UNIVERSITY OF CENTRAL ASIA
GRADUATE SCHOOL OF DEVELOPMENT
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STOCKHOLM INTERNATIONAL
PEACE RESEARCH INSTITUTE

Social Cohesion through Community-based Development in Kyrgyzstan

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WORKING PAPER #46, 2018

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Abstract:

Community-driven development (CDD) – a widely practiced tool by development donors and practitioners worldwide - strives to empower and develop communities by giving them joint control over aid allocations. This is expected to improve local development, local governance, and strengthen social cohesion. However, the empirical evidence for the third outcome is quite weak. This paper presents the findings of an impact evaluation research examining the extent the community driven development intervention imple-mented during 2014-2017 strengthened social cohesion in two regions in Kyrgyzstan. Our findings are that, on the one hand, the CDD project led to a sense of unity and cooperation and to a perception of improvements in local governance and educational services. On the other hand, the program had at best a weak effect on deep-trenched perceptions, attitudes and trust for closely related social groups and local institutions. We posit that these results obtained in part because the duration of the CDD interventions was rather short and the micro-projects were only realized in less than a half of villages in treatment sub-districts. It stands to reason that larger and longer CDD projects would have had larger impacts on social cohesion as well.

Keywords: Social cohesion, community-driven development, local development, governance, impact evaluation, theory of change, household survey, post- conflict.

JEL classification: C31, C93, D02, H43.

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Contents

Figures

Tables

Abbreviations

AA	*Ayil Aimak (*lowest administrative level in rural Kyrgyzstan*)*
AKF	Aga-Khan Foundation
AKF KG	Aga-Khan Foundation Kyrgyz Republic
AKDN	Aga Khan Development Network
AO	*Ayil Okmotu* (local administration)
BIRGE	The branding title of the intervention activities
CDD	Community-driven development
DPI	Development Policy Institute
DD	Difference-in-differences set-up
HH	Household
IPPA	Institute for Public Policy and Administration of UCA
ISDC	International Security and Development Center
ITT	Intention to treat
GAMSUMO	State Agency for International Relations and Self-Governance
LDS	Local development strategy
LiK	*Life in Kyrgyzstan* Study
MDE	Minimum detectable effect
MSDSP KG	Mountain Societies Development Support Programme in Kyrgyzstan
NGO	Non-governmental organization
PDO	Project development objective
SIPRI	Stockholm International Peace Research Institute
SOCECONIC	Center for Social and Economic Research
TOT	Treatment on treated
UNDP	United National Development Programme
UCA	University of Central Asia
WG	Working group

Acknowledgements

This report on the impact evaluation of a project on social cohesion through community-driven development contributes to knowledge on this topic in Central Asia and beyond, and is a multi-disciplinary, international collaboration between researchers and practitioners.

The research was led by principal investigator Professor Tilman Brück, Director of ISDC - International Security and Development Center and Dr Roman Mogilevskii, Associate Director at the Institute for Public Policy and Administration at the University of Central Asia (IPPA UCA). The research team furthermore included Dr. Damir Esenaliev, Dr Anastasia Aladysheva, and Gulzhan Asylbek kyzy from Stockholm International Peace Research Institute (SIPRI), and Dr Kanat Tilekeyev and Aida Bolotbekova from IPPA UCA.

This research report encompasses input not only from the research team but also from many dedicated colleagues, partners and individuals who played various roles during the lifetime of the project, and to whom the research team are most grateful.

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Finally, we appreciate the generosity in time and effort of all the respondents who participated in our research.

Executive Summary

Context, Relevance and Set-up

Community-driven development (CDD) strives to empower and develop communities by giving them joint control over aid allocations as well as resources, which is expected to improve local development and local governance. CDD is widely practiced by development donors and practitioners worldwide, usually in standard, peace-time settings. CDD may also strengthen social cohesion, peacebuilding and stabilization in conflict-affected and fragile settings. However, the empirical evidence for this hypothesis is quite weak (Casey, Glennerster, & Miguel, 2012; King & Samii, 2014; King, Samii, & Snilstveit, 2010; White, Menon, & Waddington, 2018).

Kyrgyzstan has implemented CDD projects for more than two decades, investing in local infrastructure and governance capacity. In 2010, violent inter-ethnic conflict – originating from political and economic factors – took place in Kyrgyzstan, claiming hundreds of lives, displacing several hundred thousand people, and destroying numerous private and public properties. Despite the relative political stability achieved since 2010, the country remains fragile to political events and economic shocks. Against this background, Kyrgyzstan is an interesting setting for testing if CDD can also lead to peacebuilding and stabilization.

This impact evaluation analyses the causal effect of a CDD intervention, which is unique in focusing explicitly on the link between CDD and social cohesion. Specifically, the intervention has two distinct channels, one of which is specifically designed to enhance local social cohesion. The normal intervention was labelled CDD and the enhanced intervention was labelled CDD+ (or "CDD plus"). Both treatment arms funded infrastructure micro-projects worth about US$20,000 dollars each per community and also included some social cohesion enhancing activities. However, the CDD+ arm included more such activities. The intervention took place from 2014 to 2017 in 15 sub-districts in two regions of South Kyrgyzstan. The intervention was delivered by MSDSP KG, a public foundation operating in Kyrgyzstan which is part of the Aga Khan Development Network (AKDN).

The impact evaluation design involved both a randomized approach and a matching approach. Treatment communities were randomized across CDD and CDD+ interventions and matched in pairs. In addition, data from 30 sub-districts acting as the control were collected. The research activities were implemented by a team of researchers from the Stockholm International Peace Research Institute and the University of Central Asia.

Key Findings

The rationale for the CDD intervention is that the process of implementation of a programme induces community members to work together. In this process, they gain more understanding about other social groups and local leadership. By working together towards a common goal, community members become more cooperative and gain trust. Furthermore, these impacts can be reinforced by the public goods that a CDD project eventually delivers, such as clinics, roads, or access to clean water. These goods should address economic, health, or infrastructure needs and might have a further, re-enforcing positive effect on community cohesion by improving living conditions, ensuring quality public services, and creating space for engagement.

We find empirical support for some of these ideas. The results indicate that the programme has had some positive effects on 1) a sense of unity and respect between various social and ethnic groups, 2) participation in voting at national and local elections, and 3) a sense of physical security in the neighbourhoods. At the same time, we identify some negative effects on the sense of belonging, which can be interpreted both positively and negatively. Importantly, and in contrast to our theory of change, we do not find any statistically significant effects on trust in other people and on trust in local government. The direct outcomes of the CDD programme, such as improved local public services resulting from mobilization and investment efforts, point to some marginal improvements, such as a more positive assessment of local authorities' work and improved satisfaction with educational services.

In summary, our overarching findings are that, on the one hand, the CDD project led to a sense of unity and cooperation and to a perception of improvements in local governance and educational services. On the other hand, the programme had at best a weak effect on deep-trenched perceptions, attitudes and trust for closely related social groups and local institutions. We posit that these results were obtained in part because the duration of the CDD interventions was rather short and the micro-projects were only realized in less than a half of the villages in the treatment sub-districts. It stands to reason that larger and longer CDD projects could have had a more significant impacts on social cohesion.

Recommendations for Programming

We find only limited evidence on the ability of community-driven development projects to foster social cohesion. As such, CDD programmes do not appear a perfect tool for fostering social cohesion. In part, this may be related to the fact that social cohesion depends on a host of other factors that go beyond local social norms and local governance, and are related to national policies and developments. To shape social cohesion more effectively would hence require more comprehensive programmes that also address bottlenecks for social cohesion at the national level.

The CDD programme under review here had short implementation periods. Correspondingly, the research project only considered a very short period of potential impact. Many development interventions struggle due to being restricted by the donor's project cycles. In this respect, multi-year and multi-cycle interventions would probably allow the potential benefits of the CDD approach to materialize. As social cohesion is a slow-changing phenomenon, planning to measure social cohesion several years (e.g., three years) after the intervention has ended may also help identify its true impact.

The heterogeneous impacts of the intervention point to the limits of CDD to reach minority groups. In our analysis, we observe a relatively higher share of women being aware and being a part of the project activities. However, we do not find any significant effects for ethnic minorities. We wonder whether an intervention limited in scope, value and time can be a driving force to improve deep-rooted inter-ethnic attitudes and relations. However, the field observations and the quantitative data suggest that the interventions were more effective in smaller sub-districts. Future CDD interventions could consider targeting smaller groups of people or smaller community organizations in the intervention sites to to make more of an impact on minority groups.

The Social Cohesion Index was used to fine-tune the intervention activities, which could be done in a similar way in future interventions. The index has strong merits to be used not just as a diagnostic tool but also as a communication tool. First, as soon as the index results were released, it was used by MSDSP KG for each treatment sub-district to understand what levels and which dimensions are strong or weak. While it was not possible to address the weakest indicators, the information was useful to get a sense of the sub-districts in which social cohesion was low. Secondly, the Social Cohesion Index was used to communicate with the population of the treatment sub-districts in order to provide information and catalyse discussions about community issues.

Recommendations for Future Learning

This project offers a rigorous testing ground for studying not just the drivers of social cohesion but also how social cohesion is measured by applying the"Social Cohesion Radar" methodology (Bertelsmann Stiftung, 2017; Delhey & Dragolov, 2016; Dragolov et al., 2016). The case of Kyrgyzstan is, to the best of our knowledge, the most comprehensive study of social cohesion as we collected data on social cohesion at the individual level and at higher levels in a consistent framework. Furthermore, the data were collected three times over a four-year period and are based on a panel of respondents. Finally, the data are comparable at regional and national levels. These unique features enable us to make a useful contribution to the study of the measurement, the drivers and the outcomes of social cohesion.

Specifically, our case study has advanced the use of the Social Cohesion Radar methodology for programming purposes and lays out a foundation for the application of the Social Cohesion Radar in other settings. Such future research may address the commonalities and differences in using this methodology in various country settings.

The Social Cohesion Index we present here is a very powerful new tool for research and programming. While the underlying indicators in the data collected are relevant to the Kyrgyz context, we are not restricted to a locally contextualized measurement framework. For example, the results from the Social Cohesion Index point out that the weakest dimensions are Social Networks, and Solidarity/Helpfulness. From our local knowledge and related research (Kuehnast & Dudwick, 2004), we know that the Kyrgyz invest a lot of time and resources to maintain their social capital. The same goes for Solidarity/Helpfulness, for which we know that people help each other a lot in Kyrgyzstan. Future research may wish to probe how deep such social networks and interactions are.

1. Introduction

This report presents the findings of an impact evaluation research examining the extent to which community-driven development projects foster social cohesion. The project's intervention activities and research took place from 2014 to 2017 in Osh and Naryn regions of Kyrgyzstan. The project was funded by the World Bank and the Aga Khan Foundation. The intervention activities were carried out by the Mountain Societies Development Support Programme in Kyrgyzstan; the research was conducted by Stockholm International Peace Research Institute and the Institute of Public Policy and Administration of the University of Central Asia.

Community-driven development has been widely used as a poverty reduction and local development tool by the international community and national governments in low to middle income and conflict-affected countries. The approach empowers the local population with decision-making and control over resources to address community needs in basic services, infrastructure, schools, and hospitals. CDD approaches are particularly prominent in conflict and fragile situations as formal authorities may not have the capacity to deliver public services.

CDD operations constitute a sizable share of global development aid. For instance, in 2017 the World Bank had 187 active CDD projects in 77 countries totalling US$19 billion complemented by an additional US$13 billion through other donors and borrowers (World Bank, 2018). CDD has been a particularly prominent development tool in Kyrgyzstan in the last two decades. The most well-known programme has been the World Bank-funded Village Investment projects which has invested in practically every rural sub-district in Kyrgyzstan since the early 2000s (World Bank, 2015; World Bank in the Kyrgyz Republic, 2016). Other donors, including UN organizations and bilateral donors, include CDD-types of activities in their portfolio. MSDSP KG, the implementing agency, implemented CDD operations in remote areas of Kyrgyzstan before engaging with this project.

CDD-project outcomes include improved local development, more capable local governments, and enhanced social cohesion. While the first two outcomes are found to be true in most cases, the evidence on social cohesion effects so far has been mixed (Casey et al., 2012; King & Samii, 2014; King et al., 2010; Mansuri & Rao, 2004; World Bank, 2012)DRC, Liberia, and Sierra Leone. Social cohesion — trust and cooperation in society — has emerged over the last two decades as an important concept in both academic and political discourse, especially in fragile environments. At the same time, evidence on how to build social cohesion and peace at various levels of society has been quite scarce.

Thus, the Social Cohesion Project seeks to understand how CDD interventions contribute to social cohesion in rural Kyrgyzstan. The project development objective is to identify, pilot, and build capacity for social cohesion mechanisms in CDD approaches. This includes: (i) identification of potentially successful approaches to promote social cohesion in community-driven development; (ii) the subsequent piloting of such approaches through community-driven social mobilization and investment in micro-projects; and (iii) the rigorous tracking of the effectiveness of such approaches through an evidence-driven monitoring and evaluation framework (World Bank, 2018).

This project is also interesting from the country perspective. It includes two regions of Kyrgyzstan which allows useful comparisons to be made. Osh region is an ethnically-mixed part of Kyrgyzstan with a large representation of Uzbeks - the second largest ethnic group in the country. The project took place three years after the eruption of violent conflict in June 2010. This short-lived but violent conflict resulted in more than 400 deaths, about 400,000 people being displaced, and numerous properties destroyed. Since order was restored, significant peacebuilding efforts have been made by the Kyrgyz government and the international community, thus this project seeks to learn whether CDD can be used as an effective form of peacebuilding intervention. The second region is Naryn, which is mountainous and sparsely-populated with a mostly ethnic Kyrgyz populace. The inclusion of Naryn was justified so as to learn about perceptions and attitudes of mono-ethnic regions concerning social cohesion, and whether levels and dynamics of social cohesion differ compared to multi-ethnic communities.

This study rests on the generalized theory of change of CDD which in turn is based on intergroup contact theory (Allport, 1954). No pre-analysis plan was registered, but a set of nine hypotheses pertaining to social cohesion, local governance and public services was outlined in the project's baseline report (Esenaliev et al., 2016) and the analysis uses the outcome indicators based on those hypotheses. Another consideration for not doing a pre-analysis plan was due to the planned adaptive nature of the intervention activities which were supposed to be designed and experimented on after the baseline information and appraisal of the study sites become available. Given the pilot nature of the activities that would enhance social cohesion, a pre-analysis plan was not as necessary as in the case of studying a pre-fixed intervention.

The accompanying research employed a randomized approach to infer causal links between CDD and social cohesion. The research methodology rests on a randomized control trial approach based on a comparison of two groups of communities - piloting and control communities. The research hypothesizes that the pilot communities – which receive the CDD micro-grants and conduct corresponding mobilization and participation activities - are likely to demonstrate enhanced social cohesion after the intervention compared to those control communities which received no intervention from the project. Intervention sites were selected through a multi-step randomized approach that included narrowing down the initial list of 133 qualified communities to 30. Using pair-wise matching based on population size and ethnic composition, 15 communities were randomly assigned the treatment group and the other 15 communities a control status. Comparing baseline, midline, and endline survey data between two groups of treatment communities, we are able to infer causal effects.

This report describes the methodology and results of the impact evaluation research and details about the underlying intervention. It starts by describing the three key elements of the impact evaluation research: intervention, the theory of change, and outcomes (Chapter 2). Chapter 3 describes the national and regional economic and political context and assesses the extent to which the findings can be generalized outside of the project communities. Chapter 4 is dedicated to methodological issues, including the evaluation strategy, sampling and data collection, and ethical considerations. Chapter 5 describes the programmatic processes and parameters. The main quantitative findings are presented in Chapter 6 which includes a balance test, difference-in-difference results, and sub-groups analysis. Chapter 7 presents the methodology and findings of the Social Cohesion Index and makes a link to the results at the individual level. A discussion in Chapter 8 provides more details about the intervention and research process in order to assess the reliability of the results. The report concludes with recommendations for policy and practice, as well as with annex chapters, one of the most significant of such being a qualitative research summary.

2. Intervention, Theory of Change and Research Hypotheses

2.1. Intervention

The project intervention follows the CDD approach, widely used in Kyrgyzstan and in developing countries in general, as a tool to support local development. The project interventions were built on the previous experience of AKF and MSDSP in participatory development and community mobilization projects in Kyrgyzstan and other parts of the world. The intervention component of

the project was implemented in 2015, 2016 and 2017, though some of the micro-projects were completed in the first quarter of 2018. The project intervention activities were branded by the name *BIRGE*, which means 'together' in both Kyrgyz and Uzbek languages.

The project development objective was to identify, pilot, and build capacity for social cohesion mechanisms in CDD approaches. This included: (i) identification of potentially successful approaches to promote social cohesion in community-driven development, and (ii) the subsequent piloting of such approaches through community-driven social mobilization and investment micro-projects. The introduction of specially-designed CDD interventions and their subsequent evaluation will help answer three research questions:

- Do the project's CDD approaches improve social cohesion in conflict-affected communities in Kyrgyzstan?
- Does the impact of the intervention differ between mono- and multi-ethnic communities?
- Which CDD approaches have the greatest impact on social cohesion outcomes and indicators?

To meet the objectives of the project, two approaches for intervention activities were developed during the initial stages, namely the CDD approach and the CDD+ approach. The first approach comprised of traditional CDD approaches including five key elements: situational analysis (local assessment), selection of target partners (working group), participatory community needs identification/prioritization (local development strategy), sub-granting for local projects, and participatory monitoring and evaluation.

The second approach, CDD+, included additional activities on top of the standard approach in order to create conditions for enhanced social cohesion in a half of the intervention communities. These additional activities included: 1) community initiatives, and 2) technical assistance and capacity building for local authorities. Community initiatives included deliberations on community issues, support to hold forum theatres, and youth-led initiatives to help vulnerable social groups. The technical assistance and capacity building included, for example, focused assistance to improve local development strategies, trainings on local budgets and asset management, social auditing, and legal assistance. Both types of extra activities included deliberations and possible applications of the concept of social cohesion. For example, MSDSP KG built the capacity of local government and non-government organizations to jointly self-assess the state of social cohesion at the community level, identify factors that divide communities, and develop strategies to improve social cohesion.

2.2. Theory of Change

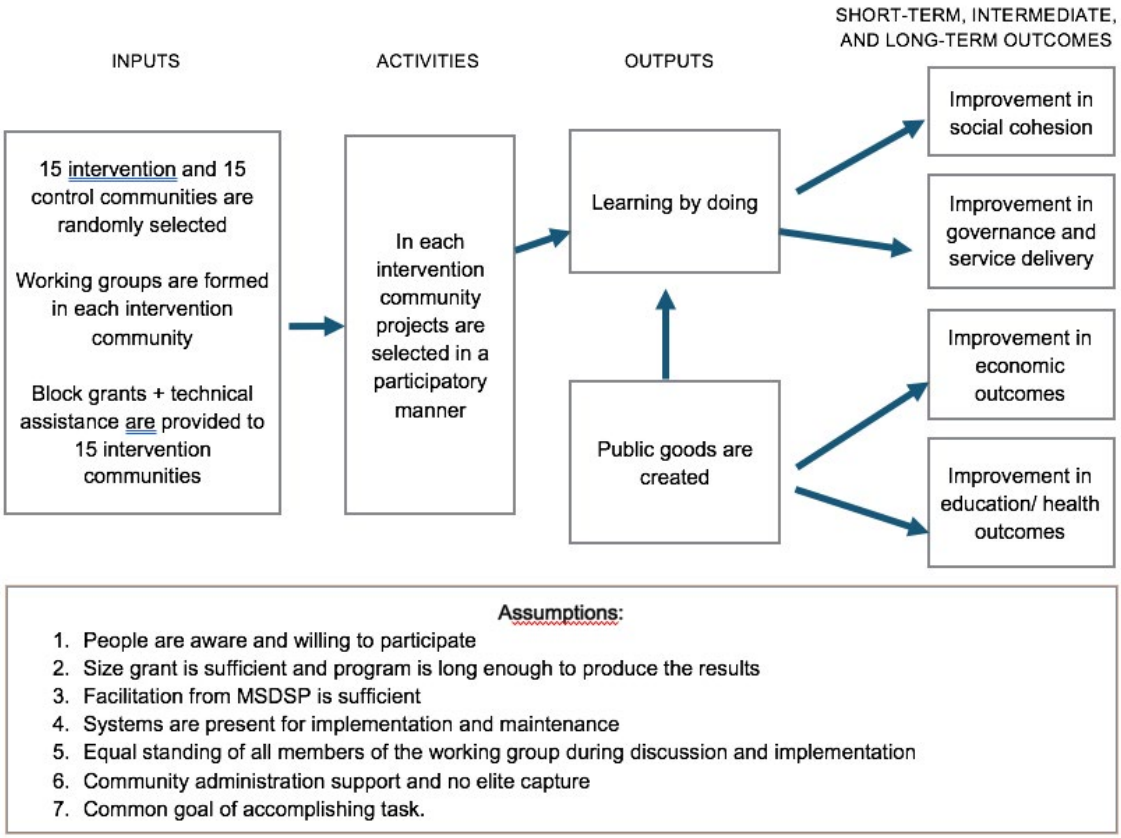
This project applies the universal theory of change for CDD interventions. CDD embodies a participatory bottom-up approach aimed at improving social and economic outcomes. According to the theory of change, the main ingredients of the project intervention are: 1) 15 intervention and 15 control communities are randomly selected for the project and impact evaluation; 2) MSDSP forms a working group in each of the 15 intervention communities; working groups consist of members of different social groups, local administration, and informal leaders; 3) technical assistance and grants amounting to about US$20,000 dollars are provided to the intervention communities to contribute toward addressing a community developmental need. The working groups are central to the practical implementation of the intervention by serving communication, engagement, implementation, and oversight roles. A basic mechanism linking input, activities, outputs, and outcomes of the project is depicted in Figure 1.

Per this theory of change, there are two major outputs of the project. First, during the numerous cycles of the process leading to the implementation of a chosen micro-project(s), the members of the working groups "*learn by doing*". It is assumed, that by working together to implement a CDD project, more can be understood about other social groups and local leadership: by working together towards a common goal, they become more cooperative and gain trust in one another. On the other hand, as a result of the whole process, a public good - such as clinics, schools, roads,

and access to clean water - is created. The public good – in addressing economic, education, health, or infrastructure needs - might have a wider effect on social cohesion by improving living conditions in communities, ensuring quality public services, and creating space for engagement between community members. This effect is assumed to affect a population beyond the community's direct beneficiaries.

The notion that CDD improves social cohesion is based on the assumptions of Allport's *Contact Theory* (Allport, 1954). Allport's theory states that active contact between members of different groups can leads to more tolerance if: 1) members have equal standing during discussions, in decisions and implementation; 2) there is support to members from local administration or a higher structure in a hierarchy; and 3) there is a common goal of accomplishing a task. This theory fits very well with the CDD approach; however, the project requires several more specific assumptions for the theory of change to be fulfilled. These CDD assumptions require that: 4) people are aware of the project and are willing to participate; 5) the size of the grant is sufficient to implement the project and there is enough time to do so; 6) facilitation from the implementing agency is effective and sufficient; and 7) the systems are present for implementation and maintenance. If all these assumptions are fulfilled, a CDD approach may enhance social cohesion in intervention communities in addition to development and governance outcomes. We present a review of whether these assumptions actually held in the discussion chapter of this report.

Figure 1. Theory of change of CDD programmes



However, we do not rule out the effects of other theories of change. Another view, namely conflict theory (Tajfel & Turner, 1970) states that if we bring people of different groups into close proximity with each other, their prejudices towards the other groups are reinforced, and that they may perceive each other even more negatively than before. Another factor that may come into play is the opportunity costs for community members of participation in CDD activities. In order to participate effectively, the benefits of participating in the project should outweigh any income forgone due to the necessity to skip a productive activity (e.g. a job, or farm work) or any other commitments. In our analysis, we do not eliminate these hypotheses and consider all factors that may explain the results of the intervention.

2.3. Outcomes and Impacts

Key outcomes of CDD interventions are local economic development, improved governance and
Key outcomes of CDD interventions are local economic development, improved governance and
enhanced social cohesion (King, 2013; Mansuri & Rao, 2013; Wong, 2012b). This project primarily studies social cohesion and improved governance outcomes. As an outcome indicator, social cohesion is an intangible concept and is an attribute of a group of people. We conduct the analysis of the effects at both individual and community levels. First, we select key indicators at the individual level, and explore whether the project led to changes in people's perceptions, attitudes and behaviour. The second level is at the level of villages and sub-districts where we apply direct indicators such as trust in people, but also the composite metrics, namely the Social Cohesion Index. Thus, the research examines the following hypotheses relating the interventions to social cohesion at the individual level:

H1. Individuals in intervention communities will exhibit higher levels of **unity in co-living.**

H2. Individuals in intervention communities will exhibit higher levels of **trust in community residents**.

H3. Individuals in intervention communities will exhibit higher levels of **respect for ethnic differences** between people.

H4. Individuals in intervention communities will exhibit higher levels of a **sense of belonging** in their communities.

H5. Individuals in intervention communities will exhibit higher levels of **civic engagement**.

The research examines the following hypotheses relating the interventions to local governance:

H6. Individuals in intervention communities will exhibit higher levels of **trust in local administration**.

H7. Individuals in intervention communities will exhibit higher levels of **trust in informal leaders**.

H8. Individuals in intervention communities will report higher levels of **participation in decision-making** on local issues.

H9. Individuals in intervention communities will report higher levels of **satisfaction with local public services**.

Auxiliary outcomes are those that are not of a primary interest from an evaluation standpoint, but which provide additional insight into the direct or indirect unintended impact of interventions. In addition to the social cohesion and local governance indicators, we examine other development and welfare outcomes. The following indicators are of particular interest: 1) Household consumption and income; 2) improved access to health or educational facilities, 3) more active political participation. Another aspect is the effect of the project on excluded groups because CDD intends to empower women, youth and minorities, which could result in better gender and ethnic representation with the effects spreading further into intra-household attitudes, roles and decision-making (Wong, 2012a). An interesting question to explore is whether women who participated in the working group thereafter became more empowered at the individual and household levels.

The social cohesion index, presented in detail in Chapter 7, measures village and sub-district level social cohesion and has three domains and nine dimensions widely used in the economic literature on bonding and bridging social capital. These are: 1) social networks; 2) interpersonal trust; 3) acceptance of diversity; 4) identification; 5) institutional trust; 6) perception of fairness; 7) solidarity and helpfulness; 8) respect for social rules; and 9) civic participation. The methodology and components of the social cohesion index are presented in Chapter 8.

We expect that the impact of the project on social cohesion is not necessarily linear. It could be "U-shaped," if after the intervention the social cohesion goes down when participants start to realize that the problem exists and then higher than the initial level when the project starts to have an impact. At the beginning of the project, when individuals from different ethnic and other backgrounds are placed together in close proximity, their prejudice towards each other may be reasserted or "opened up" by the project. Then, after the "adaptation period" individuals may accept each other, and their group's social cohesion levels may rise. Alternatively, the impact could be "reverse U-shaped" if there is an immediate positive impact which wanes after a certain time.

We expect that the impacts of the CDD interventions on social cohesion may not be large. Individual perceptions and attitudes could be deep-routed and formed by many factors, such as environment, family, friends, upbringing, and even genetic endowment according to the most recent research (for example, in Paluck & Green, 2009). Another important issue is that attitudes and perceptions reinforce behaviour, and that behaviour then reinforces attitudes and perceptions. The CDD intervention may move this cycle into a positive domain; however, this may not be sufficient to break the prejudices and behaviour given the relatively short time from when the intervention took place.

From this standpoint, behavioural sub-outcomes of the social cohesion index such as social networks, solidarity and helpfulness, and civic participation could be more difficult to change than attitudinal sub-outcomes such as interpersonal trust and acceptance of diversity. It could also be the case that social desirability bias drives individuals to respond more positively to their attitudes than behaviour. Finally, the sub-outcome related to identity is one of the most difficult to change because it largely relates to the embedded cultural environment.

3. Study Context

3.1. Study Site and Target Group

This project was implemented in two out of Kyrgyzstan's seven *oblasts* (regions), Osh and Naryn. The selection of Osh region was mainly to contribute to the knowledge about what works in peacebuilding after it experienced violent clashes in June 2010. While the conflict mainly took place in the country's southern regions, where Osh oblast belongs, the inclusion of Naryn oblast was motivated by an interest in exploring the differences in attitudes and behaviours of the population in mono-ethnic, Kyrgyz communities. The University of Central Asia also has a university campus in Naryn which has a great effect on the development of the region. As such, this was another consideration when selecting Naryn region.

The target group is the population of treatment sub-districts. However, the project interventions rest on an intense collaboration with local governments, leaders of formal and informal groups, and NGOs. The project emphasizes the participation of women, ethnic minorities and youth in its activities.

3.2. Country, Political, Social and Economic Context

Kyrgyzstan is a landlocked mountainous country in Central Asia with a multi-ethnic population of 6.2 million as of 2017. It is one of the poorest countries in the region with a GNI per capita of US$1,100 in 2016. Located within reach of large Chinese, Russian and South Asian markets, it borders with China, Kazakhstan, Tajikistan, and Uzbekistan. Kyrgyzstan demonstrated some success in fostering open institutions but has experienced controversial developments in supporting democracy and civic freedom. The key political achievement in recent years was a peaceful transition of power to Sooronbay Jeenbekov, who was elected president in October 2017.

The first president of the country, Askar Akaev, was removed from office in 2005 after 15 years in power. Public dissatisfaction with the conduct of the parliamentary elections in February 2005, along with grievances concerning the decline of socio-economic conditions and corruption led to a massive uprising. Nevertheless, the root causes of the first regime persisted during the reign of the next president of the country, Kurmanbek Bakiyev. In April 2010, anti-government demonstra-

tions took place again, originating from the regions and extending to the capital city. The protests were caused by the diffused view that corruption, and the abuse of public assets, had increased tremendously. These protests ended with the removal of Bakiev from office and the formation of an interim government led by opposition leaders with Roza Otunbaeva elected as the position of interim president for a period of one year.

In the midst of the unstable political situation, violent inter-ethnic clashes erupted in June 2010 in Osh city and surrounding areas, where most of the country's Uzbek community, the country's largest ethnic minority, resides. As a result, hundreds of people were killed, over 2,500 were injured, over 400,000 displaced, and a lot of property damaged (Kyrgyzstan Inquiry Commission, 2011; Melvin, 2011). A significant number of people, particularly young men, from the rural areas of Osh oblast participated in the violence. This civil conflict led to a weakening of confidence within the private sector and to economic and fiscal pressures. Although stability has returned, the process of reconciliation has been slow and particularly challenging in Osh and Jalalabad oblasts.

The political developments since mid-2010 demonstrated an openness and dynamism of political processes in the country as evidenced by the opposition political parties represented well in both national and local parliaments. Despite uneven progress with civil rights, people enjoyed more freedom of speech after 2010. However, over time, the country's third president, Almazbek Atambayev consolidated power by the end of his term in 2017. Pressure was put on independent media sources and several high-profile opposition leaders were imprisoned on the grounds of corruption. Presidential elections, which took place in mid-October 2017, resulted in victory for the pro-Atambayev presidential candidate, Sooronbay Jeenbekov.

In the economic sphere, despite low GDP growth rates, Kyrgyzstan has experienced a significant decline in poverty. The share of the country's population in poverty fell from 38% in 2012 to 25% in 2016, and extreme (food) poverty was practically eliminated. Remittances from Kyrgyz migrants working abroad – which amount to around one-third of its GDP - are one of the key sources of poverty reduction and drivers of economic growth. Kyrgyzstan's accession to the Eurasian Economic Union in 2015 does not appear to have brought the expected stimulus to economic growth and exports, though access to labour markets and working conditions of migrants seem to have been improved.

Osh oblast, one of the sites of the project on social cohesion, is a densely inhabited area in Kyrgyzstan with a population of about 1.6 million people as of 2017, of whom Uzbeks constitute about one third. Osh city was the centre of violent conflict that erupted in June 2010. Physical rehabilitation and recovery of destroyed infrastructure was carried out by the Kyrgyz government with significant financial support from other countries and development donors. Dozens of international humanitarian and peacebuilding projects were realized in South Kyrgyzstan with the purpose of capacity building and of preventing potential violence in the future.

The other project area, Naryn oblast, is one of the most sparsely populated regions in the country with about 0.28 million as of 2017. The population is mono-ethnic with 99% represented by ethnic Kyrgyz. The oblast is predominantly rural, and the main economic activities here are in agriculture, mainly livestock breeding. As a result of the low potential for employment and growth, Naryn oblast is one of the poorest areas in the country with a 38% poverty rate.

Several national and local political events have taken place in the course of the project which might have had some effects on the measured outcomes of the project. As an illustration, when a parliament election campaign starts, the running individuals and political parties activate their efforts to "please" voters by investing in the developmental needs of the communities. This aligns with the intervention efforts of the CDD project and might produce contamination and bias in perceptions, attitudes and opinions, especially when data collection takes place before the elections. At the regional level, local elections were held in March, May and December 2016, including Osh and Naryn oblasts with few project communities affected. At the national level, parliamentary elections were held in October 2015; a national referendum took place in December 2016 proposing amendments to the constitution; and finally, the country held presidential elections in October 2017. (See Annex B for a timeline and of major political events).

3.3. External Validity and Sample

External validity – the extent to which the results of this study can be generalized to other or wider populations and contexts - is important as the underlying research in this project is called to contribute toward global knowledge about CDD's capacity to enhance social cohesion. As we discuss below, the sample of sub-districts that were part of the intervention activities represents mostly the rural population in middle-sized sub-districts, and therefore, generalization of the results to the regional and national levels can only be made with a great degree of caution.

The study sites are representative of the rural areas of two oblasts, Osh and Naryn. However, the sample is not representative of urban and distant rural areas in both regions. Another consideration is that the Osh sample comes from communities where little or no violence took place in and around June 2010. The violent conflicts happened mainly in Osh city and its suburbs, and other cities such as Jalalabad (Kyrgyzstan Inquiry Commission, 2011), and thus, the population of interest was not directly exposed to the conflict events[1].

The sample size is large enough to represent well the population in the selected villages and sub-districts. On average, the coverage of the population with our sample size was about 6.4% of the total number of households in the baseline survey, with the minimum percentage being 0.4%, and maximum – 72.6%. We find that the demographic characteristics of the sampled households matched well with the overall population demographics, though in few ethnically mixed villages we observed some differences.

The sample in the study sites fits also well with the underlying population characteristics at the oblast level. However, as discussed earlier, the sample is quite special in terms of neither representing the semi-urban and urban areas, nor the distant rural communities in both oblasts. Yet complementing the quantitative study with qualitative research and national level data from the Life in Kyrgyzstan study (Brück et al., 2014) helps to assess to what extent the findings from this research can be generalizable to national and other country contexts and to predict the success of an enhanced CDD approach in future applications.

4. Evaluation: Design, Methods and Implementation

4.1. Identification Strategy

The research methodology applies a randomized control trial method based on the comparison of two groups of communities (pilot and control). The research rests on the hypothesis that the pilot communities are likely to demonstrate enhanced social cohesion indicators after the intervention compared to those receiving no intervention.

The evaluation design is based on a difference-in-differences (DD) method. We will observe two types of groups: pilot AAs and control AAs for two time periods (before and after the programme is implemented). The impact of the programme is then estimated as:

$$\bar{\delta} = (\bar{y}_{P,2} - \bar{y}_{P,1}) - (\bar{y}_{C,2} - \bar{y}_{C,1})$$

where *P* and *C* represent outcomes for the pilot and control communities, respectively; the baseline period is labelled 1 and the follow-up period is labelled 2. The DD estimate starts with the time changes on average for the individuals (in pilot AAs) and then proceeds with the change means for individuals in control communities. This method of impact evaluation is based on the "parallel paths" assumption, meaning that developments in both pilot and control communities are assumed to be similar and the only difference is the intervention for the pilot group. The estimation will eventually be implemented as a regression, adding relevant covariates.

Intervention sites were selected through a multi-step randomized approach that included filtering out potentially qualified communities from 137 sub-districts in the initial stage. This resulted in

[1] However, some of the communities were at the epicenter of the violent clashes in 1990; namely, Uzgen sub-district which was a part of this project's sample.

a sample frame of 38 sub-districts, which was eventually narrowed down to 30 communities: 15 pilot and 15 "matching" control communities. The pair-wise matching was based on population size and, for multi-ethnic communities, ethnic composition.

At the onset of the project, MSDSP KG determined the selection criteria of the project sub-districts. The project initiators targeted 15 pilot (or treatment) sub-districts or *ayil aimaks* (AAs). These 15 AAs were paired with the same number of control communities to evaluate the impact of project interventions. To select a sample frame of eligible communities for the baseline survey, the team identified 137 AAs in Osh and Naryn oblasts. They then excluded those that did not meet the selection criteria for forming a sample frame of AAs for randomisation. The following criteria were established to form the sample frame for the project:

- No previous participation in MSDSP KG's community mobilisation activities.
- Small to medium population size (between 1,000 and 30,000).
- Some distant locations in both oblasts were excluded.
- For Osh oblast:
    - Location is not close to Osh city's Kara-Suu market.
    - At least 10% of the population in multi-ethnic AAs is not Kyrgyz.

Randomization was implemented by the research team using computer-generated random numbers using STATA statistical software. The randomization and treatment assignment were done in three steps. First, 18 pairs of AAs were matched based on population size and, for multi-ethnic communities in Osh oblast, on ethnic composition. This means that two remaining a*yil aimaks* were left out because their demographic characteristics were dissimilar to the other sub-districts. The second step was a computer-based randomization (through random number generation) in which we assigned a pilot or a control status to each AA. Thirdly, the random process was also applied to define which pairs will be considered in the project – thus, three pairs of AAs were left without any project coverage. As a result, with the 1:1 allocation ratio, 15 AAs were assigned a treatment status and 15 AAs were assigned a control status.

The randomization was semi-public in the presence of research and implementation teams. The research team conducted the randomization. The beneficiaries did not participate in the randomization process. The results of the randomization were discussed, and two sub-districts had their status changed based on operational considerations. First, one of the sub-districts in Naryn oblast was located very far, and thus, would result in higher travel costs and more time for operational staff. Secondly, two sub-districts in the treatment group in Osh oblast were considered as economically well-off and the project's programme would be not so attractive to them.

4.2. Sample Size

The sample size of the number of sub-districts and households to survey was determined by the donors, AKF USA and the World Bank, who suggested to implement the project interventions in 15 sub-districts in two oblasts, Osh and Naryn, and to add 15 sub-districts to be used as a control group. The number of households to be surveyed was defined at 2,000 in total, with information collected from 1,200 households in the pilot sub-districts and from about 800 households in the control sub-districts. Given that we envisioned the collection of the data at the individual level, this meant the collection of about 7,000 individual responses.

Out of a total 30 sub-districts, 20 were from Osh oblast (comprising of 117 villages), and 10 sub-districts from Naryn oblast (22 villages). In each village, a listing procedure of households was applied to enable random selection. Each village was divided into several clusters, depending on village size. Then, in each village, one cluster was randomly selected. Small villages were analysed as a cluster. A list of all households was prepared for each cluster. During the listing process, some villages were excluded due to the absence of a permanent population[2].

The final sample of the population points covered by the listing process was 137 villages (116 villages in the Osh sample and 21 villages in the Naryn sample). The distribution of households

[2] Barak village from Osh was excluded because it is an enclave, located within the territory of neighbouring Uzbekistan.

was based on the population size of the sample (of the targeted 2,000 households, 1,700 were located in Osh oblast and 300 in Naryn oblast). All three waves of the survey were collected around August-November in 2014, 2016, and 2017. The quantitative surveys were administered at the individual-, household-, and village-level.

Table 1. Evolution of the sample of communities, households, and individuals

	Total			Control			Pilot		
	2014	2016	2017	2014	2016	2017	2014	2016	2017
Ayil aimaks	30	30	30	15	15	15	15	15	15
Villages (aiyls)	137	137	137	73	73	73	64	64	64
Households	1,982	1,982	1,956	783	786	775	1,199	1,196	1,181
Individuals	6,343	6,783	6,846	2,508	2,641	2,686	3,835	4,142	4,160
Youth	866	825	800	340	321	319	526	504	481

Source: SoCo baseline, midline, and endline surveys (2014, 2016, 2017)

Given the sample size, we conducted the power analysis to define the level of change needed to confidently detect the attributable change in the outcomes of interest. To be able to tell whether the programme affects social cohesion, we want to see whether the mean of the treatment sample is different from the mean of the comparison sample. Therefore, our hypothesis is that the programme improves the social cohesion of the group exposed to the programme (households and individuals within treatment AAs) more than that of the group not exposed to the programme (households and individuals within control AAs).

The null hypothesis is, therefore: The null hypothesis is, therefore: H_0*:Treatment effect =0* and our research hypothesis is H_1:*Treatment effect ≠0.* .

The minimum detectable effect (**MDE**) of an experiment is the smallest effect that, if true, has an **X**% chance of producing an impact estimate (difference in means) that is statistically significant at the **Y** level:

- **X** is the statistical power of the experiment for a research hypothesis equal to the **MDE**; **X** is conventionally set at **80%**[3]
- **Y** is the level of statistical significance used to decide whether or not a true effect exists **Y** is conventionally set at **5%**[4]

We used existing data from the 2012 "Life in Kyrgyzstan" survey on trust in local government as an outcome variable for our hypothetical calculation (Brück et al., 2013). The trust outcome is a 4-scale variable, which takes values from 1 – no trust at all, to 4 – absolute trust. The average value in the sample is **2.70** for rural areas (similar values if taking only Naryn and Osh: **2.75** and **2.73**, respectively). The standard deviation is **88** percentage points.

The total number of intervention AAs is set to **15**, so the number of control AAs is also equal to **15**, giving us **30** clusters in total. Assume further that intra-class correlation, i.e. the share of the total variation that is explained by cluster-level variance, is equal to **0.1**. The sample size is set to **2,000** with **66** households per AA. Assume that the proportion of the sample that is the treatment group **P** is equal to **0.5.**

We want to know what **MDE** we are able to detect with these parameters. We are using this formula:

$$\text{MDE}= \frac{M_{J-2}}{\sqrt{P(1-P)J}}\sqrt{\rho+\frac{1-\rho}{n}\sigma}$$

[3] Power measures the probability that we will avoid Type II errors (i.e. a failure to reject the null hypothesis when in fact there is a difference between the treatment and comparison groups)

[4] Significance level is the chance of rejecting null hypothesis when there is no true treatment effect

where **J** is the total number of clusters (AAs), ρ is the intra-class correlation, σ is the standard deviation of an outcome variable, and M_{J-2} for two-tailed test we set equal to **2.8** (Bloom, 1995).

Plugging these parameters into the equation gives us an **MDE** equal to **0.34**. This means that there is an **80**% chance that we may be able to pick up an effect as small as **0.34** points in the trust value (which is a **13**% increase of the average value).

4.3. Data Collection

We collected primary quantitative survey data at three levels. First was the individual level which included adult and young household members. The inclusion of the young population was motivated by the participation of youth in the conflict in 2010 – and thus, surveying the young household members aged 14-17 was intended to address the knowledge gaps about this group's attitudes and perceptions. The second level of the data focused on the household level in order to take into account household demographic, economic and other characteristics. The third level was at the community level, both village and sub-district. In the community surveys we collected data from the local leaders of each village, and the socio-economic characteristics of each village.

The baseline, midline, and endline surveys were conducted, respectively, in 2014, 2016, and 2017 in the same time period starting from late-August till mid-October. The synchronization of the data collection period gives an extra input to the internal validity of the study ensuring that the data are exposed to the same seasonal effects. The baseline and endline surveys are comparable in terms of content where the full set of modules was asked. We refer to the baseline report of this project (Esenaliev et al., 2016) for a description of the process and content of the baseline questionnaires. The midline survey was conducted based on the shortened version of the baseline questionnaires and included only the parts needed to construct the social cohesion index to take into account underlying events such as natural and political shocks. The midline and endline questionnaires included an additional section asking the individual respondents about their knowledge about and participation in the project implementation activities.

The survey data collection throughout the project was conducted by the Center for Economic and Social Research, Soceconic. Soceconic is a Bishkek-based survey and consulting firm with an excellent reputation, seasoned staff and considerable experience conducting household surveys in Kyrgyzstan. The Soceconic team in Osh oblast included about 40 interviewers and four supervisors. The Naryn oblast team was smaller, with nine interviewers and two supervisors, due to a smaller sample of surveyed households in Naryn. The field supervisors were responsible for technical support, data quality checks, and for the collection of information in the community questionnaire, along with two regional supervisors who were responsible for logistical and administrative issues.

The fieldwork was typically preceded by the development of questionnaires, piloting, obtaining ethical approval, translating questionnaires into Kyrgyz, Uzbek and Russian[5], and providing training for the field staff. A pilot survey took place one month before the baseline survey in July 2014; no pilot surveys were conducted for the midline and the endline surveys because the questionnaires remained unchanged and the respondents were largely the same. Based on the pilot test results and consultations with the interviewers, the questionnaires for the baseline survey were optimized to make them unequivocally clear.

Two-day trainings for interviewers and supervisors separately in Osh and Naryn before each data collection phase were provided by researchers from SIPRI and UCA and the management of Soceconic. The training consisted of explaining the goals of the project, in-class study of the questionnaires, and in-class exercises. During the first day of training, the content of the household and individual questionnaires was presented. All interviewers were divided into pairs to practice

5 Russian version was introduced to by the request of the data collection company, Soceconic as some terms translated from English to Russian were clearer than in the Kyrgyz and Uzbek versions. Therefore, the Russian version was used as a reference copy in case the clarifications needed to the enumerators or the respondents. In a few cases, the Russian questionnaires were used to collect data.

filling in the individual questionnaires, which helped identify and address any unclear questions. All interviewers had to complete the household questionnaires as a homework assignment and discuss the questionnaire the following day. The second day was dedicated to exercises on the youth and community questionnaires. Before the fieldwork, all interviewers and field supervisors were equipped with an interviewer manual that contained explanations of the fieldwork process and the survey questions.

The data in all three waves were collected through face-to-face interviews using paper questionnaires. The average workload per interviewer was approximately 25 households, but the actual number of individual-level responses differed depending on the size of households surveyed. On average, the time spent on one household questionnaire was about 43 minutes and on one individual questionnaire about 40-43 minutes (Table 2). Whenever possible, the interviewers were encouraged to conduct individual interviews without the presence of other household members so as to get unaffected responses.

Table 2. Time spent to conduct one interview

in mins

Status	Total			Control			Pilot		
	2014	2016	2017	2014	2016	2017	2014	2016	2017
Households	43	23	43	44	24	42	43	22	44
Individuals	43	25	40	44	26	40	42	25	40
Youth	34	25	37	34	24	38	34	25	36

Source: SoCo baseline, midline, and endline surveys (2014, 2016, 2017)

Efforts were made to match the respondents and the interviewers of the same gender and ethnicity, although most of the field staff were women. While most of the interviews were conducted in Kyrgyz language, a sizable portion of the surveys were conducted in Uzbek, and a small portion – in Russian (Table 3). An introduction to the questionnaires in Uzbek language was one of the data collection innovations implemented in this project at the request of the World Bank and the research team plans to assess if there are any systematic differences in responses taking this particular aspect into account.

There was not much difference between treatment and control communities from the data collection perspective. However, in the midline survey an additional module about awareness and participation in the intervention activities was administered only in the treatment communities. The respondents received a small monetary compensation for their responses, amounting to about 75 Kyrgyz soms (US$1.10 dollars) per one completed questionnaire.

Table 3. Languages in which the interviews were conducted

in % to total

	Total			Control			Pilot		
	2014	2016	2017	2014	2016	2017	2014	2016	2017
Households									
Kyrgyz	77	83	89	81	88	96	74	80	84
Uzbek	17	17	6	16	12	4	18	20	8
Russian	6	0	5	4	0	0	8	0	8
Individuals									
Kyrgyz	73	81	88	80	85	95	69	79	84
Uzbek	17	19	6	15	15	4	19	21	7
Russian	9	0	5	5	0	0	12	0	9
Youth									
Kyrgyz	72	83	89	79	86	96	68	81	84
Uzbek	20	17	6	18	14	4	21	19	7
Russian	8	0	6	3	0	1	11	0	9

Source: SoCo baseline, midline, and endline surveys (2014, 2016, 2017)

Data quality checks were done at several stages of the data collection. The first quality check was done when the interviewers submitted the completed questionnaires to the field supervisors. Each field supervisor was responsible to randomly check 5% of the completed questionnaires by visiting or calling by phone the selected households. The second quality check was made at the data entry level. If there were major inconsistencies or missing information, the interviewers were asked to contact or to visit the households in question again to clarify the responses.

The data cleaning process was mainly the responsibility of SIPRI and UCA, and was generally focused on data labelling and management of data entry mistakes. Whenever possible, data inconsistencies, for example out-of-scale answers or duplicate household or personal identifiers, were solved in consultation with the data collection company. Some inconsistencies, which were not easily solved without thorough checks, may have remained in the data files.

4.4. Attrition Analysis

Sample attrition is not an issue in this study. As shown in Table 1, the initial 1,982 households surveyed in the baseline survey reduced to 1,956 in the endline survey in 2017, which is a 1.3% reduction overall and across both treatment and control communities. Moreover, the number of individual respondents aged 14 or older grew by 6% in 2017 compared to the number of respondents in 2014. The number of the same individuals who were interviewed in all three waves is 5,493, which corresponds to 58% of unique respondents interviewed in all three waves of the survey. Overall, the project collected data from 9,462 individuals throughout the course of the project.

4.5. Ethics

The ethical approval of baseline and endline questionnaires was conducted by IRB Services, which is an independent company that reviews research involving humans and performs ethical oversight. The ethical approval process includes the provision of all study documentation to IRB Services by the institutions conducting the research, including project documents and the survey questionnaires. After a few rounds of clarifications, IRB issues recommendations and an approval of the survey.

During the data collection we ensured respondents that the personal information provided is confidential, and that the data collected would be anonymized and analysed in an aggregate form. Any information that could link a respondent's identity to their unique identification code was only accessible to the data collection team and solely used to track the respective individual during the midline and endline surveys. The data made available to the larger research team do not contain information that enables third parties to link the identities of the participants to their responses.

Our study included surveying young people aged 14-17 years on topics of community life, trust, and perceptions. The young respondents were asked to participate in the survey only after consent was first given by a parent / guardian. Both parents and the young respondents were then asked to sign the consent sheets.

We also received support letters from the Agency for International Relations and Self-Governance of Kyrgyzstan (GAMSUMO) to equip the interviewers during the fieldwork. This was necessary to ensure that the data were collected for a study and that the project was endorsed by the relevant institution of the Kyrgyz government.

5. Intervention Design and Implementation

5.1. Key Programme Elements and Programmatic Activities

The intervention activities were conducted by MSDSP KG, a public foundation established by AKF, which strives to improve the livelihoods of communities in Kyrgyzstan. MSDSP KG implements a range of integrated interventions in rural development, education and health, which are executed in collaboration with and between community-based groups and local authorities. MSDSP KG is

based in Osh and Naryn cities in Kyrgyzstan and has about 80 staff members with an average annual budget of over US$3 million (MSDSP KG, 2013). MSDSP KG has experience in conducting community-based development from previous projects in areas such as capacity building of local authorities in developing and implementing local development strategies; childhood development; and natural resource management.

The delivery of the project activities was done by MSDSP KG staff which consists of the director of MSDSP KG, the project manager, and seven field managers. The field managers were in charge of dealing directly with the local authorities and the working groups. Each field supervisor was assigned two to three intervention sub-districts.

MSDSP KG, AKF KG, and UCA are part of the Aga Khan Development Network (AKDN). AKDN has been supporting the establishment of institutions and programmes in Kyrgyzstan since 2001. Operating in all seven oblasts (provinces) of the country and guided by locally-identified development priorities, AKDN agencies work to increase access to high quality education, foster economic opportunities and financial inclusion, build human capacity and infrastructure, as well as to strengthen civil society and local governance.

The content of the programme

The intervention activities were based on two approaches that were delivered to two groups of the treatment sub-districts. The first approach, standard CDD, largely followed the standard approach in many CDD programmes and included seven activities: situational analysis, selection of target partners to form the working group, participatory community needs identification/ prioritization to be reflected in local development strategies, mini-grant awards for selected sub-projects, and participatory monitoring and evaluation. The second approach, CDD+, included additional activities on top of the standard approach in order to create conditions for enhanced social cohesion. These additional activities included 1) technical assistance and capacity building for local authorities, and 2) community initiatives. Figure 2 illustrates the intervention and data collection activities for the standard, advanced, and control sub-districts. Below we describe the details of all intervention activities.

Figure 2. Intervention components by type of intervention communities

Sub-districts → **& Intervention components↓**	**CDD** *7 sub-districts*	**CDD+** *8 sub-districts*	**Control** *15 sub-districts*
Standard CDD	• Situational analysis • Selection of partners • Participatory community needs identification / prioritization • Sub-granting for local projects • Participatory monitoring and evaluation		No activity
Capacity building	Some activity	Full scale activities	No activity
Community initiatives	No activity	Full scale activities	No activity
Data collection	Yes	Yes	Yes

Source: Authors' illustration

The standard CDD approach

The standard CDD approach consisted of seven steps that are described below.

Step 1. Situational analysis of the selected sub-districts. After the 15 intervention sub-districts (*aiyl aimaks)*, were randomly selected, MSDSP KG started field visits and learning about these sub-districts. During these visits, the field teams collected information on demographics, physical and social infrastructure, livelihoods, previously implemented development projects, existing social networks, and community and civil society organizations. The latter groups were invited to join the project-initiated working groups.

Step 2: Formation of working groups. A key to successful community-driven development is the participatory identification of community needs, be it social, economic, or infrastructure issues. In order to map community development priorities, the project promoted a revision of local development strategies (LDS) in the pilot sub-districts. Facilitation of the revision of LDCs entails the establishment of a working group (WG) per sub-district which is supposed to be composed of local authorities, informal leaders, and include women, youth, and ethnic minorities. WGs formed under the project are fixed-term bodies and serve as the connecting points between community members of different backgrounds in identifying community priorities, planning, and implementing the selected micro-projects.

Step 3: Preparation or updating of local development strategies. LDS is a framework document that, according to Kyrgyz legislation, should be developed by local authorities in consultation with the local community on a regular basis (every 1-3 years). Typically, LDSs were developed with minimal community consultation, and in some cases were near-identical copies of those for neighbouring sub-districts. WGs either developed or amended LDSs with the inclusion of local formal and informal institutions. Ownership of this process by the community and local government authorities was crucial to the success of LDSs.

Step 4: Capacity building for working groups. MSDSP KG organized training sessions for WGs on the implementation and management of local development strategies. These sessions focused on budget development, project management, fundraising and mobilization of community resources for development, and reporting. Each WG received training on the following five topics:

- *Assessment of local development strategies*: review of existing local development strategies to determine if they are reflective of community needs, and whether they should be revised or redeveloped.

- *Situation analysis*: direct interviews, community polling, and desk study tools to develop municipal socio-economic profiles, assessment of municipal budget performance in the last three years, municipal asset management, past and current programmes implemented by municipalities, and community development priorities.

- *Community needs assessment*: application of problem tree analysis, cause-effect relations, interviews and observation tools to identify and rank community needs.

- *SWOT analysis*: of all data collected during the previous three sessions to cluster the community's strengths, weaknesses, opportunities, and threats.

- *Organization of public hearings*: WGs organized public hearings in 38 target villages to present the updated LDSs around May 2016.

Step 5: Adoption of local development strategies. Once WGs completed the development or update of the LDSs, MSDSP KG assisted in conducting public consultations. The purpose of public consultations was to seek endorsement of the strategy by the community and local governments. Public hearings were aimed at informing about the *BIRGE* project, disclosing the results of the needs assessment report prepared by the WGs and discussing each priority identified during the needs assessment exercise. After the consultations, each sub-district government submitted the LDS to the local council for approval and adoption.

Step 6: Receipt of grants. After the completion of LDSs and building the capacity of WGs, each sub-district was invited to develop grant proposals to address the development needs outlined in LDSs. MSDSP KG trained and informed the WGs on grant support mechanisms, sub-project

eligibility criteria, budget and other requirements. WGs submitted grant proposals to the joint committee of MSDSP KG and local government officials to co-finance the activities defined in the strategy. The micro-projects proposed by WGs and the communities were selected on a competitive basis. Each of the intervention sub-districts received about US$20,000 as a block grant to support the implementation of selected micro-projects that were mainly directed to improve social and physical infrastructure, and educational and health facilities.

Step 7: Monitoring of LDS implementation. MSDSP KG enhanced the capacity of public steering committee members to conduct regular monitoring of strategy implementation. The monitoring results are reported to the local council who is tasked with ensuring quality implementation per regulation of the Kyrgyz government from 2010 on monitoring the quality and relevance of government institutions and local self-government work.

CDD+ approach

The expanded approach, CDD+, included some standard CDD activities plus two types of activities that can be largely classified as *capacity building* of local authorities and community groups, and as *community initiatives* that were catalysed by the project-related community deliberations. The capacity building component is expected to improve the efficiency of local authorities in delivering public services and to enhance trust and a sense of fairness. The community initiatives encompassed various activities carried out by communities such as mobilization of resources to address other development needs not covered by the project micro-grants, organization of charity events or information campaigns. Largely, the community initiatives are the result of discussions around local development strategies and deliberate efforts of the programme implementers to sustain the discussions and actions around community needs. Thus, the community initiatives served as a bridging mechanism between various groups in the treatment communities, which are expected to enhance inter-personal and inter-group trust and a sense of togetherness.

The capacity building activities are summarized in Table 4 below. These activities mostly targeted the staff of local governments, local parliaments and members of the project working groups in CDD+ sub-districts. One of the activities, the information campaigns on legal awareness, included the villagers as well. The trainings were directed to improve the expertise and effectiveness of the staff of local governments in delivering the core functions expected from local authorities. The trainings were mostly outsourced to specialized institutions and NGOs, though the project implementers led the designing and delivery of the capacity building and communication activities. There were clear benefits in outsourcing some of the tasks as it ensured efficient delivery and eased the burden on the MSDPS staff.

Table 4. Capacity building activities in CDD+ sub-districts

Activity conducted by local governments, working groups and population	No of sub-districts	No of participants	% of women	% of youth
Training on analysis and mobilization of local resources for implementation of LDS	4	97	45	22
Trainings on planning and budgeting of local development and investing	7	179	55	25
Training on joint management and implementation of LDS for WGs and LGs	7	200	62	30
Training on public-private partnerships	7	223	46	...
Training on municipal property management and public-private partnership	7	222	42	...
Training on social audit	6	124	69	22
Two forums to exchange experience on effective management and implementation of LDSs	...	64	47	...
"Know Your Rights" information campaign including community groups and population	4	47	32	...
Infographic videos describing 24 core functions of local governments	15	...	...	...

The capacity building activities are expected to foster social cohesion through improved provision of public services by local authorities and improved communication vertically. These activities assume that the capacity building will have noticeable effect on the lives of the population, within and beyond the lifetime of the project. However, this assumption is a strong one as improved capacity may not necessarily lead to raised revenue by the local governments and the implementation of projects that address developmental needs. Another consideration is the change in local leadership as the political cycle runs for about five years, after which the composition of the local parliaments and administration may be different. The reality is that the institutional memory may not be transferred to a new administration, and even if so, the new leadership may not necessarily adopt the knowledge and processes that were 'embedded and upgraded' by the project efforts. On the whole, the impact evaluation cannot single out the effects of the capacity-building sub-component, but as the analysis later shows the governance effects are either very small or non-existent.

The community initiatives are the innovative part of the intervention and called to '*build bridges*' across social groups in the treatment communities. The idea is that various groups may see the same situation or issue from different perspectives and that by creating spaces and opportunities to voice their opinions, concerns and suggestions, the project can contribute to more understanding and cooperation. These events can be counted as one of the outputs of the intervention efforts as they come as a result of community deliberations in various stages of the project. One interesting feature of this project was the provision of the social cohesion index results for the communities to help the community members in the process of identifying local developmental needs.

Overall, 21 social events were held in 14 intervention villages throughout the duration of the project. Community initiatives were largely cantered on building trust between people and communities with the purpose of encouraging positive changes in the form of small scale improvements to local infrastructure, bringing people together for social activities, and making concerted efforts to maintain their neighbourhoods. Practically each initiative included a diverse population sample reflecting the attendance of women, men, youth, schoolchildren, disadvantaged groups of the population, and community leaders. As part of the CDD+ approach these activities were characterized by such initiatives as tree planting, street cleaning, and creating short documentaries.

Two activities deserve particular attention, one of which was to engage with school students and their schools in generating content about emerging community issues. To do this, 14 students

from seven CDD+ sub-districts received smartphones for photo and video shooting in order to record and report important social events taking place in their communities, including the project activities. Students used a Facebook group called *BIRGE JASHTAR* as a platform to post the news. Another example is forum theatres[6] which served as an entertaining platform to make the community members more aware of certain problems. One of the direct results of such theatres was the installation of a street light at a road crossing in one of the treatment villages where traffic casualties was identified as an acute problem.

Therefore, the intervention activities varied in intensity starting from the CDD standard approach to the CDD+ approach that included capacity strengthening for local authorities and community groups and deliberate efforts to catalyse the community initiatives based on existing but also on novel approaches.

5.2. Monitoring System to Track Implementation Roll-out

This project combines large scale data collection for impact evaluation purposes to measure the outcomes and a standard monitoring and evaluation data collection to monitor the activities and outputs. Additionally, the project exploited a mixed methods approach by conducting three rounds of qualitative research that were called to provide more insights into both the implementation and impact evaluation teams.

MSDSP KG conducted monitoring and evaluation data collection, along with field visits to conduct and monitor the implementation activities and subprojects. An additional output of the monitoring system included conducting case studies of some of the community initiatives and sub-projects that helped to focus on critical aspects in implementation, planning, successes, and things to improve upon in future. Project specialists also consulted on the preparation of a package of documents for the transfer of grant funds and of final financial statements for completed subprojects. The implementation team undertook regular monitoring of the intervention activities of the project in order to contribute to understanding if the enhanced CDD approach is effective. A summary of those activities is as follows:

1) *Monitoring of public hearings in CDD and CDD+ target sub-districts*. This particular activity entailed participant observation of public hearings, a review of how community members were mobilized and interacted during the hearings, and an assessment of the public participation according to gender, age, and geographical background.

2) *Annual quantitative assessments of beneficiary participation in decision-making processes.* The assessment revealed a high level of awareness about *BIRGE* project activities among beneficiaries who participated in the survey and high levels of participation in events organized within the framework of the project. Finally, survey participants positively evaluated the project's usefulness for the community.

The key positive findings derived from the monitoring activities are the following. First, the micro-projects funded by the project accurately reflected communities' needs as demonstrated by the survey responses and willingness of community members to contribute almost a quarter of sub-project costs financially and by the reported transparency of the prioritization process. Secondly, the participation mobilization efforts were successful as evidenced by an active level of involvement of the working group members in the preparatory stages and the high level of participation of women in the project-initiated meetings and activities. Thirdly, CDD activities were successful, especially broad participation in the appraisal process, revision of local development strategies, and social audits.

[6] Forum theater is a tool for exploring and rehearsing possible actions that people can take to transform their lives and environment. It's often used in preparation to taking action.

5.3. Adverse Events in Intervention

There were no serious adverse effects in the intervention part of the project, though the inquisitive demands expected from the project slowed the intervention process in the beginning which meant some of the sub-projects and activities were still ongoing at the time of the endline survey. It would have been more straightforward to implement a CDD approach as MSDSP KG had done in the past; however, this project was directed to generate new knowledge about how advanced, more inventive approaches in CDD may affect social cohesion. The following comments reflect the observations and the facts related to intervention activities.

The development of the CDD+ activities necessitated a slow start and the same can be attributed to the late completion of a few sub-projects whose timeline extended beyond the formal closure of the project in late-2017. The baseline data were collected and presented one year after the project started (Esenaliev et al., 2016), which was a vital source of information in learning about the levels of social cohesion and the areas where the intervention could focus.

The distinction between the standard CDD and the advanced CDD+ approaches was not entirely clear. MSDSP provided training to local authorities also for the standard CDD sub-districts. This decision was driven by the efficiency and ethical considerations made given the project invested in training materials and processes, and that the other treatment sub-districts would also benefit from such trainings. This probably led to some contamination effects that made seeing any differences between CDD standard and advanced approaches more difficult.

Some operational lessons learned were the inefficiency of some processes as a part of both approaches. One example is the monitoring and evaluation teams in the working groups which did not have a clear role and prescribed processes. Another example was the unknown features and technical complexities of the chosen sub-projects. For instance, one of the projects in delivering clean water through drilling the ground met unexpected topological and engineering issues that put at risk the timely delivery of the micro-project. Therefore, recommending to create risk assessment plans for micro-project implementation seems to be a step that would safeguard from time and resource waste.

Community mobilization was challenging in the communities with a large population. The reasons for this are clear – it takes more effort and motivation from local leaders and working group members to get into contact with more people so as to get their inputs and contributions given the size of working group members and local government staff was more or less fixed in all sub-districts. The sub-districts with large population also tend to have larger local budgets and the fixed amount of the grant from the project may not be sufficiently attractive for such communities. From the other side, larger sub-districts have better staff and technical capacity to work with the development donors. Poorer sub-districts lack capable staff that can lead to some difficulties in the implementation of the sub-projects. These observations lead to questions on whether the CDD block grants should be proportional to population size and whether the number of working group members should also to be adjusted accordingly.

Lastly, the project was implemented in sub-districts where many other donors were also actively conducting similar or other types of interventions. This fact is true not only for the treatment sub-districts but also for the control sub-districts. This makes the impact evaluation more challenging and while we collected quantitative information about the other projects in the programme areas, we are far from having enough information that would help us to judge in what direction the effects of these programmes are heading.

6. Results

6.1. Baseline Characteristics

This section examines whether the randomized assignment of target communities into pilot (or intervention) and control groups achieved a balance in demographic characteristics. If so, there would be no statistically significant differences between the intervention and control communities

based on demographic indicators, such as population size and ethnic composition. The baseline data suggest that we achieved balance on these characteristics at village, household and individual levels. The impact estimation technique – the difference-in-differences approach - helps to eliminate the few pre-project differences described below; therefore, the impact could be attributed to the project and not to initial differences between control and pilot groups.

Table 5 presents the total means and test of balance of demographic indicators between pilot and control villages (*ails*). The total number of villages surveyed is 137 with 73 villages being in the pilot group and the remaining 64 in control. Pilot villages on average occupy a larger area, 330 hectares (ha) versus 286 hectares for control villages, but the difference is not statistically significant.

Table 5. Balance test at village level

Village (ail) level

Indicator	Total mean	Control	Pilot	t-stat	
Area of the community, ha	309	286	330	0.62	
Travel distance to oblast center, in km	53	56	50	-0.68	
Population, # of people	2,630	2,801	2,479	-0.66	
Share of Kyrgyz, %	76	77	75	-0.21	
Share of Uzbek, %	18	17	19	0.24	
Village has kindergarden	0.64	0.70	0.58	-1.27	
Share of HHs with access to safe drinking water, %	57	55	59	0.57	
Development project was implemented in last 3 years # shocks happened in village in last 12 months	0.82	0.72	0.92	1.65	*
Average % of households affected by all shocks	3.6	4.0	3.4	-1.51	
Sample size	44	46	42	-0.59	
	137	64	73		

Source: Baseline Survey for the Social Cohesion Project, 2014.

The mean differences between control and pilot (treatment) villages are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

Among many other characteristics that we test include: travel distance to oblast centre, number of people living in the villages, share of Kyrgyz and Uzbek populations, if a village has a kindergarten, if the households have access to drinking water, the number of shocks occurred in the village in the last 12 months, and average percentage of households affected by all shocks. The differences in these characteristics between pilot and control villages are not statistically significant, meaning that we achieved balance in randomization. The only indicator where we see a significant difference is the proportion of villages where the development project was implemented in the past three years. It is larger in the pilot villages than in the control villages, and this difference is statistically significant at a 10 per cent level.

Household level indicators are presented and analysed in three areas: 1) demographics, 2) income and asset wealth, and 3) access to services. Household demographics reveal no statistically significant differences between pilot and control communities, validating that the balance was achieved at the household level due to randomization (

Table 6). Household size is about 6 persons in both communities and includes mostly members of a working age and children. On average, about 74% of the households are Kyrgyz, and 23% Uzbek. About 24% of households reported having migrants in their families.

When comparing income and asset wealth, the differences between the indicators such as household income per capita and car and livestock ownership (sheep), are not statistically different between treatment and control households. However, households in the control group on average own larger plots of land than the pilot households. Finally, when it comes to access to services, we investigate the following indicators: clean water availability, frequent disruption of energy supply, distance to local administration, and distance to the nearest hospital. Among these characteristics,

households in control group have significantly longer distances to the next hospital (2.6 km) than the pilot households (1.3 km).

Table 6. Balance test at household level

Indicator	Total mean	Control	Pilot	t-stat	
Household size	6.0	5.9	6.0	0.75	
Work aged, 18-65	3.5	3.4	3.5	0.68	
Children aged 0-17	2.3	2.2	2.3	0.82	
Household proportion of Kyrgyz ethnicity	0.74	0.73	0.74	0.07	
Household proportion of Uzbek ethnicity	0.23	0.24	0.23	-0.02	
Household has a migrant(s) abroad	0.24	0.21	0.26	1.42	
HH income per capita, Soms	3,737	3,605	3,824	0.77	
Household owns a car(s)	0.40	0.41	0.39	-0.65	
Size of owned l and, ha	1.05	1.33	0.86	-1.67	*
Sheep equivalent unit	20.1	21.8	19.0	-0.53	
Water is from clean source	0.70	0.70	0.69	-0.08	
Frequent disruptions of energy supply	0.29	0.30	0.29	-0.09	
Distance to local administration, km	2.18	2.46	2.00	-1.11	
Distance to next hospital, km	1.84	2.63	1.34	-2.59	***
Sample size	1,982	783	1,199		

Source: Baseline Survey for the Social Cohesion Project, 2014.

The mean differences between control and pilot (treatment) households are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

Finally, we compare the main characteristics at the individual level between individuals in the pilot and control groups (Table 7). The individuals in both samples are on average 40 years old, 52 per cent female, 74 per cent officially married, and 72 per cent being ethnic Kyrgyz and 26 per cent Uzbek. Around half are officially employed and have a high school degree (around 11 years of schooling). About 47 per cent are inactive on a job market - that is not searching for employment -, and have on average less than one chronic illness.

We measured risk attitudes on a scale from 1 to 5, and on average individuals are risk-neutral. Overall life satisfaction and satisfaction with a community are high: around 7 out of a maximum of 10. Individuals in the control group tend to be more satisfied with their life than individuals in the pilot group.

Table 7. Balance test at individual level

Indicator	Total mean	Control	Pilot	t-stat	
Age, years	40.6	40.9	40.4	-0.90	
Female	0.52	0.52	0.51	-1.32	
Married	0.74	0.73	0.75	1.04	
Kyrgyz	0.72	0.70	0.73	0.42	
Uzbek	0.26	0.27	0.25	-0.31	
Years of schooling	10.9	10.8	10.9	1.01	
Employed	0.50	0.48	0.51	0.69	
Inactive	0.47	0.49	0.46	-0.75	
Number of chronic illnesses	0.64	0.61	0.66	0.68	
Risk taking attitude, 1->5	3.2	3.1	3.2	0.86	
Overall life satisfation, 0-10	6.9	7.2	6.7	-2.57	**
Satisfation with community life, 0-10	7.1	7.1	7.0	-0.62	
Sample size	6,343	2,508	3,835		

Source: Baseline Survey for the Social Cohesion Project, 2014.

The mean differences on individual indicators between control and pilot (treatment) communities are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

The indicators in Table 8 correspond to the nine groups of outcomes that were elaborated upon in Section 2.3 and suggested in the baseline stage of the project (Esenaliev et al., 2016). In the baseline report we hypothesized that the project may influence individual perceptions and behaviour. The outcomes fall into the following categories: 1) trust in community members and in general; 2) unity in co-living; 3) respect to ethnic differences; 4) sense of belonging; 5) civic engagement; 6) trust in local administration; 7) trust in informal leaders; 8) participation in local decision-making; and 9) satisfaction with local public services. There are no differences between individuals in pilot and control groups in the majority of outcomes, except answers on identity, helpfulness, perceptions of security, and interactions with people of different background.

At the baseline, interpersonal trust levels are relatively high. Each trust variable is measured from 1 ('*No trust*') to 4 ('*Complete trust*'). On average, individuals trust each other (the values are larger than 3). However, people tend to trust individuals of different ethnicity (2.7) less than of their own ethnicity (3.0). Attitudes and perceptions of people of different ethnic group are on average also high. "People of different social backgrounds get on well together", "I have meaningful interactions with people from different backgrounds", and "Ethnic differences between people are respected" have the average values of 3 out of 4. In terms of self-identity, people see themselves strongly as members of the village and ethnic group (3.5 and 3.6 out of 4, respectively).

Institutional trust measured as trust towards sub-district governor, sub-district parliament, and informal leaders is high at the baseline (3 or more on a scale from 1 to 4). Perceptions of fairness ("Local administration and *kenesh* treat people fairly") are also relatively high. The perceptions of the levels of security are high (3 out of 4). Interestingly, civic participation in the villages is also quite high: about 76 per cent of people vote in the elections, and 92 per cent of people voted in the last local election.

Table 8. Balance test of outcome indicators at individual level

Indicator	Total mean	Control	Pilot	t-stat	
General trust to people	3.5	3.6	3.5	-1.26	
Trust in people in village	3.2	3.3	3.2	-0.39	
Trust in people of different ethnicity	2.7	2.7	2.7	-0.02	
People of diff. backgrounds get on well together	3.1	3.1	3.1	0.58	
Meaningful interaction w.people from diff. backgrounds	3.1	3.2	3.0	-2.52	**
Ethnic differences between people are respected	3.2	3.2	3.1	-1.95	*
I see myself as a member of my neighborhood	3.5	3.5	3.6	2.24	**
I see myself as a member of my village	3.5	3.5	3.6	2.01	**
I see myself as a member of my ethnic group	3.6	3.4	3.6	2.59	***
Trust to sub-district governor	3.0	3.0	2.9	-1.27	
Trust to sub-district parliament	3.0	3.0	3.0	-0.14	
Trust to informal leaders	3.2	3.2	3.2	-0.87	
Local administration & parliament treat people fairly	2.9	3.0	2.9	-1.41	
Local and district administration are attentive & solve problems	0.30	0.29	0.31	0.41	
Community members can participate in meetings of local authorities	3.0	3.0	3.0	-0.41	
Informed well about activities of local administration	0.28	0.27	0.28	0.41	
Always votes in elections	0.76	0.77	0.75	-0.51	
Voted in the last local election	0.92	0.93	0.91	-1.22	
Participated in civic activities	0.34	0.36	0.33	-0.75	
Satisfaction with education services	3.28	3.37	3.23	-1.77	*
Satisfaction with health services	3.28	3.37	3.22	-2.15	**
Feels safe in the neighborhood during day	3.4	3.6	3.3	-2.07	**
Feels safe in the neighborhood during night	3.0	3.2	2.8	-3.06	***
Sample size, # of respondents	6,343	2,508	3,835		

Source: Baseline Survey for the Social Cohesion Project, 2014.

The mean differences on individual indicators between control and pilot (treatment) communities are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

6.2. Empirical Strategy

In a basic form, we estimate the following equation:

$$Y_i=\alpha+\beta T_i+\gamma t_i+\delta(T_i*t_i)+\varepsilon_i \qquad (1)$$

where Y_i is an outcome for an individual ; T = 0 or 1, where 0 indicates individuals in the control communities, and 1 indicates individuals in the treatment communities; t = 0 or 1 where 0 indicates pre-treatment data (baseline collected in 2014), and 1 indicates a post-treatment time (endline data collected in 2017). Every observation is indexed by the letter $i = 1.. N$; individuals have two observations each, one pre-treatment and one post-treatment. The coefficients have the following interpretation: α = constant term, β = treatment group specific effect (to account for average permanent differences between treatment and control), γ = time trend common to control and treatment groups, δ = true effect of treatment.

The specification above corresponds to the intention to treat (ITT) estimates, as we compare outcomes of all residents in the treated communities with the outcomes in the control communities irrespective of the fact that the intervention activities and micro-projects might not have reached and benefited everyone in the treatment areas. However, we also present the results of so-called treatment on treated (ToT), in which we only consider the respondents from the villages that had directly benefited from micro-projects in the treatment sub-districts.

The estimation specification presented in the next section includes individual, household, and village level control variables. At the individual level, we control for age, education, health status, employment status, and duration of the interview during data collection. Household controls include household size, income per member, and livestock size. At the village level, we include control variables indicating if a village is a capital of a sub-district, travel distance to oblast capital, total area of a sub-district, level of economic prosperity, share of migrants-sending households, number of community shocks, and whether a village has development aid being implemented at the time of the survey.

6.3. Difference-in-differences Analysis

This section presents the results of the difference-in-difference estimates by comparing the differences in outcomes between treatment and control communities before and after the intervention took place[7]. In doing so, we present in Table 9 the coefficients of estimates, δ, and in addition we include standard errors of estimates which are necessary to also show the precision of the estimates as evidenced by t-stat results. We exploit the standard notion of marking the significance of the results at the three conventional levels, with 10%, 5%, and 1% of error rate. We interpret the results as significant at 5% error rate and lower. The estimation specification presented includes all the control variables at the individual, household and village levels. We take the estimation with the control variables as a main specification and cluster the standard errors at the village level. The specification of the estimations going from the simple, non-control version – to the full controls specification is presented in Annex C in Table 15. We can say that the results stay relatively stable across specifications. We believe that the control variables included, allows us to take into account the key differences between the control and treatment sites.

The difference-in-difference results at the individual level show that the programme had some positive effects on 1) the sense of unity and respect between various social and ethnic groups, 2) participation in voting at national and local elections, and 3) the sense of physical security in their neighbourhoods. At the same time, we noted some negative effects to the sense of belonging. We did not find any statistically meaningful effects on trust in people and on trust in local government

[7] We do not present the results for the midline survey, though it is planned to be incorporated in the later versions of the report.

as our theory of change predicted. The direct outcomes of the CDD programme, such as improved local services and governance resulted from the mobilization and investment efforts, point to some marginal improvements, such as a more positive assessment of local authorities' work and improved satisfaction with educational services.

All in all, our interpretation is that the project intervention activities have created a momentum of unity and cooperation, and a perception of improvements in local governance and educational services, but the programme had a weak or no effect on deep-trenched perceptions, attitudes and trust in immediate social groups and local institutions. We tend to refer these results to the fact that the lifetime of the CDD interventions was rather short and that the micro-projects were realized in about a quarter of villages in treatment sub-districts addressing one development need. On the whole, the intervention activities were not likely to affect normal life in a substantial way.

A group of outcomes in the category "Trust in people", which is represented by three questions here show some increase in general trust, but no change in trust to their village residents and other ethnic groups. This seems to counteract to the predictions of the contact theory, but as these findings demonstrate, trust to people has not improved. We tend to interpret this finding in the following three ways. First, the baseline level of trust was already high in those immediate groups. For example, the level of trust in neighbours was on average 3.2 on a scale from 1 to 4. The level of trust in other ethnic groups stood at 2.7 in the baseline data, which is relatively high. Secondly, people's trust cannot change quickly because of one CDD project that was present in their lives for a relatively short period of time. Thirdly, the measurement scale is maybe not the best tool to capture moderate change if there was some change happened in the level of trust. It is not clear how much intervention is needed to move a person's response from "Trust somewhat" to "Trust fully". Perhaps, a more nuanced measurement scale from 1 to 10 could better capture subtle changes in people's trust in others.

Table 9. Difference-in-differences analysis at individual level

Outcome indicator	DID coeff.	SE	t-stat	Sample
General trust to people	0.17	0.10	1.69 *	12,426
Trust in people in village	0.00	0.08	-0.04	12,301
Trust in people of different ethnicity	-0.01	0.12	-0.05	11,673
People of different backgrounds get on well together	0.11	0.09	1.23	12,458
Meaningful interaction with people from different background	0.30	0.10	2.89 ***	12,428
Ethnic differences between people are respected	0.26	0.10	2.62 ***	11,690
I see myself as a member of my neighborhood	-0.25	0.08	-2.92 ***	12,466
I see myself as a member of my village	-0.19	0.09	-2.05 **	12,495
I see myself as a member of my ethnic group	-0.27	0.11	-2.57 **	12,134
Always votes in elections	0.09	0.05	2.02 **	12,615
Voted in the last local election	0.06	0.02	2.67 ***	11,926
Participated in civic activities	-0.02	0.06	-0.36	12,624
Trust to sub-district governor	-0.01	0.10	-0.09	12,133
Trust to sub-district parliament	-0.09	0.10	-0.95	12,050
Trust to informal leaders	-0.08	0.09	-0.89	12,162
Local administration & parliament treat people fairly	0.19	0.11	1.69 *	12,411
Community members can participate in meetings of local authorities	0.02	0.11	0.15	12,414
Local and district administration are attentive & solve problems	0.08	0.07	1.03	12,627
Satisfaction with education services	0.19	0.11	1.76 *	12,398
Satisfaction with health services	0.08	0.09	0.84	12,513
Feels safe in the neighborhood during day	0.26	0.13	1.92 *	12,544
Feels safe in the neighborhood during night	0.33	0.15	2.18 **	12,436

Source: Baseline and Endline surveys of the Social Cohesion Project, 2014 and 2017.
Note: The results are difference-in-differences estimations at indivdiual level including individual, household, and village controls. The standard errors (SE) are clustered at village level. Significant effects are marked by '*' if p ≤ 0.1; '**' if p≤0.05, and by '***' if p≤0.01.

The noted positive effects of creating a constructive environment in community life are in line with the expectations of CDD's theory of change as we observed more positive assessment in statements such as "Meaningful interactions with people of different background" and "Ethnic differences between people are respected". These results are the most stable and positive results from this study. Largely, the programme activities seem to create a more constructive and cooperative environment in the pilot communities. The level of endorsement of these two statements is higher for about 10% and 8%, respectively in the pilot sub-districts compared to the average baseline level of both groups.

Two other areas of positive effect are observed in the higher level of voting during the elections and in safety perceptions. Both effects cannot be predicted directly from the CDD theory of change. We do not know for sure if the pilot communities had more cases of holding local parliamentary elections or if it is one of the unintended positive effects of the programme. The increased sense of security can be attributed to some direct effects of the micro-project investments, such as installation of street lights, but also to more trustful relations and safer environment due to the project activities. These results are generally in line with the intentions of the mini-project investments to improve public services, such as in the education sector where out of 22 mini-projects about a quarter were directed to improve school and pre-school infrastructure.

One of the negative effects of the programme is a reduced sense of belonging (also called identification) in the treatment communities which somehow goes against the other positive effects. However, these results are robust and stable across various specifications. One explanation concerns the reaction of the villages that did not win a micro-grant from the project. As discussed in Chapter 5, micro-grants were provided to implement an infrastructure project in 25 villages in 15 sub-districts which in total has 64 villages. As a result, the other 39 villages had no visible benefit from the project but might have invested time and effort during the mobilization stage. As we are aware from the qualitative research, some sub-districts have a constructive 'next is your turn' approach in distributing development aid (Schröder, 2018). However, some sub-districts might have had less constructive, more competitive or less participatory processes which might have resulted in a declined sense of belonging when not all voices were heard or taken into account. The other potential reason could be that the legal knowledge provided as part of the extended CDD+ interventions made people aware that their situation is not as good as it could be. This finding is in line with the results of the impact evaluation study of a peacebuilding education programme Living SidebySide in which the students in control schools featured a declined sense of belonging after the programme (Aladysheva et al., 2017).

However, we also propose another, more positive interpretation of the results in Identification indicators. These results may also imply that the project widened identity borders. If individuals had strongly associated themselves before with others surrounding them based on location, ethnicity, or other identity traits, they may have had a "positive bias" towards individuals of the same identity (for example, in voting towards leaders of the same ethnic group), and a 'negative' one towards out-group members. When identity borders become blurred – for example, because of the project's intervention activities directed to catalyse community initiatives and bring about a change - it may create a more attentive and less biased view towards other groups and lead to a less segregated and more tolerant society.

We do not find any effect on governance-related indicators that are part of the CDD's theory of change. For instance, we do not find any effect on trust in local leadership or positive perception in the effectiveness of local administration. The only marginal and positive effect is noted in the statement 'The local administration and parliament treat all people fairly'. These results may be linked to implementation issues as some case studies point to a less ideal fulfilment of the requirements of MSDSP by the working groups and local administrations. For example, the case study in one of the sites reveal that not all the potential beneficiaries were contacted and consulted about the selected mini-project (Ismanbaeva, 2017). The population's weak interaction and connection with local government was also revealed in the qualitative research that complemented the quantitative evaluation. As revealed in Schröder (2018), the local administrations are mostly present during the 'good' times by conducting ceremonial roles in celebrations and other community events. The development needs are vast in most rural areas and the local budgets are thin that means local government is often unable to address the needs of the population. Such development

aid as project BIRGE is quite common in rural areas as evidenced by the baseline survey which revealed that about 92% of pilot villages had some sort of development project implemented in the previous three years.

The project interventions were not visible to everyone in the treatment communities. As discussed in Chapter 2, the sample of respondents was drawn on a random basis, and given that some of the sub-districts were quite large with up to 10-11 villages with only one of the villages set to receive a micro-grant, it is not really clear what level of exposure is expected from the programme. As the endline survey data show (Table 10), about 25% of adult respondents have heard about the project. This rate of awareness is more or less comparable across gender and ethnicity, but there is a stark difference between Naryn where 64% of respondents have heard about the project and Osh, where the rate of awareness is 20%. The participation rate in the project meetings was about 5% of respondents which is in line with the estimates from the attendance rate of local budget hearings in Kyrgyzstan (Esenaliev & Kisunko, 2015). Again, Naryn stands out in terms of having 25% of surveyed residents taking part in project-initiated meetings. The rate of participation in the project activities was about 0.5%.

Among the respondents who know about the project, the rate of decision-making power, ownership and endorsement of the project activities is about 50%. There are, however, notable differences along gender, ethnic and regional lines. Those who are male, Kyrgyz, and Naryn residents seem to rate the decision-making power and relevance of the project activities higher than female, non-Kyrgyz, and Osh residents. For example, if 92% of Naryn respondents (who know about the project) think that the project meets their needs, the corresponding number is 31% in Osh oblast. Clearly, these numbers point out that in the smaller communities - as it is case with Naryn oblast – CDD projects have a chance to succeed as the number of beneficiaries is larger per one dollar granted and the participation rate is higher that leads to a good use of the micro-grants.

Table 10. Awareness about and participation in the project intervention

Indicator	All pilot	Female	Male	Kyrgyz	Non-Kyrgyz	Naryn	Osh
% of positive responses from all respondents							
Knows about the project	24.7	22.5	27.0	21.8	32.3	63.9	19.8
Attended project meetings	5.3	4.5	6.0	5.4	4.8	25.1	2.8
Participated in project activities	0.5	0.3	0.6	0.4	0.5	0.6	0.4
% of positive responses of the respondents who know about the project							
My voice matters in project decisions	50	41	57	58	35	82	37
We own the project&responsible for it	54	49	58	66	33	94	38
Project meets our needs	49	46	51	64	22	92	31
# of individuals	4,149	2,102	2,047	2,998	1,151	463	3,686

Source: Social Cohesion endline survey, 2017

6.4. Standard CDD and CDD+: Was There Any Effect?

The key question of this research project was whether targeted activities to foster social cohesion can be achieved in an enhanced CDD framework. To answer this question, we present the results of the difference-in-differences analysis by separately showing the effects of the standard CDD approach and of the CDD+ approach each in comparison to the control communities. In addition, we compare the results of the two intervention approaches, CDD and CDD+.

The general conclusion from the results presented in Table 11 is that we do not observe much difference between the two approaches both when compared separately to the control group, and when compared to each other. Largely, the results remain consistent and comparable when both types of communities are compared to the control communities. However, there are a few interesting nuances related to CDD+ communities. First, the coefficients for the indicators meas-

uring the sense of belonging have larger estimate coefficients and are more robust. Secondly, the perception of security seems to be driven very much by CDD+ communities where the effects are larger and statistically more reliable.

Likewise, the CDD+ approach does not seem to have any exceptional effect compared to the CDD standard approach. With the exception of satisfaction with educational services, there are no statistically significant differences between the two treatment groups.

Table 11. Standard and enhanced CDD approaches

Outcome indicator	Total	CDD	CDD+	CDD+ vs CDD
General trust to people	0.17 *	0.14	0.22 *	0.03
Trust in people in village	0.00	0.00	-0.01	-0.09
Trust in people of different ethnicity	-0.01	-0.02	-0.01	-0.05
People of different backgrounds get on well together	0.11	0.11	0.10	-0.08
Meaningful interaction with people from different background	0.30 ***	0.34 ***	0.25 **	-0.20
Ethnic differences between people are respected	0.26 ***	0.29 **	0.22 *	-0.19
I see myself as a member of my neighborhood	-0.25 ***	-0.20 **	-0.28 ***	-0.12
I see myself as a member of my village	-0.19 **	-0.11	-0.26 **	-0.16
I see myself as a member of my ethnic group	-0.27 **	-0.26 **	-0.28 **	-0.13
Always votes in elections	0.09 **	0.09 *	0.10 *	-0.04
Voted in the last local election	0.06 ***	0.07 **	0.05 **	-0.03
Participated in civic activities	-0.02	-0.05	0.01	0.06
Trust to sub-district governor	-0.01	0.03	-0.08	-0.16
Trust to sub-district parliament	-0.09	-0.09	-0.08	0.00
Trust to informal leaders	-0.08	-0.03	-0.15	-0.16
Local administration & kenesh treat people fairly	0.19 *	0.18	0.18	-0.09
Community members can participate in meetings of local authorities	0.02	0.07	-0.04	-0.21
Local and district administration are attentive & solve problems	0.08	0.10	0.06	-0.04
Satisfaction with education services	0.19 *	0.26 **	0.11	-0.25 *
Satisfaction with health services	0.08	0.10	0.04	-0.11
Feels safe in the neighborhood during day	0.26 *	0.13	0.35 *	0.09
Feels safe in the neighborhood during night	0.33 **	0.25	0.39 **	-0.01
Sample size, individuals	12,426	6,359	6,067	8,918

Source: Baseline and Endline surveys of the Social Cohesion Project, 2014 and 2017.
Note: The results are difference-in-differences estimations at indivdiual level including individual, household, and village controls. The standard errors are clustered at village level. Significant effects are marked by '*' if p ≤ 0.1; '**' if p≤0.05, and by '***' if p≤0.01.

There are several reasons that help explain the similarity of the effects of the two CDD approaches. These reasons relate to timing and contamination factors. First, the intervention activities were intensely concentrated in the last two years of the project lifetime. This is partly related to the innovative and experimental nature of both research and intervention components which necessitated delays in the project. Second, the CDD+ activities were also suggested in the standard CDD communities, and thus, the distinction between the standard CDD and advanced CDD+ approaches was not entirely clear. MSDSP provided the trainings to build the capacity of local authorities also for the standard CDD sub-districts as discussed in Figure 2 in Chapter 5.

6.5. Analysis of Aggregated Outcomes

To enrich the difference-and-differences analysis at the individual level, we constructed the index of social cohesion at the individual level as presented in Table 12 below. As can be seen, the table replicates the nine dimensions and three domains of the social cohesion index. As we conducted the difference-in-differences analysis based on the aggregated level of the dimensions and domains, we see the negative effects in Identification and Solidarity/Helpfulness being sustained at this level, but all the positive effects are cancelled out. As we go to the domains level, the negative effects also cancel out and there is lack of any effect of the CDD programme if to use the overall index as an outcome. This finding – when compared to individual outcome indicators – point out that the aggregate indicators may hide nuanced effects of the programme and when we have detailed information, it helps to see what is happening behind the averaged results based on an aggregate indicator.

Table 12. Difference-in-differences analysis based on broad outcome indicators

Domains and Dimensions	DID coeff.	SE	t-stat	Sample
D1.1 Social Networks	-0.01	0.22	-0.06	12,649
D1.2 Trust in People	0.01	0.23	0.05	12,548
D1.3 Acceptance of Diversity	0.30	0.23	1.32	12,552
D2.1 Identification	-0.68	0.26	-2.58 ***	12,526
D2.2 Trust in Institutions	-0.21	0.29	-0.73	12,476
D2.3 Perception of Fairness	0.40	0.32	1.25	12,627
D3.1 Solidarity and Helpfulness	-0.66	0.29	-2.27 **	12,637
D3.2 Respect for Social Rules	0.34	0.34	1.01	12,580
D3.3 Civic Participation	-0.08	0.23	-0.35	12,649
Domain 1: Social Relations	0.13	0.15	0.86	12,649
Domain 2: Connectedness	-0.16	0.20	-0.80	12,641
Domain 3: Focus on the Common Good	-0.14	0.18	-0.76	12,649
Social Cohesion Index	-0.06	0.14	-0.40	12,649

Source: Baseline and Endline surveys of the Social Cohesion Project, 2014 and 2017.
Note: The results are difference-in-differences estimations at indivdiual level including individual, household, and village controls. The standard errors are clustered at village level. Significant effects are marked by '*' if p ≤ 0.1; '**' if p≤0.05, and by '***' if p≤0.01.

6.6. Sub-group Analysis: Gender, Ethnicity, Regions

This section describes the results of the difference-in-differences estimates based on gender, ethnicity, and between the two regions in the study, Naryn and Osh oblasts. This analysis is the extension of the results presented in the previous section using the data at individual level.

Table 13. Difference-in-differences analysis by gender and ethnicity

Outcome indicator	Total	Female	Male	Kyrgyz	Non-Kyrgyz
General trust to people	0.17 *	0.13	0.20 *	0.17	0.09
Trust in people in village	0.00	0.01	-0.01	0.09	-0.29 **
Trust in people of different ethnicity	-0.01	-0.03	0.02	0.05	-0.17
People of different backgrounds get on well together	0.11	0.09	0.14	0.15	-0.05
Meaningful interaction with people from different background	0.30 ***	0.27 ***	0.33 ***	0.35 ***	0.12
Ethnic differences between people are respected	0.26 ***	0.25 **	0.26 ***	0.31 ***	0.16
I see myself as a member of my neighborhood	-0.25 ***	-0.26 ***	-0.23 ***	-0.28 ***	-0.18
I see myself as a member of my village	-0.19 **	-0.21 **	-0.16 *	-0.20 **	-0.21
I see myself as a member of my ethnic group	-0.27 **	-0.31 ***	-0.23 **	-0.36 ***	-0.05
Always votes in elections	0.09 **	0.11 **	0.08 *	0.11 **	0.09
Voted in the last local election	0.06 ***	0.07 ***	0.05 **	0.06 ***	0.06
Participated in civic activities	-0.02	-0.02	-0.01	-0.05	0.05
Trust to sub-district governor	-0.01	0.01	-0.03	0.07	-0.25
Trust to sub-district parliament	-0.09	-0.08	-0.10	-0.01	-0.32 *
Trust to informal leaders	-0.08	-0.07	-0.09	-0.12	0.01
Local administration & kenesh treat people fairly	0.19 *	0.21 *	0.16	0.28 **	-0.01
Community members can participate in meetings of local authorities	0.02	0.05	-0.01	0.14	-0.24
Local and district administration are attentive & solve problems	0.08	0.06	0.10	0.09	-0.01
Satisfaction with education services	0.19 *	0.19 *	0.19 *	0.23 *	0.06
Satisfaction with health services	0.08	0.06	0.09	0.09	0.03
Feels safe in the neighborhood during day	0.26 *	0.28 **	0.23 *	0.25 *	0.21
Feels safe in the neighborhood during night	0.33 **	0.37 **	0.29 *	0.33 *	0.35
Sample size, individuals	12,426	6,359	6,067	8,918	3,508

Source: Baseline and Endline surveys of the Social Cohesion Project, 2014 and 2017.

Note: The results are difference-in-differences estimations at indivdiual level including individual, household, and village controls. The standard errors are clustered at village level. Significant effects are marked by '*' if $p \leq 0.1$; '**' if $p \leq 0.05$, and by '***' if $p \leq 0.01$.

Gender does not seem to play a distinct role in the effects of the programme on social cohesion indicators, but there are important outcomes which had stronger effects on female respondents. The results presented in Table 13 show that the effects are largely similar for both men and women. Notable larger effects for female are recorded in voting in elections and an increased sense of security in the neighbourhood. Female responses practically drive the marginally significant result in perceptions of good work done by local authorities.

Table 14. Difference-in-differences analysis by regions

Outcome indicator	Total	Mono	Multi	Naryn	Osh
General trust to people	0.17 *	0.23	0.14	0.21 **	0.16
Trust in people in village	0.00	0.21 *	-0.07	0.02	-0.02
Trust in people of different ethnicity	-0.01	0.23	-0.10	0.41 **	-0.07
People of different backgrounds get on well together	0.11	0.30 *	0.04	0.19	0.09
Meaningful interaction with people from different background	0.30 ***	0.48 **	0.21 *	0.33 ***	0.26 **
Ethnic differences between people are respected	0.26 ***	0.36 *	0.20 *	0.24	0.24 **
I see myself as a member of my neighborhood	-0.25 ***	-0.06	-0.25 ***	-0.26 *	-0.26 ***
I see myself as a member of my village	-0.19 **	0.00	-0.20 *	-0.20 **	-0.19 *
I see myself as a member of my ethnic group	-0.27 **	-0.29 **	-0.25 **	-0.24	-0.26 **
Always votes in elections	0.09 **	-0.07	0.12 **	-0.01	0.10 *
Voted in the last local election	0.06 ***	0.03	0.06 **	0.04	0.06 **
Participated in civic activities	-0.02	-0.16	0.03	0.08	-0.03
Trust to sub-district governor	-0.01	0.05	-0.09	0.17	-0.02
Trust to sub-district parliament	-0.09	-0.07	-0.15	0.02	-0.10
Trust to informal leaders	-0.08	0.04	-0.14	-0.25	-0.05
Local administration & kenesh treat people fairly	0.19 *	0.34 **	0.12	0.19	0.20 *
Community members can participate in meetings of local authorities	0.02	0.02	0.01	-0.11	0.02
Local and district administration are attentive & solve problems	0.08	0.14	0.07	-0.01	0.09
Satisfaction with education services	0.19 *	-0.04	0.22 *	-0.01	0.20 *
Satisfaction with health services	0.08	-0.25 *	0.13	0.06	0.07
Feels safe in the neighborhood during day	0.26 *	0.66 **	0.13	0.74	0.23 *
Feels safe in the neighborhood during night	0.33 **	0.42	0.26	0.16	0.35 **
Sample size, individuals	12,426	2,690	9,736	1,231	11,195

Source: Baseline and Endline surveys of the Social Cohesion Project, 2014 and 2017.
Note: The results are difference-in-differences estimations at indivdiual level including individual, household, and village controls. The standard errors are clustered at village level. Significant effects are marked by '*' if p ≤ 0.1; '**' if p≤0.05, and by '***' if p≤0.01. "Multi" means multi-ethnic sub-districts in which prevalence of one ethnic group is less than 90% of its population.

An important finding derived from the analysis done separately for Kyrgyz and non-Kyrgyz ethnic groups is that the results are entirely driven by the former group. We see practically zero effect of the programme on ethnic minorities, besides for two negative outcomes which do not appear significant in the aggregate results. For example, the minority ethnic groups seem to trust less their co-villages as well as local parliaments as a result of the programme activities. This result seems to be going against the expectations of the programme which make efforts to involve ethnic minorities in community life and the implementation of the programme's activities.

The next disaggregation looks separately at Osh and Naryn oblasts, but also at the mono- and multi-ethnic sub-districts. Naryn oblast residents exhibit more trust in people and more positive and meaningful interaction with people. However, the rest of the programme effects are absent for Naryn oblast, and thus, are mainly driven by Osh oblast. To illustrate this, more political participation is driven by Osh residents, as is satisfaction with security and educational services.

6.7. Other Results

This sub-section presents the results of estimation based on the sample of youth, and also discusses if two alternative methods of estimations are different from the key DID ITT results.

This project included youth, who are household members aged 14-17 years, in the quantitative survey. Compared to adult individual surveys, this sample has a small proportion of panel respondents, as most of these young respondents turned 18 by the time of the endline survey and were analysed as a part of the adults sample. As presented in Table 18 in Annex C, the programme has practically no effect at youth level. While some activities in the intervention involved high-school students, the CDD programmes have even more limits in involving and empowering youth in community planning and decision-making.

We apply DID estimates because some outcome indicators were not balanced in the baseline. If the treatment and control groups were balanced in all respects, it would have been enough to apply the difference-in-means (DIM) approach, which would compare the level of outcomes between two treatment groups only at the endline as both approaches would provide similar results. To make an extra check we also present the DIM results in Table 16 in Annex C, which largely show similar results as in the DID approach, but the level of significance is either weak or completely absent.

The last results to show is the treatment on treated (ToT) estimates. The difference from the ITT approach is that we include in the control group only those communities that were granted micro-grants. This is done to check if the direct beneficiaries in the villages which received an improved infrastructure in their residence, might feature stronger effects compared to the respondents in the control communities. As we present the results in Annex C in Table 17 this hypothesis does not seem to hold. In only two cases the results are supported, but otherwise we do not observe any difference from ITT results. This finding suggests that even the communities which directly benefit from the micro-grants do not necessarily feature improved social cohesion as well.

7. Social Cohesion Index

The project developed a measurement framework to assess levels of social cohesion and to guide the intervention activities. This index was called for a comprehensive understanding of the effect of CDD interventions on social cohesion. The research team, tasked with the development of a social cohesion index, commissioned this work to external expertise based on existing international experience.

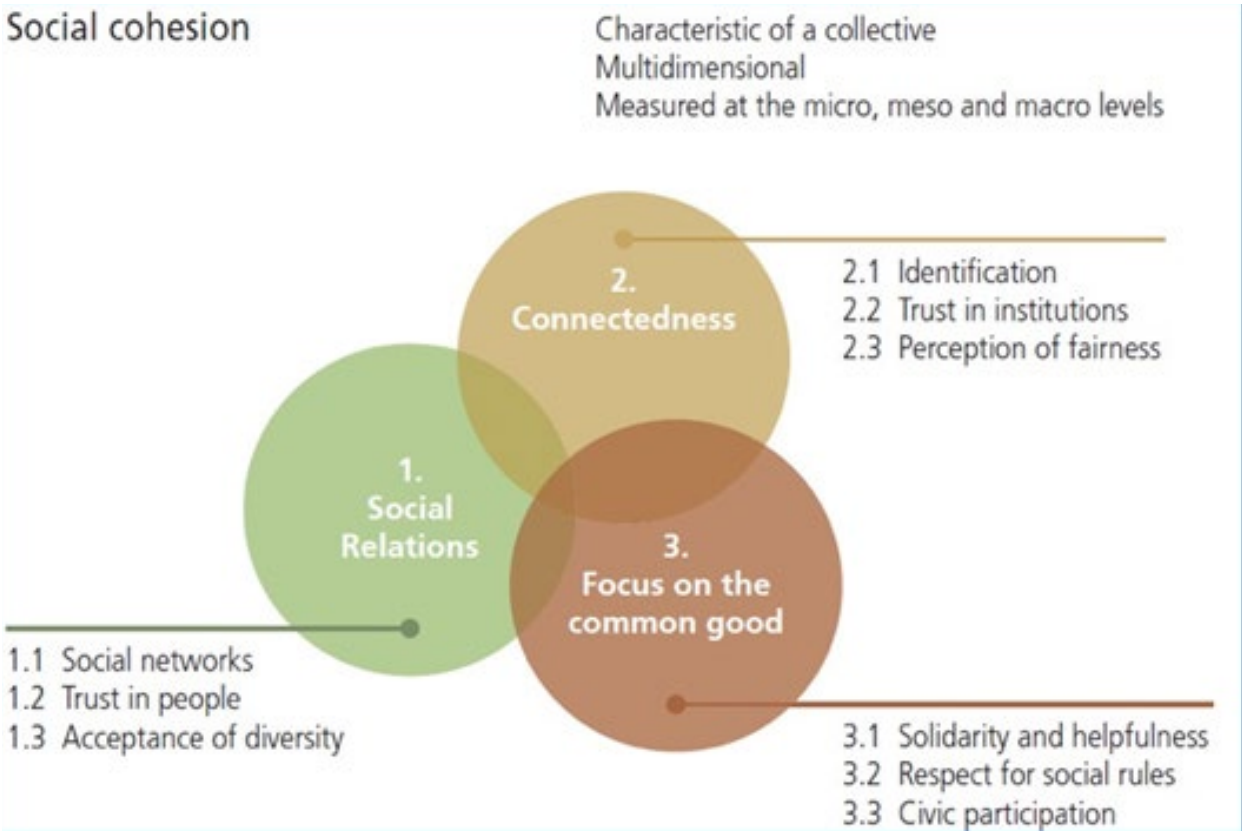
At the outset of the research component of the project, the team had a different understanding from what was applied in the end in respect to constructing the index. The baseline report (Esenaliev et al., 2016) describes the initial understanding of a social cohesion metrics which would consist of two dimensions: access to resources, services, and decisions; and social capital. However, as the research team gained more understanding on the topic and measurement principles, this approach was found to be incorrect as it summed up elements and determinants of social cohesion together. For example, education is understood to be a determinant of social cohesion, but it could not have been a part of a composite index.

The decision was to commission the development of the index in mid-2015 when the baseline data became available. Following the bidding procedure, the team selected a proposal from Jacobs University Bremen, Germany, with Dr Mandi Larsen as the main author and Prof. Klaus Boehnke acting as oversight. They suggested using the Social Cohesion Radar model developed and already tested in Germany and European countries (Bertelsmann Stiftung, 2017). The development of the methodology and the report was completed in March 2016. The final index report using the baseline data was published in September 2016 as a UCA working paper (Larsen & Boehnke, 2016). The developed social cohesion index has been instrumental in tracking the impact of the interventions as well as a diagnostic tool to assess the levels and conditions of social cohesion in the treatment communities.

7.1. Methodology of the Social Cohesion Index

Based on the methodology of the Social Cohesion Radar developed by Jacobs University Bremen and the Bertelsmann Foundation (both based in Germany), a cohesive society is characterized by close social relationships, intensive emotional connectedness, and a pronounced orientation towards the common good. This methodology served as the framework for two successful empirical investigations of social cohesion over time: a comparison of 34 Western nations and a comparison of Germany's 16 federal states (Dragolov et al., 2016). This concept of social cohesion metrics consists of three domains: *social relations, connectedness,* and *focus on the common good*. *Social relations* particularly encompass social networks, trust in people, and acceptance of diversity. *Connectedness* includes identification, trust in institutions, and a perception of fairness. A *focus on the common good* is made up of solidarity and helpfulness, respect for social rules, and civic participation. *Figure 3* below shows three domains and their corresponding three dimensions.

Figure 3. The three domains of social cohesion and their respective dimensions

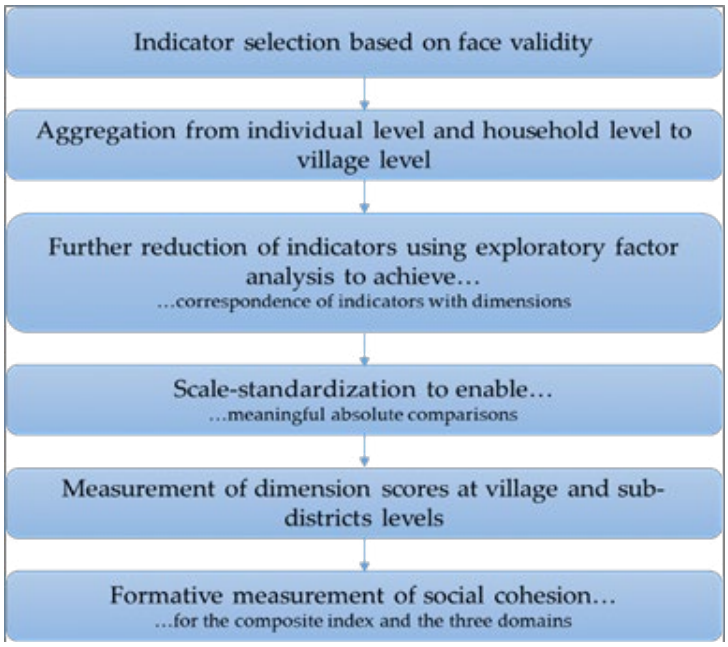


Source: Dragolov et al. (2016).

The concept of the Social Cohesion Radar fits well with the purposes of the project. *Firstly*, the breakdown of the dimensions of social cohesion would provide more detailed assessments of the intervention's impact on the specific dimensions of social cohesion. This is important given that the project's interventions are not expected to affect all dimensions of social cohesion, but rather various dimensions at various degrees. *Secondly*, this concept excludes determinants and outcomes of social cohesion (e.g. economic and human resources, life satisfaction) from the elements of social cohesion and allows for a clear distinction between them. *Thirdly*, this concept of social cohesion is universal in nature as it can be applied to other contexts, both within Kyrgyzstanand in other countries.

The development of the index entailed several steps. *Figure 4* below shows the steps followed to calculate the index scores at dimensions, domains, and for each village and sub-district levels. We refer to the UCA working paper by Larsen and Boehnke (2016) for a more detailed description of the steps made to develop the index.

Figure 4. Steps for developing the Social Cohesion Index



Source: Larsen & Boehnke (2016)

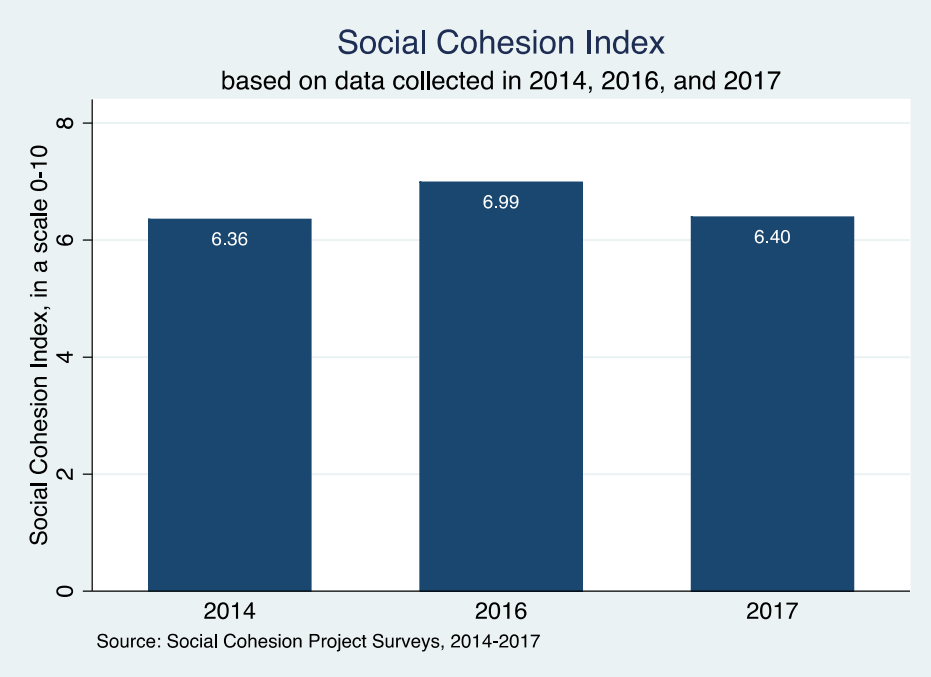
7.2. Index Results at Baseline, Midline, and Endline

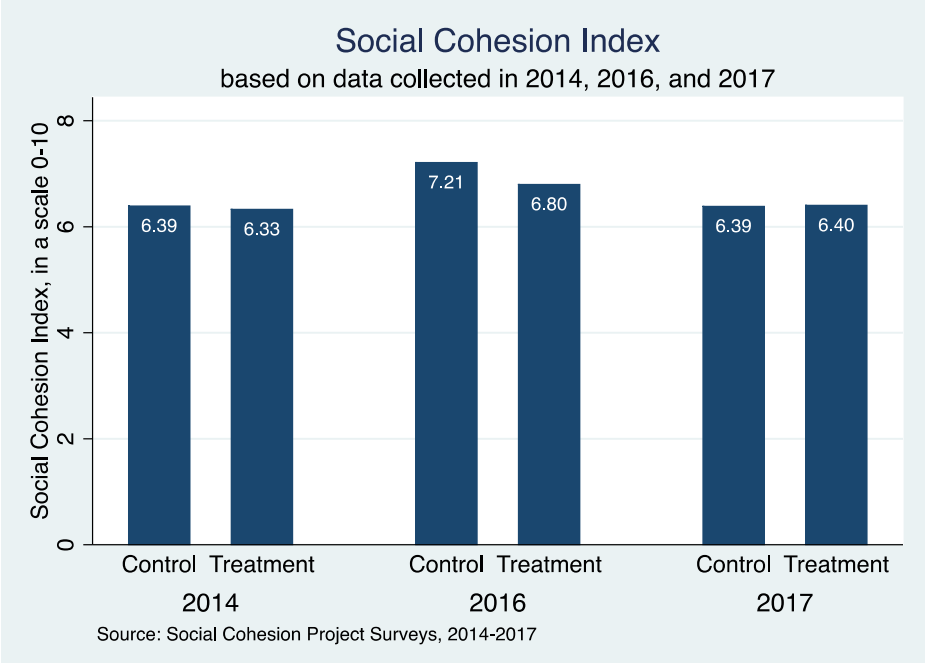
Overall social cohesion scores at *baseline* in the surveyed sub-districts had no extreme valuesin either direction. This meant that there was room to improve social cohesion within the targeted communities. Hence, the research team was less concerned about the social cohesion values being "too high" as concluded based on specific indicators from the baseline survey. Both treatment and control sub-districts had similar starting levels of social cohesion, which laid the groundwork for demonstrating the effect of the intervention at the endline survey. Identification and acceptance dimensions of diversity seemed to have been particularly strong, while social networks, solidarity and helpfulness showed room for improvement through the project interventions in the sub-districts.

The *midline* survey revealed an overall increase in the index from 6.4 to 7.0 on a 0-10 scale. All three domains and nine dimensions saw improvements, with significant improvement of the domain "Focus on the common good". Control communities gained slightly more improvements compared to pilot communities. The overall impact so far (the difference between pilot and control communities across time between baseline and midline surveys), based on the index at village and sub-district levels, was negative, but statistically insignificant. While the research team would expect some positive impact from the initial mobilization phase of the intervention, the sequencing was off for this to occur in time to impact the results of the midline survey. During the onset of the survey, the implementation of sub-projects had just begun and thus affected little the programme beneficiaries.

The index at *endline* was calculated as soon as the endline data were ready. The results pointed to the fact that the levels of social cohesion returned to the levels of the baseline period. The chart below shows the dynamics of the aggregate index across pilot and control groups in three points of measurement. The calculations were made using the same set of indicators across three waves to make the results comparable across time.

Figure 5. Social Cohesion Index baseline, midline, and endline





8. Discussion on Internal and External Validity

In this section, we review concerns and qualifications related to internal and external validity, with the purpose of facilitating the interpretation of the results. External validity discussions help us to understand to what extent the study findings can be generalized to other areas in Kyrgyzstan and across other countries.

8.1. Internal Validity

The internal validity conditions are largely met. We have a balanced sample of communities, and the balance test shows that the randomization based on demographic indicators was quite successful as there are no critical differences between the treatment and control groups. We do not think that the contamination issue – a case when an intervention benefits the population in the control group - is relevant here as the processes of mobilization, participation and implementation were restricted to the pilot sub-districts. More importantly was the issue of the presence of other donor projects. As our information in the baseline reveals, in 87% of villages there was another project implemented, while this number was 82% by time of endline data collection in the autumn of 2017. We believe that our impact evaluation to a great extent measures the effects from other development programmes.

Sample attrition is not an issue in the study. The initial 1,982 households in the baseline survey were down to 1,956, which is a 1.3% reduction overall and in both treatment and control communities. Moreover, in terms of individual responses the number grew by 8% in 2017 compared to the number of respondents in 2014.

The Hawthorne effect is likely to be present. A Hawthorne effect arises when the actors under an experiment are aware of the evaluation, and might behave in a way to fulfil the desired outcomes. We cannot rule out the possibility of Hawthorne effects by the stakeholders who were part of the intervention activities. However, given that the sample of households was drawn independently from the implementation team, and based on a randomized approach, it is less likely that total population would be behaving in a way to conform to expectations. Indeed, some community mobilization activities explicitly discussed the importance of social cohesion, so that effect might be present.

Novelty or disruption effects are likely to be negligible. These effects refer to cases when an experiment or intervention is new or disruptive, so the effect from these aspects may result in a change of an outcome which might be not applicable when such aspects are not present or faded away. For example, if a CDD project was offered for the first time in Kyrgyzstan, it would have both novelty and disruptive effects. However, given that CDD projects have been implemented already for about two decades, the novelty or disruptive effects are not really present. South Kyrgyzstan may be described as a large laboratory with numerous peacebuilding and development projects using elements of the CDD approach together with other types of interventions. We assume that the novelty and disruption effects are not significant for the project communities.

The John Henry effect is likely to be negligible in the study. This effect is when individuals in a control group are aware of their treatment status and behave in a way to 'compensate' for the lack of treatment. If this is so, then the measured effects will be underestimated. The control communities in the project were largely unaware about the intervention taking place in the treatment communities. In addition, the presence of many donors in all project areas further decreases the likelihood of the John Henry effect.

The Social Cohesion Radar, adopted in this project, is one of the most comprehensive and novel models of measuring social cohesion. This project has piloted the measurement of social cohesion as one of the key outcomes of CDD programmes by adopting the Social Cohesion Radar methodology. The entire notion of measurement of the complex social phenomenon such as social cohesion is still a work in progress and the project measurement is prone to the errors and deficiencies in the field. So, in terms of measuring correctly social cohesion some work still needs to be done, and therefore, more evidence based on future applications of the metrics of social cohesion for research and programming would be very welcome.

Interviewer or researcher bias might be present. The data collection company Sotseconic, which collected all waves of the survey data, applies procedures for data quality checks during the fieldwork and during the data entry. The researcher who conducted this evaluation study co-delivered the interviewer trainings and was informed about the process of data collection and processing. However, it is difficult to judge the presence and the extent of interviewer effects. The research team plans to examine this aspect of bias. Interviewer effects that result in the data being biased

or contaminated might come from several aspects: first, the personality, the style of work, gender, ethnicity, and age – all these affect how the respondents provide information during the survey and whether there will be any bias, including social desirability bias. Secondly, the interviewers might intentionally or not, falsify the data by filling out information in a way that saves time and effort; or by filling out by themselves without visiting the respondents. While the data collection company assured us that all measures were done to reduce such cases, we are not in a position to estimate the extent of interviewer bias. Researcher bias is probably not large as the team of researchers does not have any interest and can be regarded as neutral towards any outcome of the evaluation study.

This project is among the few that combined quantitative and qualitative research. The research team aligned the quantitative and qualitative work so to be able to gain more insight in terms of the processes and mechanisms of change. Three rounds of qualitative interviews were conducted looking at the concept of social cohesion, mobilization efforts and participation in the intervention-suggested micro-projects. The qualitative research findings were useful in validating the assumptions of the theory of change and in the interpretation of the results of the quantitative estimations. More importantly, the qualitative results were used to help the implementation team learn about the issues and situation in the target intervention areas as the qualitative study sites included various types villages for the implementation team. Results of the study were disseminated among the implementation team not only in the form of reports but also through training modules and practical lessons for better perception by project staff.

8.2. External Validity

The intervention can be described as an expanded CDD approach. The key idea of this project was to come up with additional activities that could potentially improve social cohesion on top of a standard CDD approach. To what extent the conducted activities were conducive to strengthen social cohesion is not clear from the results. As discussed in Chapter 5, the additional activities included capacity building in governance and community initiatives.

The implementing agency, MSDSP KG, has a proven track record in conducting CDD operations, although the design of advanced CDD activities was a challenge. MSDPS KG implemented the CDD operations in 15 sub-districts in 2012 (MSDSP KG, 2013). This project comes as an expansion of the typical CDD activities with the purpose to contribute to knowledge about CDD and social cohesion. The presence of the research partners was a useful addition, although it took time to understand the various perspectives of researchers and practitioners. In addition, the subject is relatively new, and there was not enough experience to learn from other development institutions in the country and the region. The resulting set of additional activities, which went beyond the typical set of activities culminating in the release of mini-grants, mainly targeted at improving the '*bridging*' mechanisms of social cohesion by creating various spaces and formats of interaction of various social groups. The community initiatives became more pro-active as a result of the project activities, serving as an accelerator or catalyser of deliberations and follow-up actions.

Heterogeneous results point to the limits of CDD to reach minority groups. We see satisfactory results in the programme effects on women, but we do not see many effects on ethnic minorities.

The scalability of the project and replication of the approaches could be a welcome step to validate the results. The main contribution of the project was to go beyond the standard CDD approach and invest in robust research and evaluation. The positive features of the research component include the large sample size of households and individuals, allowing for measurement of the impact at various levels starting at individual.

9. Findings for Policy and Practice

9.1. Key Findings

The rationale for the CDD intervention is that the process of implementation of a programme induces community members to work together. In this process, they gain more understanding about

other social groups and local leadership. By working together towards a common goal, community members become more cooperative and gain trust. Furthermore, these impacts of the process can be reinforced by the public goods that a CDD project eventually delivers, such as clinics, roads, or access to clean water. These goods should address economic, health, or infrastructure needs and might have a further, re-enforcing positive effect on community cohesion by improving living conditions, ensuring quality public services, and creating space for engagement.

We find empirical support for some of these ideas. The results indicate that the programme has had some positive effects on 1) a sense of unity and respect between various social and ethnic groups, 2) participation in voting at national and local elections, and 3) a sense of physical security in the neighbourhoods. At the same time, we identify some negative effects in the sense of belonging, which can be interpreted both positively and negatively. Importantly, and in contrast to our theory of change, we do not find any statistically significant effects on trust in other people and on trust in local government. The direct outcomes of the CDD programme, such as improved local public services resulting from the mobilization and investment efforts, point to some marginal improvements, such as a more positive assessment of local authorities' work and improved satisfaction with educational services.

In summary, our overarching findings are that, on the one hand, the CDD project led to a sense of unity and cooperation and to a perception of improvements in local governance and educational services. On the other hand, the programme had at best a weak effect on deep-trenched perceptions, attitudes and trust for closely related social groups and local institutions. We posit that these results were obtained in part because the duration of the CDD interventions was rather short and the micro-projects were realized only in a part of the treatment population.

The research findings from this project closely correspond to the evidence from the recent 3ie synthetic review of CDD outcomes. The recent synthetic review of CDD outcomes done by 3ie (White et al., 2018) point to the lack of evidence on the ability of CDD to improve social cohesion. With our project showing some effects on social cohesion, we are in a beneficial position to contribute to this discourse as the research design encompasses large sampled data at various levels, allowing the impact of the programme on social cohesion at individual and community levels to be measured.

9.2. Key Lessons for Future Work

The timing of the intervention and impact evaluation was quite short. By the time of the endline data collection, some of the micro-projects were still in process, so in terms of seeing direct effects for the beneficiaries, and also the effects of the increased capacity of local governments, the time for measurement of the programme effects seems to be short. Many development interventions are restricted to the donor's project cycles and are thus restricted as a result thereof. In this respect, multi-year and multi-cycle interventions would probably allow the potential benefits of the CDD approach to materialize. As social cohesion is a slow changing phenomenon, planning to measure social cohesion several years (say three years) after the intervention ended may also help identify its true impact.

Size of micro-grants per capita varied across the sub-districts and seems to have had an effect on participation and on the endorsement of the micro-projects as it appears so in Naryn. The coverage of the interventions is small to see any change in large sub-districts. Thus, it stands to reason that larger and longer CDD projects would have had larger impacts on social cohesion as well.

CDD interventions have limits generating citizen involvement within communities. At best, CDD programmes seem to be a partial tool to foster local social cohesion. However, CDD depends on other factors that go beyond local social norms and local governance and that are also related to national policies and developments.

This project offers a deeper testing ground for the Social Cohesion Radar methodology. Given its adoption, this project offers a focused and multilevel analysis of the methodology in the case of Kyrgyzstan. The Kyrgyz case is probably the deepest case as it has data collected at the individual level and higher levels, and was done three times over the course of four years and is based on a

panel of respondents; finally, the data can be compared at both regional and national levels. This allows for a deep contribution to be made on the question of determinants and outcomes of social cohesion; the use of the Social Cohesion Radar methodology for programming purposes and lays out the foundation for the application of the Radar in other settings. Future research may look at results using the Radar methodology in various country settings (Bertelsmann Stiftung, 2017; Delhey & Dragolov, 2016; Dragolov et al., 2016).

The social cohesion index is a new tool that needs more testing and research. While the underlying indicators in the data collected have a relevance to the Kyrgyz context, we are far from making a locally contextualized measurement framework. For example, the results from the social cohesion index point out that the weakest dimensions are *Social Networks,* and *Solidarity/Helpfulness*. From local knowledge and previous research (Kuehnast & Dudwick, 2004) we know that the Kyrgyz population invests a lot of time and resources to maintain their social capital. The same goes for *Solidarity/Helpfulness* - we know that people help each other out a lot. It is felt that perhaps we are not capturing the depth and quality of social networks and interactions. For example, higher social capital is associated with participation in a larger number of formal and informal groups, but also with the quantity of financial and non-financial help. While we tried to ask for all types of informal and formal groups, the mere larger number of memberships may not reflect the strength of social capital. The same goes for solidarity indicators in which the quantity of help provided or received from others is not a sign of the whole indicator as the underlying assumption is that all people have similar needs in getting help and similarly are asked for help from others.

The index was used for fine-tuning the intervention activities. The social cohesion index has good merits to be used as a diagnostic tool but also as a communication tool. As soon as the index results were released, it was used by MSDSP KG to understand what levels and which dimensions are strong or weak in the treatment sub-districts. The information was useful to get a sense of the sub-districts in which social cohesion was low. In addition, the social cohesion index was used to communicate with the population of the treatment sub-districts in order to provide information and catalyse discussions about community issues.

Qualitative research helped to study deeper the realities of the local population and the environment around the programme. Ideally, the qualitative research could have be conducted first to localize the concepts, and correspondingly, to better design data collection tools and more precisely measure the outcome and corresponding indicators. The definition of community is one example. A study by Schroeder (2018) points to the notion of community as a neighbourhood – several households forming a supportive, cooperative network. As we know from reality, a Kyrgyz village is divided into parts based on kinship networks, and as groups, they have established relations and norms (Gullette, 2007). These kinships give society as a whole an identity even in small villages, and we are not yet sure yet how bonding mechanisms of social capital interact with invasive 'bridging' developments, such as CDD.

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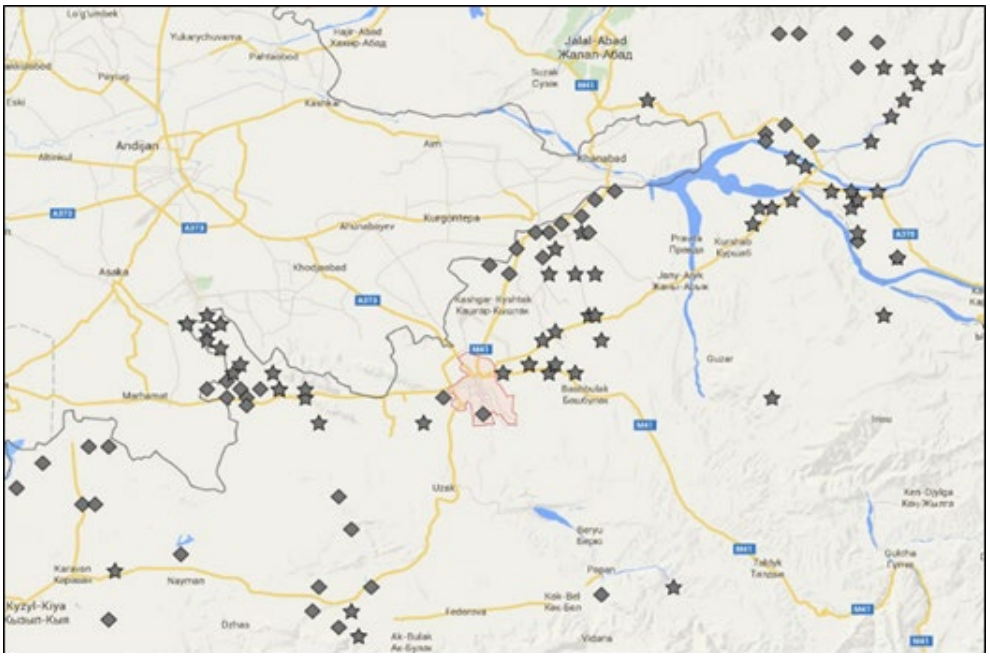
Annexes

Annex A: Map of the Project Communities

Figure 6. Location of Project Communities in Naryn Oblast

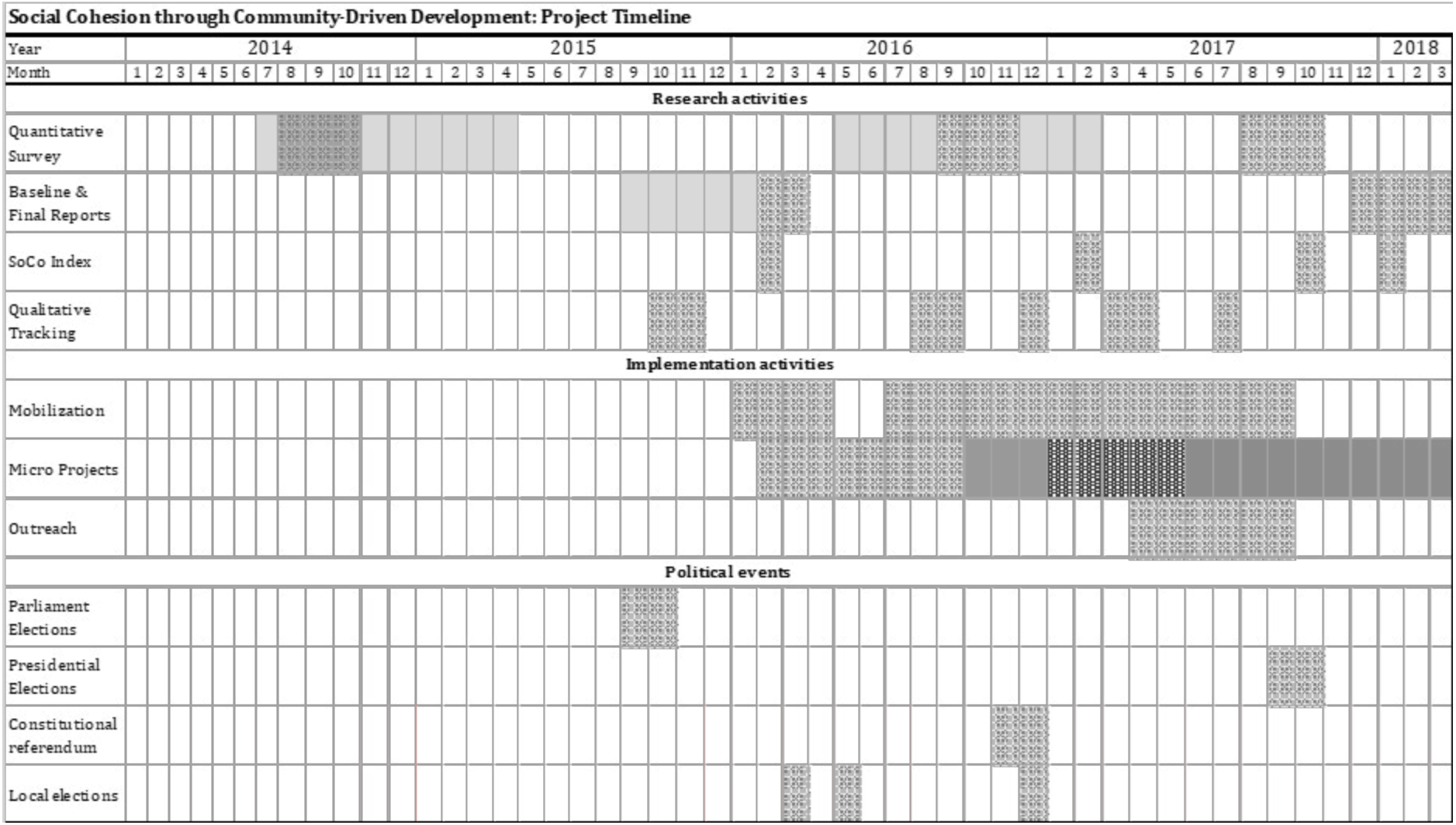
Source: Authors illustration using Google Maps. Pilot villages are marked with ★; the control villages are marked with ◆.

Figure 7. Location of Project Communities in Osh Oblast



Source: Authors illustration using Google Maps. Pilot villages are marked with ★; the control villages are marked with u.

Annex B: Timeline of the Project Activities and External Events



Annex C: Additional Results

Table 15. Difference-in-differences results with and without control variables

Outcome indicator	Coefficients of the estimations				N
	No controls	+individ. controls	+HH controls	+ village controls	
How likely that you will ask for help	0.14	0.12	0.12	0.18	12,618
General trust to people	0.18 *	0.18 *	0.17 *	0.17 *	12,426
Trust in people in village	0.13	0.13 *	0.13 *	0.13	12,336
Trust in people of own ethnicity	0.02	0.02	0.02	-0.02	11,998
Trust in people of different ethnicity	0.05	0.04	0.04	-0.01	11,673
People of different backgrounds get on well together	0.11	0.11	0.10	0.11	12,458
Meaningful interaction with people from different background	0.29 ***	0.28 ***	0.28 ***	0.30 ***	12,428
Ethnic differences are respected	0.24 **	0.24 **	0.23 **	0.26 ***	11,690
I see myself as a member of my village	-0.18 *	-0.18 *	-0.18 *	-0.19 **	12,495
I see myself as a member of my ethnic group	-0.24 **	-0.24 **	-0.24 **	-0.27 **	12,134
Trust to sub-district governor	0.05	0.05	0.05	-0.01	12,133
Trust to sub-district parliament	-0.06	-0.06	-0.06	-0.09	12,050
Trust to informal leaders	-0.04	-0.04	-0.04	-0.08	12,162
Local administration & parliament treat people fairly	0.23 **	0.21 *	0.21 *	0.19 *	12,411
Most people in village help each other	-0.03	-0.02	-0.02	-0.02	12,276
Helped others financially	-0.08 **	-0.08 **	-0.08 **	-0.07 **	12,618
Helped others non-financially	-0.10 *	-0.10 **	-0.11 **	-0.09 *	12,618
Feels safe in neighborhood during day	0.25 *	0.26 **	0.26 **	0.26 *	12,544
Feels safe in neighborhood during night	0.28 *	0.28 *	0.28 *	0.33 **	12,436
Always votes in elections	0.09 *	0.08 *	0.08	0.09 **	12,615
Voted in the last local election	0.04 *	0.04	0.04 *	0.06 ***	11,926
Informed about activities of local administration	-0.04	-0.05	-0.05	-0.05	12,627
Satisfaction with education services	0.22 *	0.21 *	0.19 *	0.19 *	12,398
Satisfaction with health services	0.11	0.11	0.10	0.08	12,513

Source: Baseline and Endline surveys of the Social Cohesion Project, 2014 and 2017.

Note: The results are difference-in-differences estimations at indivdiual level. Intention to treat (ITT) estimations. The standard errors are clustered at village level. Significant effects are marked by '*' if p ≤ 0.1; '**' if p≤0.05, and by '***' if p≤0.01.

Table 16. Difference-in-means results with all control variables

Outcome indicator	DID coeff.	SE	t-stat	Sample
General trust to people	0.12	0.07	1.78 *	6,677
Trust in people in village	0.00	0.06	0.00	6,581
Trust in people of different ethnicity	0.02	0.07	0.34	6,369
People of different backgrounds get on well together	0.14	0.08	1.84 *	6,721
Meaningful interaction with people from different background	0.11	0.07	1.53	6,711
Ethnic differences between people are respected	0.10	0.07	1.40	6,147
I see myself as a member of my neighborhood	-0.08	0.07	-1.15	6,719
I see myself as a member of my village	-0.05	0.07	-0.63	6,716
I see myself as a member of my ethnic group	-0.03	0.08	-0.36	6,612
Always votes in elections	0.05	0.03	1.67 *	6,742
Voted in the last local election	0.02	0.01	1.71 *	6,437
Participated in civic activities	-0.04	0.04	-0.96	6,741
Trust to sub-district governor	-0.03	0.06	-0.44	6,543
Trust to sub-district parliament	-0.04	0.05	-0.66	6,487
Trust to informal leaders	-0.08	0.06	-1.43	6,610
Local administration & parliament treat people fairly	0.11	0.07	1.56	6,651
Community members can participate in meetings of local authorities	0.00	0.06	0.04	6,621
Local and district administration are attentive & solve problems	0.10	0.05	1.86 *	6,744
Satisfaction with education services	0.08	0.08	1.04	6,676
Satisfaction with health services	-0.02	0.06	-0.25	6,701
Feels safe in the neighborhood during day	0.02	0.07	0.24	6,699
Feels safe in the neighborhood during night	-0.08	0.08	-1.01	6,636

Source: Baseline and Endline surveys of the Social Cohesion Project, 2014 and 2017.
Note: The results are difference-in-differences estimations at indivdiual level including individual, household, and village controls. The standard errors (SE) are clustered at village level. Significant effects are marked by '*' if $p \leq 0.1$; '**' if $p \leq 0.05$, and by '***' if $p \leq 0.01$.

Table 17. Difference-in-differences results based on treatment on treated

Outcome indicator	DID coeff.	SE	t-stat	Sample
General trust to people	0.14	0.13	1.05	7,155
Trust in people in village	0.06	0.12	0.48	7,044
Trust in people of different ethnicity	-0.09	0.16	-0.57	6,655
People of different backgrounds get on well together	0.11	0.11	0.98	7,158
Meaningful interaction with people from different background	0.25	0.16	1.59	7,132
Ethnic differences between people are respected	0.26	0.14	1.85 *	6,651
I see myself as a member of my neighborhood	-0.08	0.10	-0.73	7,168
I see myself as a member of my village	-0.08	0.10	-0.84	7,192
I see myself as a member of my ethnic group	-0.27	0.14	-1.92 *	6,944
Always votes in elections	0.01	0.06	0.16	7,227
Voted in the last local election	0.04	0.03	1.18	6,822
Participated in civic activities	-0.05	0.08	-0.64	7,228
Trust to sub-district governor	0.01	0.13	0.06	6,929
Trust to sub-district parliament	-0.06	0.13	-0.45	6,962
Trust to informal leaders	-0.05	0.11	-0.44	6,974
Local administration & parliament treat people fairly	0.18	0.17	1.03	7,100
Community members can participate in meetings of local authorities	0.00	0.14	0.03	7,103
Local and district administration are attentive & solve problems	0.12	0.11	1.17	7,233
Satisfaction with education services	0.07	0.15	0.47	7,124
Satisfaction with health services	-0.05	0.11	-0.50	7,192
Feels safe in the neighborhood during day	0.18	0.22	0.84	7,195
Feels safe in the neighborhood during night	0.27	0.22	1.22	7,146

Source: Baseline and Endline surveys of the Social Cohesion Project, 2014 and 2017.

Note: The results are difference-in-differences estimations at indivdiual level including individual, household, and village controls. The estimates correspond to treatment on treated (TOT) in which only respondents from villages whci received micro-grants to implement the selected micro-project. The standard errors (SE) are clustered at village level. Significant effects are marked by '*' if p ≤ 0.1; '**' if p≤0.05, and by '***' if p≤0.01.

Table 18. Difference-in-differences results for youth sample

Outcome indicator	DID coeff.	SE	t-stat	N
General trust to people	0.04	0.13	0.34	1,555
Trust in people in village	0.05	0.09	0.49	1,550
Trust in people of different ethnicity	-0.02	0.13	-0.15	1,438
People of different backgrounds get on well together	0.02	0.13	0.13	1,564
Meaningful interaction with people from different background	0.16	0.11	1.40	1,541
Ethnic differences between people are respected	0.20	0.13	1.48	1,501
I see myself as a member of my neighborhood	-0.08	0.12	-0.66	1,533
I see myself as a member of my village	-0.04	0.11	-0.35	1,567
I see myself as a member of my ethnic group	0.00	0.12	0.02	1,522
Trust to sub-district governor	0.06	0.11	0.53	1,484
Trust to sub-district parliament	-0.02	0.12	-0.14	1,401
Trust to informal leaders	-0.06	0.12	-0.45	1,488
Feels safe in the neighborhood during day	0.16	0.15	1.03	1,564
Feels safe in the neighborhood during night	0.07	0.17	0.41	1,555

Source: Baseline and Endline surveys of the Social Cohesion Project, 2014 and 2017.
Note: The results are difference-in-differences estimations at youth level including individual, household, and village controls. The standard errors (SE) are clustered at village level. Significant effects are marked by '*' if p ≤ 0.1; '**' if p≤0.05, and by '***' if p≤0.01.

Table 19. Local leaders: Project knowledge and participation

Indicator	All pilot	Female	Male	Kyrgyz	Non-Kyrgyz	Naryn	Osh
% of positive responses from all respondents							
Knows about the project	60	61	60	57	72	92	54
Attended project meetings	38	31	40	33	57	70	31
Participated in project activities	17	19	17	17	17	39	13
% of positive responses of the respondents who know about the project							
My voice matters in project decisions	84	76	86	82	89	93	80
We own the project& responsible for it	84	86	83	83	85	97	79
Project meets our needs	88	90	87	88	87	100	83
# of individuals	376	84	292	301	75	64	312

Source: Social Cohesion endline survey, 2017