STOCKHOLM INTERNATIONAL
PEACE RESEARCH INSTITUTE

UNIVERSITY
OF CENTRAL ASIA
GRADUATE SCHOOL OF DEVELOPMENT
Institute of Public Policy and Administration

Social Cohesion through Community-based Development Project in the Kyrgyz Republic

Baseline Survey Report

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WORKING PAPER NO.34, 2016

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Abstract

This report features the baseline survey findings for the project Social Cohesion through Community-based Development. The baseline survey, administered at the individual, household, and community levels, and with a sample of 2,000 households and over 6,000 individuals, offers comprehensive information on a wide range of topics facilitating a rigorous impact evaluation analysis. The findings based on the data indicate success in randomization, but the levels of outcome indicators are found to be high which raises implications for both research and intervention components of the project.

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

JEL codes: D74, R20, R29

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Abbreviations

AA – *Ayil Aimak (*lowest administrative level in rural Kyrgyzstan*)*
AFE – Artefactual field experiments
AKF – Aga-Khan Foundation
AKF (Kgz) – Aga-Khan Foundation Kyrgyz Republic
AKDN – Aga Khan Development Network
AO – *Ayil Okmotu* (local administration)
CBO – Community-based organisation
CSO – Civil society organisation
CDD – Community-driven development
DD – Difference-in-differences set-up
HH – Household
ISDC - International Security and Development Center
LDS – Local development strategy
LGO – Local government organisation
LiK – *Life in Kyrgyzstan* Study
MSDSP KG – Mountain Societies Development Support Programme in Kyrgyzstan
NGO – Non-governmental organisation
PDO – Project development objective
SIPRI – Stockholm International Peace Research Institute
UNDP – United National Development Programme
UCA – University of Central Asia
WG – Working group

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This baseline survey report on the Social Cohesion through Community-based Development project is a result of a collaborative effort by a working group made up of representatives of the Stockholm International Peace Research Institute (SIPRI) and the University of Central Asia (UCA). The project aims to strengthen social cohesion through the delivery of community-driven development projects in selected multi- and mono-ethnic rural areas in Kyrgyzstan and to measure an impact of the intervention activities. This report was funded by the World Bank and Aga Khan Foundation.

The main authors of the report are Dr Damir Esenaliev, Senior Researcher at SIPRI, Dr Kanat Tilekeyev, Senior Research Fellow at the Institute of Public Policy and Administration (IPPA) at UCA, and Jamilya Karabaeva, Research Assistant at SIPRI. Overall guidance was provided by Principal Investigator Professor Tilman Brück, Director of the International Security and Development Center (ISDC) and Dr Roman Mogilevskii, Associate Director at IPPA. Other team members included Dr Anastasia Aladysheva of SIPRI and Bakhrom Mirkasimov, Nazgul Abdrazakova, Aida Bolotbekova and Saule Chalbasova of UCA. We thank Francesca Pavan, Intern at SIPRI for her written contribution to the first draft of the report. The joint SIPRI/ UCA team would like to thank all colleagues and friends who participated in the report discussions and provided valuable comments and feedback.

EXECUTIVE SUMMARY

The goal of the Social Cohesion through Community-based Development project is to strengthen social cohesion through the delivery of community-driven development projects in selected areas in Kyrgyzstan and to measure an impact of the intervention activities. This baseline report documents the results of the survey conducted as a part of the research component of the project. This work represents an initial stage of the impact evaluation and was conducted by a joint team from the Stockholm International Peace Research Institute (SIPRI) and the University of Central Asia (UCA). The project is funded by the World Bank and the Aga Khan Foundation.

Intervention sites were selected through a multi-step randomised approach that included filtering out potentially qualified communities from 130 communities in the initial stage. This resulted in a sample frame of 38 communities, 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. The research methodology includes a randomised control trial method based on 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.
A baseline survey was conducted by Soceconic company in both pilot and control communities in August-November 2014. The baseline survey was administered at the individual-, household-, youth- and community or village-level. The final sample included 1,986 households, 6356 responding adults, 866 youth and 795 village leaders.

The baseline data demonstrated that the randomisation was successful in generating comparable pilot and control groups based on their similarities in population size and ethnic composition. The community-level data also suggests that populations in the two observed groups have comparable levels of access to utilities and housing. Likewise, there are no substantial differences in household composition size, consumption costs or income levels. However, in terms of asset ownership and access to key public services, households in the control communities seem to be better off compared to households in the pilot areas. This was revealed by their ownership of more durable assets, more livestock, larger plots of land, better access to irrigation and energy supplies. On the other hand, households in the pilot areas have better access to drinking water, and education and healthcare services, due to their location nearer to important social service providers, such as schools and hospitals.

Individual-level data, collected from adult and young household members, are an important part of the baseline survey as intervention outcomes will be measured at this level. The data shows similarities in schooling, age and ethnic representation of individuals in the pilot and control communities, but displays a difference in labour force participation, which is higher in the control communities. An analysis of individual preferences, attitudes, networks and participation in public life gives a mixed picture, which does not allow for detecting either systematic differences or similarities between the two observed groups.

Importantly, the individual-level data suggests a high level of social cohesion across the population in both communities. Respondents reveal a high level of trust in various social groups and institutions, a strong sense of belonging to communities and the country, and a strong sense of community ownership and cooperation between the people. For instance, the average score for the headline social cohesion indicators is 3.2, with 4 being the maximum score. These results somewhat contradict the assumptions made at the onset of the project that social cohesion was significantly weakened in the post-conflict areas in Osh oblast (Ismailbekova 2013; Nick Megoran 2012; Roberts 2010)[1].

These high levels of social cohesion raise questions for both researchers and intervention implementers. First, they have considerable implications for the success of the intervention activities, as they leave little room for positive changes in social cohesion levels. The findings suggest that the intervention activities should be specifically targeted at social or demographic groups that exhibit relatively low levels of social cohesion. Second, the high social cohesion levels oblige the research team to investigate whether the individual responses were possibly driven by social desirability bias. Respondents may have expressed what they believed they should say, as opposed to what they truly or subconsciously believe, thus contributing to higher levels of measured social cohesion than expected. This potential problem will be addressed with the help of qualitative research methods during the implementation phase.

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1 Aksana Ismailbekova. "Coping Strategies: Public Avoidance, Migration, and Marriage in the Aftermath of the Osh Conflict, Fergana Valley," *Nationalities Papers 41(1):109–27*, (2013)
Nick Megoran. "*Averting Violence in Kyrgyzstan: Understanding and Responding to Nationalism*," (2012)
Sean R. Roberts. "*What's Ethnicity Got to Do With It? Healing the Wounds of Uzbek-Kyrgyz Violence in the Ferghana Valley*," Washington, (2013)

1. INTRODUCTION

1.1. Project Description

The Social Cohesion Through Community-Based Development project, implemented from 2014 to 2017, aims to *identify, pilot and build capacity for social cohesion mechanisms in community-driven development approaches*. The project has a focus of developing and piloting innovative approaches to strengthen social cohesion. The project harnessed the efforts of a number of organisations and has two main components: an intervention component and a research/evaluation component. The intervention component aims to support the creation of social cohesion through the delivery of community-driven development (CDD) projects in selected rural areas of Kyrgyzstan. The research component is designed to measure the impact of project interventions through the administration of baseline and endline surveys and the collection of other data. The project is funded by the World Bank and the Aga Khan Foundation (AKF).

Box 1: Definition of Social Cohesion

Social cohesion in this project is defined as "*convergence across groups in society*". Social cohesion provides a structure for collective life that helps ensure greater degrees of predictability and certainty in both inter- and intra- group relations.

Several definitions of social cohesion are used internationally. These are some examples:

"Social cohesion is a set of social processes that help instill in individuals the sense of belonging to the same community and the feeling that they are recognized as members of that community." J.P. Delevoye, *Social and Territorial Cohesion (Cohésion Sociale et Territoire)* (Paris: French Government, 1997).

"Social cohesion is an ongoing process of developing a community of shared values, shared challenges and equal opportunities within Canada, based on a sense of trust, hope and reciprocity among all Canadians." Government of Canada, *Canadian Identity, Culture and Values: Building a Cohesive Society (Identité, Culture et Valeurs Canadiennes: Construire Une Societé Cohésive)*. (Ottawa: Government of Canada, 1996).

A baseline survey was conducted in 2014, during the first phase of the project. This report describes the survey design and findings. The research methodology includes a randomised control trial method, based on a comparison of two groups of communities (pilot and control). The research hypothesis is that pilot communities are likely to demonstrate enhanced social cohesion indicators, compared to those receiving no intervention or control communities. The baseline survey sample included 2,000 households, of which 1,200 were interviewed in intervention areas and 800 in control areas. The sample was derived from targeted mono-ethnic areas in Naryn and multi-ethnic areas in Osh oblasts (regions).

The intervention component of the project is being implemented in 2015 and 2016 by the Aga Khan Foundation Kyrgyz Republic (AKF (Kgz)) through its Mountain Societies Development Support Programme in Kyrgyzstan (MSDSP KG), in consultation with the

SIPRI/UCA consortium. The intervention will begin with awareness-raising activities in 15 sub-districts in Naryn and Osh oblasts. AKF (Kgz) will facilitate the formation of working groups (WGs) of village members in the selected areas. The WGs will receive training on governance, local development planning, project management and principles of social cohesion. The WGs will submit grant proposals to a committee to co-finance various activities. After the selection of proposals, micro-projects will be implemented in target areas.

Two distinct approaches (buckets A and B) will be applied to the WG process to enhance social cohesion. During the preparation study of the CDD, two approaches for the project were developed; Buckets A and B. Bucket A comprises of traditional CDD approaches including five key elements: situational analysis (local assessment), selection of target partners (working group), participatory community needs identification/prioritisation (local development strategy), sub-granting for local projects, and participatory monitoring and evaluation. Bucket B will use the same base approach as Bucket A, however enhanced activities that facilitate social cohesion will be used in the implementation of the CDD project.

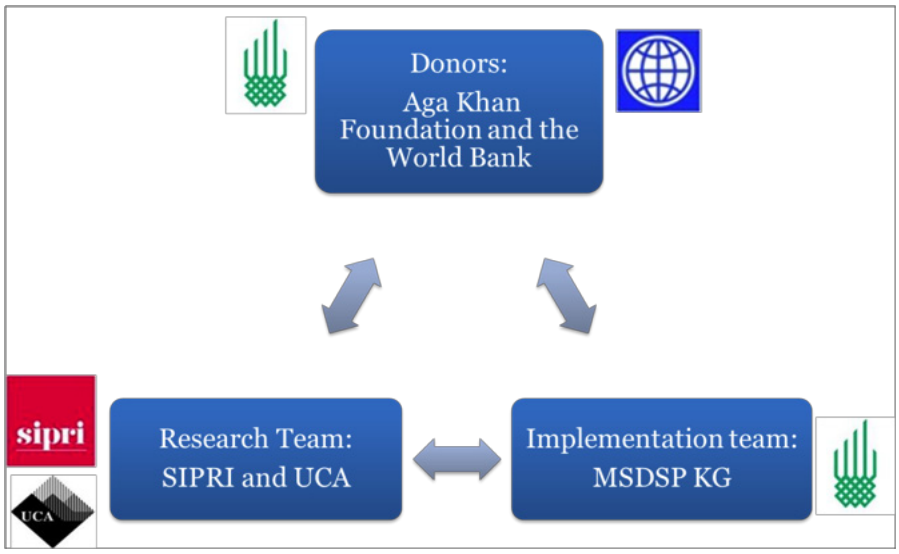
During the intervention stage, the SIPRI/UCA research team will design and introduce a tracking system to learn about dynamics and mechanisms of changes due to the intervention activities in the target areas. In the final stage of the project, an end-line survey of the same samples of respondents will be conducted to measure project impact. Comparing baseline, end-line and intermediate findings, the research will produce an impact evaluation of CDD in Kyrgyzstan related to social cohesion.

1.2. Implementing Partners

The Social Cohesion project consists of two components: research and intervention. The research component is jointly implemented by SIPRI and UCA. The intervention component is being implemented by MSDSP KG (see Figure 1.1).

SIPRI is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament. Established in 1966, SIPRI provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public. Based in Stockholm, SIPRI also has a presence in Beijing and Washington, DC and is regularly ranked among the most respected think tanks worldwide.

Figure 1.1: Project Partners



UCA was founded in 2000 to offer an internationally recognised standard of higher education in Central Asia and prepare graduates to contribute leadership, ideas and innovation to the economies and communities of the region. The Presidents of Tajikistan, the Kyrgyz Republic and Kazakhstan and His Highness the Aga Khan signed the International Treaty and Charter establishing this secular and private University, which was ratified by the respective parliaments and registered with the United Nations. UCA brings with it the commitment and partnership of the Aga Khan Development Network (AKDN). The Institute of Public Policy and Administration (IPPA) is part of the Graduate School of Development at UCA. IPPA was established in 2011 to promote systematic and in-depth research and explore policy alternatives on issues related to the socio-economic development of Central Asia.

MSDSP KG, an initiative of AKF (Kgz), is a locally registered public foundation, which seeks to improve the livelihoods of select communities in Kyrgyzstan's mountain areas. MSDSP KG implements a range of integrated interventions in rural development, education and health, which converge in villages and are implemented in collaboration with and between community-based groups and local government authorities.

2. RESEARCH AND INTERVENTION PLANNING

This section provides a brief overview of the community, household and individual participant selection for the baseline survey. The second half of the section provides a description of the intervention activities.

2.1. Community and Participant Selection

At the onset of the project, MSDSP KG determined the selection criteria of the project communities (Box 2). The project initiators targeted 15 pilot (or treatment) communities 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 133 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 percent of the population in multi-ethnic AAs is not Kyrgyz.

Box 2: Kyrgyz Administrative Divisions

Ayil aimak is the lowest administrative level in rural Kyrgyzstan. A typical *Ayil aimak* consists of several villages and has population of around 5,000 people. The next two levels of administrative divisions are *rayon* and *oblast*.

Randomisation of the intervention was made by pair-wise matching based on population size and, for multi-ethnic communities, ethnic composition. The pair-wise matching formed pairs of communities similar in population size and ethnic composition. Given that the sample frame was limited (38 AAs to form 15 pairs), the matching was not perfect in all cases. After forming the pairs, random numbers were used to assign a pilot status to one of the AAs and a control status to the second. The results of the sample frame and the number of AAs selected in Osh and Naryn oblasts are presented in Table 2.1. with details provided in Appendix A.

In Osh Oblast, eight multi-ethnic and two mono-ethnic pilot sub-districts made up of 117 villages were selected.[2] The selected areas are primarily inhabited by ethnic Kyrgyz and Uzbeks. Given the oblast's ethnically diverse demographic structure and post-conflict status, the project interventions in Osh Oblast may be helpful in identifying approaches for "bridging" or building social networks between socially heterogeneous groups and fostering intergroup social cohesion.

Table 2.1: Number of Ayil Aimaks for Random Selection

Area	No. of AAs before filtering	No. of AAs in sample frame	Available no. of AA pairs	No. of AA pairs selected
Total	**133**	**38**	**18**	**15**
Osh multi-ethnic	47	17	8	8
Osh mono-ethnic	24	10	5	2
Naryn	62	11	5	5

Source: MSDSP KG and authors' calculations

[2] These numbers deviated from the original project plan of targeting nine multi-ethnic and three mono-ethnic sub-districts with 45 villages in Osh Oblast.

In Naryn Oblast, five mono-ethnic sub-districts comprised of 11 villages with a population of largely ethnic Kyrgyz were selected.[3] Activities in Naryn are expected to help in identifying approaches for "bonding" or developing intra-group social cohesion since this oblast is representative of the rural mono-ethnic population of the country.

Table 2.2: Estimated Sample of Households (HHs) for the Baseline Survey

Type of AA	No. of HHs	No. of adults	No. of youth	No. of AAs	No. of villages	HHs per AA	HHs per village
Naryn Mono	242	730	83	10	22	24	11
Osh Mono	175	651	100	4	15	44	12
Osh Multi	1,584	5,907	903	16	102	99	16
Total/average	2,000	7,288	1,086	30	139	56	13

Source: MSDSP KG and authors' calculations

The sample size for the baseline survey was set at 2,000 households, including 1,200 households in 15 pilot or intervention AAs and 800 households in 15 control AAs. While a one-to-one proportion of intervention and control samples would have been desirable, the control sample was restricted to 800 households for budgetary reasons. By implementing two community-driven development approaches in mono- and multi-ethnic communities, our expectation, based on the results of the power analysis, is that the minimum detectable change in the outcome indicator could be as much as 15 percent. The survey is therefore expected to reach around 80 households per AA in intervention areas and 53 households per AA in control areas.

2.2. Description of Project Intervention

The project intervention is the community driven development (CDD) approach, widely used by the international community over several decades as a poverty reduction and sustainable development tool in low to middle income and conflict-affected countries.[4] CDD projects support responses to a variety of urgent local needs such as infrastructure, schools, hospitals, nutrition programmes and business development (Wong 2012) [5]. This project applies the universal theory of change for CDD interventions (Box 3).

The intervention component of the project is focused on the development of CDD micro-projects to build and strengthen social cohesion within and across communities. MSDSP KG will implement the interventions in Years 2, 3 and 4 in the intervention AAs. No intervention will be carried out in the control AAs. Project interventions will build on AKF and MSDSP's experience working with local communities in Kyrgyzstan, implementing participatory devel-

[3] These numbers deviated from the original project plan of targeting three mono-ethnic sub-districts with 15 villages in Naryn Oblast.

[4] CDD is also used in developed countries, see for example: http://www.dissentmagazine.org/blog/booked-1-whats-wrong-with-community-development.

[5] Susan Wong. "*What Have Been the Impacts of World Bank Community-Driven Development Programs? CDD Impact Evaluation Review and Operational and Research Implications",* Washington D.C., The World Bank, (2012).

opment and community mobilisation 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 the 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?

Within their existing Kyrgyz CDD programmes, MSDSP facilitates the formation of working groups (WGs) of village members, and trains these groups on governance, local development planning, project management and principles of social cohesion. WGs either develop or amend a local development strategy (LDS) to strengthen local formal and informal institutions by making them more inclusive and accountable. WGs then submit grant proposals to a committee of MSDSP and local government officials to co-finance activities defined within the strategy.

Under the Social Cohesion project, projects proposed by WGs and communities will be selected on a competitive basis in project areas. Each AA in intervention areas will receive about $20,000 as a block grant to support the implementation of selected micro-projects. Micro-projects will be implemented integrating pilot approaches to maximise the convergence of various social groups in targeted communities.

Box 3: Theory of Change

A theory of change is a description of how an intervention is supposed to deliver the desired result. It describes the causal logic of how and why a particular programme will reach its intended outcomes. It depicts a sequence of events leading to outcomes and explores the conditions needed for the change to take place.

Community driven development (CDD) is an approach that gives control of development decisions and resources to community groups. Targeted communities receive funds, decide on their use, plan and execute the chosen local projects, and monitor the provision of resultant services. It improves not just incomes, but people's empowerment and social cohesion (see Figure A.4).

CDD has proved an effective way of rebuilding communities and producing valuable peace dividends in post-conflict situations, by restoring trust at the local level and rebuilding social relationships.

Based on existing initiatives, the project design anticipates that certain priority approaches will be adopted. One such approach is a focus on enhanced participatory approaches to strengthen the relationship between state and citizens through collaborative development planning in villages. The project will deploy strengthened participatory approaches involving traditional and non-traditional community organisations to develop LDSs with village *ayil okmotu* (village executive bodies) and *ayil keneshes* (village parliaments). For social mobilisation, and the selection and implementation of investment micro-projects, the project will pilot new approaches to collaboratively involve diverse social and demographic groups

in decision-making committees, meetings and conferences overseen by community WGs. This will be accomplished by drawing on organised civil society such as non-governmental organisations (NGOs), indigenous structures such as *aksakal* (elders councils), *ashar* (common works committees), *ayil okmutus* (AOs) and *keneshes* to strengthen the planning and delivery of micro-projects to enhance relationships between and within groups. The project will also explore ways in which inter- and intra- group social dialogue can be incorporated into social mobilisation and planning, anchored on the delivery of a tangible investment micro-project to fulfil a common set of community-defined objectives.

Special attention will be paid to enhancing the capacity of community-based organisations (CBOs) and local authorities to understand and apply concepts of social cohesion, conflict management and local decision-making, and to developing integrated long-term local strategies to reinforce cohesion between different groups in targeted communities. MSDSP KG will build the capacity of CBOs and local government organisations (LGOs) to jointly self-assess the state of social cohesion at the community level, identify factors that divide communities, and develop long-term strategies to improve social cohesion.

3. IMPACT EVALUATION DESIGN

This section describes the research objectives, impact evaluation design, randomisation process, comparison groups and intervention outcomes.

3.1. Intervention Objectives and Hypothesised Outcomes

The Social Cohesion Project seeks to understand how CDD interventions contribute to social cohesion in rural Kyrgyzstan. The Project Paper describes the following goals(The World Bank 2013):

> The Project Development Objective (PDO) is to identify, pilot, and build capacity for social cohesion mechanisms in CDD approaches. The approach the project takes to achieve the PDO 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 micro-projects; (iii) the rigorous tracking of the effectiveness of such approaches through an evidence-driven monitoring and evaluation framework.[6] (The World Bank 2013)

Among the indicators to track achievement of the PDO, the most relevant one from the research point of view is the *"Percentage of overall beneficiaries who feel project investment decisions reflect their needs and believe they have an enhanced role or voice in local decision-making as a result of the project (disaggregated by demographics)."*[7] (The World Bank 2013).

[6, 7] "Kyrgyz Republic: Social Cohesion through Community-Based Development," Project Paper, Washington D.C., The World Bank, (2013).

3.2. Research Design and Randomisation

At the heart of randomised impact evaluation lies the question: What would have happened to the outcomes of interest in the absence of an intervention? It is therefore important to ensure that the intervention is based on a randomisation procedure that divides a set of qualified intervention objects (sample frame) into groups that share characteristics (also known as statistical twins) and assigns an intervention and control status to the groups randomly. The similarity between the pilot or intervention group and the control group ensures that, given any confounding factors and processes, any differences observed over the intervention period between the groups can be attributed to the intervention.

In many development projects, the sample frame is simply not large enough or has limitations, and this is true of this project. The resultant sample frame of the qualified communities was the right size to form pilot and control groups of a required size. Our primary sampling frame comprised of a list of 137 AAs selected by MSDSP KG. However, after filtering out some AAs, based on project criteria (see Appendix A), the team was left with 38 AAs that met the requirements of the sample frame for randomisation.

The randomisation and treatment assignment process was done in two steps. First, 18 pairs of AAs were matched based on population size and, for multi-ethnic communities in Osh oblast, on ethnic composition. Computer-based randomisation (through random number generation) assigned pilot or control status to each AA in each pair. As a result, 15 AAs were assigned pilot status and 15 AAs control status. The remaining three pairs of AAs were left without any project coverage.

Data collection includes baseline and follow-up (or end-line) surveys of 2,000 households in both intervention and control AAs. The survey data includes responses of household adult members (aged 18 and older) and youth (aged 13 to 17), as well as community information. A panel study strategy was used (the same households, individuals and communities are surveyed in both baseline and follow up), allowing for the measurement of the overall degree of change with a relatively high degree of certainty. The quantitative research will collect sufficient data about the pilot and control groups to measure different aspects of social cohesion and compare the level of key selected indicators before and after the intervention.

The evaluation design is based on a difference-in-differences (DD) set-up. 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:

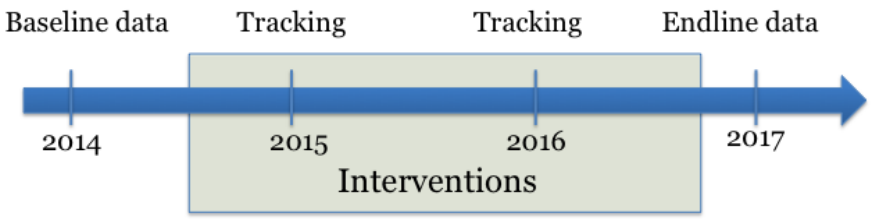
$$\hat{\delta} = (\bar{y}_{P,2} - \bar{y}_{P,1}) - (\bar{y}_{C,2} - \bar{y}_{C,1})$$

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 in averages 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 only the difference is the intervention for the pilot group. The estimation will eventually be implemented as a regression, adding relevant covariates.

Qualitative research will complement the survey data as part of a tracking system. This will include in-depth interviews with a select number of beneficiaries, focus group discussions and artefactual field experiments, such as trust and cooperation games, to measure changes in behaviour. This data - to be collected in Years 2 and 3 of the project - will help the team assess the immediate impacts of the intervention and explore the different impact(s) that the intervention has on beneficiaries. It may also provide insight into why one intervention or location showed a higher degree of change than another.

The combined quantitative and qualitative data will generate new knowledge about the degree of cohesion at individual, household and community levels, as well as about the reactions of various demographic and social groups to the intervention. Quantitative research will provide an empirical validation of the hypothesis about the influence of active intervention on social cohesion. The qualitative study will analyse the processes between the start and end points and support a deeper understanding of the intervention process (see Figure 3.1).

Figure 3.1: Evaluation and Intervention Flow Chart and Timeline



3.3. Outcome Measures

Key outcomes of CDD interventions are local economic development, improved governance and enhanced social cohesion (King 2013; Mansuri and Rao 2013; Wong 2012). This project will primarily study social cohesion and improved governance outcomes, but will also track direct outputs and local development outcomes of the micro-projects. Since the type of micro-projects to be implemented is not yet known, the research team did not form hypotheses relating the interventions to welfare gains directly linked to micro-projects in areas such as irrigation and improved health facilities.

Instead, the outcome indicators in this project fall into two groups: (1) attitudinal and behavioural outcomes, and (2) institutions and social norms.

All indicators are measured using: (a) primary survey data from community, household, adult, and youth questionnaires; (b) secondary data from the monitoring system of the intervention component; (c) findings from individual interviews and focus group discussions; and (d) interviews and artefactual field experiments that measure behaviour in areas such as trust, altruism and cooperation.

Relevant outcomes from (a) would include the perceptions, beliefs, attitudes and behaviour of individuals towards fellow community members, local governance bodies and the community environment. Outcomes from (b) will be helpful in observing intermediate outputs and

outcomes of the intervention. The individual interviews and focus group discussions (c) will help examine the mechanisms of change and the impact of the micro-projects and intervention elements on social groups based on gender, age and ethnicity. Finally, a set of games or field experiments (d) is planned with community members both from pilot and control groups to help assess changes in behaviour in key areas related to social cohesion.

3.3.1. Primary and Secondary Outcomes

The research will examine the following hypotheses relating the interventions to social cohesion:

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 will examine 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** in 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 could provide valuable additional insight on the direct or indirect impact of interventions. In addition to the local development and welfare indicators mentioned above, other aspects of social cohesion and local governance will be examined. The following indicators will be of possible interest:

- Household consumption and incomes.
- Improved access to health or educational facilities.
- Attitudes and beliefs about gender.
- Political participation.
- Trust in central government.

The effect of the intervention on heterogeneous social groups, based on gender, age and ethnicity will be examined. This analysis, based on baseline data, will be useful in tailoring interventions to reach disadvantaged groups.

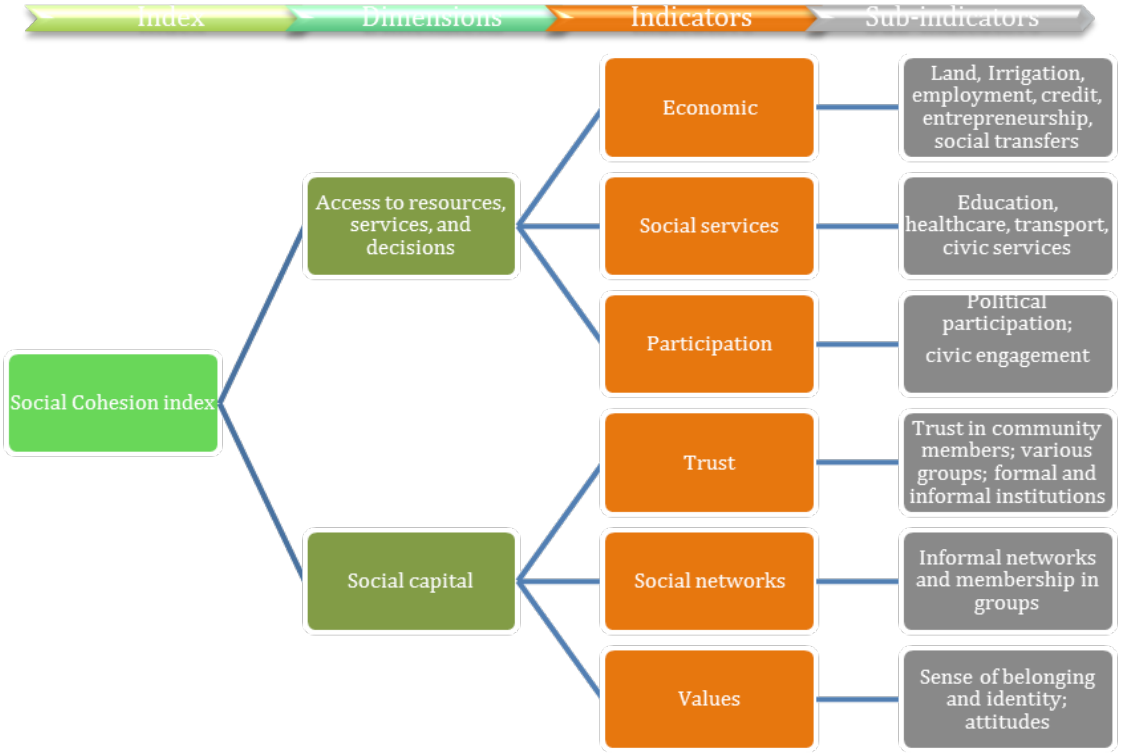
3.3.2. Social Cohesion Index

As an additional research element of the project, the research team is developing and framing a social cohesion index. The research team took into account international practices in measuring social cohesion, and adjusted these to best suit the context of Kyrgyzstan and the needs of the project. The Social Cohesion Index consists of two dimensions: 1) Access to resources, services and decisions, and 2) Social capital (see Figure 3.2). The Index measures six types of indicators: economic, social services, participation, trust, social networks and values.

The primary expected outcome of the intervention is improved social cohesion in intervention communities. However, because social cohesion includes a number of elements that relate to individual perceptions, it is challenging to devise a satisfying single multi-dimensional indicator of social cohesion. The proposed Social Cohesion Index consolidates a number of indicators, but also allows for them to be disentangled so that important indicators and sub-indicators can be inspected individually and compared to others. Overall, the index can be calculated by several methods, including as an average percentage of deprivations in each indicator (a multidimensional poverty approach) or using factor analysis.

While it is unlikely that a single AA intervention would address all elements of the Social Cohesion Index, it is important that each sub-indicator be compared with the others to understand the relationships between indicators and sub-indicators. Replication of such a comparison could potentially prove interesting for research in other regions, promoting deeper understanding of how these elements interact in other contexts.

Figure 3.2: The Social Cohesion Index



3.3.3 Other Measures of Interest and Unintended Consequences

Additional efforts will be made to control for confounding factors and processes that can affect key outcomes of the intervention, such as the impact of parallel development projects implemented by other institutions and local and political developments.

Comparing outcome indicators based on the baseline data for this project with complimentary sources of data will strengthen the analysis. Throughout the project, we will work with pertinent data from other sources, such as the *Life in Kyrgyzstan* survey, the last wave of which was collected in 2013, which has the key indicators pertaining to this project.[8] (Brück et al. 2013)

The methodology also allows us to be aware of possible unintended consequences that the intervention may cause. Below is the list of related assumptions:

- There will be no envy among populations within intervention AAs because the outputs of the micro-projects benefit not all, but a limited number of villages or social groups. The envy may result in worsened indicators of social cohesion such as trust to people and institutions, sense of belonging, and civic participation.
- There will be no envy among population of the control communities because the intervention is provided only to the intervention communities. This may result in over-estimation of the impact of the interventions due to this potential effect.
- No in-migration or inflation effect due to the interventions is observed. This relates to a situation when people migrate to intervention areas due to presence of the interventions or the prices will not rise due to activities of the project intervention. Given the low scale of the interventions, we do not expect any effect due to in-migration or inflation.

4. BASELINE SURVEY ADMINISTRATION

4.1. Survey Development

Survey design and planning began simultaneously with intervention planning and impact evaluation design. The baseline survey was designed to gather information at different levels through face-to-face interviews. The Social Cohesion survey questionnaire was based on the survey developed by SIPRI/UCA for the *Life in Kyrgyzstan* survey.[9] The original *Life in Kyrgyzstan* survey was adapted; excessive information was removed and new modules and questions on social cohesion indicators were introduced, based on suggestions by project partners (see Table 4.1). It was prepared in English, Russian and Kyrgyz and included three levels of questionnaires:

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8 Tilman Brück. "Household Survey Data for Research on Well-Being and Behavior in Central Asia," Journal of Comparative Economics 42(3): 819–35, (2013)

9 Information about the *Life in Kyrgyzstan* survey is available at http://lifeinkyrgyzstan.org/

- Community questionnaire (including interviews with leaders of community groups[10]),
- Household questionnaire, and
- Individual questionnaire (for adults aged 18 years and older).

After internal discussions, the questionnaires were presented to the World Bank for approval in May and June 2014. The following suggestions were proposed:

- Introduce a separate questionnaire for youth aged 14 to 17, since there is lack of knowledge about attitudes and behaviour of this age group.
- Translate the questionnaires into Uzbek, to better capture the significant Uzbek population in Osh communities.

The final versions of the baseline survey questionnaires took into account this feedback and cover a wide range of topics related to different aspects of rural life (see Table 4.1). Prior to printing, all questionnaires went through the following procedures:

- Approval by the World Bank;
- Translation into Russian, Kyrgyz and Uzbek;
- Pilot survey process (pre-test of the Kyrgyz and Uzbek questionnaires for ensuring understanding by respondents) and fine tuning; and
- Ethical approval by IRB Services.[11]

Listing procedure: A total of 30 rural communities were selected for the survey: 20 communities, including 117 villages, from Osh Oblast and 10 communities, including 22 villages, from Naryn Oblast. In each village, a listing procedure of rural households was applied to enable random selection.

[10] The section on Community Groups included responses from up to six local leaders, including a head of village, a director of a school, a member of water users or pasture committees, a head of the *aksakal* (elderly) council, a religious leader, a head of an NGO, a women's or youth group.

[11] An ethical approval of all questionnaires was done by IRB Services (http://www.irbservices.com) an independent company that reviews research involving humans and performs ethical oversight of the research that it approves.

Table 4.1. Content of the Baseline Survey Questionnaires

Individual Questionnaire	
No.	Section
1.	Subjective well-being
2.	Education, health and personality
2.A.	Education
2.B.	Health
2.C.	Personality
2.D.	Decision making
3.	Trust, identity and sense of belonging
3.A.	Trust
3.B.	Identity and sense of belonging
4.	Social life
4.A.	Social networks
4.B.	Membership in groups
4.C.	Civic participation
4.D.	Political participation
5.	Local governance
6.	Attitudes and perceptions
6.A.	Attitudes to various social groups
6.B.	Perception of security
6.C.	Attitudes to entrepreneurship
7.	Labour market
7.A.	Current employment status
7.B.	Overview of work during the last 7 days
7.C.	Current unemployment or inactivity
7.D.	Labour market history since 1990
8.	Movements
9.	Violence and community tensions
9.A.	Violence
9.B.	Community issues

Community Questionnaire	
No.	Section
1.	Community information
1.A.	Respondent's characteristics
1.B.	Geography, population and migration
1.C.	Access to services and infrastructure
1.D.	Economic activity
1.E.	Development programmes
1.F.	Shocks affecting community
2.1.-	Leaders of community groups
2.A.	Respondent's characteristics
2.B.	Participation and decision making
2.C.	Community issues

Household Questionnaire	
No.	Section
1.	Household
1.A.	Household composition
1.B.	Child education
1.C.	Children's attitudes
2.	Housing and assets
2.A.	Housing
2.B.	Assets
2.C.	Land
3.	Savings and credit
4.	Consumption and expenditure
4.A.	Food items
4.B.	Non-food items
4.C.	Expenses on customs and traditions
5.	Income sources
6.	Migration
6.A.	Current labour migration
6.B.	Remittances
7.	Shocks

Youth Questionnaire	
No.	Section
1.	Subjective well-being
2.	Education, health, and personality
2.A.	Education
2.B.	Health
2.C.	Personality
3.	Trust
4.	Identity and sense of belonging
5.	Social networks and information
6.	Attitudes and perceptions
6.A.	Attitudes to various social groups
6.B.	Perception of security
6.C.	Attitudes to entrepreneurship
7.	Movements
8.	Violence and community tensions
8.A.	Violence
8.B.	Community issues

Source: Baseline survey questionnaires

Each village was divided in several clusters, depending on village size. Then, in every village, one cluster was randomly selected. Small villages were analysed as a cluster. A list of all households was prepared for each cluster. Maps of the villages were drawn by trained interviewers (See Figure A. 1 in Appendix A). During the listing process, some villages were excluded due to the absence of the permanent population. Barak village from Osh was excluded because it is an enclave, located within the territory of neighbouring Uzbekistan.

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 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 O). Households in a selected cluster were chosen based on a step-based selection procedure; every N-th was selected for coverage. N is the step between households defined by the following formula:

$$N = \frac{TH}{S},$$

where, *TH* is the total number of households in the cluster and *S* is the selected sample for the cluster. For the Naryn sample, each cluster had 11 to 17 selected households. For the Osh sample, each cluster had 11 to 18 households selected for the sample.

4.2. Enumerator/Survey Firm Recruitment and Training

The baseline survey data collection was conducted by the Center for Economic and Social Research, Soceconic. Soceconic is a Bishkek-based survey, research and consulting firm with an excellent reputation, seasoned staff and considerable experience conducting household surveys in Kyrgyzstan.[12] The SIPRI/UCA team non-competitively selected Soceconic to conduct the baseline survey for the following reasons:

- The company successfully conducted four annual waves of the *Life in Kyrgyzstan* survey (2010-2013), resulting in the collection of good quality data. Leveraging this experience will save time and resources.
- The *Life in Kyrgyzstan* survey questionnaires formed a significant part of the baseline survey data collection tool for the Social Cohesion Project. Interviewers who collected data for the *Life in Kyrgyzstan* survey are familiar with the majority of questions.
- Soceconic personnel (both interviewers and supervisors) have unique experience collecting panel data, maintaining contact information and developing tracking procedures to locate respondents in consequent waves of data collection.
- Other data collection companies in Kyrgyzstan have less experience than Soceconic collecting large-scale quantitative household and panel surveys, tending instead to collect marketing, sociological and opinion poll information.

[12] The firm has implemented numerous large-scale data collection activities for the World Bank, the Asian Development Bank, DFID and national institutions.

Soceconic was contracted after approval from the World Bank in June 2014. Two-day training sessions for interviewers and supervisors were delivered in Osh and Naryn.[13] The Osh Soceconic team included 40 interviewers and four supervisors. The Naryn team was smaller, with nine interviewers and two supervisors, due to smaller sample of survey households in Naryn.

During the first day of training, the content of the household and individual questionnaires was presented. All interviewers were divided into pairs to practice filling in the individual questionnaires. This helped to identify and clarify unclear questions. A separate session was dedicated to cluster maps and searching for targeted households in each cluster. All interviewers had to complete the household questionnaires as a homework assignment and present them to a supervisor the next day. This further helped to clarify questions. On the second day, similar activities were conducted, with a focus on the youth and community questionnaires.

4.3. Problems and Concerns

Listing procedures began at the end of August 2014 and were completed by the end of August 2015. A number of difficulties arose in Osh. The negative reaction of some village heads resulted in interviewers being stopped and their notes being seized. The process was put on hold until an official letter was obtained by the AKF Kg representative from the State Agency on Local-Self Government and Inter-Ethnic Relations under the Government of the Kyrgyz Republic.[14] However, even after presenting the letter in one village, the village head prevented the listing procedure. The field manager from Soceconic then visited the local administration to urge them to support the process.

The high seasonal workload of rural respondents created other difficulties. Many respondents were busy in the fields and interviewers were forced to visit some households multiple times. In October 2015, the field work schedule was interrupted by a week-long religious holiday.

Fieldwork took place from September to December 2014. A software application for data processing was developed and tested during September 2014. Data processing of the questionnaires took place from October 2014 to January 2015. The first raw database was submitted to the research team by Soceconic at the end of January 2015. The first round of data cleaning took four weeks and was conducted by a joint SIPRI/UCA team of eight led by SIPRI. At the beginning of March 2015, all identified errors, missed entries and logical inconsistencies were submitted to Soceconic for correction and clarification. A second round of data cleaning was done at the end of March, followed by a second submission of the cleaned database by Soceconic. The database was finally cleaned in August 2015.

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13 In Osh, the training was delivered on 28 and 29 August 2014 by a SIPRI representative and the Director of Soceconic. In Naryn, the training was delivered on 6 and 7 September 2014 by a UCA representative.

14 Letter #01-32/226 dated 10 September 2014.

5. BASELINE ANALYSIS

This section describes the baseline sample and provides descriptions of findings at the community, household and individual levels, including data on youth. Analysis of important indicators and differences based on different variables, including residency in pilot or control communities, Naryn and Osh oblasts and ethnic composition of communities, is also presented.

5.1. Baseline Sample

The final baseline survey sample consists of 1,986 households from 30 AAs in Naryn and Osh oblasts which closely meets the original sample plan set at 2,000 households. Given that each AA includes several villages, the total number of sites where data was collected was 137 villages. In each household, each adult (aged 18+) and youth (14-17 years old) provided information, resulting in individual data collected from 6,356 adults and 866 young respondents. The share of households and individuals across pilot and control communities was 60 to 40 percent respectively, as envisaged by the sample design.

Table 5.1: Baseline Survey Sample

Status / Oblasts	Total	Pilot			Control		
		Total	Naryn	Osh	Total	Naryn	Osh
Ayil aimaks	30	15	5	10	15	5	10
% of total		*50*			*50*		
Ayils (villages)	137	68	11	57	69	10	59
% of total		*50*			*50*		
Ayil leaders	795	394	64	330	401	56	345
% of total		*50*			*50*		
Households	1,986	1,165	173	992	821	131	690
% of total		*59*			*41*		
Individuals	6,356	3,735	434	3,301	2,621	331	2,290
% of total		*59*			*41*		
Youth	866	521	75	446	345	41	304
% of total		*60*			*40*		

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

5.2 Baseline Characteristics and Tests of Balance

This section examines whether the randomised selection of target communities into intervention (pilot) and control groups achieved a balance. With a balance, 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 suggests that a balance of demographic indicators was achieved between the

two types of communities, but that recognisable differences exist in many dimensions at the community, household and individual levels. While it would be desirable to achieve a balance between the communities on all key characteristics, such as economic sector and infrastructure, it was not possible and the observed differences are not expected to inhibit the research design.

All indicators described in this section, present average means for the following dimensions of the sample: 1) Total sample; 2) Community sub-samples, shown separately for a) pilot/control areas, b) Naryn/Osh oblasts, and c) mono-/multi-ethnic communities. This combination of community divisions helps to highlight commonalities as well as differences between the areas.

Another important note for the data is the application of population weights for the indicators at the household and individual levels. Given a fixed number of households was surveyed in sample villages of varying population, the households and the individuals from more populated areas were assigned a higher population weight, and conversely, the residents in smaller villages were assigned a smaller weight. The weighting ensures that the calculated means and the differences take into account community population size.

5.3. *Ayil Aimak* and Village Level

The information provided in this sub-section is based on the community questionnaire administered in each village by interviewing a village head or an official from local administrations. The village-level data are thus aggregated to analyse information at the AA level. The data presented below also validates the pre-survey assumptions on population size and ethnic composition that were made before the randomisation.

Overall, the pilot AAs have a slightly larger area and population compared to the control AAs (see Table 5.3). The average area of pilot AAs is larger than that of control AAs: 1,575 hectares (ha) compared to 1,084 ha. The average number of villages per AA (4.6 villages) is practically the same between the two groups. Despite housing a larger population than control AAs (12,311 compared to 11,707 people), pilot AAs are less densely populated (7.8 people per ha compared to 10.8 people per ha). Household distribution is uneven among pilot and control AAs. On average, pilot AAs are inhabited by more households than control AAs; 2,542 compared to 2,272.

A comparison of ethnic composition reveals that non-Kyrgyz ethnic groups constitute about a quarter of the total population in the surveyed communities. Based on the community data, non-Kyrgyz populations constitute 22 percent of total number of households in the pilot AAs, and 17 percent in the control AAs. In turn, the sample of surveyed households exhibits a lower share of non-Kyrgyz in the pilot AAs (20 percent) and a higher share in the control AAs (17 percent). This points to the fact that non-Kyrgyz population is slightly underrepresented in the pilot communities and slightly over-represented in the control communities.

Validating the research and sample design, the number of households surveyed was higher in pilot AAs (78 households per AA) than in control AAs (56 households). This constitutes between 3.3 and 3.7 percent of households surveyed in each AA.

Table 5.2. Ayil Aimak Level Indicators

Indicator	Average	Pilot	Control	Naryn	Osh	Mono-ethnic	Multi-ethnic
Area, ha	1,329	1,575	1,084	286	1,851 ***	437	2,110 ***
Number of villages	4,6	4,5	4.6	2,1	5,8 ***	2,6	6,3 ***
Population, people	12,009	12,311	11,707	3,997	16,015 ***	5,273	17,903 ***
Number of households	2,407	2,542	2,272	854	3,183 ***	1,081	3,567 ***
Share of non-Kyrgyz, %	19,8	22,3	17,3	0,2	29,6 ***	1,4	35,9 ***
Share of non-Kyrgyz based on the sample of households, %	21,1	20,4	21,8	0,6	31,3 ***	0,7	38,9 ***
Number of surveyed households per *Ayil Aimak*	67	78	56	30	85 ***	37	93 ***
Number of household surveyed as a share of total, %	3,5	3,7	3,3	4,8	2,8 ***	4,4	2,7 ***

Source: Baseline Survey for the Social Cohesion Project, 2014.
The mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

Differences between control and pilot groups persist at the village level (Table 5.3). Pilot villages occupy a larger area, have larger populations and accommodate more households than control villages. The average area of pilot villages is 375 ha, while for control villages, it is 246 ha. This difference is statistically significant.

Table 5.3. Village Level Indicators

Indicator	Average	Pilot	Control	Naryn	Osh	Mono-ethnic	Multi-ethnic
Area, ha	309	375	246 ***	204	322 *	211	338 ***
Population, people	2,630	2,716	2,545	1,903	2,761	2,050	2,836
Number of households	527	561	494	407	549	420	565
Share of Kyrgyz, %	76,2	74,0	78,4	99,9	72,0 ***	98,3	68,4 ***
Share of Uzbeks, %	18,4	20,7	16,2	0,0	21,8 ***	0,4	24,9 ***
Share of other ethnic groups, %	5,3	5,3	5,3	0,1	6,3 ***	1,3	6.7 ***
Share of households with migrants, %	18,9	18,4	19,4	1,8	21,5 ***	10,4	21,7 ***

Source: Baseline Survey for the Social Cohesion Project, 2014.
The mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

When it comes to demographics, there is the same disparity: pilot villages are home to 2,716 people and 561 households, and control villages are home to 2,545 people and 494 households. The share of non-Kyrgyz, including ethnic Uzbeks, is higher in pilot villages than in control villages. In pilot villages, Kyrgyz make up 74 percent of the population, while in control villages, they make up 78 percent. However, the demographic differences are not statistically significant.

An analysis of the economic situation, infrastructure and access to services suggests that control villages are better off economically than the pilot villages. In majority of pilot villages (76 percent), respondents assessed their current living standard as improved, compared to 58 percent in the control villages.

Table 5.4. Village Economic Status, Services and Infrastructure

Indicator *in ratio, if not indicated otherwise*	**Ave-rage**	**Pilot**	**Control**	**Naryn**	**Osh**	**Mono-ethnic**	**Multi-ethnic**
Village services and infrastructure							
Share of aged 1-5 attending kindegarten, %	21.3	18.8	23.7	37.2	18.4 ***	32.6	17.2 ***
Share of households with clean drinking water, %	59.3	58.4	60.1	74.0	56.7 ***	64.3	57.5
Share of households with access to irrigation, %	79.5	77.2	81.9	80.4	79.4	72.9	81.7
Village has street lights	0.36	0.44	0.29 *	0.71	0.30 ***	0.47	0.33
Village economics							
Living standarts have improved	0.67	0.76	0.58 **	0.76	0.66	0.83	0.61 ***
Most households are above midlle class	0.33	0.34	0.32	0.19	0.35 *	0.25	0.36
Share of households with car owned, %	47.2	45.8	48.7	41.2	48.3	38.3	50.4 ***
Size of land distributed through land reform, sotka	18.2	17.2	19.3	47.4	13.0 ***	33.1	12.9 ***
Share of households with no agricultural land, %	11.4	12.4	10.5	30.3	8.3 ***	20.9	8.2 ***
Share of households with no livestock, %	17.7	19.6	15.8	30.0	15.5 *	23.2	18.7
Community had development projects	0.82	0.91	0.74 ***	0.90	0.81	0.78	0.84

Source: Baseline Survey for the Social Cohesion Project, 2014.
The mean differences for the community categories are tested using t-test. Significant differences are indicated by * ($p<0.1$), ** ($p<0.05$), *** ($p<0.01$).

Land and livestock are important assets in rural Kyrgyzstan. During the land reform in mid-1990s, slightly larger plots per capita were distributed in control areas (19 *sotka*[15]) compared to pilot areas (17 *sotka*). Not necessarily related to this, the proportion of households lacking agricultural land is estimated to be higher in pilot villages than in control villages (12.4 percent compared to 10.5 percent). Similarly, the percentage of individuals owning no livestock is almost 4 percentage points higher in pilot villages than in the control villages (19.6 percent compared to 15.8 percent). This economic gap may explain why pilot villages were receiving more development projects than the control villages (91 percent compared to 74 percent) since community development projects tend to invest more in poorer communities.

15 10 x 10 metres

5.4. Village Leaders

The community questionnaire had a sub-module to interview village leaders to learn the community life and issues from the management perspective. For each village where the survey was conducted, up to six village leaders of formal and informal institutions were interviewed. Leaders of formal institutions included the head of the village, school director and head of water or pasture users association. Informal leaders included the head of the elders council (*sovet aksakalov*), religious leaders, and heads of NGOs or any other social group.

A total of 795 leaders were interviewed. Their average age was 51 and on average, they had served in their positions for close to six years (Table 5.5). About 77 percent of village leaders are male and 80 percent are of Kyrgyz ethnicity. A third have a university education. There are no significant differences in the personal characteristics of surveyed village leaders among the pilot and control communities, although leaders in Naryn oblast tend to be younger, Kyrgyz, and have served in their position for a shorter period of time.

Table 5.5. Village Leaders

Indicator *in ratio, if not indicated otherwise*	**Average**	**Pilot**	**Control**	**Naryn**	**Osh**	**Mono-ethnic**	**Multi-ethnic**
Age, years	51	51	51	46	52 ***	48	52 ***
Male	0.77	0.77	0.77	0.78	0.77	0.77	0.77
Kyrgyz	0.80	0.80	0.81	0.99	0.77 ***	0.99	0.73 ***
University degree	0.33	0.34	0.32	0.37	0.32	0.23	0.33
Years in this position	5.7	5.7	5.7	4.6	5.9 *	5.0	6.0 *

Source: Baseline Survey for the Social Cohesion Project, 2014.
The mean differences for the community categories are tested using t-test. Significant differences are indicated by * ($p<0.1$), ** ($p<0.05$), *** ($p<0.01$).

The findings from the village leaders draws a favourable picture of community participation and collective decision making in surveyed communities. However, the data also highlights problems with implementation of decisions and the underrepresentation of women and ethnic minorities in community decision-making. This is true across pilot and control communities, but the villages in Naryn Oblast demonstrate better community participation and decision-making outcomes. Practically all villages conducted community meetings in the 12 months preceding the interviews (Table 5.6) and three out of four villages have a dedicated meeting place. On average, 3.5 meetings with the participation of 93 villagers were held.

Ethnic minorities and women are largely underrepresented in these meetings. The share of non-Kyrgyz participants was 9 percent compared to their 20 percent share in the total population in project areas. The share of women participating in community meetings was only 25 percent, compared to their 50 percent share in the total population. In contrast, the share of youth participants in these meetings is relatively high (about a quarter of all participants), though this number may be arbitrary due to the vagueness of the age group definition. Decision-making is democratic and done by voting, and most decisions are documented. However, only about 44 percent of community decisions are implemented.

Table 5.6. Community Participation and Decisions

Indicator *in ratio, if not indicated otherwise*	Ave-rage	Pilot	Control	Naryn	Osh	Mono-ethnic	Multi-ethnic
Any community meetings conducted?	0.94	0.91	0.96 *	0.93	0.94	0.94	0.94
There is a special meeting place	0.76	0.76	0.76	0.82	0.75	0.78	0.75
№ of meetings in the last 12 months	3.49	3.49	3.50	5.27	3.17 ***	4.21	3.24 **
Number of people attended in average	93	91	94	58	99 ***	67	101 ***
Share of women attended, %	24.9	24.9	25.0	22.5	25.4	23.8	25.3
Share of youth (ages 18-30) attended, %	25.1	25.7	24.5	30.0	24.2 *	31.3	23.0 ***
Share of ethnic minorities attended, %	9.1	8.7	9.5	1.4	10.5 ***	2.9	11.2 ***
Meeting decisions are made by voting	0.64	0.62	0.67	0.79	0.62	0.74	0.61 *
Meeting decisions are documented	0.80	0.82	0.78	0.86	0.79	0.73	0.83
Most decisions are implemented	0.44	0.39	0.49	0.46	0.43	0.41	0.45

Source: Baseline Survey for the Social Cohesion Project, 2014.
The mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

Based on village leader responses, there are few issues related to trust and conflict. There seem to be few incidences leading to deteriorating trust between community residents in the last three years (Table 5.7). Only 30 percent of village leaders reported conflict in their villages, though this proportion is surprisingly higher in Naryn oblast (35 percent). Major sources of conflict seems to be related to land and water. Most conflict resolution is facilitated by formal institutions, such as local governments. However, this is more prevalent in Naryn Oblast than in Osh, where informal conflict resolution ways are also prevalent. The prevalence of peace-building interventions is higher in pilot areas, in multi-ethnic communities in Osh Oblast.

Table 5.7. Trust and Conflicts

Indicator *in ratio, if not indicated otherwise*	Ave-rage	Pilot	Control	Naryn	Osh	Mono-ethnic	Multi-ethnic
Trust between people deteriorated in the last 3 years	0.15	0.18	0.12 *	0.18	0.14	0.12	0.16
There were conflicts in this village	0.30	0.24	0.37 **	0.35	0.29	0.32	0.30
Share of land and water related conflicts	0.27	0.20	0.33 **	0.29	0.26	0.27	0.27
Share of conflicts resolved by local government	0.29	0.30	0.29	0.33	0.28	0.30	0.29
Share of conflicts resolved by informal groups and institutions	0.16	0.18	0.15	0.05	0.19 ***	0.06	0.20 ***
There are peace-building projects	0.37	0.41	0.33	0.18	0.40 ***	0.20	0.43 ***

Source: Baseline Survey for the Social Cohesion Project, 2014.
The mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

5.5. Household Level

Household level indicators are presented and analysed in four areas: 1) demographics, 2) income, consumption and finance, 3) wealth and housing and 4) access to services.
Household demographics reveal no statistically significant differences between pilot and control communities, validating the balance achieved at the household level due to randomisation (Table 5.8). Household size is 5.5 persons in both communities, households are made up largely of working-age members and children. However, there is a notable difference in household size between two oblasts: households in Naryn tend to be smaller on average, mainly due to having fewer working-age members. As a result, the child dependency ratio is higher in Naryn.

Table 5.8. Household Demographics

Indicator *in ratio, if not indicated otherwise*	**Ave-rage**	**Pilot**	**Control**	**Naryn**	**Osh**	**Mono-ethnic**	**Multi-ethnic**
Female head	0.18	0.17	0.20	0.16	0.19	0.14	0.20 *
Household size, *no. of people*	5.5	5.6	5.5	4.9	5.6 ***	5.2	5.6 ***
Children up to 7 years	1.0	1.0	1.0	0.9	1.0	1.0	1.0
Children aged 7-17	1.2	1.2	1.1 *	1.2	1.2	1.2	1.2
Workage, 18-65	3.5	3.6	3.5	2.8	3.6 ***	3.2	3.6 ***
Old-aged, 65+	0.2	0.2	0.3	0.3	0.2	0.2	0.3
Dependency ratio	0.57	0.56	0.59	0.65	0.56 *	0.63	0.56 *
HHs with migrants a broad	0.24	0.24	0.24	0.08	0.27 ***	0.14	0.27 ***

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

Nearly 18 percent of households are headed by females. The share of these households is greater in Osh Oblast, due to labour migration of male family members. On average, 24 percent of households reported having migrants in their families. The share of households with migrants abroad is much higher in Osh (27 percent) compared to Naryn (8 percent).

While total consumption and income is higher in the pilot households compared to the control households, the deviation becomes insignificant after controlling for household size (Table 5.9). There are no differences in amount of social transfers and remittances received. Households in Osh Oblast report lower consumption per capita, but larger income. Households in Naryn rely substantially on public social transfers, while households in Osh rely on remittances as an important source of income.

Table 5.9: Household Consumption, Income and Finance

Indicator *in thousand Soms per month, if not indicted otherwise*	**Average**	**Pilot**	**Control**	**Naryn**	**Osh**	**Mono-ethnic**	**Multi-ethnic**
Household consumption	20.9	21.3	20.4 *	22.0	20.7	22.5	20.4 ***
Consumption per person	4.2	4.3	4.1	4.8	4.1 ***	4.7	4.1 ***
Household income	21.1	21.9	20.3 **	16.7	21.7 ***	18.0	22.0 ***
Household income per person	4.3	4.4	4.2	3.7	4.4 ***	3.8	4.5 ***
Social transfers received	2.8	2.7	2.9	4.0	2.6 ***	3.3	2.6 ***
Remittances received	4.1	4.5	3.7	0.1	4.7 ***	1.0	4.9 ***
Household makes saving, *share*	0.29	0.32	0.25 ***	0.08	0.32 ***	0.18	0.32 ***
Household took loan, *share*	0.12	0.09	0.15 ***	0.42	0.08 ***	0.27	0.08 ***
Loan amount	68.1	73.4	65.0	74.3	63.1	72.7	63.7

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

Table 5.9 also presents important indicators on household assets and finance. A third of the households in pilot communities report being able to save compared to a quarter of households in control areas. The difference in this variable between Naryn and Osh is large; only 8 percent of households in Naryn report having savings, compared to 32 percent in Osh. While less extreme, the gap between mono-ethnic and multi-ethnic communities is still large, with 18 percent of households in mono-ethnic communities reporting savings, compared to 32 percent in multi-ethnic communities. The reverse is true when we look at loans taken by households. Only 9 percent of pilot households take out credit, while 15 percent of households from control areas report having loans. About 42 percent of households from Naryn take out credit, while only 8 percent of households from Osh report taking loans. Remittances could play a key role in explaining the difference on savings and credit between Naryn and Osh, since Osh households receive more remittances that could be saved, while Naryn households need to rely on credit more frequently, in the absence of other sources of income.

Households in pilot communities seem worse off in terms of major assets, having smaller plots of land, less livestock and fewer durable assets than households in control communities. While ownership of land is almost universal (95 percent of households own land), the average size of plots in control communities is 35 percent larger than in pilot areas. In terms of regions, the average size of plots in Naryn Oblast is 2.5 times larger than those in Osh Oblast. This regional difference is also reflected in ownership of livestock and durable assets; households in Naryn report almost four times more livestock and a higher level of assets compared to those in Osh. The control group has higher levels of livestock ownership and is wealthier than the pilot group.

Table 5.10. Household Assets and Housing

Indicator *in ratio, if not indicated otherwise*	**Average**	**Pilot**	**Control**	**Naryn**	**Osh**	**Mono-ethnic**	**Multi-ethnic**
Household has land	0.95	0.94	0.97 ***	0.98	0.95 ***	0.98	0.95 ***
Land size, *ha*	0.9	0.8	1.1 ***	2.0	0.8 ***	1,7	0.7 ***
Livestock units, *sheep equivalent*	17	14	20 ***	51	12 ***	38	11 ***
Number of cars	0.44	0.40	0.47 ***	0.32	0.45 ***	0.38	0.45 *
Asset index, *HH level mean=100*	100	78	123 ***	123	97 ***	112	97 ***
Housing value, *thou. Soms*	1.104	1.124	1.083	445	1.199 ***	779	1.196 ***
Living area in household dwelling per person, m^2	17.5	18.0	17.0	14.9	17.9 ***	15.6	18.1 ***

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

The majority of households report having easy access to water resources, with insignificant differences between different sub-samples. Almost half of all households report owning a car (44 percent). However regional differences exist, with 45 percent of households in Osh owning a car, compared to only 32 percent in Naryn. It could be noted that having greater access to resources (land, livestock, and water) does not guarantee higher levels of income, and savings, but it may correlate to the number of migrants in the household and level of remittances. It also should be noted that the value of housing is determined by the distance to oblast's major urban area, oblast population size and population density. Houses in Osh Oblast cost substantially more than in Naryn. Naryn houses also provide smaller living quarters per household member (15 square metres) compared to those in Osh (18 square metres).

A comparable share of households report unsafe water sources in Naryn and Osh (17 percent), but the amount substantially diverges in mono-ethnic (25 percent) and multi-ethnic areas (15 percent). This means that the mono-ethnic subsample of Osh has less access to clean water than the multi-ethnic subsample of Osh, which is situated closer to Osh city. An assessment of the quality of drinking water demonstrates another aspect of the problem. Osh households complain more often about the quality of drinking water than those in Naryn (23 percent compared to 12 percent). This indicates that access to water does not guarantee access to good quality drinking water.

With regard to energy interruptions, the majority of households reporting interruptions are located in multi-ethnic communities in Osh. In Naryn and in mono-ethnic communities, the problem is negligible. Remote areas may receive better services, such as drinking water and electricity, due to lower population density.

Table 5.11. Access to Services

Indicator *in ratio, if not indicated otherwise*	**Average**	**Pilot**	**Control**	**Naryn**	**Osh**	**Mono-ethnic**	**Multi-ethnic**
Easy access to irrigation	0.55	0.51	0.58 ***	0.59	0.54	0.54	0.55
Unsafe source for drinking water	0.17	0.15	0.19 ***	0.18	0.17	0.25	0.15 ***
Bad quality of drinking water	0.22	0.18	0.25 ***	0.12	0.23 ***	0.18	0.23 **
Frequent energy interruptions	0.27	0.29	0.26 ***	0.03	0.31 ***	0.05	0.34 ***
Distance to local administration, *km*	1.7	1.5	1.8 ***	1.5	1.7 ***	1.6	1.7 ***
Distance to a nearest school, *km*	0.8	0.7	0.9 ***	0.5	0.8 ***	0.5	0.9 ***
Distance to a nearest hospital, *km*	1.5	1.1	2.0 ***	1.3	1,6 *	1.4	1.6 ***

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

Largely, the households in pilot areas seem to be located closer to the key social objects, such as local administrative services, schools and hospitals. Residents of Naryn Oblast enjoy closer distances to these resources, compared to those in Osh Oblast.

An overview of household characteristics indicates significant differences between subsamples. However, it is important to note that key demographic characteristics are similar for pilot and control groups of households. Differences in socioeconomic conditions in both subsamples need to be taken into account in further analysis. Access to economic resources does not automatically indicate an advantage in income and consumption, and may correlate with participation in labour migration. The differences between Naryn and Osh, as well as between mono-ethnic and multi-ethnic areas, provide the basis for analysis for further project implementation.

5.6. Individual Level

This section describes individual-level indicators based on data collected from members of surveyed households aged 18 and older. The description of differences is based on objective variables (age, gender, ethnicity, education and labour market status), headline social cohesion indicators (proxies for intervention outcomes) and subjective variables that represent categories of social cohesion (trust, preferences, social networks, attitudes and opinions).

Demographics, Education and Labour Market Status

The individuals in the pilot and control communities are similar in demographic indicators such as age, gender and ethnic background. The average age of residents from pilot and control communities is similar at 40 and 40.7 years respectively. Kyrgyz residents' share is about 59 percent in both pilot and control communities and Uzbeks make up to 39 and 37 percent in pilot and control communities, respectively. In both communities, the average number of years of schooling is about 11.

However, there are substantial differences in labour market indicators. About 45 percent of individuals in pilot communities are employed, a lower share than the 52 percent of employed individuals in control communities. Given that the share of unemployed is comparable at about 4 percent, the share of economically inactive people is higher in pilot communities compared to control communities.

Table 5.12. Demographics, Education and Labour Market Status

Indicator *in ratio, if not indicated otherwise*	**Average**	**Pilot**	**Control**	**Naryn**	**Osh**	**Mono-ethnic**	**Multi-ethnic**
Age, *years*	40.3	40.0	40.7	43.3	40.0 ***	41.5	40.1 **
Female	0.53	0.51	0.54	0.51	0.53	0.49	0.53 *
Kyrgyz	0.59	0.59	0.59	0.99	0.55 ***	0.99	0.50 ***
Uzbek	0.38	0.39	0.37	0.00	0.42 ***	0.01	0.47 ***
Other ethnicity	0.02	0.01	0.03 ***	0.00	0.02 ***	0.00	0.03 ***
Years of schooling	10.9	10.9	11.0 *	11.2	10.9 *	11.3	10.9 ***
Employed	0.48	0.45	0.52 ***	0.60	0.47 ***	0.51	0.48 *
Inactive	0.48	0.51	0.45 ***	0.38	0.49 ***	0.42	0.49 ***
Unemployed	0.04	0.04	0.03 **	0.03	0.04 *	0.06	0.03 ***

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

Headline Social Cohesion Indicators

The five headline social cohesion indicators measure cooperation, relationships and attitudes among community residents from different social backgrounds, including ethnic affiliation. This set of questions is important to the impact assessment as it is used as one of the key outcomes of the intervention.

The data shows that the average level of these indicators is high across both groups, indicating high levels of social cohesion. It also shows that control communities exhibit a small but statistically significantly higher level of social cohesion compared to pilot communities (Table 5.13). More concretely, on a scale from 1 to 4,[16] respondents from both pilot and control groups responded that people from different backgrounds get on well, that they have meaningful interactions with people from different backgrounds, that ethnic differences between people are respected, and that people treat one another with respect and consideration, at an average level of 3.2.

[16] 1 corresponds to "strongly disagree", 2- disagree, 3- agree, and 4- strongly agree.

Table 5.13. Headline Social Cohesion Indicators

Indicator *on a scale from 1 to 4**	Average	Pilot	Control	Naryn	Osh	Mono-ethnic	Multi-ethnic
People from different social backgrounds get on well together	3.15	3.11	3.18 ***	3.27	3.14 ***	3.04	3.17 ***
I have meaningful interactions with people from different backgrounds	3.11	3.03	3.20 ***	3.06	3.11	3.14	3.10
Ethnic differences between people are respected	3.22	3.17	3.27 ***	2.97	3.24 ***	3.17	3.23 ***
People treat one another with respect and consideration	3.27	3.17	3.38 ***	3.17	3.28 ***	3.16	3.30 ***
I consider it to be a problem when people are attacked because of their ethnic origin or religion	3.34	3.27	3.41 ***	3.36	3.33	3.28	3.35 ***

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).
* The scale values correspond to the following responses: 1 – Strongly disagree, 2- Somewhat disagree, 3 - Somewhat agree, 4 - Strongly agree.

The high level of social cohesion leaves little room for improvement for the intervention activities. These findings contradict the assumptions made at onset of the project that social cohesion was weakened in the post-conflict areas in Osh Oblast.

Trust in Social Groups and Institutions

Both groups demonstrate largely comparable levels of confidence in social groups and institutions. However, in most cases, the population in control communities exhibits higher levels of trust than those in pilot communities in people in their communities in general, people of other ethnicities, local governors and informal leaders, local NGOs, central government and the president.

Table 5.14. Trust in Social Groups and Institutions

Indicator *on a scale from 1 to 4**	Average	Pilot	Control	Naryn	Osh	Mono-ethnic	Multi-ethnic
People in community	3.30	3.23	3.38 ***	3.08	3.33 ***	3.31	3.30
People of own ethnicity	3.10	3.06	3.14 ***	2.74	3.13 ***	3.01	3.12 ***
People of other ethnicity	2.78	2.74	2.83 ***	2.28	2.83 ***	2.69	2.80 ***
Local governer	3.02	2.88	3.17 ***	2.95	3.03 **	3.02	3.02
Local parliament	3.01	3.02	3.00	2.92	3.02 ***	3.08	2.99 ***
Local informal leaders	3.28	3.22	3.35 ***	3.12	3.30 ***	3.27	3.28
Religious leaders	3.09	3.08	3.09	2.95	3.10 ***	3.08	3.09
Local NGOs	2.94	2.91	2.98 **	2.55	2.98 ***	2.99	2.93 *
Central government	2.94	2.86	3.02 ***	3.00	2.93	2.93	2.94
President of the Kyrgyz Republic	2.97	2.90	3.05 ***	3.34	2.93 ***	3.14	2.93 ***

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).
* The scale values correspond to the following responses: 1 – No trust at all, 2- Some distrust, 3 – Some trust, 4 – A lot of trust.

Sense of Belonging, Social Networks and Participation

A large share of respondents in both pilot and control groups feel like a member of their communities (94 percent) and like a citizen of Kyrgyzstan (96 percent in pilot groups and 95 percent in control groups). The data indicates that 92 percent of respondents in control groups think that people are cooperative in their community, compared to 87 percent in pilot groups. When it comes to borrowing money in case of an emergency, 19 percent in the control groups and 22 percent in the pilot groups think that no one would lend them up to 2,000 soms. Participation in social groups is 6 percent higher among control groups, at 43 percent compared to 36 percent in pilot groups.

Table 5.15. Sense of Belonging, Social Networks and Participation

Indicator *in ratio, if not indicated otherwise*	**Average**	**Pilot**	**Control**	**Naryn**	**Osh**	**Mono-ethnic**	**Multi-ethnic**
Feels part of community	0.94	0.94	0.94	0.98	0.94 ***	0.97	0.94 ***
Feels like a Kyrgyzstan citizen	0.96	0.96	0.95	0.98	0.96 ***	0.97	0.95 ***
Thinks that people are cooperative in this community	0.90	0.87	0.92 ***	0.84	0.90 ***	0.86	0.90 ***
Nobody to lend 2 000 Soms in emergency	0.21	0.22	0.19 ***	0.20	0.21	0.17	0.21 ***
A member of a social group	0.39	0.36	0.43 ***	0.31	0.40 ***	0.30	0.41 ***
No civic activity in the last 12	0.35	0.29	0.40 ***	0.20	0.36 ***	0.23	0.37 ***
No interest in politics	0.33	0.30	0.36 ***	0.29	0.33 *	0.25	0.35 ***
Does not vote in elections	0.07	0.08	0.06 ***	0.02	0.08 ***	0.03	0.08 ***

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

Though respondents from pilot groups display more civic participation and interest in politics than those from control groups, this does not necessarily mean that they are more active voters. The ratio of those who abstain from voting is 8 percent among pilot respondents compared to 6 percent among control groups.

Community Governance and Sense of Security

Slightly more people in pilot groups (31 percent) than in control groups (27 percent) think that they cannot affect local community decisions and are not informed about the work of their AOs and AAs (50 percent in pilot groups compared to 48 percent in control groups). This might partially explain the less active voting patterns among pilot groups. Despite this, there are still more respondents in pilot groups interested in their AA budgets, and willing to pay more taxes if services improve (58 percent in pilot groups compared to 50 percent in control groups). Those who think that ethnic groups should solve community issues jointly make up 86 percent of control group respondents and 78 percent of pilot group respondents.

Table 5.16. Community Governance and Sense of Security

Indicator *in ratio, if not indicated otherwise*	**Average**	**Pilot**	**Control**	**Naryn**	**Osh**	**Mono-ethnic**	**Multi-ethnic**
Not informed about works of *Ayil Okmotu* and *Ayil Kenesh*	0.49	0.50	0.48	0.32	0.51 ***	0.36	0.52 ***
No interest in *Ayil Aimak's* budget	0.28	0.23	0.34 ***	0.24	0.29 ***	0.18	0.31 ***
Thinks they cannot affect local governance decisions	0.29	0.31	0.27 ***	0.20	0.30 ***	0.19	0.31 ***
Ready to pay more if public services improve	0.54	0.58	0.50 ***	0.43	0.56 ***	0.55	0.54
Agrees that ethnic groups should solve community issues jointly	0.82	0.78	0.86 ***	0.79	0.82	0.87	0.81 ***
Feels unsafe in community area during daytime	0.15	0.23	0.06 ***	0.12	0.15 ***	0.17	0.14 ***
Feels unsafe in community area during night time	0.28	0.35	0.19 ***	0.39	0.26 ***	0.33	0.26 ***

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

The perception of safety is higher among control groups compared to pilot groups. Only 6 percent of control group respondents feel unsafe in their communities during the day, compared to 23 percent of respondents from pilot groups. Similarly, 19 percent of control group respondents tend to feel unsafe in their communities during the night, compared to 35 percent of respondents from pilot groups.

Life Satisfaction and Attitudes

Control group respondents are more satisfied with their lives in general than respondents in the pilot group. On a scale from 0 to 10 (where 0 indicates the lowest level of satisfaction and 10 indicates the highest), control group respondents rated their satisfaction at 7.4 on average, compared to the 6.8 rating by pilot group respondents. The two groups are similar in terms of satisfaction with community life and risk-taking attitudes in general. Gender attitudes are similar across the two groups. However, these data lack statistical significance, so cannot be considered definitive.

Table 5.17. Life Satisfaction and Attitudes

Indicator *in ratio, if not indicated otherwise*	Ave-rage	Pilot	Control	Naryn	Osh	Mono-ethnic	Multi-ethnic
Overall life satisfaction, 0- › 10 /1	7.1	6.8	7.4 ***	7.1	7.1	7.1	7.1
Satisfaction with community life, scale 0- › 10 /1	7.2	7.2	7.2	7.3	7.2	7.1	7.3 ***
Thiks that men solve community issues better	0.78	0.77	0.78	0.62	0.79 ***	0.76	0.78
Thiks that women should be housewives	0.88	0.88	0.89	0.68	0.91 ***	0.83	0.90 ***
Willing to take risk, scale 1 - › 5/2	3.1	3.1	3.1	3.0	3.1 **	3.1	3.1

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).
[1] The scale values correspond to the following responses: 0 (Completely dissatisfied) to 10 (Completely Satisfied)
[2] The scale values correspond to the following responses: 1 - Strongly disagree, 2 – Disagree, 3- Neutral, 4 – Agree, 5 - Strongly agree.

5.7. Youth

This section describes the findings of data collected from young members of surveyed households, aged 14 to 17. The data from this age group largely mirrors the information collected from adult household members, although some aspects, such as labour market status, are not applicable to youth.

Demographics and Education

There are a few significant differences between the control and pilot groups in terms of age, ethnic background and level of education. The average age within the youth demographic is 15.5 years in the pilot group and 15.2 in the control group. Ethnic Kyrgyz represent 64 percent of youth in the pilot group and 66 percent of youth in the control group. Ethnic Uzbeks are slightly better represented in the pilot group (36 percent) than in the control group (29 percent). The main difference in terms of ethnicity is the fact that over 4 percent of respondents belong to other minority ethnic groups[17] in the control group, compared to just 1 percent in the pilot group.

A more modest divergence is shown regarding the number of years of schooling received by respondents; in the control group the average is 8.3 years, which is slightly lower than that of the pilot group (8.8 years). Additionally, only 32 percent of respondents in the control group do not participate in extra-curricular development activities, compared to 41 percent in the pilot group.

[17] For example, Russian, Dungan, or Uighur.

Table 5.18. Youth Demographics and Education

Indicator *in ratio, if not indicated otherwise*	**Average**	**Pilot**	**Control**	**Naryn**	**Osh**	**Mono-ethnic**	**Multi-ethnic**
Age, years	15.4	15.5	15.2 *	15.1	15.4 *	15.3	15.4
Female	0.49	0.51	0.48	0.46	0.49	0.46	0.50
Kyrgyz	0.65	0.64	0.66	1.00	0.61 ***	0.99	0.56 ***
Uzbek	0.33	0.36	0.29	0.00	0.36 ***	0.01	0.41 ***
Other ethnicity	0.02	0.01	0.04 ***	0.00	0.03 ***	0.00	0.03 ***
Years of schooling	8.6	8.8	8.3 ***	8.3	8.6	8.5	8.6
Number of languages spoken	1.6	1.6	1.6	1.2	1.6 ***	1.2	1.7 ***
Average score at school, 2-›5	4.2	4.2	4.1	4.2	4.1	4.3	4.1 **
Does not attend any in-school extra cirruculum activity	0.36	0.36	0.37	0.27	0.37	0.26	0.39 **
Does not attend out-of-school development activity	0.37	0.41	0.32 **	0.23	0.38 ***	0.28	0.39 **
Does not read books in free time	0.25	0.28	0.23	0.28	0.25	0.26	0.25

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

Headline Social Cohesion Indicators

Headline social cohesion indicators, or indicators that measure attitudes towards social and ethnic differences and relationships with people from different backgrounds, do not reveal significant differences between the pilot and the control groups. When youth respondents were asked about their interactions with people from different backgrounds, respect and consideration between people with different ethnicities on a scale from 1 to 4 (with 4 indicating the highest level of social cohesion), most answers averaged at 3.26.

Table 5.19. Headline Social Cohesion Indicators for Youth

Indicator *on a scale from 1-›4*[1]	**Average**	**Pilot**	**Control**	**Naryn**	**Osh**	**Mono-ethnic**	**Multi-ethnic**
People from different social backgrounds get on well together	3.22	3.20	3.24	3.29	3.21	3.21	3.22
I have meaningfull interactions with people from different backgrounds	3.13	3.10	3.17	3.12	3.13	3.19	3.12
Ethnic differences between people are respected	3.32	3.31	3.33	3.06	3.33	3.29	3.32
People threat another one with respect and consideration	3.34	3.33	3.36	3.32	3.34	3.39	3.33
I consider it to be a problem when people are attacked because of their ethnic origin or religion	3.31	3.24	3.39	3.55	3.29	3.41	3.29

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).
[1] The scale values correspond to the following responses: 1 – Strongly disagree, 2- Somewhat disagree, 3 - Somewhat agree, 4 - Strongly agree.

The results cannot be considered definitive due to lack of statistical sginificance. The only data being statistically significant and indicating a minor divergence: When asked to respond to the statement: "I consider it to be a problem when people are attacked because of their ethnic origin or religion", on a scale from 1 to 4, respondents from the control group averaged at 3.4 and those from the pilot group averaged at 3.2.

Trust in Social Groups and Institutions

Regarding trust in people of the same and different ethnicities, in community, and local and central leaders, the two groups did not exhibit significant differences. However, a constant trend was revealed from the data: respondents from the control group always indicate a slightly higher level of trust in others across all categories than those in the pilot group. This tendency is particularly clear when respondents rate their trust in the central government and the President.

Table 5.20. Trust in Social Groups and Institutions by Youth

Indicator *on a scale from 1-›4*[1]	**Ave-rage**	**Pilot**	**Control**	**Naryn**	**Osh**	**Mono-ethnic**	**Multi-ethnic**
People in community	3.3	3.2	3.4 ***	3.2	3.3	3.3	3.3
People of own ethnicity	3.2	3.0	3.3 ***	2.9	3.2 **	3.0	3.2 ***
People of other ethnicity	2.9	2.8	3.0 **	2.4	2.9 ***	2.7	2.9 ***
Local governor	3.1	3.0	3.1 *	3.0	3.1	3.0	3.1
Local parliament	2.9	2.8	3.0 **	2.7	3.0 *	3.0	2.9
Local informal leaders	3.2	3.1	3.3 ***	3.3	3.2	3.4	3.2 **
Religious leaders	3.0	3.0	3.1	3.0	3.0	3.1	3.0 *
Central government	2.9	2.8	3.1 ***	2.9	2.9	3.0	2.9
President of the Kyrgyz Republic	3.0	2.8	3.2 ***	3.4	2.9 ***	3.2	2.9 ***

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).
[1] The scale values correspond to the following responses: 1 – No trust at all, 2- Some distrust, 3 – Some trust, 4 – A lot of trust.

Community Issues and Social Networks

The data indicate significant gaps in variables related to community issues and social networks. When asked for the percentage of friends of a different ethnicity, control group respondents indicated a lower rate (17.6 percent) than pilot group respondents (24.9 percent). Respondents in Osh report having 23.5 percent of their friends being of a different ethnicity than themselves, compared to those in Naryn who report only 1.3 percent of their friends having a different ethnicity. Not surprisingly, respondents from multi-ethnic groups report higher percentages of friends of different ethnicities (24.6 percent) compared to those from mono-ethnic groups (8.9 percent).

Table 5.21. Community Issues, Social Networks and Security

Indicator *in ratio, if not indicated otherwise*	**Average**	**Pilot**	**Control**	**Naryn**	**Osh**	**Mono-ethnic**	**Multi-ethnic**
Feels part of community	0.96	0.96	0.95	0.97	0.95	0.97	0.95
Feels like a Kyrgyzstan citizen	0.97	0.97	0.98	0.98	0.97	0.98	0.97
% of friends in different ethnicity	21.4	24.9	17.6 ***	1.3	23.5 ***	8.9	24.6 ***
No interest in politics	0.30	0.31	0.28	0.28	0.30	0.24	0.31
Not informed about work of Ayil Okmotu and Ayil Kenesh	0.50	0.47	0.54	0.62	0.49 **	0.49	0.50
Agrees that ethnic groups should solve community issues jointly	0.85	0.82	0.89 **	0.75	0.86 *	0.85	0.85
Feel unsafe in community area during daytime	0.21	0.24	0.18	0.27	0.21	0.19	0.22
Feel unsafe in community area during night time	0.14	0.18	0.09 ***	0.20	0.13	0.19	0.13 *

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).

In Osh, fewer youth (49 percent) were informed about the work of the AO and *Ayil Kenesh* than in Naryn (62 percent). This represents one of the most relevant divergences in the survey. Regarding community safety, the pilot group expressed higher levels of insecurity, with 24 percent feeling unsafe during the day time, compared to 18 percent in the control group. Youth in multi-ethnic groups reported feeling less safe than those in mono-ethnic groups. Interestingly, youth feel unsafe in their community during the day than at night.

Youth Life Satisfaction and Attitudes

Youth life satisfaction (both overall life satisfaction and satisfaction with community life) was measured on a scale of 0 to 10, with 0 indicating the "lowest level of life satisfaction" and 10 the "highest level of life satisfaction". Respondents from the control group reported being more satisfied with their lives, with an average score of 7.5, than those in pilot groups, who had an average score of 7.

Gender attitudes do not show a sharp difference among the two groups concerning life satisfaction. However, more respondents in the control group (87 percent) think that men solve community issues better than women in the pilot group (72 percent). With regard to the question about whether women should be housewives, 91 percent of the control group agrees, while fewer in the pilot group agree (82 percent).

Table 5.22. Youth Life Satisfaction and Attitudes

Indicator *in ratio, if not indicated otherwise*	**Average**	**Pilot**	**Control**	**Naryn**	**Osh**	**Mono-ethnic**	**Multi-ethnic**
Overall life satisfaction, *scale 0->10*[/1]	7.2	7.0	7.5 ***	7.5	7.2	7.5	7.2 **
Satisfaction with community life, *scale 0->10*[/1]	7.1	7.0	7.3 **	7.6	7.0 ***	7.4	7.2 **
Thinks that men solve community issues better	0.80	0.72	0.87 ***	0.75	0.80	0.75	0.81
Thinks that women should be house-viwives	0.86	0.82	0.91 ***	0.80	0.87	0.81	0.87 *
Willing to take risk, scale 1->5[/2]	3.1	3.0	3.1	3.0	3.1	3.0	3.1

Source: Baseline Survey for the Social Cohesion Project, 2014.
The weighted mean differences for the community categories are tested using t-test. Significant differences are indicated by * (p<0.1), ** (p<0.05), *** (p<0.01).
[1] The scale values correspond to the following responses: 0 (Completely dissatisfied) to 10 (Completely Satisfied)
[2] The scale values correspond to the following responses: 1 - Strongly disagree, 2 – Disagree, 3- Neutral, 4 – Agree, 5 - Strongly agree.

Overall, the data suggest that among youth, the control and pilot groups have more similarities than differences, although some remarkable divergences should be taken into account to better understand the variables being analysed as well as in designing the interventions to engage youth.

6. CONCLUSIONS

This report presented the data and findings of the baseline survey for the Kyrgyz Republic: Social Cohesion through Community-based Development project. The baseline survey was conducted in selected rural communities in Osh and Naryn regions in September-November 2014. It was designed to document the demographic, economic and social characteristics of pilot and control groups at the individual, household and community levels before the project intervention activities take place. It generated a large set of baseline data to measure the impact of the interventions, on variables ranging from demographics, living standards, and social networks, consumption to subjective well-being, attitudes and perceptions.

The baseline survey of 1,986 households in 30 rural mono- and multiethnic communities, largely met the goals of the research design and sampling distribution. The distribution of pilot and control households in the sample was 1,165 to 821, respectively, which was very close to the 3:2 ratio anticipated in the initial research design. The final sample included 16 multiethnic and 14 monoethnic AAs with each group divided into pilot and control sub-groups.

The balance between the pilot and control communities was achieved with regard to population and ethnic composition, an important element in randomised impact evaluation studies. It ensures that any change in outcome indicators between two groups by end of the intervention (allowing for confounding factors and processes) are attributable to the project intervention. Given that the randomisation could not take into account many other important factors before assigning a pilot or control status, the baseline data suggests that these groups also possess recognisable differences that can be important for in the intervention phase. For example, individuals in the two groups differ in terms of economic characteristics, but have similar social attitudes when it comes to ethnic differences, relationships with people from different backgrounds and trust.

Importantly, the data suggest a positive picture regarding social cohesion. Social cohesion indicators have an average score of 3.2, with 4 being the maximum, which does not leave the intervention programme much room to aim for improvement. We document a high level of trust in both social groups and institutions. These findings challenge assumptions made at the onset of the project that social cohesion had deteriorated in the post-conflict areas in Osh Oblast.

These high levels of expressed social cohesion pose questions for both researchers and implementers. First, they have considerable implications for the success of the intervention activities, as there seems to be a very little room for improvement when it comes to social cohesion in target communities. It is likely that intervention activities will therefore be targeted at social or demographic groups that exhibit relatively low levels of social cohesion (The World Bank 2014).[18] Second, the high levels of social cohesion expressed behoves the research team to investigate whether individual responses were driven by social desirability bias.

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18 "*World Development Report 2015: Mind, Society, and Behavior,*" Washington D.C., The World Bank (2014)

When formally surveyed, people may express what they believe they should say, as opposed to what they truly or subconsciously believe, thus contributing to higher levels of measured social cohesion than expected. This could be addressed with the help of qualitative research methods during the implementation phase.

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APPENDIX A: TABLES AND ILLUSTRATIONS

Table A.1: Project Partners Suggestions to Research Questionnaires

Suggestions	Institution	Modules (I- Individual, H- Household, C- Community)
Identity	MSDSP KG	I.8.E. Identity and sense of belonging
Participation and decision making	MSDSP KG	I.8.C. Civic participation I.8.D. Political participation C.2. Community
Satisfaction with public services	MSDSP KG	I.9.E. Local Governance I.7. Trust
Conflicts in community	AKDN KG	C.2.C. Conflicts I.6.C. Conflicts
Children and pluralism	AKDN Geneva	H.1.C. Children's Values

Table A.2: Criteria for Framing Ayil Aimaks for Osh Multi-ethnic Areas

Criteria	Number of AAs	Excluded AAs
Total	**47**	
Minority ethnicity representation is 10-90%	21	26
Population is less than 30,000 people	18	3
2+ villages per AA	18	0
Distance from Osh city – 9 km and more	17	1
No previous experience with MSDSP projects	17	0
Final sample of AAs to be drawn from	**17**	

Source: MSDSP KG

Table A.3: Criteria for Framing Ayil Aimaks for Osh Mono-ethnic areas

Criteria	Number of AAs	Excluded AAs
Total	**24**	
Ethnicity 100% Kyrgyz	24	0
Population is less than 30,000 people	24	0
2+ villages per AA	24	0
Distance from Osh city: 9-151 km	21	3
No previous experience with MSDSP projects	14	7
Include only Kara-Kulja and Uzgen rayons	10	4
Final sample	**10**	

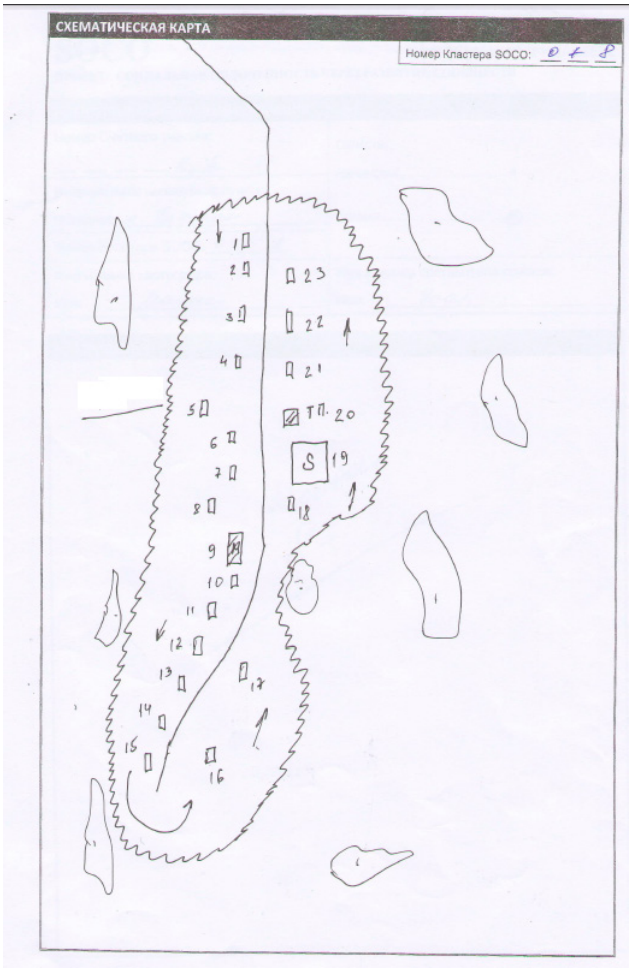
Source: MSDSP KG

Table A.4: Criteria for Framing Ayil Aimaks for Naryn Oblast

Criteria	Number of AAs	Excluded AAs
Total	**62**	
Ethnicity 100% Kyrgyz	62	0
Population is less than 30,000 people	62	0
2+ villages per AA	40	22
Distance from Naryn city: 9-200 km	36	4
No previous experience with MSDSP projects	23	13
Exclude Jumgal and Kochkor rayons	11	12
Final sample	**11**	

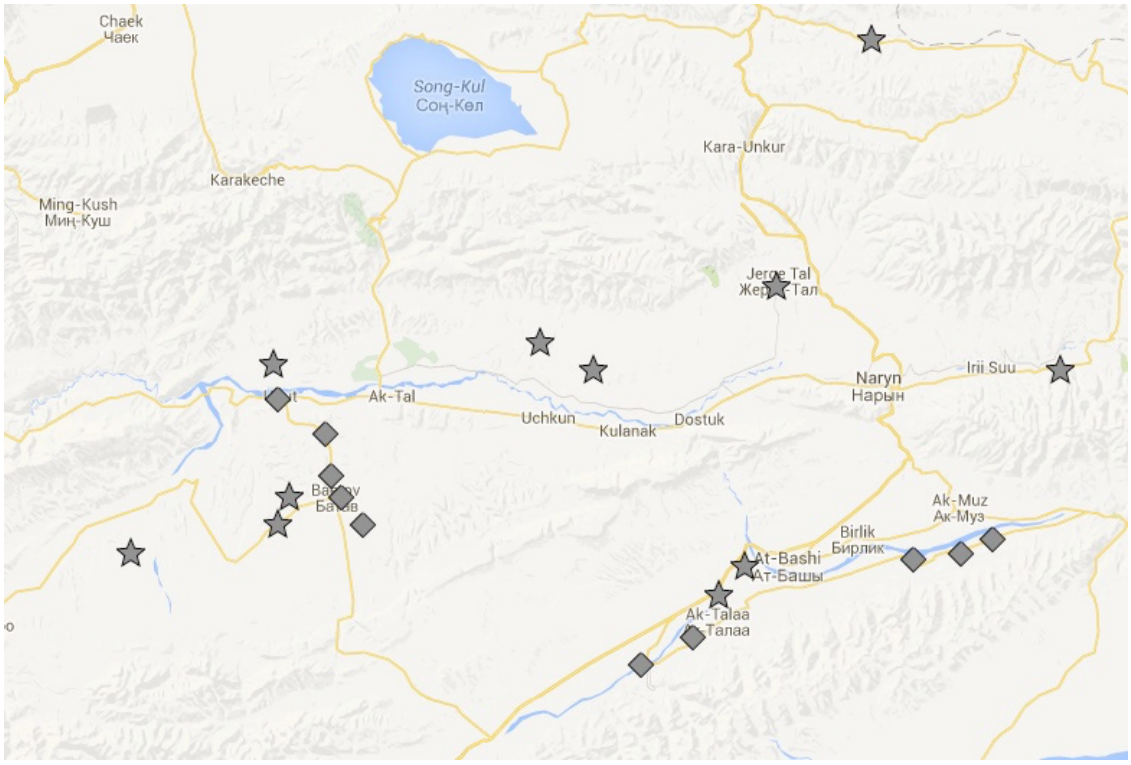
Source: MSDSP KG

Figure A. 1: Sample Village Map



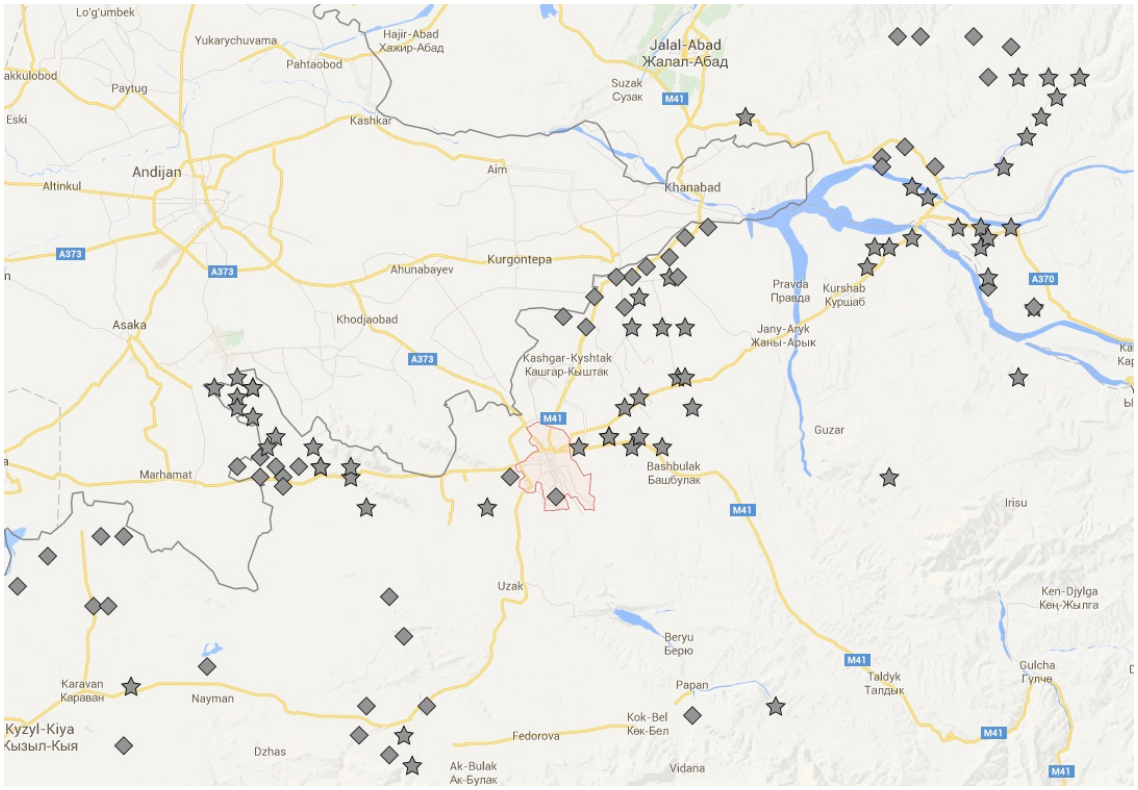
Source: Survey materials

Figure A. 2: Location of Project Communities in Naryn Oblast



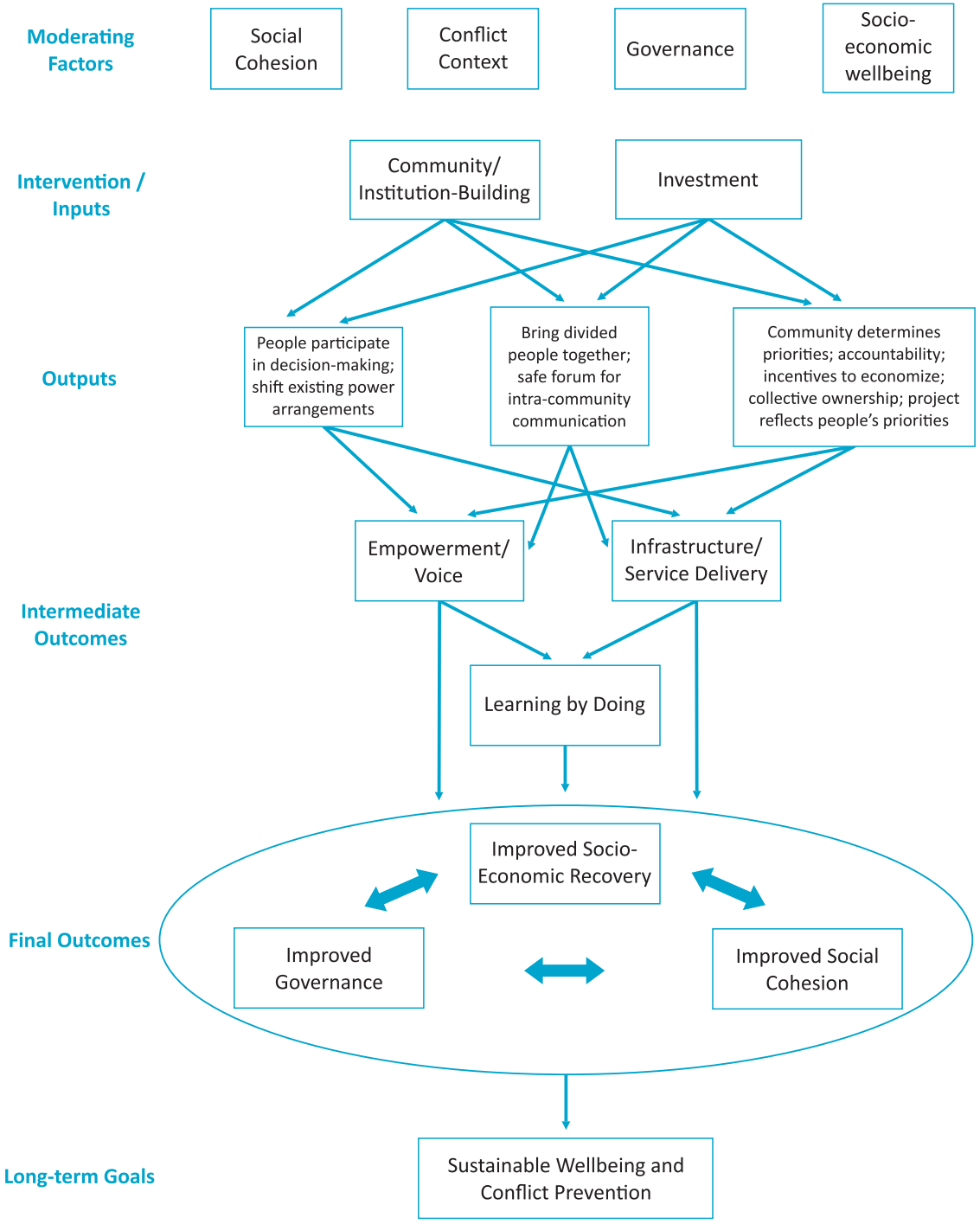
Source: Authors illustration using Google Maps. Pilot villages are marked with ★; the control villages are marked with ◆.

Figure A. 3: Location of Project Communities in Osh Oblast



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

Figure A. 4: Generalised Theory of Change



Source: Adapted from King, 2013