization directs attention to the interconnected pathways through which donor exit affects rural life. Reduced agricultural inputs and credit may weaken production and income; declining health, education, nutrition, and water services may increase household expenditures and unpaid care burdens; and the loss of disaster-preparedness and recovery programs may reduce the capacity of communities to withstand future climate shocks. The effects are therefore cumulative and socially differentiated rather than confined to the direct beneficiaries of individual projects.

The study makes three principal contributions. First, it connects debates on donor exit and aid transition with micro-level evidence from rural households, thereby shifting attention from organizational funding decisions to their socioeconomic consequences. Second, it integrates the analysis of livelihood disruption, basic-service erosion, gendered vulnerability, and climate adaptation within a single analytical framework. This demonstrates that aid withdrawal cannot be adequately understood by examining individual sectors or projects in isolation. Third, it identifies the social differentiation of aid withdrawal by showing how women, children, small farmers, landless labourers, and older people encounter distinct but interconnected forms of insecurity.

The study is significant both analytically and practically. Analytically, it advances understanding of how externally supported development interventions become embedded in local livelihood and risk-management systems and what happens when those interventions are removed without adequate sequencing or institutional replacement. Practically, it highlights the need for donor-exit strategies that assess local institutional capacity, protect essential services, and establish credible transition arrangements before programs are terminated. By showing how poorly sequenced aid withdrawal can weaken the very capacities that development transitions are expected to strengthen, the article contributes to broader debates on rural resilience, socially differentiated vulnerability, and sustainable development in Bangladesh and other aid-dependent, climate-exposed settings.

LITERATURE REVIEW

Scholarship on aid transition centres on whether donor withdrawal promotes local ownership or weakens local institutional capacity. One strand of scholarship argues that declining aid can create incentives for governments and civil society organizations to diversify funding, mobilize domestic resources, and develop more locally owned and financially sustainable arrangements, although these outcomes depend on institutional capacity, political commitment, and an enabling environment (Arhin, Kumi, and Adam 2018; Kumi 2019, 2022; Hailey and Salway 2016; Lyew et al. 2020). A competing body of scholarship shows that poorly planned donor exit can disrupt organizations and service systems that rely on external funding to retain personnel, sustain community outreach, and deliver specialized services, particularly when domestic institutions cannot replace the withdrawn financial, technical, and managerial support (Gotsadze et al. 2019; McDonough and Rodríguez 2020; Mao et al. 2021; Qiu et al. 2021; Zakumumpa et al. 2021, 2024; Huffstetler et al. 2022; Appe and Pallas 2017; Pallas and Sidel 2020). The key issue is therefore not simply whether NGOs can secure alternative funding, but whether governments, markets, and local organizations can replace the functions previously supported by donors. This challenge is particularly significant in rural development, where alternative funding and institutional capacity are often limited (Shava 2020).

Aid-supported interventions are also embedded in rural livelihood systems. In Bangladesh, village organizations have improved access to training, productive resources, and collective support (Rahman and Akter 2020), while rural credit enables farmers to purchase inputs, adopt technology, and manage production risks (Rayhan et al. 2023). When donor programs provide credit, livestock, seeds, training, and market information, they become part of the institutional infrastructure through which households organize production and income. Their withdrawal may therefore affect not only direct beneficiaries but also agricultural employment, local exchange networks, and decisions concerning investment, occupation, and migration (Zanotti et al. 2015; Thyen and Wolkenhauer 2026).

The livelihood-diversification literature further complicates the assumption that rural households can readily replace external assistance through entrepreneurship or migration. Migration and non-farm activities may broaden income sources, but their benefits depend on assets, skills,

credit, networks, and access to markets (Hassan 2018; Tasnim et al. 2025). Diversification may be adaptive when it protects or expands productive capacity. It becomes erosive when households resort to insecure employment, high-cost borrowing, asset sales, or distress migration to meet immediate needs (Habib et al. 2022). Household adjustment after aid withdrawal should therefore not automatically be interpreted as successful self-reliance.

Climate-vulnerability research provides another important perspective. Rural Bangladesh is repeatedly exposed to floods, river erosion, salinity, storms, and heat stress, which affect agricultural production, income, health, and recovery capacity (Huq et al. 2015; Sammonds et al. 2021; Hossain et al. 2023). Households commonly respond through borrowing, migration, asset liquidation, and changes in employment or farming practices (Mondal et al. 2020). However, locally led adaptation research shows that resilience depends not only on household initiative but also on institutional support, local participation, information, infrastructure, and access to resources before and after shocks (Hoque et al. 2019; Westoby et al. 2021). The withdrawal of aid-supported preparedness and recovery programs can therefore intensify existing climate risks.

These consequences are socially differentiated. Gender relations influence access to income, control over resources, mobility, and responsibility for unpaid care work (Tanjeela and Rutherford 2018; Khalil et al. 2019). When donor-supported livelihood, health, nutrition, and community programs disappear, women may lose economic opportunities while assuming additional care responsibilities. Children may experience interrupted education or poorer nutrition, while small farmers, landless workers, and older people face different forms of livelihood and service insecurity. Social vulnerability is therefore not a separate consequence of aid withdrawal but a factor shaping who is exposed, how households cope, and who bears the costs of adjustment.

Taken together, the literature shows that aid withdrawal is neither a purely financial change nor a straightforward transition toward local ownership. Its consequences depend on the degree to which donor-supported functions are embedded in livelihoods, public services, local institutions, and climate-risk management. Yet existing studies remain divided among aid transition, NGO sustainability, livelihood diversification, climate adaptation, and gendered vulnerability. They rarely explain how the simultaneous loss of livelihood support, basic services, and disaster assistance is experienced within rural households and communities.

This study addresses that gap by examining how aid withdrawal affects rural livelihoods, essential services, and household well-being; which groups are most affected and through what mechanisms; and how households cope when support for production, social services, and disaster preparedness is reduced.

This study conceptualizes aid withdrawal as a systemic livelihood shock. Aid withdrawal refers to the substantial reduction or termination of donor-supported resources, services, and institutional functions. It becomes a systemic livelihood shock when its effects extend beyond individual projects and disrupt several interconnected dimensions of household and community life.

The framework combines insights from aid-transition, rural-livelihood, social-vulnerability, and climate-resilience scholarship. This integration is necessary because aid-transition studies often emphasize organizations, while livelihood and adaptation research focuses more directly on households and communities. Bringing these perspectives together makes it possible to examine how institutional withdrawal is transmitted through everyday economic and social relations.

The framework identifies four interconnected pathways. First, livelihood contraction occurs when reduced access to inputs, livestock, training, credit, and market support weakens production and income. Second, basic-service erosion occurs when declining health, education, nutrition, water, and sanitation support increases household costs or forces families to forgo services. Third, socially differentiated vulnerability arises because women, children, small farmers, landless labourers, and older people have unequal access to assets, services, and alternative support. Fourth, declining adaptive capacity occurs when the withdrawal of preparedness, early-warning, and recovery assistance makes climate hazards more damaging.

These pressures may lead households to adopt coping strategies such as borrowing, migration, asset sales, occupational change, or reduced consumption. Such responses may be adaptive when households retain assets and institutional support, but erosive when they increase debt, reduce productive capacity, interrupt education, or weaken health and nutrition. The consequences of withdrawal are therefore mediated by the capacity of local government, access to markets and credit, the strength of community networks, and the availability of replacement services.

This framework explains why aid withdrawal does not necessarily produce self-reliance. Where public institutions, markets, and community

organizations cannot replace donor-supported functions, responsibility and risk are transferred to households with limited assets and protection. The framework therefore guides the analysis of what support was lost, how these losses affected different social groups, and whether household responses strengthened adaptation or deepened longer-term vulnerability.

METHODS

Research Design and Study Sites

This study used a qualitative design to examine how rural households and local stakeholders experienced, interpreted, and responded to recent international aid cuts in Bangladesh. The design was appropriate for investigating interconnected changes in livelihoods, access to services, social vulnerability, gender relations, and climate resilience.

Data were collected in four purposively selected districts: Kurigram, Sunamganj, Khulna, and Rajshahi. Site selection was intended to capture variation in ecological exposure, livelihood systems, service conditions, and previous reliance on donor-supported interventions. Kurigram and Sunamganj represent flood-prone and riverine settings affected by seasonal flooding, river erosion, and livelihood disruption. Khulna represents a coastal setting characterized by salinity, water insecurity, and climate-sensitive livelihoods. Rajshahi represents a heat- and drought-affected agricultural setting with different production and service-access conditions. Together, these sites provided a comparative basis for examining aid withdrawal across diverse rural contexts.

Participants and Sampling

The study conducted 12 focus group discussions, comprising three FGDs in each district (Table 1). Each group included between 6 and 10 participants. Participants were purposively selected to represent farmers, smallholders, landless labourers, women, youth, and former beneficiaries of donor-supported development programs.

Eight key informant interviews were also conducted, with two interviews in each district. Key informants included local government representatives, NGO officials, community leaders, development workers, and former project staff. They were selected because of their direct involvement in donor-supported programs or their knowledge of local livelihoods, service provision, project closure, and community-level changes following aid withdrawal.

Table 1 Distribution of FGDs and KIIs by District and Participant Category

District	FGDs	FGD participants	KIIs	KII participants
Kurigram	3	Farmers, women, former project beneficiaries	2	Local official, NGO representative
Sunamganj	3	Farmers, youth, women, former project beneficiaries	2	Community leader, former project staff
Khulna	3	Women, small farmers, former project beneficiaries	2	NGO official, local government representative
Rajshahi	3	Farmers, landless labourers, youth, former project beneficiaries	2	Community leader, development worker
Total	12		8	

Source: The authors

Data Collection

Data were collected using semi-structured FGD and KII guides. The FGD guide covered five main areas: livelihood conditions before and after aid withdrawal; changes in access to basic services; effects on women, children, small farmers, landless labourers, and older people; experiences of climate-related shocks following project closure; and coping strategies, including borrowing, migration, asset sales, and reduced consumption.

The KII guide addressed the same broad issues while placing greater emphasis on institutional responses, local service capacity, NGO exit processes, and perceived gaps in government and community support. The semi-structured format ensured consistency across sites while allowing participants to elaborate on locally specific experiences.

With participants' informed consent, interviews and discussions were audio-recorded and transcribed verbatim. Bangla transcripts were translated into English where necessary. Translations were checked against the original recordings and field notes to preserve contextual meanings,

particularly expressions concerning livelihood loss, debt, migration, dependency, and community support.

Data Analysis

The data were analysed thematically using NVivo and Braun and Clarke's six-phase approach. The process involved familiarization with the transcripts, generation of initial codes, development of candidate themes, review of themes across districts and participant groups, definition of final themes, and preparation of the analytical narrative.

Initial coding was informed by the study's conceptual focus on livelihood contraction, service access, social vulnerability, climate exposure, and coping strategies. The coding process nevertheless remained open to unanticipated patterns emerging from participants' accounts. Data collection continued until the researchers identified repeated confirmation of the principal themes across districts and participant categories.

The credibility of the analysis was strengthened through triangulation between FGD and KII evidence, comparison across study sites and participant groups, independent review of the coding, and participant validation. Non-leading questions were used, and accounts were compared across participants, stakeholder categories, and locations to identify convergence, variation, and potentially contradictory interpretations.

Ethical Considerations

Participation was voluntary, and informed consent was obtained before each interview or discussion. Participants were informed of the study's purpose, the intended use of the data, and their right to decline questions or withdraw at any stage. Identifying information was removed from transcripts, and findings were reported in anonymized or aggregated form to protect confidentiality.

RESULTS

The thematic analysis showed that recent international aid withdrawal was experienced not as a limited reduction in funding, but as a broader socioeconomic disruption affecting livelihoods, basic services, nutrition, gender relations, climate resilience, and household coping capacity. A consistent pattern emerged across farmers, women, youth, and former service beneficiaries: support for production, health, education, water, and

disaster response was withdrawn more quickly than households or local institutions could replace it.

Aid Withdrawal and the Contraction of Rural Livelihood Systems

The most immediate consequence of aid withdrawal was the weakening of household production systems. Participants did not view donor-supported programs as temporary additions to rural life. Rather, they described them as part of the practical infrastructure that enabled low-income households to cultivate crops on time, raise livestock and poultry, obtain small loans, and generate cash income.

As shown in Table 1, communities experienced rising input costs, declining agricultural yields, distress sales of livestock, and greater dependence on informal borrowing. Farmer groups reported that NGOs had previously provided paddy and vegetable seeds, fertilizer, pesticides, livestock, vans, technical training, and phased loans. These forms of assistance reduced the amount of cash required at the beginning of each production cycle and enabled smallholders, sharecroppers, and land-poor households to remain economically active (Table 2).

Table 2 Summary of Socioeconomic Effects Following International Aid Withdrawal

Outcome domain	Reported changes after aid withdrawal	Illustrative empirical evidence
Livelihoods and production	Agricultural inputs, livestock assets, small loans, and local income activities declined. Small farmers reduced fertilizer and pesticide use, and women lost poultry, livestock, sewing, and homestead gardening income.	Participants repeatedly linked lower income to the end of seeds, fertilizer, pesticides, livestock, and flexible loans. Several groups reported that families now depend on irregular wage work, informal borrowing, or migration.
Basic services	Household access to health care, education materials, safe water, sanitation, and disaster preparedness weakened. Costs shifted from NGOs to poor households.	Respondents reported the end of home visits, basic medicine, nutrition advice, school supplies, stipends, water tanks, hygiene campaigns, and emergency relief.

Table 2 (Continued)

Outcome domain	Reported changes after aid withdrawal	Illustrative empirical evidence
Food and nutrition	Dietary diversity declined because households lost homestead vegetables, eggs, milk, and small livestock. Market food became too costly for poorer families.	Women and service beneficiary groups connected child nutrition directly with the earlier availability of poultry, vegetable seeds, cows, goats, and nutrition counseling.
Gender and social vulnerability	Women, children, landless laborers, small farmers, youth, and elderly people were affected unevenly. Women lost home-based income, and children faced school dropout, child labor, and early marriage risks.	Women's groups stressed that support had allowed women to earn from home and care for children. After withdrawal, many households sent adults to distant work, weakening care and education.
Climate and coping	Floods, heatwaves, storms, and salinity intensified the effects of aid withdrawal. Coping became erosive through debt, migration, reduced meals, asset sales, and insecure work.	Participants reported crop loss, fish loss, housing damage, livestock death, and lack of emergency support during recent floods and storms.

Source: Compiled by the authors from the interviews

Following aid withdrawal, farmers reported using fewer agricultural inputs, delaying cultivation, experiencing lower yields, and accumulating greater debt. As one farmer explained, "Before, they provided fertilizer, seeds, and pesticides. Now they do not. Loans have stopped; all facilities have stopped. This is causing us major losses" (Farmer, FGD 1). This account reflects a broader pattern in which households lost several forms of livelihood support simultaneously. The resulting effects were therefore cumulative rather than confined to a single sector. The withdrawal of affordable credit further reduced households' capacity to invest in productive activities. Participants who had previously purchased cattle, goats, or poultry through group-based loans reported that they could no longer establish or sustain these activities because credit had become expensive, uncertain, or inaccessible.

Women's livelihoods were particularly affected because many donor-supported interventions focused on home-based production. Women's groups described poultry rearing, livestock ownership, vegetable gardening,

and sewing as modest but reliable sources of food, income, and bargaining power within the household. One women's group stated, "Earlier, with ducks and chickens, eggs could be eaten by children and also sold for small cash. With cows and goats, milk helped nutrition, and sometimes we could sell animals to cover school costs. Sewing machines helped some women earn. Now those supports are gone, and many women have no home-based income" (Women, FGD 4). The withdrawal of these forms of assistance therefore affected not only women's earnings, but also household nutrition, educational expenses, and women's economic agency.

Erosion of Basic Services and the Transfer of Costs to Households

Another major finding was the erosion of basic services. Participants repeatedly reported that donor-funded projects had provided doorstep health care, awareness sessions, maternal and child nutrition guidance, basic medicines, educational materials, stipends, water tanks, sanitary latrines, and disaster-preparedness support. Although modest in scale, these services reduced everyday expenses for households with limited incomes. Following aid withdrawal, the costs of health care, education, and water shifted back to families whose earnings were already declining.

Health care became less accessible and more expensive. Participants reported fewer home visits, reduced access to basic medicines, limited maternal health guidance, and greater reliance on distant public facilities where medicines were often unavailable. One women's group explained, "Earlier, NGOs gave vitamins, iron, and calcium for pregnant women, advice on pregnancy care, and sometimes basic medicine. Now we must go far to the health complex, and often medicines are not available" (Women, FGD 3). Farmer groups similarly noted that families postponed treatment, purchased fewer medicines, and no longer had access to veterinary support for poultry and livestock. Service withdrawal therefore affected both human health and productive assets.

Education was another area of marked decline. Before the aid cuts, children had received books, notebooks, pens, school bags, stipends, snacks, and assistance with school fees. Participants emphasized that this support had helped low-income families keep their children in school. After withdrawal, education-related expenses became increasingly difficult to meet. One women's group stated, "Earlier they gave children bags, books, and notebooks so they could study. Now, due to lack of money, we cannot even send them to school. Sometimes we have to marry girls off at a young age" (Women, FGD 1). This account links the loss of educational support

to wider household pressures, including school dropout and the risk of early marriage.

Water and sanitation services also deteriorated. Several groups reported that water tanks, piped-water systems, latrines, and hygiene-awareness activities had been discontinued or were no longer maintained. Households that had previously received safe-water support were forced to purchase water or rely on unsafe sources. This created additional financial and health burdens, particularly in areas affected by salinity, flooding, or damaged infrastructure.

Food Security, Nutrition, and the Decline of Homestead Production

Food insecurity emerged from both declining household income and the loss of small-scale food production. Participants linked household nutrition to donor-supported vegetable seeds, poultry, cattle, goats, and nutrition education. These interventions had enabled families to produce vegetables, eggs, and milk at home, reducing their dependence on market purchases. Following aid withdrawal, households reported less diverse diets, lower protein consumption, and a reduced ability to purchase nutritious food.

Women's groups emphasized these effects because they had managed many home-based food-production activities. One group explained, "Before, with vegetable seeds, eggs, and milk, we could meet nutrition needs. Now we cannot meet children's nutrition needs. We cannot buy enough food, and we cannot produce vegetables, eggs, or milk like before" (Women, FGD 1). This account illustrates the multiple pathways through which aid withdrawal undermined nutrition. The loss of seed support reduced vegetable production, while the loss of poultry and livestock reduced access to eggs, milk, and assets that could be sold during emergencies. The disappearance of nutrition advice and monitoring also weakened access to information about pregnancy care, child feeding, and hygiene.

Farmers likewise connected worsening nutrition to declining agricultural capacity. Without input assistance and follow-up visits, some households cultivated less land and became more dependent on food purchased from local markets. Rising prices, combined with falling cash income, led families to reduce their consumption of fish, meat, milk, eggs, and fresh vegetables. Several groups also reported that children had become more susceptible to illness.

Participants did not describe declining nutrition as an isolated welfare problem. Instead, they understood it as part of a broader chain linking livelihood contraction, reduced service access, greater market dependence, and weakening household resilience.

Gendered and Socially Differentiated Impacts

The effects of aid withdrawal were unevenly distributed across social groups, as shown in Table 3. Women were consistently identified as among the most severely affected because many of their income-generating activities depended on donor-supported poultry rearing, livestock, sewing machines, vegetable gardening, and group-based initiatives. These activities enabled women to earn income from home while continuing to manage childcare and other household responsibilities. Following aid withdrawal, many women lost these income sources, while some were compelled to seek poorly paid work outside their villages, including agricultural labor, domestic work, garment work, and employment in brick kilns.

One local service beneficiary group described this shift clearly: “Earlier, women could work while staying at home and manage the household. They could rear poultry, grow vegetables, and take care of their children. Now this is no longer possible, so they are forced to travel far for work” (Local Service Beneficiary, FGD 8). This change reduced women’s economic security while increasing the difficulty of balancing paid work with unpaid care responsibilities.

Other groups were also affected in distinct ways. Children experienced disrupted education, poorer nutrition, greater exposure to illness, and reduced parental care. Young people faced fewer local employment opportunities and limited access to skills training or start-up support. Landless labourers were particularly vulnerable because they had little or no savings, land, or productive assets to absorb the loss of assistance. These findings indicate that aid withdrawal did not affect rural households uniformly. Instead, it intensified existing inequalities by placing the greatest burden on groups with the fewest resources and alternatives.

Table 3 Social Groups Disproportionately Affected by International Aid Withdrawal

Social group	Primary effects reported	Representative evidence from field data
Women	Loss of home-based income; greater dependence on male income; movement into low-paid work.	Groups reported loss of poultry, livestock, vegetable gardening, sewing, and group activities.
Children	Reduced education support, nutrition, and care; higher risk of dropout, illness, work, and early marriage.	Participants linked the end of school materials, stipends, snacks, eggs, milk, and vegetables with child vulnerability.
Small farmers	Lower access to seeds, fertilizer, pesticides, training, and credit; higher debt exposure.	Farmer groups reported delayed cultivation, reduced input use, and lower production.
Landless and day labor households	Few savings or assets; stronger reliance on loans, migration, wage labour, and reduced consumption.	Groups described these households as unable to rebuild after floods or absorb income loss.
Youth	Reduced training, small business support, and education continuation; greater pressure to migrate.	Youth reported movement toward brick kilns, city work, garments, and informal labour.
Elderly people	Reduced medicine, nutrition advice, winter support, and household care.	Groups noted the decline of home visits, iron and calcium support, basic medicine, and blankets.

Source: Compiled by authors based on the interviews

Climate Stress as a Multiplier of Aid Withdrawal

Participants did not view aid withdrawal and climate stress as separate problems. They described floods, heatwaves, storms, drought, salinity, and river-related hazards as recurring pressures that became more difficult to manage once disaster assistance, agricultural inputs, water infrastructure, and emergency relief declined.

Floods damaged crops, washed away fish, killed livestock and poultry, destroyed roads, and damaged homes. Heatwaves increased illness, reduced the capacity for agricultural labour, damaged vegetable production, and raised irrigation needs, while storms damaged houses and trees. In this context, aid withdrawal weakened both preparedness and recovery.

One farmer group described the combined effect: “The flood last year caused us irreparable loss. The losses of the last four years were basically wiped out in a single flood. In the past, during floods, many organizations would come to help, but this year we received no assistance” (Farmer, FGD 6). Key informants similarly emphasized that climate hazards did not create vulnerability in isolation. Rather, the withdrawal of assistance weakened local coping systems, leaving households less able to prepare for, withstand, and recover from repeated environmental shocks (KIIs 2, 4, 6, and 7).

Climate stress therefore acted as a multiplier of aid withdrawal. Hazards that had previously been partly mitigated through emergency food, housing materials, input replacement, relief assistance, and access to credit became more damaging once these forms of support declined.

Coping Strategies and the Limits of Adaptation

Households responded to these pressures through migration, borrowing, wage labour, asset sales, reduced food consumption, crop changes, and greater reliance on relatives. Men migrated for work in brick kilns, construction, hotels, and garment factories. Some women entered domestic or agricultural labour, while young people sought employment outside their villages.

Although these strategies helped households manage immediate hardship, participants generally described them as forced and insecure rather than empowering. One farmer group stated, “Without NGO support, those who did day labour have gone elsewhere. They work in brick kilns. Even then, many earn only around 200 to 250 taka” (Farmer, FGD 10).

These coping patterns indicate that households were not making a smooth transition toward self-reliance. Instead, many shifted from supported local livelihoods to insecure employment, debt, asset depletion, and reduced consumption. Aid withdrawal therefore functioned as a systemic livelihood shock because it simultaneously removed productive support, essential services, risk protection, and community-based assistance.

Linking Community Experiences with Institutional Perspectives

Evidence from the key informant interviews complements the FGD findings by explaining how household-level losses developed into broader community disruption (Table 4). Local government representatives, NGO officials, community leaders, and former project staff confirmed that project

closures reduced field-level presence, weakened referral networks, and left local institutions unable to replace livelihood assistance, health outreach, educational support, and disaster response at the same pace.

These accounts support the interpretation of aid withdrawal as a systemic livelihood shock rather than a simple reduction in project benefits. They also clarify the mechanism underlying the FGD findings: where public services and local markets could not absorb functions previously performed by donor-funded programs, the associated costs and risks shifted to households. These effects were particularly severe for women, children, small farmers, landless labourers, and older people.

Table 4 Findings from FGDs and KIIs on Aid Withdrawal Effects

FGD pattern	KII explanation	Analytical implication
Livelihood inputs, credit, and training declined after project closure.	KIIs described the withdrawal of NGO staff, monitoring systems, and flexible community-based finance.	Aid exit reduced the practical infrastructure that supported production.
Health, education, nutrition, water, and disaster support shifted to households.	KIIs noted that local public services lacked funds and personnel to absorb former project functions.	Service erosion became a household cost burden, not only an institutional gap.
Women, children, landless laborers, small farmers, and older people were most affected.	KIIs linked this uneven impact to asset poverty, care burdens, and limited access to paid work or formal protection.	The impact of withdrawal was socially differentiated and reproduced existing vulnerability.
Floods, heat, storms, and salinity intensified losses after aid withdrawal.	KIIs emphasized weaker preparedness, delayed relief, and limited recovery support following the cessation of donor-funded activities.	Aid withdrawal reduced adaptive capacity under climate stress.

Source: Compiled by the authors

DISCUSSION

The findings indicate that international aid withdrawal generated interconnected pressures across rural livelihoods, basic services, informal protection systems, and climate-response mechanisms. Declining production support, reduced access to health and education, weaker nutrition provision, and the loss of disaster-preparedness assistance did

not occur independently. Rather, they reinforced one another and reduced households' capacity to manage both everyday hardship and environmental shocks. These findings are specific to the selected districts and should not be generalized to all aid-transition settings. Nevertheless, they suggest that abrupt or poorly sequenced donor exit can operate as a systemic socioeconomic shock where markets, public services, and local institutions are unable to replace externally supported functions.

The study therefore challenges transition models that assume local ownership will emerge automatically once external assistance declines. The evidence does not show that donor withdrawal inevitably prevents self-reliance. It does, however, indicate that self-reliance depends on the availability of affordable credit, functioning services, local institutional capacity, and effective risk protection. Where these conditions are absent, aid withdrawal may weaken rather than strengthen the capacities that transition policies expect communities to develop.

Aid Withdrawal and Rural Livelihood Systems

The findings suggest that donor-supported interventions had become embedded in the organization of rural livelihoods. Agricultural inputs, livestock assets, microcredit, and skills training influenced production decisions, labour allocation, income generation, and households' ability to manage seasonal risk. Their withdrawal therefore disrupted several components of livelihood systems simultaneously.

This pattern is consistent with research showing that aid-funded and civil society programs often compensate for weak markets and limited public provision in areas such as credit, insurance, agricultural extension, and local service delivery (Appe and Pallas 2017; Pallas and Sidel 2020). In the study sites, the transition from external assistance to local self-reliance was constrained by the limited availability of affordable finance, technical support, and risk protection. The resulting decline in input use, production, and livestock-based income suggests that aid withdrawal may restrict productive autonomy when viable alternatives are not established before project closure.

The contribution of this study is to show that the consequences extend beyond the loss of individual project benefits. Because donor-supported resources were connected to wider household and local economic practices, their removal affected labour demand, borrowing, food production, and livelihood diversification. Aid withdrawal should therefore be understood

as a disruption to the broader architecture of rural livelihoods rather than simply as the termination of discrete interventions.

Service Retrenchment and Human Capital Risks

The erosion of health, education, water, sanitation, and nutrition support represents a second pathway through which aid withdrawal affected household well-being. As donor-funded services declined, responsibility for meeting these needs shifted to families whose incomes were already under pressure. This transfer increased the costs of medical treatment, schooling, water access, and care.

Previous research has emphasized the contribution of development interventions to basic health and educational access in Bangladesh (Hossain et al. 2022; Roy 2023). The present study adds that the withdrawal of such support may produce less visible but potentially lasting effects. Delayed treatment, reduced medicine use, disrupted schooling, poorer nutrition, and pressure toward early marriage may weaken health, educational attainment, and future earning capacity. Comparable patterns have been identified where social protection is reduced without adequate replacement arrangements (Arnall et al. 2010).

Aid withdrawal alone cannot be treated as the sole cause of these outcomes, which are also shaped by poverty, service availability, household composition, and climate-related disruption. However, the findings suggest that withdrawal intensified existing pressures by removing resources that had previously reduced household costs and supported access to essential services.

Gendered Effects and the Redistribution of Care

The study also shows that women were affected not only as recipients of services but as economic actors within household livelihood systems. Donor-supported poultry rearing, livestock ownership, sewing, gardening, and small-scale trading had enabled some women to generate income while remaining close to children and other care responsibilities. When these supports ended, women lost both productive assets and forms of economic participation suited to existing mobility and care constraints.

This finding is consistent with feminist political economy research showing that access to productive resources shapes women's bargaining power, economic agency, and exposure to unpaid labour (Tanjeela and Rutherford 2018). The withdrawal of livelihood and service support

appeared to reallocate both care responsibilities and economic risk back to households, with women often absorbing these pressures through additional unpaid work, dependence on male income, or entry into poorly paid employment.

These findings should not be interpreted as evidence that donor programs had fundamentally transformed gender relations. Rather, they suggest that such programs had created limited but meaningful economic opportunities. Their withdrawal narrowed that space and exposed the fragility of gains that had not been fully supported by durable local institutions or wider structural changes.

Climate Exposure and Declining Adaptive Capacity

Aid withdrawal also interacted with existing climate vulnerability. Floods, heatwaves, salinity, storms, drought, and river erosion were already major sources of livelihood insecurity in the study areas. The reduction of preparedness programs, agricultural assistance, water infrastructure, emergency relief, and recovery support weakened the mechanisms through which households had previously managed these hazards.

Bangladesh is widely recognized for advances in community-based adaptation, yet adaptive capacity remains uneven and institutionally dependent in many rural settings (Fenton et al. 2017; Islam and Nursey-Bray 2017). The present findings do not imply that rural resilience is generally dependent on international donors. They indicate instead that some preparedness and recovery functions in the selected communities had not been sufficiently institutionalized before external support was reduced.

This supports the view that resilience is not an inherent or fixed community characteristic. It is produced through access to finance, infrastructure, information, public services, collective organization, and responsive governance (Fatemi et al. 2020). Aid withdrawal can therefore increase climate vulnerability when it removes institutional and material buffers without establishing effective substitutes. In this sense, climate stress multiplied the consequences of aid withdrawal, while aid withdrawal increased the damage associated with recurring environmental shocks.

Coping Without Transformation

Households responded through migration, informal wage labour, borrowing, asset sales, reduced consumption, crop changes, and greater reliance on relatives. Although these strategies provided short-term relief,

many weakened rather than strengthened future livelihood security.

This distinction is important because migration and livelihood diversification are often interpreted as evidence of adaptation. Their consequences, however, depend on the conditions under which they occur. Migration undertaken with skills, resources, and access to secure employment may diversify income. Migration driven by debt, crop failure, or the loss of local support may instead expose workers to low wages, unsafe conditions, family separation, and disrupted care. Similarly, borrowing may finance productive investment, but it becomes erosive when used repeatedly to purchase food, pay for health care, or replace lost income.

The findings therefore qualify optimistic assumptions that aid withdrawal naturally stimulates entrepreneurship, innovation, or local resource mobilization. In the study sites, the dominant pattern was constrained coping rather than transformative adaptation. This interpretation is consistent with the argument that responses which increase debt, deplete assets, or reduce future earning capacity should not be equated with resilience (Rayhan et al. 2023).

Theoretical and Practical Implications

The study contributes to the aid-transition literature by conceptualizing abrupt withdrawal as a systemic livelihood shock. This concept links institutional change at the donor and NGO levels to household-level consequences across production, service access, social relations, and climate adaptation. It also explains why the removal of several forms of assistance at the same time may generate cumulative effects that cannot be understood through sector-specific analysis alone.

Practically, the findings suggest that donor exit should be treated as an institutional transition rather than a funding deadline. Exit strategies should assess whether local governments, markets, NGOs, and community organizations can maintain essential functions after project closure. Gradual handover, predictable timelines, local capacity development, replacement financing, and continued technical support may reduce the risk that costs are transferred abruptly to vulnerable households. Particular attention is needed for services and livelihood activities that support women, children, landless labourers, small farmers, older people, and climate-exposed communities.

The results also underline the importance of protecting basic services during aid transitions. Where health, education, nutrition, water, and

disaster-response programs cannot be immediately absorbed by public institutions, transitional arrangements may be necessary to prevent temporary funding reductions from producing longer-term losses in human capital and adaptive capacity.

Limitations

Several limitations should inform the interpretation of the findings. First, the study is based on qualitative evidence from four purposively selected districts and does not estimate the prevalence or magnitude of the reported effects across rural Bangladesh. Second, participant accounts are retrospective and may be influenced by recall, expectations, or dissatisfaction following project closure. Third, the study identifies perceived changes associated with aid withdrawal but cannot establish that withdrawal alone caused every reported outcome. Economic conditions, local governance, commodity prices, and climate events may also have contributed.

The comparative use of focus groups and key informant interviews strengthened the credibility of the analysis, but future research should combine qualitative evidence with longitudinal household data, program records, and service-delivery indicators. Such research could examine how outcomes differ according to the timing and sequencing of donor exit, the strength of local institutions, and the availability of replacement support.

CONCLUSION

This study examined how international aid withdrawal affected livelihoods, access to essential services, and household well-being in four climate-exposed rural districts of Bangladesh. The findings show that aid cuts were experienced not simply as a reduction in external funding, but as an interconnected disruption to agricultural production, income generation, health care, education, nutrition, water access, and disaster preparedness. These effects were socially differentiated: women lost home-based income opportunities and faced greater care burdens; children experienced reduced educational and nutritional support; small farmers struggled with rising input costs and declining access to credit; and landless households increasingly relied on insecure employment, borrowing, migration, and asset sales. Household responses therefore reflected constrained coping rather than a smooth transition toward self-reliance. The article's main contribution is to conceptualize abrupt and poorly sequenced aid withdrawal as a systemic

livelihood shock, showing how the closure of donor-supported programs can produce cumulative effects across production, services, social relations, and climate adaptation when local institutions and markets are unable to replace withdrawn support.

The findings do not imply that donor assistance should continue indefinitely. Rather, they demonstrate that the timing, sequencing, and institutional preparation of aid transition are critical. Exit strategies should prioritize gradual handover, predictable timelines, local capacity development, and continuity in essential areas such as rural credit, agricultural extension, health, education, water and sanitation, women's livelihood support, and disaster preparedness. These conclusions should nevertheless be interpreted cautiously because the study draws on qualitative evidence from four purposively selected districts and cannot establish either the national prevalence of the reported effects or that aid withdrawal alone caused every observed change. Future research should combine longitudinal qualitative evidence with household surveys, program records, and service-delivery data, while comparing gradual, abrupt, and institutionally managed donor exits to identify which transition arrangements strengthen local capacity and which primarily transfer costs and risks to vulnerable households.

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Authors' Contributions

Tumpa: Conceptualization, Methodology, Investigation, Data Curation, Formal Analysis, and Writing—Original Draft Preparation.

Siddique: Methodology, Investigation, Validation, and Writing—Review and Editing.

Pathan: Investigation, Resources, Data Curation, and Writing—Review and Editing.

Debnath: Investigation, Project Administration, Data Curation, and Writing—Review and Editing.

Mostafa: Formal Analysis, Validation, Visualization, and Writing—Review and Editing.

Islam: Supervision, Methodology, Validation, and Writing—Review and Editing.

Hossain: Conceptualization, Supervision, Formal Analysis, and Writing—Review and Editing.

Conflict of Interest

The authors declare no conflict of interest.

References

- Abbasi, Al Amin Al, Subrata Saha, Ismat Ara Begum, Maria Fay Rola-Rubzen, Andrew McKenzie, and Mohammad Jahangir Alam. 2024. "Does Rural Transformation Affect Rural Income Inequality? Insights from Cross-District Panel Data Analysis in Bangladesh." *Heliyon* 10 (9): e30562. <https://doi.org/10.1016/j.heliyon.2024.e30562>.
- Ahmed, Atiq Kainan, Abu Wali Raghieb Hassan, and Afsana Yasmeen. 2016. "Climate Change and Livelihoods-Based Adaptation: Experiences and Lessons from Bringing the Two Discourses Together." *International Journal of Environment, Agriculture and Biotechnology* 1 (4): 1004. <https://doi.org/10.22161/ijeab/1.4.53>.
- Ahmed, Saleh, and Elizabeth Eklund. 2019. "Rural Accessibility, Rural Development, and Natural Disasters in Bangladesh." *Journal of Developing Societies* 35 (3): 391. <https://doi.org/10.1177/0169796X19868318>.
- Appel, Susan, and Christopher Pallas. 2017. "Aid Reduction and Local Civil Society: Causes, Comparisons, and Consequences." *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations* 29 (2): 245. <https://doi.org/10.1007/s11266-017-9846-0>.
- Arnall, Alex, Katy Oswald, Mark Davies, Thomas Mitchell, and Carla Coirolo. 2010. "Adaptive Social Protection: Mapping the Evidence and Policy Context in the Agriculture Sector in South Asia." *IDS Working Papers* 2010 (345): 1. https://doi.org/10.1111/j.2040-0209.2010.00345_2.x.
- Arhin, Albert A., Emmanuel Kumi, and Mohammed-Anwar Sadat Adam. 2018. "Facing the Bullet? Non-Governmental Organisations' (NGOs') Responses to the Changing Aid Landscape in Ghana." *VOLUNTAS*:

- International Journal of Voluntary and Nonprofit Organizations 29 (2): 348–360. doi:10.1007/s11266-018-9966-1.
- Bermeo, Sarah Blodgett. 2017. “Aid Allocation and Targeted Development in an Increasingly Connected World.” *International Organization* 71 (4): 735. <https://doi.org/10.1017/S0020818317000315>.
- Das, Lipon Chandra, Mohiul Islam, Shomi Aktar, and Farzana Sultana. 2024. “Climate Change Challenges in Bangladesh.” *International Journal of Big Data Mining for Global Warming* 6 (1). <https://doi.org/10.1142/S263053482430001X>.
- Eskander, Shaikh, Samuel Fankhauser, and Shikha Jha. 2016. “Do Natural Disasters Change Savings and Employment Choices? Evidence from Bangladesh and Pakistan.” *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2894791>.
- Fatemi, Mohammad Nawrose, Seth Asare Okyere, Stephen Kofi Diko, and Michihiro Kita. 2020. “Multi-Level Climate Governance in Bangladesh via Climate Change Mainstreaming: Lessons for Local Climate Action in Dhaka City.” *Urban Science* 4 (2): 24. <https://doi.org/10.3390/urbansci4020024>.
- Fenton, Adrian, Jouni Paavola, and Anne Tallontire. 2017. “Autonomous Adaptation to Riverine Flooding in Satkhira District, Bangladesh: Implications for Adaptation Planning.” *Regional Environmental Change* 17 (8): 2387–96. <https://doi.org/10.1007/s10113-017-1159-8>.
- Gotsadze, George, Ivdity Chikovani, Lela Sulaberidze, Tamar Gotsadze, Ketevan Goguadze, and Nertila Tavanxhi. 2019. “The Challenges of Transition From Donor-Funded Programs: Results from a Theory-Driven Multi-Country Comparative Case Study of Programs in Eastern Europe and Central Asia Supported by the Global Fund.” *Global Health: Science and Practice* 7 (2): 258–272. <https://doi.org/10.9745/GHSP-D-18-00425>.
- Habib, Nusrat, Anoma Ariyawardana, and Ammar Abdul Aziz. 2022. “The Influence and Impact of Livelihood Capitals on Livelihood Diversification Strategies in Developing Countries: A Systematic Literature Review.” *Research Square*. <https://doi.org/10.21203/rs.3.rs-2228191/v1>.
- Hailey, John, and Mark Salway. 2016. “New Routes to CSO Sustainability: The Strategic Shift to Social Enterprise and Social Investment.” *Development in Practice* 26 (5): 580–91. doi:10.1080/09614524.2016.1188886.

- Hassan, Mohammad Hashibul, and Lubna Jebin. 2018. "Comparative Capability of Migrant and Non-Migrant Households: Evidence from Rural Bangladesh." *Asian Economic and Financial Review* 8 (5): 618–40. <https://doi.org/10.18488/journal.aefr.2018.85.618.640>.
- Huffstetler, Hanna E., Shashika Bandara, Ipchita Bharali, Kaci Kennedy McDade, Wenhui Mao, Felicia Guo, Jiaqi Zhang, Judy Rivière, Liza Becker, Mina Mohamadi, Rebecca L. Rice, Zoe King, Zoha Waqar Farooqi, Xinqi Zhang, Gavin Yamey, and Osondu Ogbuoji. 2022. "The Impacts of Donor Transitions on Health Systems in Middle-Income Countries: A Scoping Review." *Health Policy and Planning* 37 (9): 1188–1202. <https://doi.org/10.1093/heapol/czac063>
- Hoque, Muhammad Ziaul, Shenghui Cui, Lilai Xu, Imranul Islam, Ghaffar Ali, and Jianxiong Tang. 2019. "Resilience of Coastal Communities to Climate Change in Bangladesh: Research Gaps and Future Directions." *Watershed Ecology and the Environment* 1: 42. <https://doi.org/10.1016/j.wsee.2019.10.001>.
- Hossain, Babul, Guoqing Shi, Chen Ajiang, Mohammad Salman Sohel, and Yijun Liu. 2023. "Social Vulnerability, Impacts and Adaptation Strategies in the Face of Natural Hazards: Insight from Riverine Islands of Bangladesh." *BMC Public Health* 23: 1737. <https://doi.org/10.1186/s12889-023-16497-8>.
- Hossain, Mohammad Ismail, Mohammad Istiak Hossain, Mollah Aminul Islam, and Mohammad Reza Sultanuzzaman. 2022. "Does Foreign Aid Have an Expected Role in the Economic Growth of Bangladesh? An Analysis in ARDL Approach." *International Journal of Economics and Financial Issues* 12 (6): 113. <https://doi.org/10.32479/ijefi.13664>.
- Huq, Naimul, Jean Hugé, Emmanuel Boon, and Animesh Kumar Gain. 2015. "Climate Change Impacts in Agricultural Communities in Rural Areas of Coastal Bangladesh: A Tale of Many Stories." *Sustainability* 7 (7): 8437. <https://doi.org/10.3390/su7078437>.
- Islam, Mohammad Rezaul, and Mohammad Shamsuddoha. 2017. "Socioeconomic Consequences of Climate-Induced Human Displacement and Migration in Bangladesh." *International Sociology* 32 (3): 277. <https://doi.org/10.1177/0268580917693173>.
- Islam, Mohammad Tariqul, Mohammad Monabbir Hossain, Nur Mohammad Ha-Mim, Mohammad Zakir Hossain, and Sujit Kumar Sikder. 2025. "Climate Change Impacts on Shoreline Migration and Community Livelihood Resilience: Evidence from Coastal

- Bangladesh.” *Frontiers in Sustainability* 5: 1525483. <https://doi.org/10.3389/frsus.2024.1525483>.
- Islam, Mohammad Torikul, and Melissa Nursey-Bray. 2017. “Adaptation to Climate Change in Agriculture in Bangladesh: The Role of Formal Institutions.” *Journal of Environmental Management* 200: 347. <https://doi.org/10.1016/j.jenvman.2017.05.092>.
- Jamal, Mohammad Roushon, Paul Kristiansen, Mohammad Jahangir Kabir, and Lisa Lobry de Bruyn. 2023. “Challenges and Adaptations for Resilient Rice Production under Changing Environments in Bangladesh.” *Land* 12 (6): 1217. <https://doi.org/10.3390/land12061217>.
- Khalil, Momtaj Bintay, Brent Charles Jacobs, Kylie McKenna, and Natasha Kuruppu. 2019. “Female Contribution to Grassroots Innovation for Climate Change Adaptation in Bangladesh.” *Climate and Development* 12 (7): 664. <https://doi.org/10.1080/17565529.2019.1676188>.
- Kumi, Emmanuel. 2019. “Aid Reduction and NGOs’ Quest for Sustainability in Ghana: Can Philanthropic Institutions Serve as Alternative Resource Mobilisation Routes?” *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations* 30 (6): 1332–1347. doi:10.1007/s11266-017-9931-4.
- Kumi, Emmanuel. 2022. “Domestic Resource Mobilisation Strategies of National Non-Governmental Organisations in Ghana.” *Public Administration and Development* 42 (2): 109–127. doi:10.1002/pad.1973.
- Lyew, Dominique, Douglas Perkins, and Jung-In Sohn. 2020. “Foreign Aid, Grassroots Activism, and the Strength of Applied Community Studies in Aid-Receiving Countries: The Case of Community Psychology.” *Psychosocial Intervention* 30 (1): 1. <https://doi.org/10.5093/pi2020a6>.
- Mamun, Mohammad Abdullah Al, Jianfeng Li, Aihong Cui, Raihana Chowdhury, and Mohammad Lokman Hossain. 2024. “Climate-Adaptive Strategies for Enhancing Agricultural Resilience in Southeastern Coastal Bangladesh: Insights from Farmers and Stakeholders.” *PLOS ONE* 19 (6): e0305609. <https://doi.org/10.1371/journal.pone.0305609>.
- Mao, Wenhui, Kaci Kennedy McDade, Hanna E. Huffstetler, Joseph Dodoo, Daniel Nana Yaw Abankwah, Nathaniel Coleman, Judy Riviere, Jiaqi Zhang, Justice Nonvignon, Ipchita Bharali, Shashika

- Bandara, Osondu Ogbuoji, and Gavin Yamey. 2021. "Transitioning from Donor Aid for Health: Perspectives of National Stakeholders in Ghana." *BMJ Global Health* 6 (1): e003896. <https://doi.org/10.1136/bmjgh-2020-003896>.
- Mbah, Ruth Endam, Caden Maddox Hardgrave, Drusilla Engonwei Mbah, Alyssa Nutt, and Jordan Russell. 2025. "The Impact of USAID Budget Cuts on Global Development Initiatives: A Review of Challenges, Responses, and Implications." *Advances in Social Sciences Research Journal* 12 (4): 219. <https://doi.org/10.14738/assrj.1204.18681>.
- McDonough, Amy, and Daniela C. Rodríguez. 2020. "How Donors Support Civil Society as Government Accountability Advocates: A Review of Strategies and Implications for Transition of Donor Funding in Global Health." *Globalization and Health* 16: 110. <https://doi.org/10.1186/s12992-020-00628-6>.
- Mondal, Mohammad Shahidul Haque, Tetsuo Murayama, and Shigeo Nishikizawa. 2020. "Determinants of Household-Level Coping Strategies and Recoveries from Riverine Flood Disasters: Empirical Evidence from the Right Bank of Teesta River, Bangladesh." *Climate* 9 (1): 4. <https://doi.org/10.3390/cli9010004>.
- Pallas, Christopher, and Mark Sidel. 2020. "Foreign Aid Reduction and Local Civil Society: Recent Research and Policy Guidance for Donors and International NGOs." *Nonprofit Policy Forum* 11 (1). <https://doi.org/10.1515/npf-2019-0045>.
- Qiu, Mary, Ligia Paina, Daniela C. Rodríguez, Jess A. Wilhelm, Ezinne Eze-Ajoku, Alexandra Searle, Henry Zakumumpa, Freddie Ssenkooba, Caroline MacKenzie, and Sara Bennett. 2021. "Exploring Perceived Effects from Loss of PEPFAR Support for Outreach in Kenya and Uganda." *Globalization and Health* 17: 80. <https://doi.org/10.1186/s12992-021-00729-w>.
- Rahman, Mohammad Chhiddikur, Mohammad Abdur Rouf Sarkar, Mohammad Jahangir Kabir, Mohammad Shajedur Rahaman, Jatish Biswas, Mohammad Abdullah Aziz, Mohammad Ariful Islam, Mohammad Abdullah Al Mamun, Niaz Mohammad Farhat Rahman, and Andrew McKenzie. 2025. "Vulnerability and Adaptation in Flood-Prone Ecosystems of Bangladesh: A Case Study of Rice-Farming Households." *Discover Sustainability* 6: 55. <https://doi.org/10.1007/s43621-025-00848-z>.

- Rahman, Mohammad Mizanur, and Maksuma Akter. 2020. "Effectiveness of Village-Based Organization (VBO) in Improving the Livelihood of the Rural Community in Bangladesh." *Bangladesh Journal of Public Administration* 28 (2): 17–37. <https://doi.org/10.36609/bjpa.v28i2.106>.
- Rayhan, Shah Johir, Mohammad Sadique Rahman, and Kaiyu Lyu. 2023. "The Role of Rural Credit in Agricultural Technology Adoption: The Case of Boro Rice Farming in Bangladesh." *Agriculture* 13 (12): 2179. <https://doi.org/10.3390/agriculture13122179>.
- Razali, Nurfasihah Mohd, and Mohamad Fadhli Rashid. 2021. "A Framework for Incorporating the Global Environment of Rural Community." *IOP Conference Series: Earth and Environmental Science* 881 (1): 012057. <https://doi.org/10.1088/1755-1315/881/1/012057>.
- Roy, Amit. 2023. "Foreign Aid Promotes Human Development in Bangladesh: Empirical Evidence from Governmental and Nongovernmental Aid." *Asian Review of Social Sciences* 12 (2): 10. <https://doi.org/10.51983/arss-2023.12.2.3575>.
- Rudra, Rhyme Rubayet, Mohammad Shahriar Sharif, and Mahdi Mansur Mahi. 2022. "Subsistence after Resettlement: Observations from Gucchagram Project in Narail District, Bangladesh." *Khulna University Studies*, 321. <https://doi.org/10.53808/kus.2022.icstem4ir.0028-se>.
- Sammonds, Peter, Mohammad Shamsudduha, and Bayes Ahmed. 2021. "Climate Change-Driven Disaster Risks in Bangladesh and Its Journey towards Resilience." *Journal of the British Academy* 9 (s8): 55. <https://doi.org/10.5871/jba/009s8.055>.
- Shava, Elvin. 2020. "Financial Sustainability of NGOs in Rural Development Programmes." *Development in Practice* 31 (3): 393. <https://doi.org/10.1080/09614524.2020.1853059>.
- Tanjeela, Mumita, and Shannon Rutherford. 2018. "The Influence of Gender Relations on Women's Involvement and Experience in Climate Change Adaptation Programs in Bangladesh." *SAGE Open* 8 (4). <https://doi.org/10.1177/2158244018812620>.
- Tasnim, Anika, Jasim Uddin Ahmed, Mohammad Jahangir Alam Khan, Mohammad Abdullah Al-Noman, Arifa Jannat, and Mohammad Monirul Islam. 2025. "The Role of Livelihood Diversification in Agricultural Modernization among Tribal Farmers in Bangladesh: A Binary Logistic Model Approach." *PLOS ONE* 20 (2): e0318457. <https://doi.org/10.1371/journal.pone.0318457>.

- Thyen, Kressen, and Anna Wolkenhauer. 2026. "What's 'Rural' in Rural Development? Interrogating Internationalised Visions for the African Countryside." *Journal of International Relations and Development* 29 (1). <https://doi.org/10.1057/s41268-025-00367-4>.
- Uddin, Mohammad Salim, Emdad Haque, Mohammad Nuruzzaman Khan, Brent Doberstein, and Robin Cox. 2021. "'Disasters Threaten Livelihoods, and People Cope, Adapt and Make Transformational Changes': Community Resilience and Livelihood Reconstruction in Coastal Communities of Bangladesh." *International Journal of Disaster Risk Reduction* 63: 102444. <https://doi.org/10.1016/j.ijdr.2021.102444>.
- Westoby, Ross, Rachel Clissold, Karen McNamara, Iftekhar Ahmed, Bernadette Resurrección, Nishara Fernando, and Saleemul Huq. 2021. "Locally Led Adaptation: Drivers for Appropriate Grassroots Initiatives." *Local Environment* 26 (2): 313. <https://doi.org/10.1080/13549839.2021.1884669>.
- Zanotti, Laura, Max Stephenson Jr., and Nancy McGehee. 2015. "International Aid, Local Ownership, and Survival: Development and Higher Education in Rural Haiti." *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations* 27 (1): 273. <https://doi.org/10.1007/s11266-015-9618-7>.
- Zakumumpa, Henry, Ligia Paina, Jess Wilhelm, Freddie Ssengooba, Eric Ssegujja, Moses Mukuru, and Sara Bennett. 2021. "The Impact of Loss of PEPFAR Support on HIV Services at Health Facilities in Low-Burden Districts in Uganda." *BMC Health Services Research* 21: 302. <https://doi.org/10.1186/s12913-021-06316-4>
- Zakumumpa, Henry, Ligia Paina, Eric Ssegujja, Zubin Cyrus Shroff, Justin Namakula, and Freddie Ssengooba. 2024. "The Impact of Shifts in PEPFAR Funding Policy on HIV Services in Eastern Uganda (2015–21)." *Health Policy and Planning* 39 (Supplement 1): i21–i32. <https://doi.org/10.1093/heapol/czad096>.