



Community-Based Infrastructure Development through CBOs in Malakand Division, Khyber Pakhtunkhwa: A Community Participatory Model for Fragile Region

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ABSTRACT

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This study examines the implementation and outcomes of community-based infrastructure projects executed through Community-Based Organizations (CBOs) in the six districts of Malakand Division of Khyber Pakhtunkhwa (Swat, Shangla, Chitral, Upper and Lower Dir and Malakand), with a budget of EUR 80 million and implemented over a four-year period (2013-14 to 2017-2018) through District Governance and Community Driven Programme (DGCD). Against a backdrop of post-conflict recovery and institutional fragility, the initiative aimed to enhance local service delivery, promote participatory governance, and strengthen community resilience. Using a mixed-methods approach including field observations, stakeholder interviews, and project performance data, the research evaluates the effectiveness, inclusivity, and sustainability of CBO-led infrastructure development. Findings indicate that localized planning and execution fostered greater transparency, cost-efficiency, and community ownership, though challenges related to technical capacity, procurement compliance, and long-term maintenance persist. The paper concludes with policy recommendations for scaling community-driven models in fragile and transitional contexts.

Introduction

Infrastructure development in post-conflict and under-governed regions presents a dual challenge: rebuilding physical assets while restoring institutional trust. In the Malakand Division of Khyber Pakhtunkhwa, decades of militancy and displacement disrupted conventional governance mechanisms, necessitating alternative models of service delivery. Community-Based Organizations (CBOs), rooted in local networks and social capital, emerged as pivotal actors in bridging this gap.

This paper explores the design, implementation, and outcomes of a series of community-based infrastructure projects executed through CBOs across multiple districts in Malakand. These projects ranging from water supply schemes and sanitation facilities to link roads and irrigation channels were financed through European Union (EU) and implemented by the Government of KP through a sector budget support mechanism.

DGCD has been highly effective in delivering needed infrastructure to communities in Malakand division in an expeditious and cost-effective manner. It has made good progress in meeting its goal of increasing trust between the government and citizens. The fiscal and regulatory mechanisms supported citizen engagement and the involvement of communities in identifying and implementing their development needs and in improving service delivery.

The central research question guiding this study is: *To what extent do CBO-led infrastructure initiatives contribute to effective, inclusive, and sustainable development in fragile settings?* By analyzing project data and stakeholder experiences, the paper assesses the viability of community-driven development (CDD) as a governance tool and development strategy.

Community-driven development (CDD) is a transformative approach for infrastructure planning and service delivery to overcome the institutional fragility, conflict, or limited state presence. Deep rooted in participatory governance theory, CDD lays emphasis on decentralization of decision-making power and resource allocation to the grass root level i.e. the local community through formation of organized groups such as Community-Based Organizations (CBOs). This model challenges the traditional top-down development paradigms (elite capturing approach) by positioning communities not merely as beneficiaries but as co-creators of development outcomes.

Project Background

The KP DGCD was established in response to efforts by the KP provincial government to consolidate and stabilize the post-crisis transition process in Malakand Division following the disruption to the delivery of Government services caused by the militancy and civil unrest resulting from the Afghan war and the 2010 monsoon floods. The KP DGCD was formulated in 2012 and sought to be coherent with i) the Malakand Comprehensive Stabilization and Socio-Economic Development Strategy, published in August 2009 by the provincial government shortly after the end of the military operation (2009 spring offensive to eliminate insurgency) and ii) the Post-Crisis Needs Assessment (PCNA) for Khyber Pakhtunkhwa published in October 2010. During the period 2009-2011 the provincial government re-established administrative control over the 7 districts of Malakand Division.

The overall objective of the KP DGCD as described in the 2012 Action Fiche was “to contribute to an effective development and peace-building strategy for the Government of Pakistan that supports transformation of the functioning of the State in Khyber Pakhtunkhwa and FATA, improving democracy and rule of law, making it more accountable and providing equitable opportunities for better health, education and employment”. The programme was designed to address 3 of the PCNA’s 4 strategic objectives: i) to build the responsiveness and effectiveness of the State to restore citizen trust; ii) to stimulate employment and livelihood opportunities; and iii) to ensure the delivery of basic services. The purpose of the KP DGCD programme was “to support the government of Khyber Pakhtunkhwa in reforming public administration at district level to improve service delivery, economic growth and local governance through the promotion of community-driven development in the crisis-affected Malakand Division”.

Table 1: Result Area and Objective of CDLD Policy

Result Areas of the KP DGCD (Action Fiche)	Objectives of the CDLD Policy governance framework with which the KP DGCD is aligned
1) Increased investment in community development in six district budgets of the Malakand Division responding to specific local demands for public investment in service delivery and community infrastructure.	1) Fiscal and regulatory framework for CDLD where local communities are in charge of executing local development/service delivery initiatives.
2) An inclusive, representative system of community mobilization that federates villages exist in all Union Councils of the Malakand Division	2) Building the capacity of the relevant public sector entities and functionaries at the district level to operationalize CDLD
3) Enhanced human, technical and organizational capacities of District and Tehsil government agencies to support community-driven development and be more service- and outcome-oriented.	3) Providing an enabling environment for Community-Based Organizations (CBOs) to access public funds earmarked for CDLD initiatives

Literature Review

Mansuri and Rao (2013), in their seminal work *Localizing Development*, argue that participation alone is not a solution rather, its effectiveness depends on institutional design, accountability mechanisms, and the socio-political context. They caution against idealizing community without addressing power distribution and capacity constraints. Their framework underscores the need for structured facilitation, technical support, and robust monitoring to ensure that CDD leads to equitable and sustainable outcomes.

Gugerty and Kremer (2008) explored the role of social capital in enabling collective action, particularly in rural areas. They found that communities with strong inter-cohesive relationships and trust are more efficient in infrastructure development and resolve internal disputes during the process. However, they also noted that external support (financial, technical, and administrative) is critical to scaling such efforts beyond pilot phases.

In fragile and post-conflict environments, CDD has been used not only to rebuild infrastructure but also to restore trust in governance. Beath et al. (2012) demonstrated that in Afghanistan community-led development projects improved perceptions of Government authority and reduced support for the insurgent groups. Similarly, Casey et al. (2013) showed that participatory planning in Sierra Leone enhanced civic engagement and social cohesion. These findings suggest that infrastructure, when delivered through inclusive processes, can serve as both physical and symbolic tool for peacebuilding.

CDD evaluation mainly focuses on its potential to reduce local elite capture, especially in settings with weak control. King and Samii (2014) argue that without safeguards, participatory models may replicate existing inequalities or fail to reach marginalized groups. They advocate for hybrid models that combine community input with formal institutional checks.

In Pakistan, CDD has been institutionalized through programs like the Pakistan Poverty Alleviation Fund (PPAF) and the Community-Driven Local Development (CDLD) initiative in Khyber Pakhtunkhwa. These programs have demonstrated success in mobilizing communities, improving service delivery, and enhancing transparency. However, challenges remain in ensuring technical quality, sustaining infrastructure, and integrating gender equity. The Malakand Division case builds on this legacy, offering a unique lens into CDD in a post-insurgency context where governance structures are being reimaged.

This literature provides a critical foundation for analyzing the Malakand experience. It highlights both the pros and cons of community-led infrastructure development, emphasizing the importance of context-sensitive design, capacity-building, and institutional support. The present study contributes to this discourse by offering empirical insights from a region undergoing recovery and reform, where CBOs are not only service providers but agents of resilience and transformation.

Methodology

This study employs a qualitative case study approach to examine the implementation of community-based infrastructure projects across selected districts in the Malakand Division. The methodology integrates document analysis, field observations, and stakeholder interviews to assess the effectiveness, inclusivity, and sustainability of infrastructure schemes executed through CBOs.

DGCD Design

The design and implementation arrangements as articulated in the Action Fiche and the Finance Department's Notification of November 2013, later revised in August 2015 outline the contextual challenges, justify the intervention, and demonstrate that the identified needs are well aligned with the need of the target districts and their communities.

The programme is structured around three core and interconnected results:

1. Establishing a fiscal and regulatory framework that enables local communities to lead the execution of local development and service-delivery initiatives.
2. Strengthening the institutional and operational capacities of district-level government entities and officials to effectively implement the CDLD model.
3. Creating a supportive environment through which Community-Based Organizations (CBOs) can access public funds allocated for CDLD interventions.

Role of Community-Based Organizations

The social mobilization strategy adopted by SRSP for DGCD centered on forming community-based institutions, strengthening their capacity to encompass local needs, enabling them to participate meaningfully in planning, implementing, and overseeing development activities. This approach aligned closely with the KP CDLD Policy, which emphasizes that local development must be undertaken through active community participation across all stages of the project cycle, with clear mechanisms for identifying and addressing potential conflicts of interest.

The policy further mandates that development decisions be made at the lowest tier i.e. grass root level beginning from the community or village level within each Village Council. Under this enabling framework, Community-Based Organizations (CBOs) were empowered to access public funds for CDLD interventions. These CBOs functioned as the principal implementing bodies, responsible for procurement, mobilizing local labor, and managing financial transactions. Their selection was based on predefined criteria such as community representation, relevant experience, and formal registration. To ensure compliance and quality, targeted capacity-building sessions were conducted to familiarize them with procurement procedures, financial documentation requirements, and quality assurance standards.

Table 2: Distribution of CBOs by District, January 2017 (Source SRSP second interim report)

S.No	District	CBOs Formed (Male & Female)		Total
1	Swat	612	129	741
2	Shangla	357	90	447
3	Malakand	273	73	346
4	Upper Dir	521	82	603
5	Lower Dir	512	117	629
6	Chitral	288	49	337
Total		2563	540	3103

Project Selection and Scope

The schemes were selected through participatory rural appraisal (PRA) processes carried out by community facilitators and technical teams at the district level. Projects that responded to critical service deficiencies such as drinking water systems, sanitation facilities, link roads, and small-scale irrigation works were prioritized. Emphasis was placed on schemes that reflected strong community demand and demonstrated practical feasibility.

Data Collection

- **Document Review:** Project proposals, completion reports, and financial statements were analyzed to assess compliance and performance.
- **Field Visits:** On-site inspections were conducted for a sample of completed schemes to verify physical progress and community satisfaction.
- **Stakeholder Interviews:** Semi-structured interviews were held with CBO members, district officials, and beneficiaries to capture qualitative insights on process efficiency, transparency, and impact.

The data collected on site was entered into the DGCD MIS developed for prompt reporting of the project deliverables including the infrastructure scheme plan developed, approved and implemented by the CBOs and DGDC / SRSP staff.

Sectoral Distribution

Malakand Division, where the programme operates, has suffered from the devastation caused by an insurgency as well as by floods and earthquakes. Communities here are widely scattered in remote mountainous areas where access is an issue affecting the capacity of the government to deliver sorely needed public services in a region already underserved by government public service delivery and infrastructure.

The programme has achieved its main objective of delivering community infrastructure in remote villages. These include roads, irrigation channels, drinking water supply etc.

Table 3: Projects Approved - District / Sector-Wise FY2014-15 to FY2016-17

Sector	Chitral	Lower Dir	Upper Dir	Malakand	Shangla	Swat	Total	%
Roads	50	320	276	109	59	232	1,046	34%
Streets	0	121	83	110	212	181	707	23%
Drinking Water	18	96	73	53	118	279	637	21%
Irrigation	202	22	62	20	20	52	378	12%
Education	1	24	63	34	32	29	183	6%
Social Welfare	7	4	7	5	0	22	45	1%
Sanitation	9	1	1	12	0	14	37	1%
Health	0	1	13	3	3	7	27	1%
Agriculture	0	2	0	1	0	0	3	0%
Total	287	591	578	347	444	816	3,063	100%

The number of beneficiary households reported through DGCD MIS in the approved applications, following verification and the preparation of Detailed Project Plans (DPP), was 290,985 with a no of beneficiaries over 2,327,000, which is around 35% of the total population of the six districts.

Monitoring and Evaluation

A third-party monitoring firm was engaged to conduct periodic assessments using standardized checklists and geo-tagged photography. Evaluation metrics included timeliness, cost-effectiveness, technical quality, and beneficiary feedback.

Results and Analysis

Between FY2014-15 and FY2016-17, DGCD records indicate that **3,063 communities** benefited from approved schemes, gaining essential infrastructure and strengthening confidence in the government's capacity to deliver public services. Stakeholders and beneficiaries consistently described DGCD as an effective and accessible mechanism for communities to obtain development support at lower cost. Reflecting this satisfaction, many VCs/NCs have expressed a preference for channeling their development allocations through the DGCD model rather than relying on conventional contractor-executed works.

The infrastructure provided under the program was well aligned with local priorities. Investments in drinking water systems, sanitation facilities, education-related structures, irrigation channels, and rural roads have significantly improved living conditions in remote areas. Enhanced access to these services has contributed to better health and education outcomes, reduced transportation expenses, and improved agricultural productivity.

However, across most of the inspected sites the EU M&E firm observed that there were several shortcomings in both the design and supervision of infrastructure works, which affected overall quality and which may reduce the durability of the schemes. These issues were due to inadequate training of CBOs and insufficient technical oversight, design support, and monitoring by the implementing partners, POE, and relevant line departments.

The schemes appeared to be overengineered, with unnecessary reinforcement and protection measures applied despite the naturally stable, rocky terrain. This resulted in project cost escalation. Some construction defects were significant enough to pose potential safety concerns. Other flaws were due to the limited availability of skilled labor in remote areas which could have been minimized through stronger supervision and more consistent technical guidance.

Effectiveness of Program

The programme is implemented through a budget-support modality, with financial resources transferred through the Government of Khyber Pakhtunkhwa's public financial management system, moving from the Finance Department to district-level accounts. This arrangement has substantially improved community access to essential village-level infrastructure. Evidence from the field indicates that the infrastructure delivered under this model is generally more cost-efficient and often of higher quality compared to conventional contractor-led construction.

Community ownership is strengthened through their financial contributions and their assumption of responsibility for operation and maintenance, which enhances sustainability. Stakeholders across the districts expressed strong support for this approach, noting its effectiveness and advocating for its continuation as a preferred model for local development.

Shortcomings of the Program

At the district level, many government officials perceived DGCD as a standalone “project” rather than an integral government programme. This perception weakened institutional ownership, particularly among line departments, which often showed limited interest in fulfilling their designated responsibilities, including the monitoring of community-implemented schemes. The distinction between DGCD and routine government initiatives was further reinforced by the clear separation of EU funding within the provincial ADP, where it was categorized as a “foreign-aided programme.”

Additionally, the traditional project-style implementation arrangement contributed to this perception. In the six participating districts, approximately one-quarter of total programme resources were allocated to overhead and management costs (TA, SMP, and government overheads). With more than 400 staff employed and dedicated offices, vehicles, and administrative structures, DGCD developed a distinct identity. Expanding this model to additional districts would further increase management expenditures, staffing requirements, and the visibility of DGCD as a project rather than a government-owned initiative.

The limited engagement of district-level government officers has also affected how communities view the programme, with many residents associating DGCD primarily with SRSP rather than the government. Strengthening government visibility within DGCD processes is therefore essential. One practical measure would be ensuring that district government representatives participate in small completion ceremonies held for successfully executed community schemes, thereby reinforcing the government’s role and presence in local development.

Discussion

The predominance of agriculture and road schemes reflects both immediate livelihood needs and long-term connectivity goals. The role of CBOs proved instrumental in enhancing transparency, cost-efficiency, and community ownership. Beneficiary interviews confirmed that communities felt a stronger sense of agency and trust in the process.

However, technical capacity varied among CBOs, leading to inconsistent quality. Monitoring mechanisms struggled to ensure uniform compliance, and the absence of structured maintenance plans raises concerns about sustainability. Gender inclusion also emerged as a critical gap, requiring targeted interventions.

The programme has contributed to strengthening interactions between Government institutions and local communities, resulting in a noticeable improvement in mutual trust. However, these interactions largely occur at the district administration level and typically involve only one or two CBO representatives who visit for contract signing or to address issues related to fund disbursement. The potential impact of this engagement could have been significantly greater if Government visibility been stronger at the community level.

Conclusion

This study demonstrates that community-driven infrastructure development, when supported by institutional frameworks and technical oversight, can be a viable strategy for service delivery in fragile regions. The Malakand Division experience highlights the strengths of localized planning and participatory execution.

DGCD interventions demonstrated strong relevance and impact, enabling community of the selected Districts to access essential village-level infrastructure that had long been carried out without proper community engagement. The programme has increased community engagement with District authorities, strengthening trust and improving awareness of how organized groups can secure public services. Approved schemes have delivered clear benefits, particularly by improving mobility, lowering transport costs, and easing daily burdens. Overall, the intervention has meaningfully improved local wellbeing and enhanced the value of community-driven development.

On the other hand, Stakeholders continue to view DGCD as a project rather than a government-owned programme, largely due to limited district-level ownership and the presence of a separate, full-time management structure in the field. The fast-tracked social mobilization process and temporary registration of CBOs have weakened long-term sustainability, while communities report inadequate feedback on rejected applications and insufficient clarity on selection criteria, including the 22% deduction from MSR rates. Technical processes also showed gaps where several schemes were overdesigned with inflated cost estimates, weak site supervision and record keeping, undermining effective monitoring. The most significant weakness was observed in the monitoring by line departments.

Recommendations

The assessment highlights several systemic and operational gaps that must be addressed to enhance the effectiveness, transparency, and sustainability of DGCD. Based on the evidence gathered, the following recommendations are proposed:

1. A comprehensive third-party monitoring and evaluation mechanism should be institutionalized to oversee all programme dimensions, including social mobilization, government capacity development, and infrastructure delivery.
2. Technical teams should maintain complete and regularly reviewed site records, Design and supervision responsibilities should be consolidated within a single team to ensure continuity, accountability, and adherence to engineering standards.
3. The communication strategy should be strengthened to ensure communities fully understand programme procedures, eligibility criteria, and financial conditions.
4. A detailed process-mapping exercise is required to identify inefficiencies in application processing, project execution, and fund disbursement. Identified bottlenecks should be systematically removed, and standardized SOPs developed to prevent recurrence. These SOPs may also be incorporated into the conditions for future EU tranche releases to ensure compliance.
5. DGCD should be closely integrated with the evolving local governance framework. Stronger alignment will promote coherence in community development planning and ensure that DGCD complements, rather than overlaps with, other local government initiatives.
6. Sufficient time be allotted for effective social mobilization and capacity building of CBOs. Engagement with CBOs should be a continuous process and the pool of community resource persons should be strengthened. CBOs should be facilitated to register themselves under the Social Welfare Act in Peshawar, until this Act is extended to cover Malakand Division.

References

1. Beath, A., Christia, F., & Enikolopov, R. (2012). Winning Hearts and Minds? Evidence from a Field Experiment in Afghanistan. MIT Political Science Department.
2. Casey, K., Glennerster, R., & Miguel, E. (2013). Reshaping Institutions: Evidence on Aid Impacts Using a Preanalysis Plan. Quarterly Journal of Economics.
3. Gugerty, M. K., & Kremer, M. (2008). The Impact of Development Aid on Social Capital: Evidence from Kenya. Economic Development and Cultural Change.
4. King, E., & Samii, C. (2014). Fast-Track Institution Building in Conflict-Affected Countries? Insights from Recent Evaluations. World Development.
5. Mansuri, G., & Rao, V. (2013). Localizing Development: Does Participation Work? World Bank.
6. Pakistan Poverty Alleviation Fund (PPAF). (2015). CDD Implementation Manual.
7. Government of Khyber Pakhtunkhwa. (2017). CDLD Program Annual Report FY2016-17.



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