The Impact of Police Posts on Crime and Safety in Cambodian Communes: An assessment of commune police post construction 2011-2013

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Mr. Ian Ramage oversaw the entire research project. Mr. KEO Kimhorth led the survey teams for the data collection, and Mr. Benjamin Lamberet was the Data Manager/Analyst, in charge of designing the database, overseeing data encoders, conducting the analysis and writing the report. Mr. John Nicewinter assisted with the sample design, questionnaire and data analysis, and edited the report.

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Acronyms and Abbreviations

AusAID	Australian Agency for International Development
BCC	Behaviour change communication
BL	Baseline
CCJAP	Cambodia Community Justice Assistance Partnership, 2012-2016
CCJAP III	Cambodia Criminal Justice Assistance Project, Third phase, 2007-2012
CPCS	Crime Prevention and Community Safety
CSPro	Census and Survey Processing System
Dev.	Deviation
DID	Difference-in-difference
DK	Don't know
EPI-Walk	Expanded Program for Immunization Random Walk
FU	Follow-up
MOI	Ministry of Interior
RGC	Royal Government of Cambodia
Std.	Standard

Table of Contents

Tables and Figures

Executive Summary

Angkor Research was contracted in November 2013 to assess the potential impact of the police posts built during the third phase of the Cambodia Criminal Justice Assistance Project (CCJAP III). The posts were built in 25 communes and 11 provinces, in the hope that new infrastructure would improve police effectiveness and community engagement, and reduce crime, thus improving community safety. This impact study is part of phase IV of CCJAP (the Cambodia Community Justice Assistance Partnership, 2012-2016), and will assess whether or not the police posts have achieved their initial objectives.

The quantitative and qualitative analysis includes a comparative study between villages in communes where police posts were constructed (treatment communes), and villages in communes without separate police post buildings (control communes). As no baseline analysis was conducted prior to the police posts being erected, the methodology for this survey also includes a retrospective design; respondents were asked about their experiences and perceptions of crime and community safety, and their perceptions of police posts and the police in general, for each year from 2011 to 2013. The situation in 2013 (and when relevant, in 2012) was then statistically compared to the initial situation in 2011 using a difference-in-difference (DID) analysis. This measures the potential impact of police post construction in treatment communes, relative to the level it would have otherwise been at (the counterfactual), together with the significance of that impact.

Results

The limited sample size and relative rarity of crimes among surveyed respondents made the DID analysis statistically inconclusive. Thus, although the effect of new posts on some indicators is considerable, we cannot say with statistical confidence that police post construction was responsible for these changes. However, the overall trends across indicators suggest that police posts are having a positive effect on community perceptions of the police, police attitudes, and some types of crime.

Experiences with Crime

The results show the overall improvement of the crime situation in Cambodia, with a decrease in crime since 2011 in all communes. Theft and fraud rates have observed the strongest decrease since 2011. Other categories of crime, such as violent crime, dangerous behaviour, threats and property damage, showed a sharp decline in 2012, but then rose again to near-2011 levels, recording a slight decrease in all crimes over the 3 year period.

However, communes with new police posts showed a greater reduction in all crimes committed between 2011 and 2013 (45%), than communes without police posts (36%). The impact was strongest in 2012, the first year the new police posts were operational. In 2012, new police posts may have decreased crime by almost 30% (29.6%) from the counterfactual. Although crime rose again in 2013, it was still below 2011 levels; there was a 21.2% decrease attributable to the construction of police posts in these communes. That is, building new police posts helped to reduce crime by 21.2% from 2011-2013, although the result is not statistically significant.

The effects of police posts were most noticeable on violent crimes, fraud and theft. Communes with new police posts had a 52.63% reduction in violent crimes compared to communes without police posts, although the small number of violent crimes reported makes it difficult to say with certainty if this is the result of police posts, other confounding factors, or chance. Treatment communes also showed a reduction in fraud of 39.9%, and a reduction in theft of 23.68% between 2011 and 2013.

The number of victims who report crimes to authorities is generally low (less than 20% of victims of all crimes), which can be expected given the minor nature of many of the crimes. However, in communes with new police posts, the ratio of reported crimes as a percentage of all crimes has increased 63.6% from 2011-2013 (from 11% to 18% of all crimes). The number of crimes effectively resolved in these communes has increased as well, to 91% of reported crimes in 2013 being entirely resolved (from 56% in 2011). In communes without police posts, the reporting ratio stayed the same, but resolution of reported crimes fell slightly between 2011 and 2013 (from 84% to 75%).

Perceptions of Crime

In general, all respondents felt safe in their neighbourhoods, and the perception scores for both treatment and control communes were very similar. However, since 2011 fear of crime has decreased more in communes with new police posts (13%) than in communes without posts (11%). Respondents in communes with new police posts felt slightly less safe than respondents in other communes for all 3 years, with the difference being statistically significant in 2011. These scores, and the higher crime rate in treatment communes in 2011, suggest that the initial targeting of CCJAP activities to these communes was appropriate.

More people in communes with new posts perceived a decrease in crime between 2011 and 2013 than in other communes (47% vs. 40%), which may correspond to the reduced crime rates in these areas influenced by police post construction. The primary reasons given for this change in treatment communes are stricter enforcement of laws, more police on duty at night, positive economic changes, and efforts by local authorities to provide education/advice.

Perceptions of alcohol-related crimes have worsened since 2011 in both treatment and control communes, and are the main worry. Community members are also concerned about their safety when they attend a party or ceremony (such as a wedding), and when sending their children to school.

Awareness of Police Posts

Nearly half (46%) of respondents in communes with new police posts have visited the police since 2011, which is a statistically significant difference compared to residents in control communes (40%; $p<0.1$). Nearly all (96%) respondents who visited the new police posts found them easy to access (compared to 93% of control commune respondents).

Respondents preferred the new police posts. They reported the new posts to be cleaner than where the police were stationed in communes without posts, and they also reported that the police in new posts were more polite than their counterparts in control areas. These results were significant at the 1% confidence level ($p<0.01$), which suggests that police post construction has the strongest influences on community perceptions of police posts and the attitudes of police officers stationed at these posts.

The only complaint about access among treatment respondents was that the police would ignore their requests if they did not provide an additional payment for their services. Respondents in control communes had the same complaint, but also said that their police offices were inconveniently located, not always open, and that officers were often unavailable.

Six criteria were mentioned as important for police posts: aesthetics; welcome area; location; cleanliness/maintenance of the post; organization; and suitable size. 80% of respondents did not have any complaints about the new police posts, compared to half (52%) of control respondents. The numerous dislikes of where police were stationed in control communes included their obsolescence and small size, mostly. The main recommendations thus correspond to the problems previously enumerated by respondents; in control communes, larger, aesthetically pleasing, and conveniently located police posts should be built.

Police Involvement and Community Awareness

Communes with new police posts showed a 10% increase in the number of police patrols from 2011-2013, compared to a 4% increase in control communes. People living in communes with new police posts were also generally more satisfied with the police than people in the control group. In all communes, the attitude of police was perceived as improving from 2011 to 2013.

Table 1: Summary of difference-in-difference results.

Category	Police post effect (%)	DID	P-value
Experiences with Crime*			
Violent crime	-52.63%	-0.02	0.223
Theft	-23.68%	-0.108	0.469
Dangerous behaviour	+4.90%	0.005	0.908
Threat	-10.87%	-0.01	0.816
Fraud	-39.90%	-0.083	0.254
Property damages	+19.05%	0.012	0.937
All crimes	-21.19%	-0.203	0.427
Perceptions of Crime**			
Personal fear of crime	+1.06%	0.023	0.907
Fear of crime in the village	+0.44%	0.01	0.954
Fear of cruel crime	+1.56%	0.03	0.863
General perceptions of crime	-3.62%	-0.08	0.597
Perceptions of alcohol problems	+1.13%	0.058	0.835
Perceptions of drug problems	+1.02%	0.022	0.902
Community Safety***			
At home at night	+0.36%	0.028	0.893
Sending children to school	+0.33%	0.025	0.909
At work/rice fields	-0.25%	-0.02	0.915
Travelling in the local area	+0.53%	0.043	0.808

Category	Police post effect (%)	DID	P-value
Attending a party/ceremony	+1.08%	0.08	0.699
Safety in general in community	+1.54%	0.122	0.456
Police Involvement and Community Awareness			
Attitude of police* **	-0.83%	-0.063	0.839
Police patrols*	+7.20%	3.315	0.729
General satisfaction with police* **	+1.23%	0.091	0.656

*using the number of occurrences (number of crimes, number of patrols, etc.).

**using a 1 to 10 scale, from lowest risk (1) to highest risk (10).

***using a 1 to 10 scale, from very unsafe (1) to very safe (10).

Table 1 summarizes the DID analysis of changes in the treatment communes as a result of police post construction. Positive changes attributable to the police posts (between the 2013 endline and the 2013 counterfactual) are presented in green, and potential negative impacts are in red. The p-value, which is a measure of statistical significance, has to be lower than 0.1 (significance level α=10%) for a result to be considered significant (that is, we can be reasonably confident that the results are not due to chance).

Introduction

Since 1997, the Australian Agency for International Development (AusAID) has provided technical and legal resources to the Royal Government of Cambodia (RGC) to support legal and judicial reforms, with a focus on improving access to justice, especially for vulnerable groups such as women, children and youth. From 1997-2012, this assistance was provided through the Cambodia Criminal Justice Assistance Project in three phases (CCJAP I – CCJAP III). The fourth and final phase of CCJAP is being implemented from 2012-2016. It has been renamed the Cambodia Community Justice Assistance Partnership (CCJAP) in order to reflect its stronger focus on community initiatives and its programme objective of "Contributing to building safer communities as well as sentencing and prison reform". To support this goal, CCJAP has identified three strategic program outcomes:

1. The justice system is managed for more effective pre-trial arrangements, use of non-custodial sentencing and improved prisons.
2. Women, youth and children are safer and communities have less crime.
3. Communities, police, courts and prisons use data to support management.

The key strategies to support these outcomes are based on a partnership approach with RGC.

The third phase of CCJAP (CCJAP III) provided support through its small-scale infrastructure programme for the construction of commune police posts in 25 communes in 11 provinces, operating under the theory that improving this infrastructure would improve police effectiveness, thus reducing crime and improving community safety. At the start of this phase, RGC has requested CCJAP IV to continue supporting the construction of commune police posts.

Based on this request, CCJAP IV has commissioned this research project, to objectively analyse whether police post construction has been a key factor in the success of community safety and crime prevention interventions in local communities. The overall objective of this impact evaluation is to assess the contribution, relevance, effectiveness and sustainability of police posts in contributing to CCJAP's second strategic objective, "Women, youth and children are safer and communities have less crime".

Conditions of Commune Police

There are many communes throughout the country which do not have independent police post buildings, which is a considerable concern for the Cambodian government. Although tasked with the important role of maintaining public order and enforcing the laws of the state, many commune police officers are expected to do their jobs with a lack of adequate infrastructure and equipment. This leads to many problems with both police effectiveness, morale and community engagement.

Without a suitable, well-equipped police post building, the police and local authorities in these communes have developed a variety of methods to provide the police with working areas. Some commune police forces share space with administrative officials in commune halls or other government buildings. In other cases, the police are stationed within or under the personal house of a local authority (such as a village chief or commune police chief), or on their private land. And in other communes, the police have only a small lean-to or thatch hut on public land which serves as their office. Besides infrastructure, other

necessary office equipment – from simple tables and chairs to holding cells and official forms – are often lacking.

Poor infrastructure and lack of equipment can erode community confidence in the police, and negatively influence community perceptions of the professionalism and effectiveness of officers stationed in these areas. In communes without police posts, some respondents in the survey said that their police posts more closely resembled cow stables or local food stands ("rice porridge restaurant"), indicating their lack of confidence in these institutions. These situations make communities less likely to trust police, and make it harder for police to do their jobs. Police officers stationed in private houses or in other government buildings also pose a threat to the confidentiality and anonymity of local victims and complainants, and can result in conflicts of interest for the police and other local authorities. Difficult working conditions can also affect police officers' motivations and morale, further decreasing their effectiveness and eroding public trust.

Methodology

This project utilised a quasi-experimental research design to measure the effects of police post construction on community crime and perceptions of safety, as well as respondents' awareness of their police posts and satisfaction with commune police.

Sample design

As CCJAP III provided targeted police post support among communes benefitting from other project activities, it was not possible to randomize the beneficiary and control groups. Angkor Research purposively selected communes from among a list of those that received support to construct a police post during CCJAP III (the "treatment" group). Selection was based on a number of indicators:

- Construction of police posts around the same time, so that all respondents would have exposure to the treatment for the same amount of time;
- Construction of police posts after 2011, to reduce errors in memory recall before the police posts were built;
- Geographical diversity, to represent multiple areas of the country.

Using these criteria, five communes with police posts constructed in Dec. 2011 were selected; one each in Banteay Meanchey, Battambang, Kampong Cham, Kampong Speu, and Prey Veng provinces. These provinces represent three of the four geographic areas of Cambodia. The only geographic area not represented is the Coastal zone, which is also the least populous zone in the country.[1] They thus provide a geographically diverse portrait of crime and community safety indicators.

After selection of CPCS beneficiary communes with police posts, communes which had no police posts were selected as the "control" group. By looking at communes which are similar to the treatment communes but do not have police posts, we try to understand what would have happened if police posts had not been built in treatment communes. One control commune was selected for each treatment commune, based on a number of factors. The control communes were selected for their similarity to the treatment communes, to reduce natural differences in crime and safety likely to occur between geographical and administratively separate communes. The indicators for selection of control communes were (in order of importance):

- Lack of an independent commune police post building;
- Administrative proximity to the treatment commune (within the same administrative district/province);
- Geographical proximity to the treatment commune;
- Similar population density (urban/rural classification) to the treatment commune.

[1] The World Bank divides Cambodia into four zones, based on similar geographic and socioeconomic conditions: the Plains/Central zone (Kampong Cham, Kandal, Prey Veng, Svay Rieng and Takeo); Tonle Sap zone (Kampong Thom, Siem Reap, Banteay Meanchey, Battambang, Pursat, and Kampong Chhnang); Coastal zone (Koh Kong, Kampot, Krong Preah Sihanouk and Krong Kep); and, Plateau/Mountain zone (Oddar Meanchey, Preah Vihear, Stung Treng, Kratie, Ratanakiri, Mondolkiri, Kampong Speu and Krong Pailin).

Adjacent communes within the same administrative district are ideal as control communes, as they reduce many of the variations which can affect the indicators. However, in two of the provinces, selection of an adjacent control commune was not possible. In Kampong Speu, the control is a non-adjacent commune within the same district, because it is the only commune in that district without a police post. And in Prey Veng, where all communes in the selected district had recently constructed police posts, the control commune was an adjacent commune in an adjacent district, which was also rural and located along the main road.

The sample for this survey was designed to understand the effects of police posts on the entire commune population. As such, four villages (clusters) in each commune were selected: the village with the police post (or where police officers are currently stationed, in control communes); two villages that are close to the police post; and, one village within the commune that is far away from the police post. Villages were chosen for proximity based on provincial maps created by the Ministry of Planning, and updated in 2011. When more detail was required (e.g., in areas with high population density), the Cambodian Atlas was referenced, to find the exact distances between villages.

Table 2: Sample distribution

	Treatment		Control			
Province	**Villages**	**Households**	**Villages**	**Households**	**Total (HH)**	**Percent**
Banteay Meanchey	4	80	4	80	**160**	20%
Battambang	4	80	4	80	**160**	20%
Kampong Cham	4	80	4	80	**160**	20%
Kampong Speu	4	80	4	80	**160**	20%
Prey Veng	4	80	4	80	**160**	20%
Total	**20**	**400**	**20**	**400**	**800**	**100%**

Within the clusters, systematic random sampling was used to select the households to be interviewed for this survey. Random sampling at the household level was conducted using a modified version of the Expanded Program for Immunization Random Walk (EPI-Walk) method. Using this method, the village population was ascertained and a sampling interval was calculated based on the pre-determined required number of household interviews (20) and the current number of households, as provided by the village chief.

A sketch map of the village was drawn in collaboration with the village chief, showing approximate locations of all dwellings within the village boundaries. All roads and paths in the village were included in the map. Four to six key intersections in the village and on the boundaries were identified and numbered, and one was chosen at random as the starting point. Fieldwork teams began interviewing at the house closest to this chosen intersection.

From this starting point, researchers turned right and walked down the road/path selecting every n^{th} household based on the sampling interval. At the end of the road they turned around and returned on the

opposite side of the road, continuing the count. Whenever the interviewers came to an intersection, they always turned right. In this way the entire village was covered and all households had an equal chance of being included in the sample.

Questionnaire

The questionnaire was designed by the Angkor Research team to objectively measure the impact of police post construction on indicators of crime prevention and community perceptions of safety. It consists of 6 sections:

- Respondent information;
- Experiences with crime;
- Perceptions of crime;
- Community safety;
- Police post knowledge, attitudes and perceptions;
- Police involvement in the community;

Some sections of the questionnaire were modified from templates developed for similar surveys of the Crime Prevention and Community Safety (CPCS) and Community Policing projects of CCJAP III.

The questionnaire was designed in English, translated into Khmer, and then pre-tested twice in a rural commune close to Phnom Penh to ensure that the instrument is collecting valid data, and that both field staff and respondents understand the questions and response codes. One pre-test was conducted with the field supervisors and editors involved in this study, and the second pre-test was conducted during the field staff training with all field staff and alternates selected for the data collection phase of this project.

Data collection

All field staff and alternates selected to participate in this survey underwent training for five days in January, 2014, at the Angkor Research office in Phnom Penh. The field staff were trained on the final instrument, and conducted the second pre-test at the end of the training. Staff were also trained in appropriate interview techniques, household sampling procedures, and data collection methods, as well as ethical issues.

Interviews for this survey were conducted by two field teams at the end of January, 2014. A total of 804 interviews were conducted with selected respondents in the 40 target villages.

Fieldwork was overseen by the Research Director, and directly supervised by the Fieldwork Director. As the Fieldwork Director was also a supervisor, he was in the field with the teams for the entirety of the survey. When not in the field, the Research Director was in daily telephone contact with both the Fieldwork Director and the other supervisor. There were no significant problems with the field data collection.

Supervisors and Field Editors used field reporting forms to manage data collection. In the field, Supervisors and Editors conducted spot checks, re-interviews and/or direct observations of 20% of all interviews to ensure data quality. The Editors also checked all questionnaires before leaving each cluster. Each team reported in from the field at the end of each day with the total completed interviews and any non-

responses. These figures were tabulated and sent back out to all field staff, the Research Director, and relevant CCJAP staff the next morning via SMS, with both the previous day's fieldwork results and a running total for each team.

Data processing and analysis

After fieldwork, data was entered into a specially designed data entry tool using CSPro (Census and Survey Processing System) software by trained data encoders. All questionnaires were entered twice by different data encoders (double data entry). The two datasets were then reconciled, and all entries checked for inconsistencies. The Data Manager then verified and corrected all inconsistencies by comparing the datasets with the completed questionnaires. Checks and error messages for legal values, validation rules and queries for internal consistency checks were also performed**.** Simple cross tabulations allowed us to check and either explain, correct, disregard or delete incorrect values.

All quantitative data was analysed using Stata statistical analysis software. Descriptive analysis and cross tabulations were conducted for all metrics. Qualitative data was translated into English by our in-house editors, and then recorded in CSPro. It was cleaned and recoded by the Data Manager/Analyst with the support of the Research Director. Qualitative data was analysed for prevailing trends by the Data Manager/Analyst.

Because not all questions are valid for all respondents, and some questions may have multiple answers from each respondent, the sample size for each question can be different than the overall size of the survey sample. This sample size is expressed as "n", and is provided in the text when referring to an indicator that is different from the survey response rate, or where the sample size may be unclear. The n is also provided for tables and graphs, and provides a way for readers to understand the nature of that response.

Analysis of quantitative data was conducted using a difference-in-difference (DID) design, which shows changes in the representative treatment and control populations over time, and allows us to determine whether changes in the treatment group differed significantly from those in the control (and can thus be correlated with the construction of police posts), or were consistent with the changes in control. For further explanations of DID analysis techniques, see Annex 2.

Informed consent and confidentiality

Due to the sensitive nature of this research, multiple measures were implemented to ensure the confidentiality and anonymity of respondents. First, no identifying information about respondents was recorded by field staff. Names, addresses and telephone numbers of respondents were not recorded on the questionnaire. Individual respondent information is not included in the report or annexes.

Second, all data has been aggregated to present results by treatment/control groups, rather than at the village or household level. Thus, identifying individual responses or acts of crime is not possible by examining the survey results.

At the start of the interview, respondents were informed of the purpose and nature of the survey. Respondents were aware that they could refuse to participate or cancel the interview at any time during

the process. The interviewer then requested the verbal consent of each respondent to conduct the interview.

Limitations

There are many difficulties with predicting the effects of an intervention on the entire population of a community, especially as it concerns crime and safety. First, all data collected for this survey was self-reported by respondents, who may have over-reported or under-reported crimes for many reasons (forgetfulness, loss of face, hope of additional support, fear of retribution, etc.).

Second, because rates of crime and reporting among the general population are low, the number of individual crimes committed in each category does not generally allow us to analyse the results in a statistically significant way. In many cases, the crimes and reporting have been aggregated into more general categories (e.g., all thefts, all violent crimes, etc.) to provide a more statistically powerful result.

Third, people are more likely to remember a negative experience than a positive or neutral one, referred to as the negativity bias.[2] Thus, when asked to quantify their perceptions of safety and satisfaction with police, respondents may be more likely to focus on a single negative experience with individuals or police in their community, rather than positive or neutral experiences of the same weight. The findings on respondent perceptions of safety and satisfaction with police should be considered in this context.

Lastly, DID analysis requires us to assume that the treatment and control groups would have similar trends in crime and safety over time, except for the influence of the treatment. However, there are many factors which can confound the results of an impact evaluation. National and local trends in crime and perceptions of safety can influence all or some selected communes, reducing the treatment effect. In general, Cambodia has reported a reduction in crime since 2000.[3]

In addition, although the control communes were selected for their geographic and administrative similarity to treatment communes, they are still individual communities, with unique variations. Reports from field staff showed that both treatment and control communes had localized issues which they attributed to increased crime. These included large numbers of ethnic minorities or other groups (such as day labourers in a local industry) that were often blamed for crime in these communes. Either the actual influence of these groups, or a resulting negativity bias, could have impacted crime rates and perceptions of safety reported by respondents. In addition, treatment communes may have received support from CCJAP III to conduct multiple activities, in addition to construction of police posts. If so, it is not possible from this research to determine which of these activities had the most effect.

[2] For more information on negativity bias, see Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). *Bad is stronger than good*. Review of General Psychology, 5, 323-370.
[3] Broadhurst, R. and Bouhours, T. (2009). *Policing in Cambodia: Legitimacy in the making*. Policing & Society, 19(2), 174-190.

Sample Characteristics

The survey enjoyed a very high response rate, with 99.26% completed interviews. Out of the total 806 individuals selected for the survey, 4 respondents refused to be interviewed, one was absent despite three attempts to interview them, and one interview was incomplete (Figure 1). A total of 800 interviews in 5 provinces were thus completed during the field survey (Table 3).

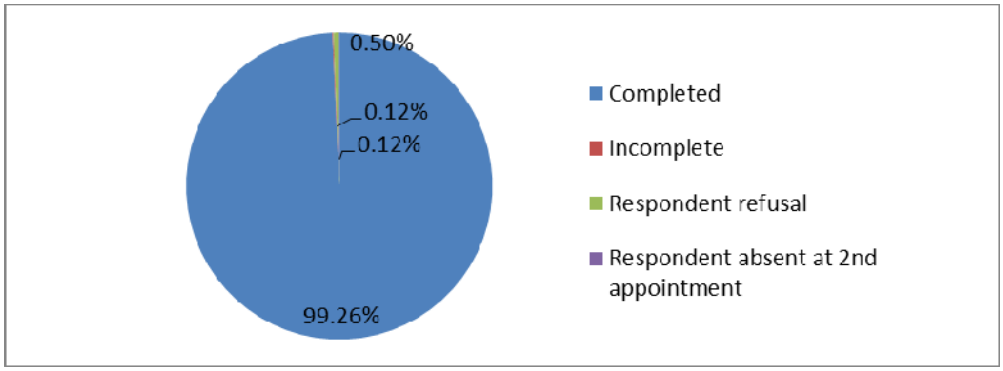

Figure 1. Response rate for target sample (n=806).

Table 3. Breakdown of household interviews, by province.

Province	Treatment	Control	Total	Percentage
Banteay Meanchey	80	80	160	20%
Battambang	80	80	160	20%
Kampong Cham	80	80	160	20%
Kampong Speu	80	80	160	20%
Prey Veng	80	80	160	20%
Total	**400**	**400**	**800**	**100%**

Sample demographic information

The final sample consists of 272 males and 528 female respondents. The treatment and control samples are not statistically different in terms of the male-female ratio (66% female in both groups; Figure 2),[4] and the sex of the head of respondent households (69% female in both groups; Figure 3).[5]

[4] Chi-squared test for male-female ratio was not significant (χ^2=0.0223, df=1, p=0.881).
[5] Chi-squared test sex of household head was not significant (χ^2=0.0059, df=1, p=0.939).

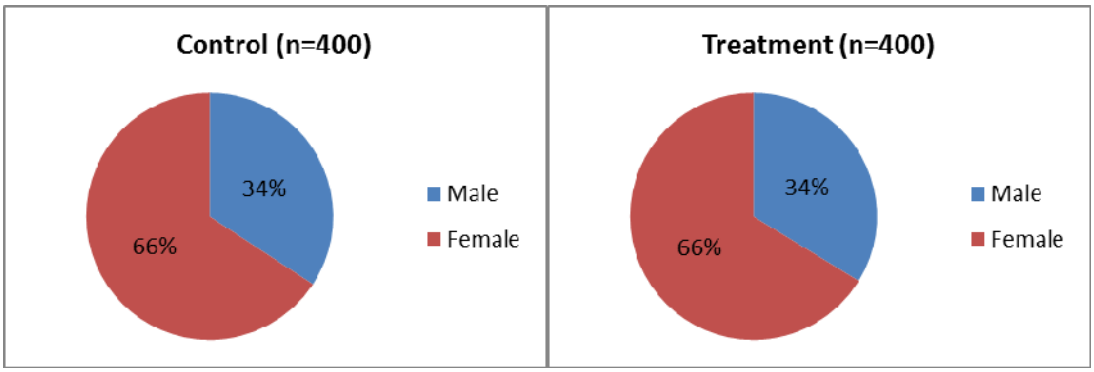

Figure 2. Sex of respondents.

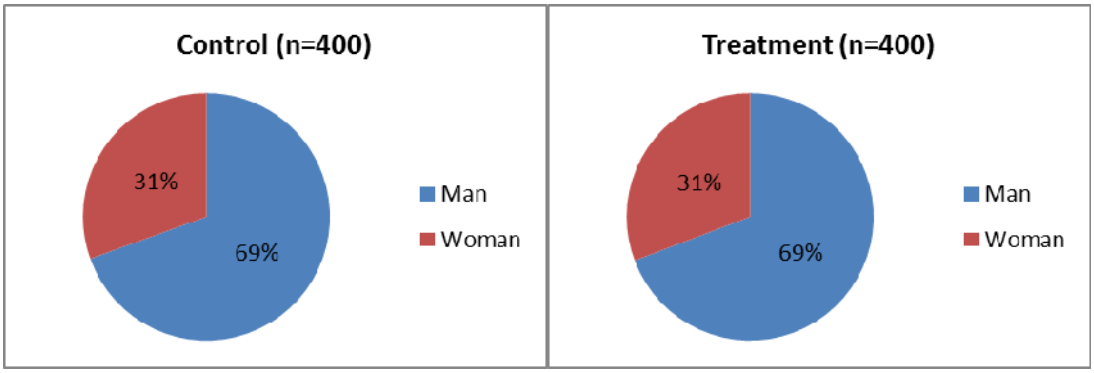

Figure 3. Sex of respondent household head.

The age pyramid for both population groups is displayed in Figure 4. Once again, both groups show a similar age structure,[6] both with an average age of 46 years old. The gap observed in the 35-40 year-old age category can be attributed to the low birth rates and loss of life during the Khmer Rouge period, from 1975-1979.

[6] T-test was not significant (t=-0.0873, df=798, p=0.9305, two-tailed).

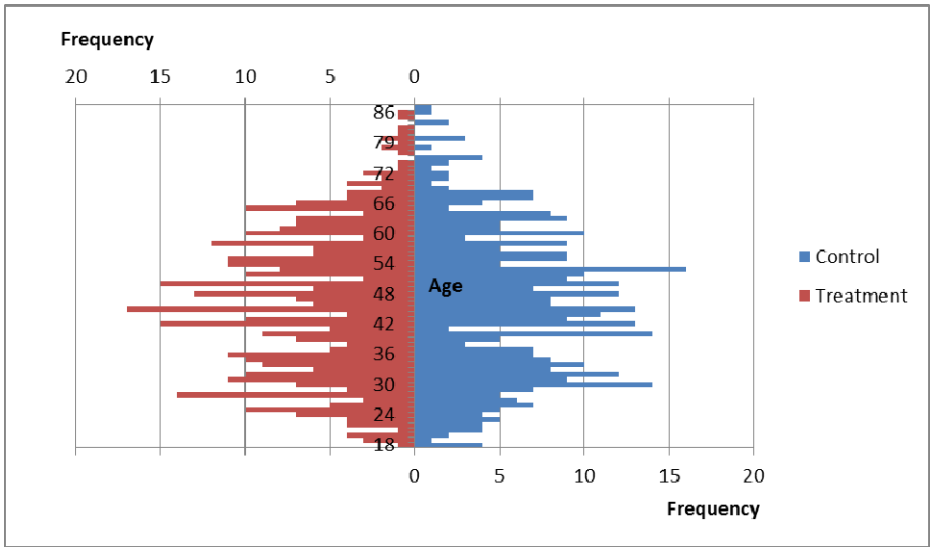

Figure 4. Respondent age pyramid (n=800).

Respondents in the control communes have lived there for an average of 32.9 years, whereas those from treatment communes lived there for 28.8 years (Figure 5). The highest frequencies were at 35 years of residency (around 40 respondents in treatment communes, and 38 respondents in control communes), and correspond to the post-Khmer Rouge period of internal migration, when people were able to move freely around the country. Many families at that time returned from forced relocation sites or refugee camps, settling back in their home villages or permanently moving to other areas of the country.

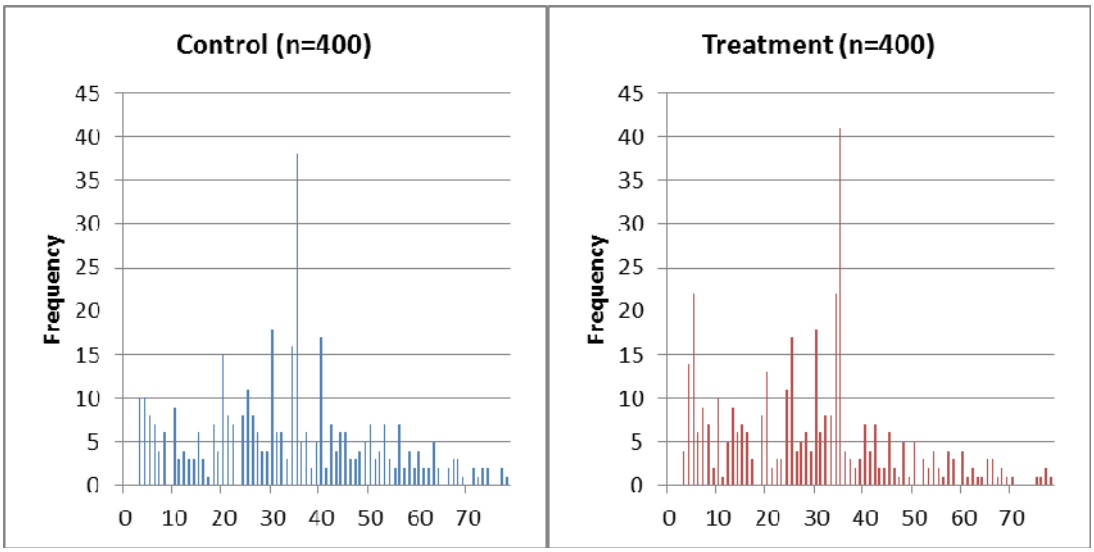

Figure 5. Number of years resident in village.

Relation to police and government officials

44% and 37% of the treatment and control households, respectively, mentioned being related to a police officer or other government official. The chi-squared test showed that the treatment and control groups are statistically different for this parameter ($p<0.05$).[7]

However, the two populations are not statistically different in the kinds of police/officials they are related to (Figure 6).[8] Most of the time, the concerned households are related to government officials; only 15.8% and 12.5% of all respondents in treatment and control groups are related to police officers.

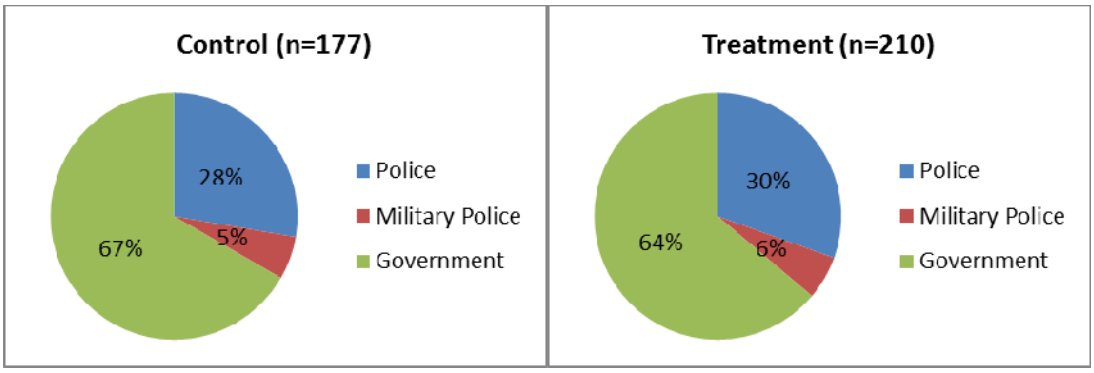

Figure 6. Relation to police/government officials.

Education

Three-quarters of all respondents (78.4%) mentioned having attended school, divided evenly between the treatment and control groups (314 and 313 respondents, respectively). In terms of educational level, the difference between the two groups is not significant.[9]

In treatment areas, respondents completed an average of 7 grades of school, while in control communes the average was 6 grades (Figure 7). The chi-squared test for this parameter reveals that the two groups are statistically different in terms of their educational level, and that this difference is not due to chance between the different grades ($p<0.01$).[10]

[7] Chi-squared test was significant ($\chi^2=4.0668$, df=1, p=0.044).
[8] Chi-squared test was not significant ($\chi^2=0.3776$, df=2, p=0.828).
[9] Chi-squared test was not significant ($\chi^2=0.0074$, df=1, p=0.932).
[10] Chi-squared test was significant ($\chi^2=28.5527$, df=13, p=0.008)

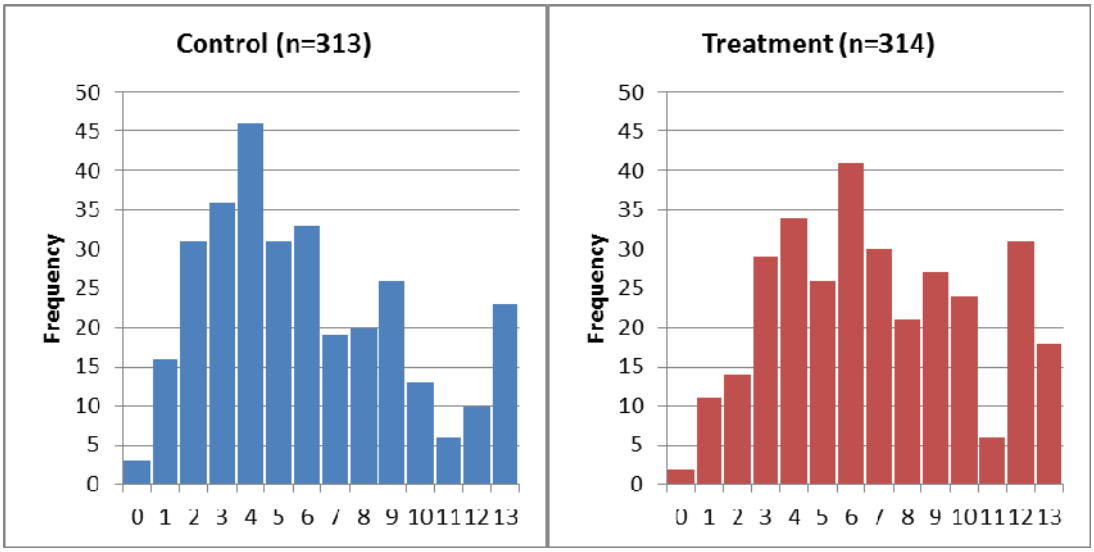

Figure 7. Highest education level completed.

Household wealth ranking

Angkor Research used the wealth index originally developed by members of our team in 2005, and used in numerous surveys since then, to calculate the wealth distribution of respondents in this survey. This index is fast and easy to administer in the field, making it an ideal addition to other metrics, and is very well correlated to other wealth ranking methodologies, such as IDPoor. This index comprises six components, whose weighted values are computed to obtain a final wealth score, ranging from 1 to 19. The detailed methodology for the wealth index can be consulted in Annex 1.

The wealth scores obtained for this survey follow a classic bell-curve distribution, slightly skewed towards richer households (Figure 8). The lowest score recorded is 1 (2 households), while the highest score is 17 (n=1). The highest scores observed are from 14 to 17 (corresponding to 105 households), which can largely be attributed to households living in the two targeted communes in Kampong Cham province. These communes are located in highly developed urban areas, which are usually wealthier than rural areas in Cambodia. The mean wealth score for all respondents is 10.13, and the median is 10 (standard deviation=3.02).

We used these wealth scores to group respondents into three wealth group categories: the poorest, the poor and the better-off groups. The poorest and the better-off classes are chosen to correspond as much as possible to the lowest and the highest quintiles, respectively. In other words, each of these two categories represents around 20% of the sample population. Therefore, the wealth group categories were determined as follows:

- Poorest = wealth score ≤ 7. This category represents 19.1% of the survey population.
- Poor = 8 ≤ wealth score ≤ 12. This category represents 59.5% of the survey population.
- Better-off = wealth score ≥ 13. This category represents 21.0% of the survey population.

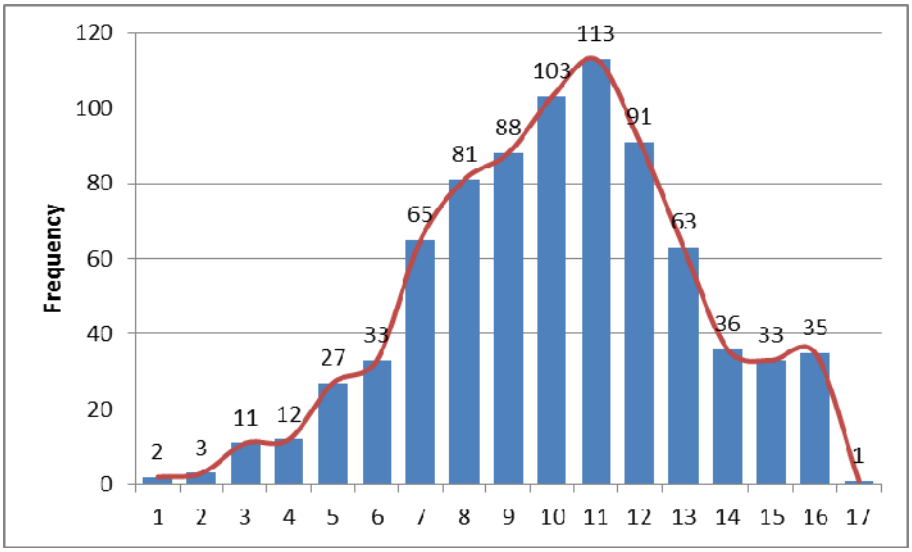

Figure 8. Wealth ranking, by respondent households (n=797).

The wealth group segmentation for the control and treatment populations is given in Figure 9. The chi-squared test indicates that the two groups are statistically different for this parameter ($p<0.05$).[11]

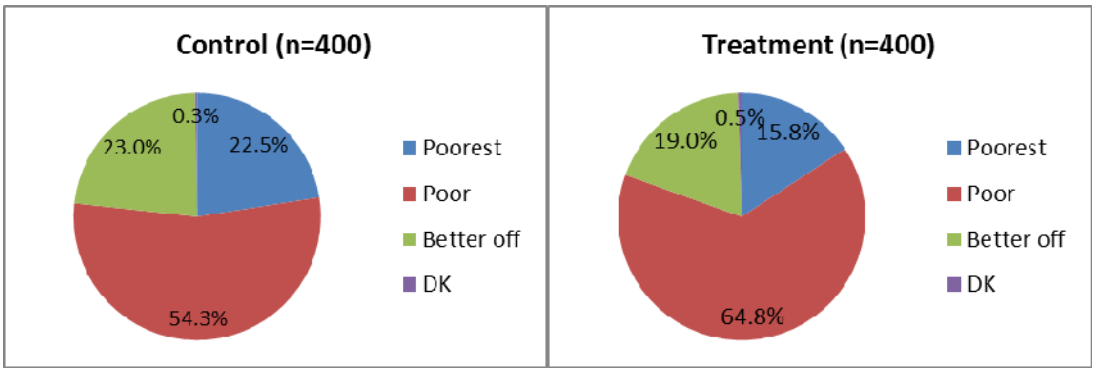

Figure 9. Wealth group categories within the control and treatment populations (control missing=1; treatment missing=2).

To check if wealth parameters could have an effect on the survey outcomes (a possible bias, as the wealthiest/poorest people could feel more/less safe in their community because of their economic situations), we tested the trend rates using difference-in-difference (DID) analysis for the total number of crimes mentioned and general feelings of safety, excluding both the better-off and the poorest groups. The results concern exclusively the "poor" segment of the population (59.5% of the sample), and were very similar to those obtained for the whole sample population, which shows that for these parameters, differences in wealth did not bias the survey outcomes. It also indicates that the respondents have more or less the same experiences with crime and perceptions of safety, regardless of their economic situations.

[11] Chi-squared test was significant ($\chi^2=10.3277$, df=3, p=0.016).

Similarly, we tested the influence of the extreme wealth groups (poorest and better-off) on satisfaction with police posts, and satisfaction with the police in general. Once again, the results obtained were very close to those calculated over the whole sample population. People perceive police posts, and the police in general, in the same way regardless of their economic situation.

Experiences with Crime

Frequencies of crime were measured by asking respondents how often their household members were the victims of crime, and how many times those crimes occurred in 2011, 2012 and 2013. Then, respondents were asked whether they had reported these crimes, where they reported them (commune police, village authorities, judicial system, etc.) and the final outcomes from these reports, if any.

Six categories of crime were addressed, each with a number of sub-categories. The categories of crime selected for inclusion in this survey were based on a number of factors. First, the Cambodian Criminal Code was consulted, to understand the types of crimes and how they are defined in the country. This was then compared with the definitions of crime in other countries (including Australia and America). Lastly, a list of these crimes was compiled, including both serious crimes (felonies) and minor crimes (misdemeanours), and edited for the survey context; that is, only crimes considered relevant to the local Cambodian households selected for survey interviews were included in the final questionnaire. For example, although cybercrimes are serious, it is unlikely that the target population for this survey will report being a victim of this type of crime.

Within each category of crime, a number of sub-categories were listed, based on research staff's previous experience with this module, and the most frequently given answers in the pre-tests of the questionnaire.[12] For example, the fraud category covers such crimes as: "defrauding someone about the amount of money you will pay them"; "selling something for an above normal price"; "providing false information"; and, "borrowing money and fleeing/leaving the village". An "other" answer category was also included for each question on crime, for respondents to report any crimes which were not included in our questionnaire. Because of the low frequency of crimes in each sub-category, in the analysis phase we aggregated the crimes from each sub-category, to get a total number of crimes in each category.

In this section, we first report the situation for all crimes, and secondly detail the trends for each category. Control and treatment groups are always separated, and DID analysis shows the impact of police post construction in treatment communes on crime in those areas, and its statistical significance. Finally, we show the trends in crime reporting, and the corresponding outcomes.

All crime

Each year, nearly one-third of all households (31.5%) reported that they were victims of at least one crime. More households in both groups were victims of crime in 2011 (n=293) than in subsequent years. Overall, the number of crime victims showed a net decrease of 37, corresponding to a 12.6% decrease over the three years studied. This follows the general trend of decreasing crime in Cambodia. Although there were more victims in treatment communes before the new police posts were built, the number of victims declined more rapidly in these areas than in control communes (13.7% vs. 11.4%).

[12] A similar section on crimes experienced by respondents was used for the impact evaluations of the CPCS and Community Policing projects of CCJAP III from 2009-2012.

Table 4. Number of households that were victims of at least one crime.

Victims	2011	2012	2013	Diff. 2011-2013	% diff.
Control	140	101	124	16	11.43%
Treatment	153	106	132	21	13.73%
Total	**293**	**207**	**256**	**37**	**12.63%**

Victims reported a total of 998 crimes in 2011, 560 in 2012 and 589 in 2013. Treatment communes reported more crimes in 2011 (before construction of police posts) than control communes, but crimes in these areas declined by over half in 2012 (50.5%; Figure 10) before rising slightly in 2013, for a net decline of 44.8% in the 2 years after the police posts were built. The control group observed an absolute decrease in crimes committed of 36.4% over the same time period.

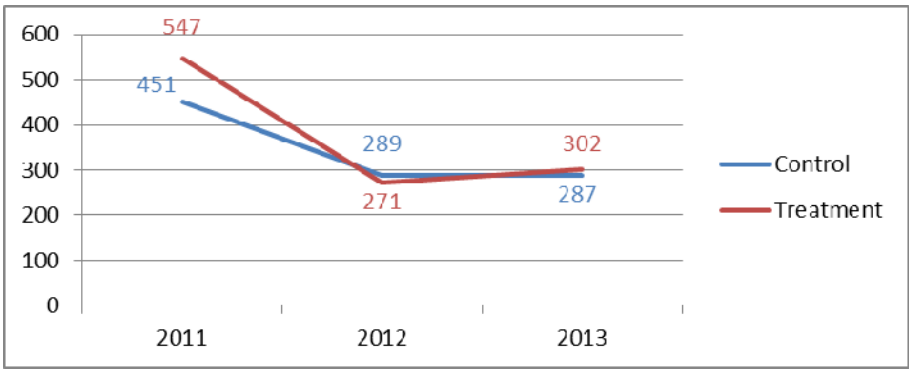

Figure 10. Number of all crimes experienced by households (n=800).

First, DID analysis was conducted on the crime rate between 2011 and 2012. This is the time when crime showed the largest decrease. Thus, construction of police posts may have influenced crime rates more the first year that it was built (2012) than in subsequent years. Table 5 shows that the treatment effect in 2012 is a decrease of 0.285 crimes per household, indicating that new police posts potentially decreased crime in treatment communes by 29.6% compared to the counterfactual for 2012. The p-value, although lower than in the 2013 DID analysis, is still not significant at the 10% level (p>0.1).

Table 5. Difference-in-difference analysis of all crimes/respondents, from 2011 to 2012.

	2011			2012			
	Control	**Treatment**	**Diff(BL)**	**Control**	**Treatment**	**Diff(FU)**	**DID**
All crime	1.127	1.368	0.24	0.723	0.677	-0.045	-0.285
Std. error	0.133	0.133	0.189	0.133	0.133	0.189	0.267
t	8.46	2.93	1.27	-1.91	-1.18	-1.27	-1.07
P>t	0	0	0.203	0	0	0.811	0.285

R-square: 0.01148

Figure 11 shows the absolute trend in the average number of crimes per respondent households, in both treatment and control communes along the entire time surveyed (2011 to 2013). The counterfactual line

represents the crime rate in treatment communes if no police posts had been built in 2011. The potential effect of police post construction, the DID, is then the difference between the treatment and the counterfactual values in 2013. This graph and its corresponding table (Table 6) show that there has been a decrease in crime of 0.203 crimes per household from where it otherwise would have been in 2013 if the police posts were not built. This correlates to a reduction in crime of 21.2% attributable to police posts in the 2 years after they were first built.[13] However, these results should be considered carefully, as the high p-values indicate that the police posts may not have caused these effects (p>0.1). That is, these changes may have been due to confounding factors, such as changes in administrative or economic situations, or chance. But, we can say that the construction of new police posts has had a potentially stronger effect on crime from 2011 to 2012 than from 2011 to 2013.

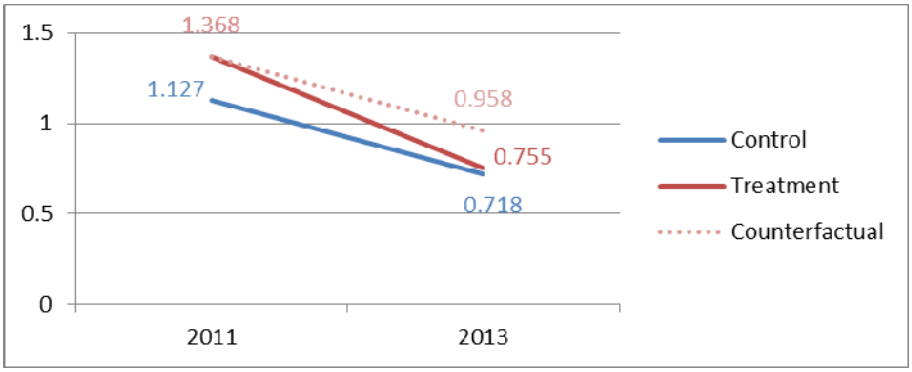

Figure 11. Average crime rate per household, 2011 to 2013, with counterfactual (n=800).

Table 6. Difference-in-difference analysis of all crimes/respondents, from 2011 to 2013.

	2011			2013			
	Control	**Treatment**	**Diff(BL)**	**Control**	**Treatment**	**Diff(FU)**	**DID**
All crime	1.127	1.368	0.24	0.718	0.755	0.037	-0.203
Std. error	0.127	0.127	0.18	0.127	0.127	0.18	0.255
t	8.85	3.01	1.33	-2.09	-0.63	-0.88	-0.79
P>t	0	0	0.183	0	0	0.835	0.427

R-square: 0.01111

Crime reporting

More than 80% of victims do not report crimes to the police or other authorities (Figure 12). 2012 was the lowest year for crime reporting; around 87% of victims in 2012 did not report the crimes. However, from 2011 to 2013, reporting among victims in the treatment group increased 26.7% (from 15% to 19%), while reporting decreased in the control group by 5.9% in the same period.

[13] 21.2%=100*0.203/(0.718+0.24), where 0.203 is the DID and (0.718+0.24) is the counterfactual value at endline.

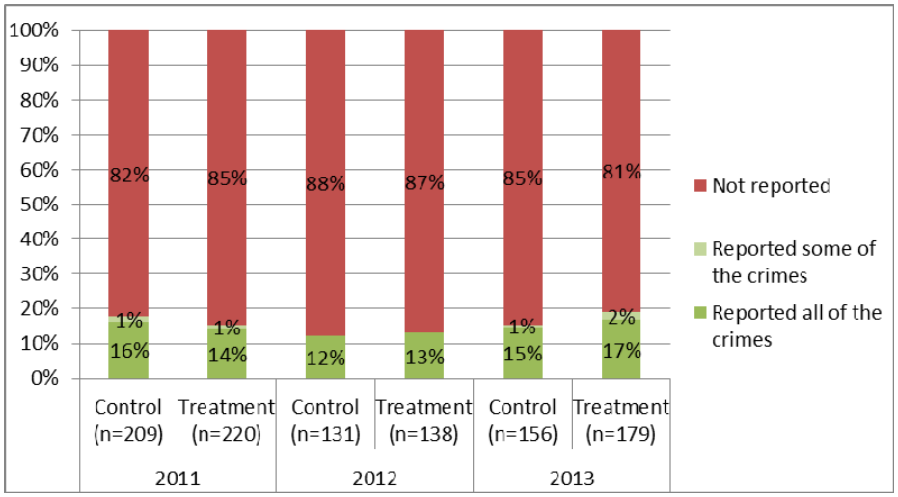

Figure 12. Crime reporting, by victims of types of crime.

Table 7 shows the number of crimes reported to authorities by victims of different types of crimes. Victims primarily report crimes to their local police, although the village chief also receives many reports of crimes. Less than half of victims that reported crimes in treatment areas reported to the police in 2011. However, after the new police posts were built, reporting to police increased 50.2% in these communes over the next two years. In control communes, most victims that reported crimes did so to the police, although this number declined 17.8% from 2011-2013. The decision of where to submit a report may also depend on the severity of the crime.

Table 7. Percent distribution of crime reporting to authorities, by victims of types of crime (n=184).

	2011		2012		2013		
	Control (n=42)	**Treatment (n=39)**	**Control (n=17)**	**Treatment (n=19)**	**Control (n=31)**	**Treatment (n=36)**	**Total**
Village chief	23.8%	38.5%	23.5%	21.1%	29.0%	27.8%	**28.3%**
Police	66.7%	46.2%	76.5%	57.9%	54.8%	69.4%	**60.9%**
Other government staff	0%	5.1%	0%	0%	12.9%	2.8%	**3.8%**
Any court	9.5%	10.3%	0%	10.5%	0%	0%	**5.4%**
Military police	0%	0%	0%	5.3%	0%	0%	**0.54%**
Other	0%	0%	0%	5.3%	3.2%	0%	**1.1%**
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

We also notice that the number of crimes reported per crimes committed has increased from 2011 to 2013, especially in treatment communes, where this ratio has increased by nearly two-thirds (63.7%; Figure 13). However, in 2013, more than 80% of crimes were still not reported to authorities. Over the three years studied, only 7.20% of 2,556 crimes mentioned by respondents were reported to authorities.

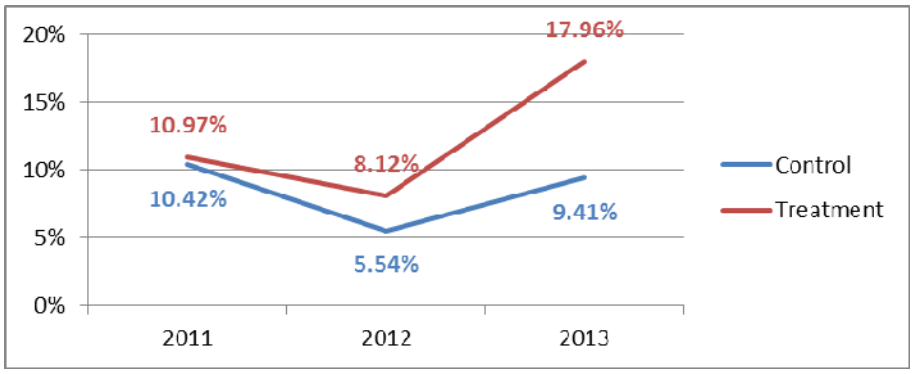

Figure 13. Percentage of crimes reported, by all crimes committed.

Table 8 gives the results of the DID analysis for all crimes reported, as a ratio of crimes experienced, among respondents who were victims of crime. Construction of police posts has potentially increased reporting of crime among victims by 50% (0.062 reported crimes per victim). Although this result is not statistically significant (p>0.1), it is one of the strongest findings in the survey.

Table 8: Difference-in-difference analysis of crimes reported/crimes experienced, among respondents who experienced crime, from 2011-2013.

	2011			2013			
	Control	Treatment	Diff(BL)	Control	Treatment	Diff(FU)	DID
Crime reporting	0.149	0.117	-0.032	0.156	0.186	0.03	0.062
Std. error	0.029	0.028	0.04	0.031	0.03	0.043	0.059
t	5.1	-1	-0.8	0.37	2.18	1.4	1.04
P>t	0	0	0.425	0	0	0.494	0.297

R-square: 0.00518

Respondent victims that reported crimes were then asked whether the problem had been resolved after the report had been given. That is, did the authority where the victim reported the crime solve the problem? In most cases, authorities in both treatment and control communes helped to solve most crimes that were reported to them. The lowest resolution rate was in treatment communes before the new police posts were built (2011). Since then, the number of reported crimes in treatment communes which were entirely resolved by authorities has steadily risen to 91% of all crimes reported in 2013. While the resolution rate in control communes was already high in 2011, the rate in these areas has decreased slightly over the 3 years studied (Figure 14).

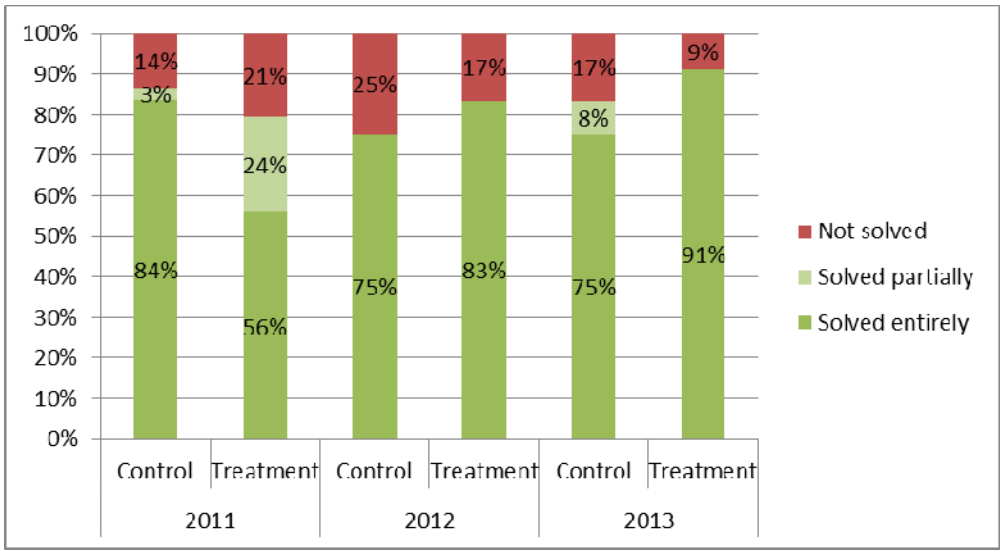

Figure 14. Percent distribution of crime reporting outcomes, by crimes reported.

In the next sections, we give the detailed statistics for each category of crime that households reported.

Violent crime

Violent crime is generally considered to be any crime where force or bodily injury occurs, either in isolation or as part of another crime (such as robbery). The questionnaire listed six main sub-categories of violent crime, as well as an "other" option for respondents to describe any crimes not explicitly listed:

- Killing someone (murder);
- Raping someone (sexual assault);
- Shooting someone with a gun;
- Stabbing someone with a knife or other sharp object;
- Hitting someone with another object, such as a stick;
- Hitting/kicking someone.

Crimes reported could have been committed against either the direct respondent, or against a member of their household.

Overall, there were very few violent crimes described by the respondents, with an average of 15 violent crimes reported among all respondents each year. The most commonly experienced violent crime was being hit with a hand/kicked, with more than half of all violent crimes reported in the survey (63.6%; 15 incidents in 2011, 3 in 2012 and 10 in 2013). The second most common violent crime was being hit with something (22.7%), followed by rapes (0.9%; 4 incidents total) and stabbings (2 incidents). One respondent also reported being tied up by an assailant before being robbed of his moto in 2013.

The number of violent crimes in treatment communes decreased dramatically the first year after police posts were built (86.7% decrease between 2011 and 2012), compared to a 66.7% decrease in control communes. By the second year after the posts were built, violent crimes were still 53.3% lower in treatment communes than 2011, but had returned to the same level in control communes (Figure 15).

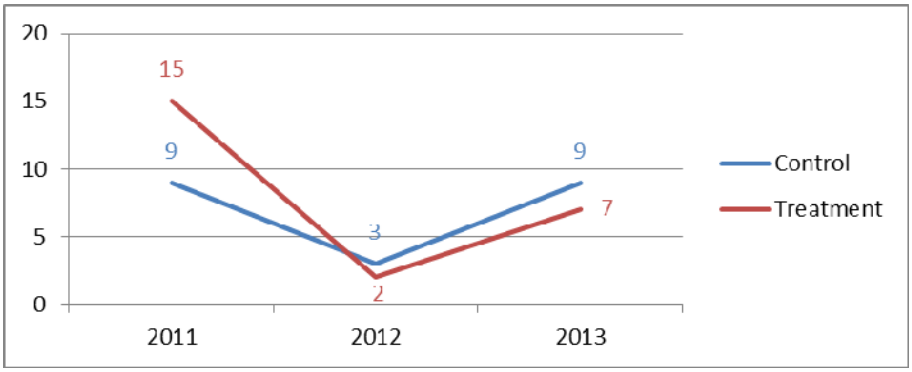

Figure 15. Number of violent crimes experienced.

Table 9 shows that the construction of police posts has potentially decreased the average number of violent crimes per respondent by around 0.02, or 52.6%. This number should be considered carefully, as we cannot be confident this result was due to the construction of police posts (p>0.1).

Table 9. Difference-in-difference analysis of violent crimes/respondent (n=800).

	2011			2013			
	Control	Treatment	Diff(BL)	Control	Treatment	Diff(FU)	DID
Violent crime	0.022	0.037	0.015	0.023	0.018	-0.005	-0.02
Std. error	0.008	0.008	0.012	0.008	0.008	0.012	0.016
t	2.74	1.85	1.29	0.02	-2.4	-1.71	-1.22
P>t	0.006	0	0.196	0.006	0.033	0.666	0.223

R-square: 0.00209

Unfortunately, not all violent crimes were reported to authorities. Crime reporting may depend on the perceived severity of the crime. The most common violent crime in the survey, being hit with a hand/kicked, was not commonly reported, possibly because it was not considered "serious enough" by victims to warrant a formal complaint. On the other hand, a stabbing victim reported this crime two times, to two different authorities.

In treatment areas, reporting among victims increased from less than half (46.2%) of victims before the police posts were built, to 100% of violent crime victims reporting in 2013 (Table 10). The number of violent crime victims reporting in control communes stayed the same between 2011 and 2013. However, the total sample size here is too low to make a statistical analysis.

Table 10. Violent crime reporting, among victims of violent crime.

	2011		2012		2013	
	Control	Treatment	Control	Treatment	Control	Treatment
Not reported	2	7	2	1	2	0
Reported all crimes	7	6	1	1	7	7
Reported some crimes	0	0	0	0	0	0

	2011		2012		2013	
Total	**9**	**13**	**3**	**2**	**9**	**7**

Table 11 indicates that most violent crimes are reported to police and village chiefs. In 2013, one respondent from a control commune also mentioned reporting the crime to the Cambodian Women's Crisis Centre, a local nongovernmental organisation (NGO).

Table 11. Number of violent crime reports made with authorities.

	2011		2012		2013	
	Control	**Treatment**	**Control**	**Treatment**	**Control**	**Treatment**
Village chief	1	2	1	0	5	2
Police	5	5	0	1	4	6
Other government staff	0	0	0	0	1	0
Any court	2	1	0	0	0	0
Other	0	0	0	0	1	0

Most victims who reported violent crimes were satisfied with the resolution (Figure 16). Authorities in treatment communes were more effective at resolving violent crimes than their counterparts in control communes.

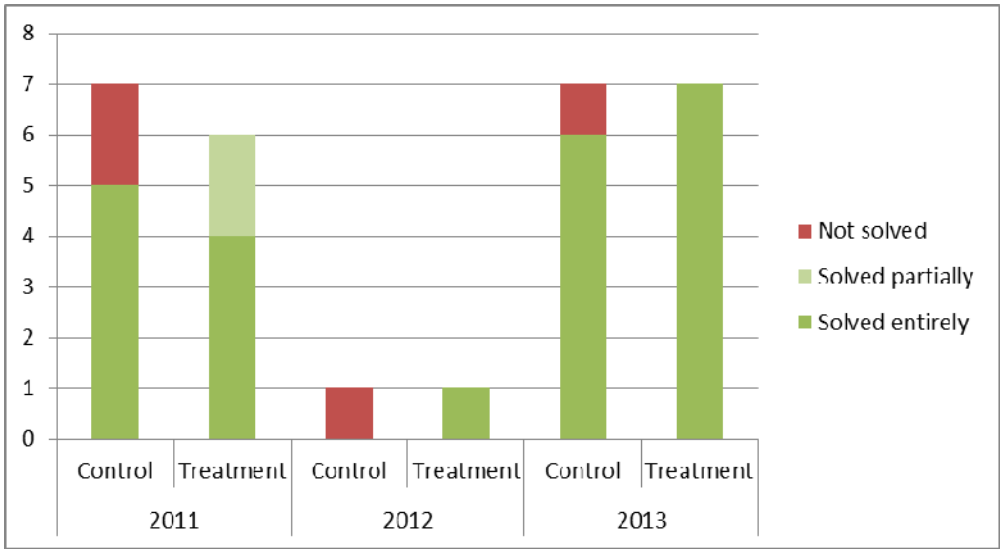

Figure 16. Outcome after reporting violent crime, by victim.

Theft

"Theft" refers to the taking of a respondent's property without their consent. The questionnaire listed 17 sub-categories, for the theft of:

- Money/gold;
- Chickens/ducks;
- Cows/buffaloes/pigs;

- Farm land;
- Bicycles/motos;
- Cloth/silk;
- Rice;
- Farm products;
- Rubber;
- Farm/fishing tools;
- Batteries (from a car, machine, etc.);
- Dogs/cats;
- Boats;
- Koyun (tractors);
- Oxcarts;
- Kitchen tools/appliances;
- Telephones/mobile phones.

There was also an "other" category, for respondents to describe the theft of an unlisted type of property.

Theft was the most common crime, with 1,019 total incidents reported in the survey. Animals were the most common good stolen, especially chickens/ducks (51.3% of all thefts) and dogs/cats (11.9%). The theft of farm products (such as fruits, vegetables and paddy rice) and kitchen tools/appliances were also common (7.8% and 7.0%, respectively). Gold and money theft were more rare, only mentioned 19 times in 2011, 3 times in 2012 and 12 times in 2013 (3.9% of all incidents).

The total number of thefts decreased dramatically from 2011 to 2013, as illustrated in Figure 17. The treatment group observed a 54.9% decrease in theft over the three years studied, compared with a 57.5% decrease in control communes. However, this difference is not statistically significant (p>0.1).

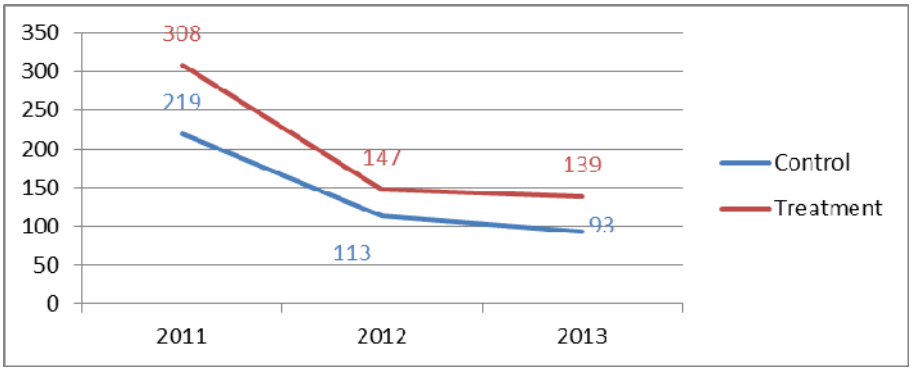

Figure 17. Number of thefts experienced.

The DID analysis shows that the construction of police posts potentially decreased the average number of theft cases per household by around 0.108 thefts per household, or 23.7% from 2011-2013. This number should be considered carefully, as the result is not statistically significant (p>0.1). However, it does follow the general trend observed in other indicators of an overall reduction in crime in the treatment communes after police posts were built.

A minority of theft cases are actually reported. The most reported theft is of chickens/ducks, which is also the most common theft in the survey. 15% of theft victims in treatment communes reported thefts to authorities in 2013, compared to 8% of victims in control communes (Table 12). There was no change in theft reporting among victims in treatment communes before and after police posts were built.

Table 12. Theft reporting, among victims of theft.

	2011		2012		2013	
	Control	Treatment	Control	Treatment	Control	Treatment
Not reported	86	75	53	51	49	55
Reported all crimes	8	11	3	3	4	6
Reported some crimes	3	2	0	0	0	4
Total	97	88	56	54	53	65

Households report thefts more frequently to their local police and village chiefs (Table 13). In 2013, thefts in treatment communes were more frequently reported to police than the village chief, whereas it was the opposite in previous years.

Table 13. Number of thefts reported to authorities.

	2011		2012		2013	
	Control	Treatment	Control	Treatment	Control	Treatment
Village chief	3	7	1	2	1	3
Police	10	6	3	0	4	7
Other government staff	0	1	0	0	0	1
Any court	0	0	0	1	0	0

There has been an improvement in the effectiveness of all authorities in helping victims resolve cases of theft (Figure 18). While in 2011, 29.2% of complainants were not satisfied with the assistance provided, especially in treatment communes, in 2013 unresolved reports declined to only 14.3% of theft victims.

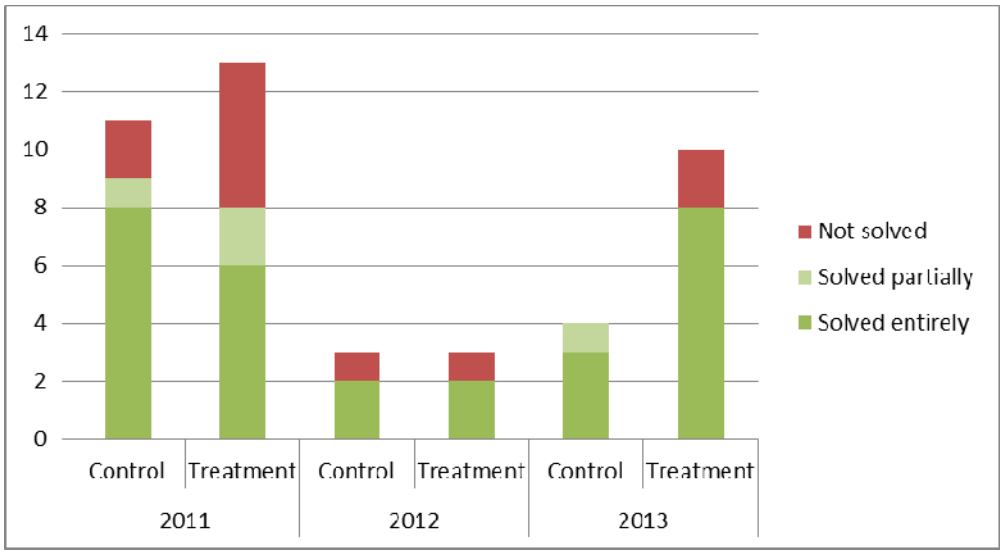

Figure 18. Outcome after reporting theft, by victim.

Danger to others

"Danger to others" refers to behaviour where an offender has endangered the life of the victim, either wilfully or recklessly. Crimes listed in this category are mostly road infractions, such as reckless driving, as other similar crimes (such as assault) are included in other categories. In addition to an "other" category, the crimes listed were:

- Reckless driving (another driver cuts you off, or drives too fast/close to you);
- Somebody shouts at you while you drive your moto/car (reckless endangerment);
- Somebody crashes into your moto/car.

Overall, the number of victims of dangerous behaviour increased slightly from 2011 to 2013 in both treatment and control communes, after a considerable decrease in 2012. The most mentioned crime in this category is reckless driving (50.7% of all incidents; 40.2% being cut off), including being cut off by another driver (92, 55 and 82 incidents in 2011, 2012, and 2013, respectively), and another driver driving too fast/close to you. Moto/car crashes steadily increased from 2011 to 2013 (from 17.4% of incidents in 2011 to 30.5% in 2013), which may be due to the increasing number of vehicles on Cambodian roads.

The total number of dangerous behaviours that occurred during the past three years is illustrated in Figure 19. Both groups follow the same general trend, but the rate of dangerous behaviours decreased more among the control group (13% decrease) than the treatment group (9%). However, this difference is not statistically significant.

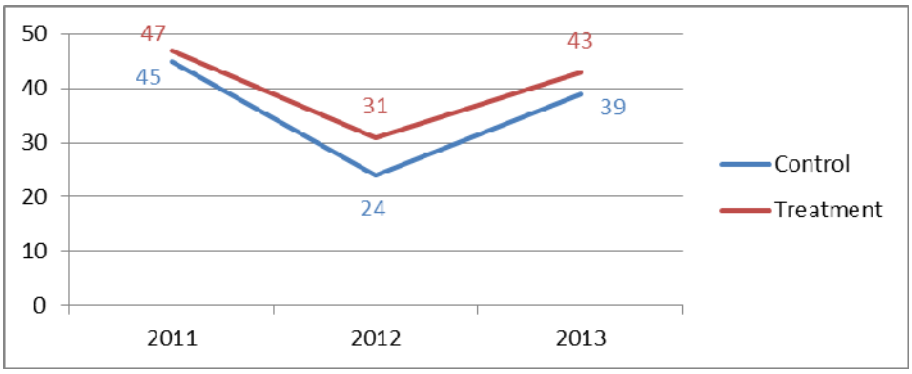

Figure 19. Number of dangerous behaviour-related crimes experienced.

The DID analysis shows that the construction of police posts has potentially had no impact on the average number of dangerous behaviour-related crimes from 2011 to 2013. The extremely high p-value (p=0.908) also indicates that there is no statistical impact of the treatment on this crime.

Table 14. Reporting of dangerous behaviour-related crimes, among victims.

	2011		2012		2013	
	Control	Treatment	Control	Treatment	Control	Treatment
Not reported	21	27	10	18	27	31
Reported all crimes	10	4	7	6	6	8
Reported some crimes	0	1	0	0	0	0
Total	31	32	17	24	33	39

Table 14 shows that a minority of crimes linked to the dangerous behaviour of other people were actually reported. Moto/car crashes were more reported, possibly because of their severity, but most crimes in this category were never reported. Except for 3 cases in 2011, all road incivilities in both treatment and control communes were reported to local police. In all years, nearly all reports were entirely resolved by the authorities, except for one case in a control commune in 2013.

Threats

"Threats" refers to statements made against respondents or their household members which show intent to do them harm, either physically or in another aspect of their life (damage to professional reputation, etc.). The questionnaire listed 5 sub-categories of threats, as well as an "other" option:

- Threatening to fire you from work;
- Threatening to take something from you;
- Threatening to kill you;
- Threatening to hit you;
- Threatening to say something bad about you (defamation/slander).

The most commonly mentioned threat was defamation – when other people threaten to say bad things about the respondent or their family (52.2% of all incidents). In our sample, 24 cases occurred in 2011, 16

in 2012 and 20 in 2013. The next most common threat was being hit (15.7%); all other threats were reported in similar numbers. It is noticeable that the specific threats of hitting and even killing respondents have increased in all communes from 2011 to 2013.

Respondents in treatment communes were the victims of significantly more threats in all three years than respondents in control communes ($p<0.1$). There was a 21.9% decline in threats directed at treatment respondents in 2012, the year after police posts were built. However, this number rose again to 2011 levels in 2013 (a 3% increase overall). On the other hand, in the control group the number of threats increased steadily; respondents mentioned 71% more threats in 2013 than in 2011.

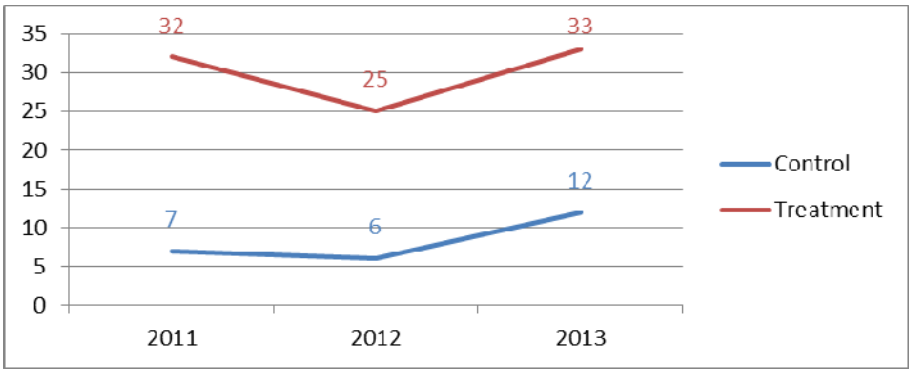

Figure 20. Number of threats experienced.

Because the number of threats in treatment communes stayed the same, while the number of threats in control communes rose, it is possible that the construction of police posts had an effect on threats. The DID analysis shows that this effect is higher in 2012 than in 2013. In 2012, construction of police posts reduced threats by 19.5% from the counterfactual. This effect declined in 2013, reducing threats in treatment areas by 10.9% from 2011. Thus, police posts may reduce threats more in the initial year after they are constructed than in subsequent years. However, the p-values for DID indicates that the results are not statistically significant ($p>0.1$).

As with other crimes, a minority of threats are actually reported, even though the number of incidents has remained high (and even increased in the control group). Although previously higher than in control communes, reporting of threats among treatment victims declined dramatically in 2013 (from 42.9% in 2012 to 16.7% in 2013). This may be because two-thirds of victims who complained in 2012 did not feel that their complaint was resolved at all (Figure 21), making them less likely to report to authorities in the future. Respondents most commonly complained to authorities when somebody threatened to hit them or say bad things about them (defamation).

Table 15. Threat reporting, among victims of threats.

	2011		2012		2013	
	Control	Treatment	Control	Treatment	Control	Treatment
Did not report	5	8	5	8	4	15
Reported all crimes	2	5	1	6	2	3
Reported some crimes	0	0	0	0	1	0
Total	**7**	**13**	**6**	**14**	**7**	**18**

Victims of threats reported to many different authorities besides the village chief and local police, including courts and other government staff. For threats, the courts seem to be utilized more than in other kinds of crimes, especially by the treatment group (Table 13).

Table 16. Number of threats reported to authorities.

	2011		2012		2013	
	Control	Treatment	Control	Treatment	Control	Treatment
Village chief	0	2	0	1	2	2
Police	1	1	1	2	1	1
Other government staff	0	0	0	0	2	0
Any court	1	2	0	2	0	0
Military police	0	0	0	1	0	0

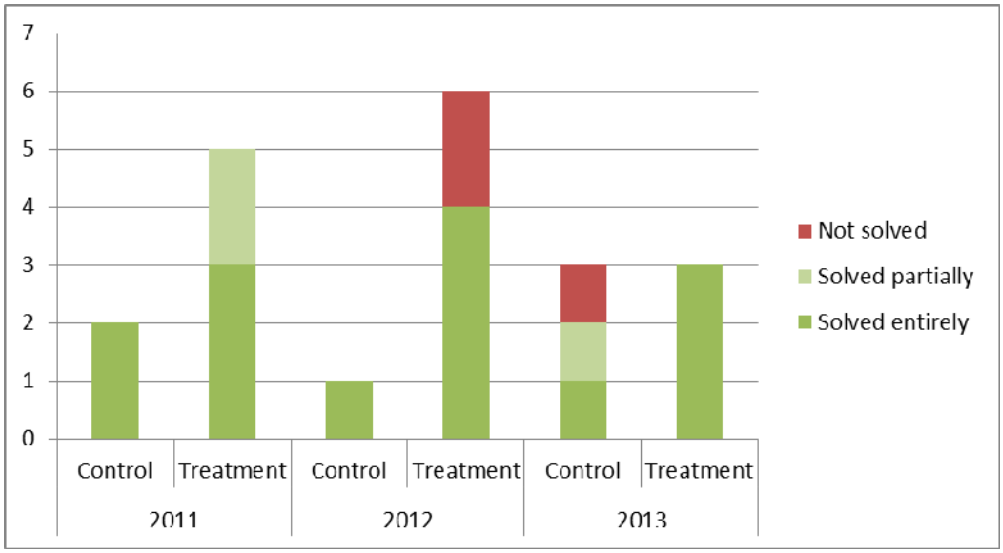

Figure 21. Outcome after reporting threats, by victim.

Fraud

Fraud refers to an attempt to deceive someone for the purpose of personal gain (usually monetary). The questionnaire listed four main sub-categories of crime, as well as an "other" option:

- Defrauding someone about the amount of money you will pay them (e.g., defaulting on a personal loan, or paying less than promised);
- Selling something for an above normal price (price gouging or profiteering);
- Providing false information about something (e.g., telling someone the wrong time for a village meeting or food distribution, in the hope that having less people there will increase the benefits provided to you);
- Borrowing money and fleeing/leaving the village.

Both treatment control and groups observed a decrease in the number of fraud victims from 2011 to 2012, but the treatment group remained steady from 2012-2013, while the number of victims rose again in the control communes. Victims mentioned that the most common fraud is linked to people borrowing money and then leaving the village without repaying the loan; 131 incidents in 2011, 39 in 2012 and 38 in 2013 (56.1% of all fraud incidents). The next most common fraud was providing false information/deceiving someone (30.7%). These two types of fraud made up nearly 9 out of 10 cases of fraud mentioned by respondents.

The total number of fraud cases that occurred in the last three years is illustrated in Figure 22. Frequencies of fraud in treatment communes declined drastically between 2011 and 2012, the first year the police posts were built, before stabilizing in 2013 (57% absolute decrease from 2011 to 2013). There was a linear decline in the control group (38% absolute decrease) over the same time.

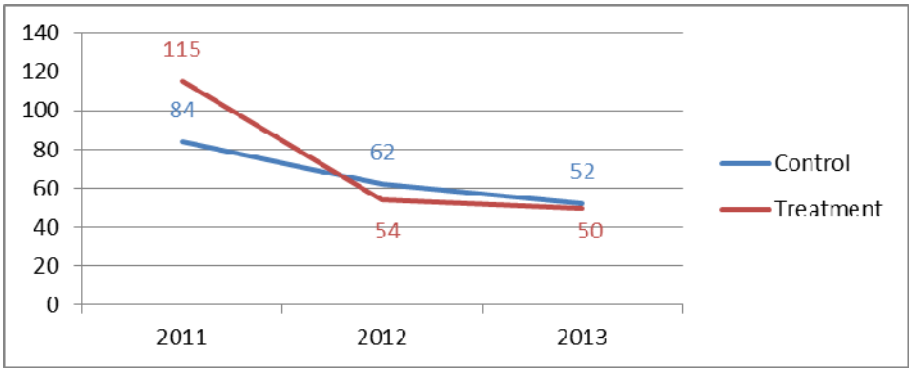

Figure 22. Number of fraud cases experienced.

The construction of police posts has potentially reduced the fraud experienced by respondents by 0.083 cases per respondent, a decline of 39.9% from 2011 to 2013. However, the p-value is high ($p>0.1$), and thus we cannot say that the new police posts have had a statistically significant impact on fraud.

In the treatment communes, no frauds were reported to authorities until 2013, and then only 5.6% of incidents were reported (compared to 7%-8% of incidents in control communes; Table 17). The few respondents who complained about fraud reported the crimes to police and village chiefs, except for one case in control communes in 2013 that was reported to other government staff.

Table 17. Fraud reporting, among victims of fraud.

	2011		2012		2013	
	Control	Treatment	Control	Treatment	Control	Treatment
Did not report	45	52	32	35	38	34
Reported all crimes	3	0	3	0	3	2
Reported some crimes	0	0	0	0	0	0
Total	**48**	**52**	**35**	**35**	**41**	**36**

Five out of 11 fraud cases (45.5%) reported to authorities were not solved. This could be the reason people do not report this kind of crime more.

Property damage

Property damage refers to the intentional damage or destruction of another person's personal property or possessions. The questionnaire listed six sub-categories of crimes which were most commonly reported in the pre-tests, as well as an "other" option:

- Hitting/burning someone's house;
- Hitting/burning someone's car, moto, or bicycle;
- Cutting someone's trees;
- Burning or destroying someone's farm products;
- Hitting/poisoning someone's pets/animals;
- Abusing someone's farm (e.g., harvesting someone else's rice, letting your animals eat their produce, etc.).

The total number of cases related to property damage that occurred during the last three years is illustrated in Figure 23. Property damage is the only crime category that was higher in control communes than in treatment communes in 2011. "Farm abuse" was the more frequently mentioned property crime, with an average of 54.3 incidents each year and 50.1% of all property damage incidents. The next most common type of property damage was cutting someone's trees (40.1% of all incidents).

In 2012, the number of crimes strongly declined in areas where police posts were built, but returned to 2011 levels in 2013 (0% absolute variation between 2011 and 2013, versus 5.7% decrease in control communes).

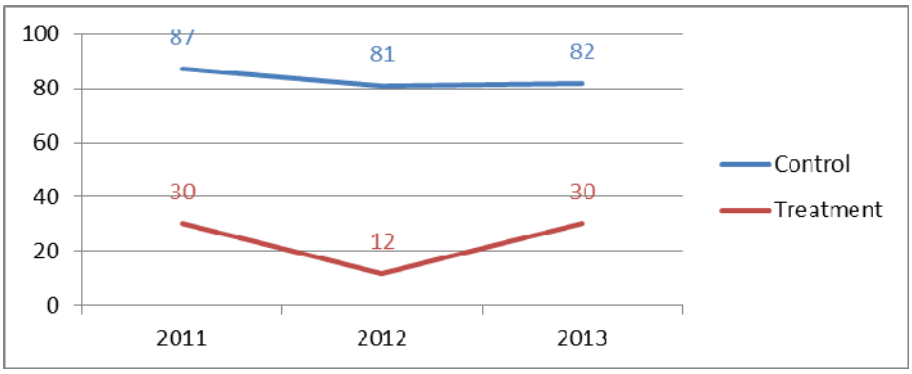

Figure 23. Number of property damage incidents experienced.

Possibly because of the relatively small number of crimes in this category, the DID analysis for property damage crimes is inconclusive. However, DID shows that construction of police posts may have reduced property damage crimes by 49.2% in 2012, and increased them overall by 19.1% from 2011-2013 (treatment effects of -0.03 and 0.012, respectively). But, the high p-values (p>0.8) confirm that no impact of police post construction can be statistically recognized for this parameter.

Table 18, below, indicates the number of victims who reported property damage crimes that they suffered to the police. The ratio of victims reporting crimes in treatment areas has increased (from 29% in 2011 to 40% in 2013), while in control areas it has declined since 2011. Reports of property damage were mostly made to the village chief, then to the police.

Table 18. Property damage reporting, among victims of property damage.

	2011		2012		2013	
	Control	Treatment	Control	Treatment	Control	Treatment
Did not report	13	17	13	7	12	10
Reported all crimes	4	5	1	2	1	4
Reported some crimes	0	0	0	0	0	0
Total	**17**	**22**	**14**	**9**	**13**	**14**

Figure 24 indicates that most of the reported property damage cases were successfully solved by the authorities. The effectiveness of authorities in resolving property damage crimes in treatment communes has apparently improved since 2011.

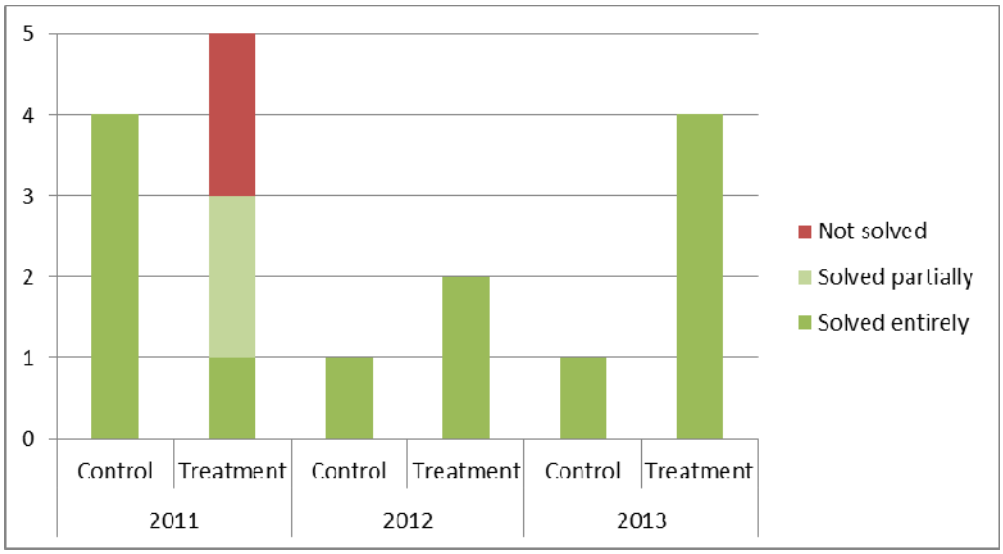

Figure 24. Outcome after reporting property damage, by victim.

Conclusions

The results of the examination of crime and reporting information provided by respondents show an overall trend towards reductions in crime in targeted areas, and in all categories of crime. This trend is stronger in treatment communes, especially in 2012, the first year that new police posts were operating in those communes. Although very few of these metrics are statistically significant ($p<0.1$), the general trends for all crime indicators are the same, which supports the hypothesis that building new police posts has helped reduce crime and improve reporting in local communities.

The most commonly mentioned crimes are thefts and fraud. Along with violent crimes, these are also the types of crime where the effects of police posts were most noticeable.

On the other hand, there seems to be no impact on threats, property damage and dangerous behaviour. One explanation could be that crimes were mentioned in such small proportions of our sample that the DID tests of significance were not sensitive enough to distinguish any statistically significant change. Another possibility is that police post construction only affects certain types of crimes.

Crime reporting is also very low for all years studied. More than 80% of victims every year do not complain to authorities. As many of the crimes mentioned by respondents are minor, we can understand why people do not always feel the need to report the crime. However, this rate has increased in communes with new police posts, where most of the time it results in a satisfactory resolution. In addition, respondents in treatment communes have increased reporting with local police, rather than village chiefs or other government officials, over the last three years. This is compared with control communes, where reports to police have declined since 2011.

Perceptions of Crime and Community Safety

In this section, respondents were asked to rate how fearful they were of crime occurring under a variety of conditions in their village, and generally. Respondents answered using a scale ranging from 1 to 10, where 1 is considered the lowest risk and 10 is the highest risk of crime. For each crime perception item, the potential impact of new police post construction was analysed using the DID test.

General perceptions of crime

Since 2011, the general perceptions of crime in respondent communes have improved, meaning that most respondents feel safer in 2013. People in communes with new police posts had a larger decrease in their fear of crime than people in communes without police posts (Figure 25); 13.3% versus 10.9% in control communes. The two groups were statistically different in 2011 ($p<0.1$); risk of crime in general was perceived as significantly higher in treatment communes than in control communes at that time. Since then, fear of crime in treatment communes has declined faster than in control communes, so that in 2013 the two groups are considered to have similar perceptions of crime.

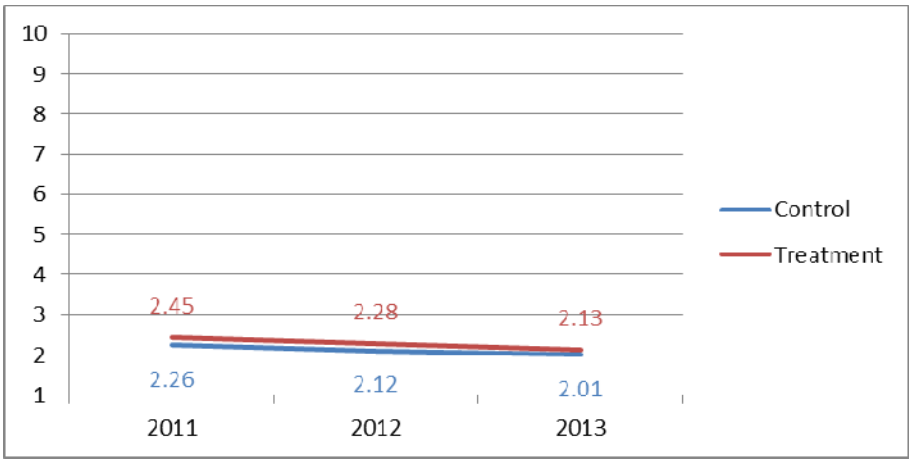

Figure 25. General perceptions of crime, mean scores (n=800).

Table 19 shows a DID of -0.08, corresponding to police posts causing a potential decrease in fear of crime of 3.62%. However, the high p-value (0.597) indicates that the treatment impact cannot be considered statistically significant.

Table 19. Difference-in-difference analysis of general perceptions of crime, mean scores (n=800).

	2011			2013			
	Control	**Treatment**	**Diff(BL)**	**Control**	**Treatment**	**Diff(FU)**	**DID**
General crime perception	2.255	2.45	0.195	2.01	2.125	0.115	-0.08
Std. error	0.076	0.076	0.107	0.076	0.076	0.107	0.151
t	29.84	4.84	1.82	-0.99	1.15	-0.55	-0.53
P>t	0	0	0.068	0	0	0.282	0.597

R-square: 0.01158

Perceived changes in crime

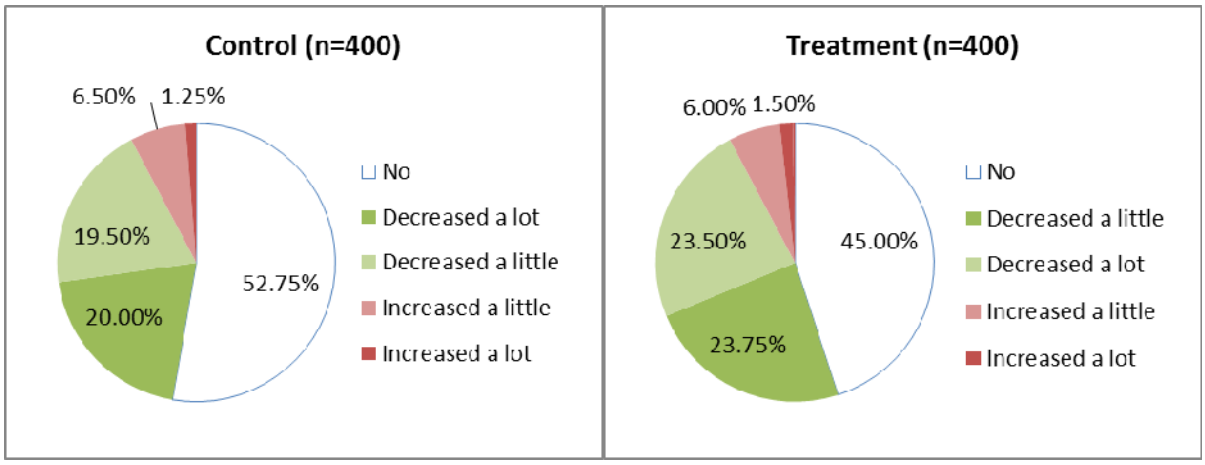

Figure 26. Reported changes in crime.

When asked whether crime has changed in their community since 2011, a smaller number of respondents in treatment communes said that there had been no change in crime over the last three years (45.0%, vs. 52.8% in control). The chi-squared test shows that the two populations are statistically different on this parameter ($p<0.05$).[14] More people in treatment communes (47.3%) perceived crime to have decreased after their police posts were built (2011-2013) than people that perceived a decrease in communes without posts (39.5%). This may correspond to the reduced crime rates that we observed in the previous section. However, the same tests reveal that there is no statistically significant difference between these two population groups in the nature of the change observed (Figure 26).[15]

Respondents were then asked about the reasons for the changes they observed, if any (Table 20). In the treatment group, 28.8% of respondents justified their perceptions of changes in crime by citing the implementation of stricter laws, while only 20% mention this reason in the control group. This could mean either that the government is creating more stringent laws than in 2011, or that the police are enforcing existing laws much more rigorously than before, which is more likely. Respondents in treatment communes (16.5%) also mentioned "economic changes", such as migration and increased job opportunities, as a primary reason for changes in fear of crime. This was followed by changes in community policing ("police on duty at night"; 10.9%) and local authorities providing more education/advice to respondents (10.1%). Although not statistically significant, more people in communes with new police posts reported positive changes in local police and authorities, such as increased police patrols, police and village chiefs on duty at night, and that police were handling complaints better than before.

Economic changes were the principal reason given by the control group for changes (23.24%), followed by stricter laws (20%) and improved education/advice from local authorities (13%).

[14] Chi-squared test was significant ($\chi^2=4.8074$, df=1, $p=0.028$).
[15] Chi-squared test was not significant ($\chi^2=0.7661$, df=3, $p=0.858$).

Only 7.5% of treatment respondents and 7.8% of control respondents perceived an increase in crime in their communities. The reasons given by respondents for increases in crime have similar importance in both the treatment and control groups (increased alcohol/drug consumption and youth gangs). The ineffectiveness of local police is cited in only 1.4% of answers in the treatment group and 1.6% of the answers given by the control group.

Table 20. Reasons for perceived changes in crime (n=409).

	Control		Treatment		
Reasons for change	**Frequency**	**Percent**	**Frequency**	**Percent**	**Total**
Stricter laws	37	20.00%	61	28.77%	98
Economic changes	43	23.24%	35	16.51%	78
Police on duty at night	18	9.73%	23	10.85%	41
Local authorities provide education/advice	24	12.97%	22	10.38%	46
Increased police patrols	15	8.11%	16	7.55%	31
Increase in youth gangs	10	5.41%	11	5.19%	21
Family /community help	14	7.57%	10	4.72%	24
Increase in alcohol consumption	11	5.95%	9	4.25%	20
Village chief on duty at night	2	1.08%	7	3.30%	9
Police handle complaints	3	1.62%	5	2.36%	8
Increase in drug use	4	2.16%	5	2.36%	9
"Safe Village" program	0	0.00%	4	1.89%	4
Ineffective police/local authorities	3	1.62%	3	1.42%	6
NGOs provide education	1	0.54%	1	0.47%	2
Others*	4	2.16%	8	3.77%	12
Total	**189**	**100.00%**	**220**	**100.00%**	**409**

** "Others" includes: lower drug consumption (n=1); increased gambling (n=1); streetlights (n=1); and, "population has higher knowledge and understanding on the law" (n=1).*

Perceptions of alcohol problems

Alcohol (drunkenness) is considered the most serious problem in all communes surveyed, with the highest mean risk scores in this study (Figure 27). The treatment and control groups have similar scores for this indicator. Moreover, fear of alcohol problems has increased from 2011-2013 in all communes, with a slightly larger increase in treatment areas (3.8%) than control (2.7%). No statistically significant differences were observed between the mean scores of the two groups.

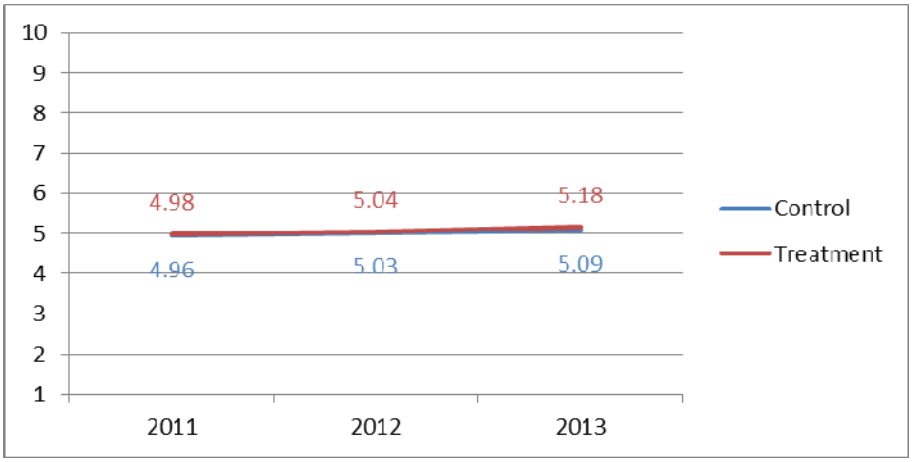

Figure 27. Perceptions of alcohol problems, mean scores (n=800).

Perceptions of crime in other situations

Respondents were asked how scared they were of crime in a variety of ways, including fear of crime happening to you or your family, fear of crime happening in your village, fear of cruel crime (such as violent crimes, including rape and murder), and the fear of drug problems in your village. The scores for all of these metrics were low, indicating that most people were not afraid of crimes occurring in these ways. People in treatment communes were generally more fearful of these situations than control communes, although the differences between treatment and control groups were minimal and generally not statistically significant. The DID analysis for each of these metrics was not significant, as the differences between the two groups were too small to accurately analyse. Police post construction did not influence perceptions of crime under these conditions.

The only significant differences were in the perceptions of drug problems. Treatment respondents were slightly more afraid of drug problems in their villages than people in communes without police posts. This fear decreased slightly in all communes between 2011 and 2013 (1.0% in treatment groups and 2.5% in control groups), but treatment communes were still slightly more fearful of drug problems than control communes in 2013.

The graphs for the mean values of each of these metrics are included below (Figure 28).

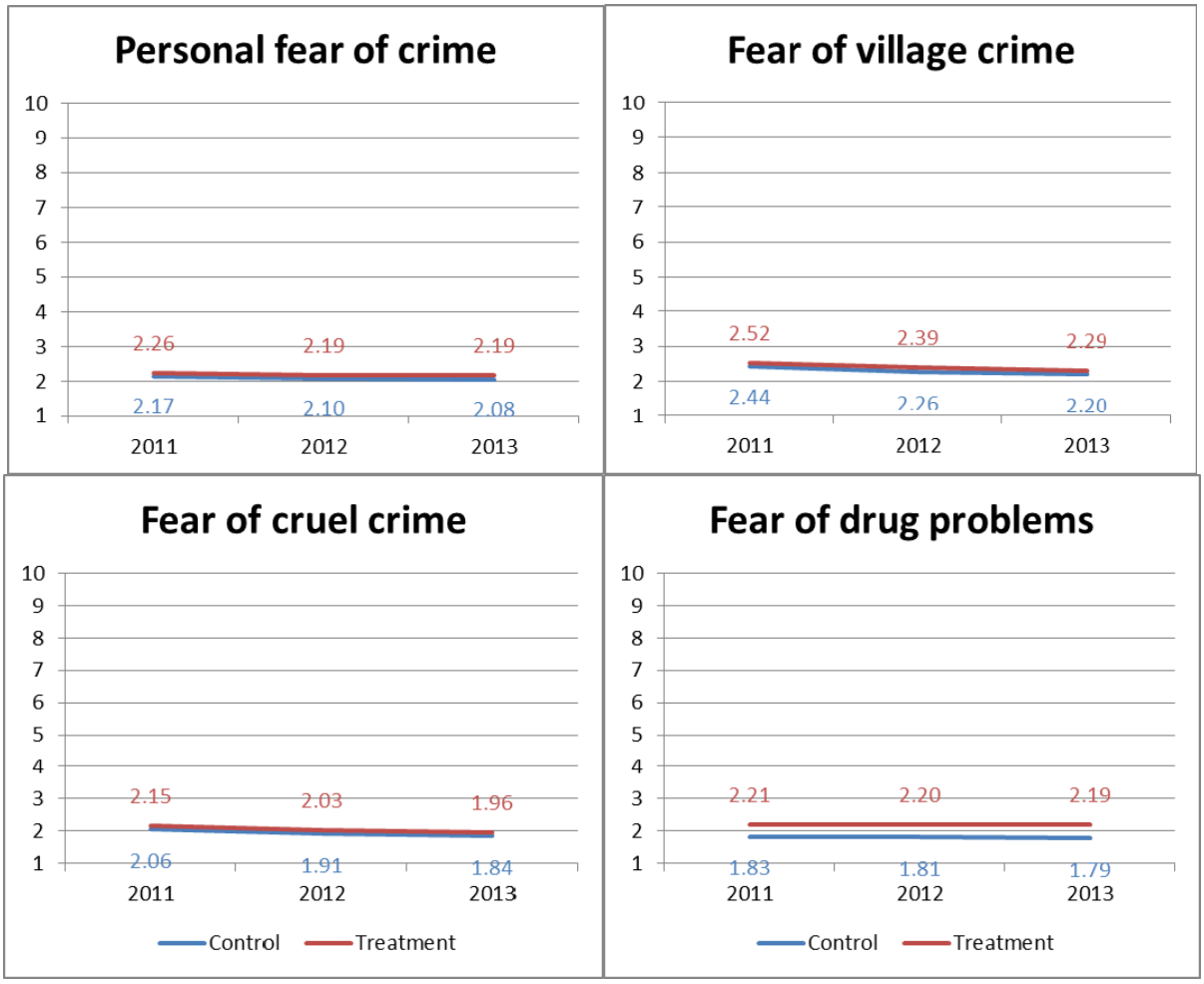

Figure 28. Perceptions of crime and drug problems, mean scores (n=800).

Community safety

Respondents were asked to assess how safe they feel in their communities under various conditions. A 1 to 10 scale was used to measure respondents' perceptions, where 1 was very unsafe and 10 was very safe. For each condition, the potential impact of police post construction was analysed using the DID test. Unfortunately, the DID analysis showed no significant impact of police post construction on these indicators of safety. This may be because the answers of the two groups were so similar, making distinctions harder to measure with statistical confidence.

Respondents generally felt safe in their villages, and this feeling of safety increased for all communes from 2011 to 2013. People in communes with new police posts felt less safe than people in control communes; this difference was significant in 2011 ($p<0.05$) before the police posts were built. In 2012 and 2013, perceptions of safety improved more in treatment communes than in control communes, such that by 2013 the perceptions of safety between the two groups were statistically similar (3.6% improvement in treatment areas, compared to 2.0% in control communes). The DID analysis for this indicator showed no

significant change due to the construction of police posts, possibly due to the similarity of the answers between the two groups.

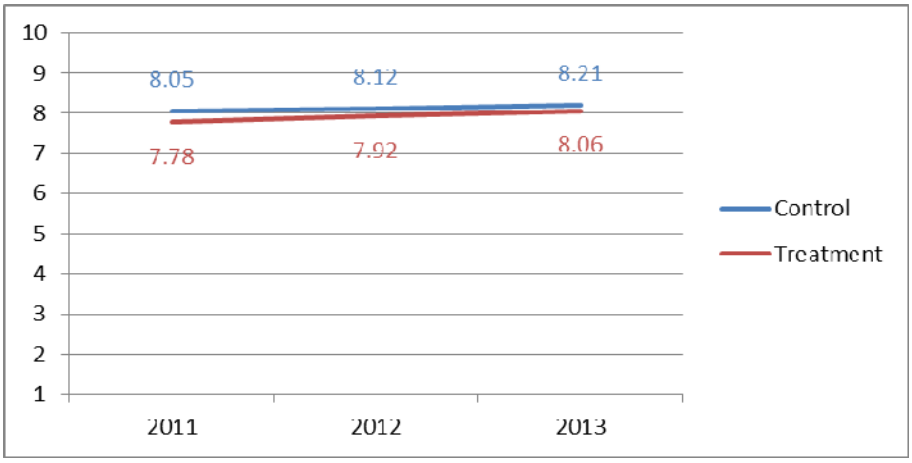

Figure 29. Changes in perceptions of general safety (n=800).

Safety in certain situations

Respondents were asked how safe they felt in a variety of situations in their communities. These situations included:

- when at home at night;
- when at work or in rice fields;
- when travelling in the commune;
- when sending children to school;
- when attending a party/ceremony (such as a wedding).

People in control communes felt slightly safer than people in treatment communes in each of these situations in 2011 (before the new posts were built). However, for most of these metrics (all except safety when at work or in rice fields), treatment communes reported stronger increases in feelings of safety from 2011-2013 than control communes. This could indicate that the construction of police posts improved perceptions of community safety more than in control villages, but the results are too small to be statistically significant.

Respondents were most concerned about their safety when they send their children to school, and when they attend a party or ceremony. They may feel less safe at parties because of the risk of alcohol-related problems at these events, which all respondents indicated they were afraid of in the previous section.

The graphs for each of these metrics are included below (Figure 30).

Figure 30. Perceptions of safety in certain situations.

Conclusions

We have seen in this section that the construction of police posts had little or no impact on the way respondents perceive crime in their communities. Differences between treatment and control communes from 2011 to 2013 were minimal for all of the parameters measured. In general, people feel safe in their communities, and they felt safer in 2013 than in 2011.

Although still not rated as a serious threat (5 out of 10), alcohol is perceived as the main threat to the safety of respondents in both groups. Treatment communes have a higher perceived risk of drug problems than control communes.

Perceptions of crime in these communities has significantly improved more in communes with new police posts than in the control communes. This is mostly due to enforcement of stricter laws, a better economic situation, more police patrols, and education/advice provided by the local authorities in both groups.

Respondents are most concerned about safety when they attend a party or ceremony, which could be linked to the previous results concerning the perceived dangers of alcohol consumption. Logically, parents also feel concerned about their children's safety when sending them to school.

Police Involvement and Community Awareness

In this section we will analyse and assess respondents' interactions with the police in their communes, including their satisfaction with the police officers and police posts. Nearly all respondents were aware that their commune had a police post (97% of treatment respondents and 98.8% of control respondents). Answers in this section had some of the strongest indicators of statistical significance in the entire report, suggesting that police post construction had the most effect in this area, increasing overall community satisfaction with the posts, improving interactions with police (in increased frequency of patrols and increased visits to police posts), and community perceptions of both the police post buildings and the attitudes of police officers.

Satisfaction with police posts

Respondents were asked to rate overall satisfaction with their police posts on a scale from 1 to 10, with 10 being very satisfied. Respondents in communes with new police posts reported significantly higher satisfaction scores than respondents in communes without police posts, indicating that treatment communes are more satisfied with their police posts than control communes (Figure 31). This result is statistically significant ($p<0.01$; see Table 21).

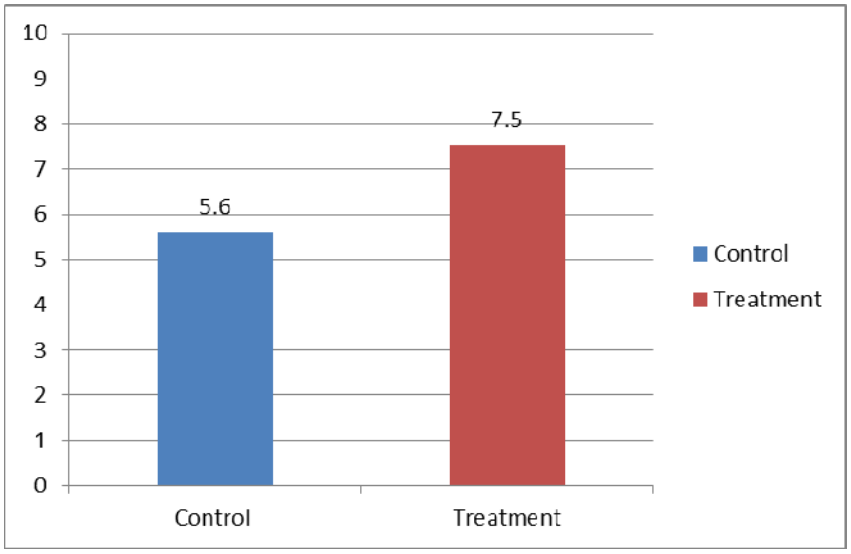

Figure 31. Current satisfaction with police posts, mean values (n=388 for each group).

Table 21. Current satisfaction with police posts.

Group	Frequency	Mean	Std. Err.	Std. Dev.	95% Conf. Interval	
Control	388	5.6	0.1	2.4	5.4	5.8
Treatment	388	7.5	0.1	2.0	7.3	7.7
Combined	776	6.6	0.1	2.4	6.4	6.7
Diff		-1.9	0.2		-2.2	-1.6

Diff=mean(Control)-mean(Treatment)

H_0: diff=0; degrees of freedom=774; t=-12.1617

- *H_a: diff<0 ; P(T>t)=0.00*

Contact with police

56% of the respondents in the treatment communes and 52.8% of the control group had at least one contact with the police since 2011.[16] Figure 32 shows that respondents from both groups have the same methods of contacting the police; visiting the police posts is the most common way, but police officers also meet the respondents at their homes or in the street. The two groups are not statistically different in the way that they last contacted the police.[17]

[16] Chi-squared test was not significant (χ^2=0.8515, df=1, p=0.356).
[17] Chi-squared test was not significant (χ^2=5.5132, df=7, p=0.598).

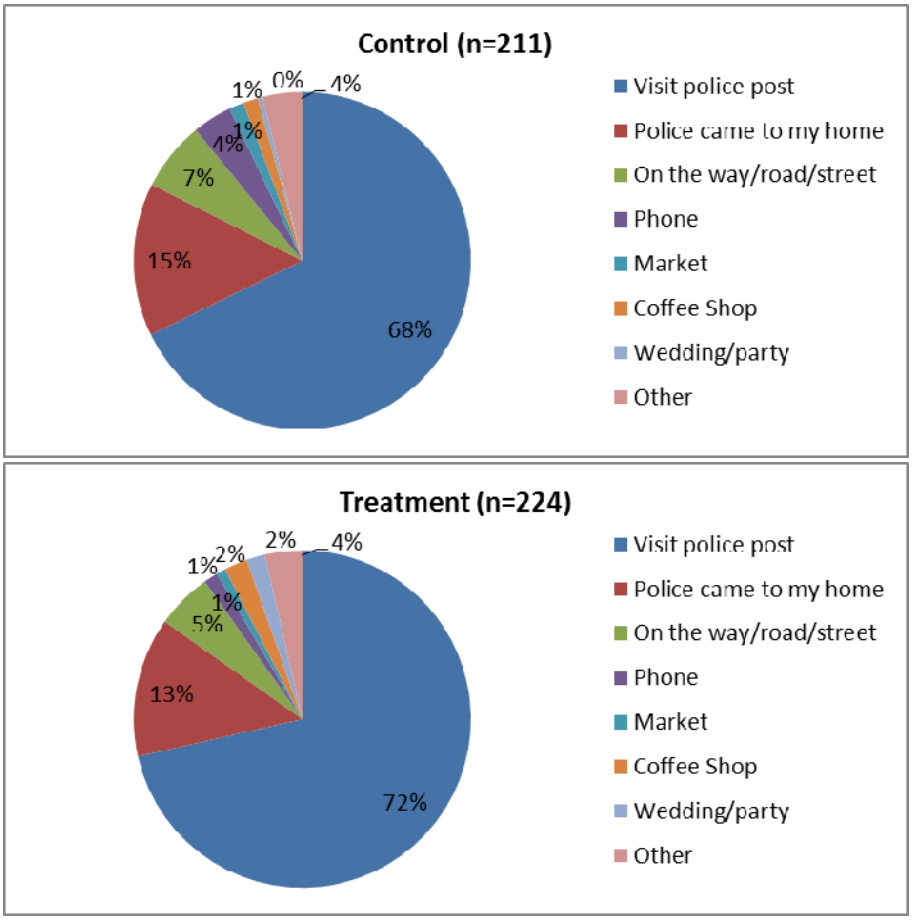

Figure 32. How respondents last contacted the police.

Respondents were also asked about the number of days they waited to take action (to go and visit the police). People reported an average of 4.3 days between when a crime occurred and when they reported it to police in the treatment group, versus 2 days' delay in control communes. Although the average values appear very different, there is no statistically significant difference between the two groups in this parameter.

Police patrol frequency

On average, around 80% of all respondents saw at least one police patrol in their village in each of the last 3 years. Slightly more respondents in control communes saw police patrols than respondents in treatment communes (79.3% and 78.9%, respectively), although the difference was not statistically significant between the groups or years surveyed.

However, respondents in communes with new posts witnessed more police patrols per year than respondents in control communes, with the average number of police patrols increasing 10.4% over the last 3 years in treatment communes (compared to a 3.8% increase in frequency in control areas; Figure 33). This difference is statistically significant in both 2012 ($p<0.05$) and 2013 ($p<0.05$), the two years that the new police posts were operating. From the DID analysis, the construction of police posts (the treatment

effect) may have contributed to a 7.2% increase in annual police patrols from 2011-2013, although this result is not statistically significant (p>0.1).

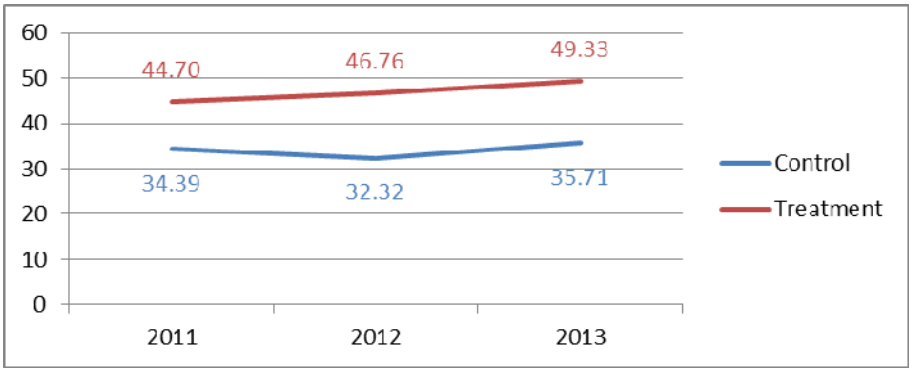

Figure 33. Average frequency of police patrols witnessed by respondents, by year.

Accessibility and reception in police posts

Since 2011, nearly half (46.1%) of respondents in communes with new police posts have visited the posts, compared to 40.3% of control commune respondents. This difference is statistically significant, showing that more people in communes with new police posts visit the police than people in communes with no police posts (p<0.1).[18]

Among respondents that visited police posts at least once, over half of respondents in all communes last visited the police in 2013 (55.3% in treatment communes and 56.6% in control communes). In the first three weeks of January, 2014, 28 treatment respondents and 22 control respondents had already visited their police. There was no significant difference between the two groups for when respondents last visited their police posts. [19]

[18] Chi-squared test was not significant (χ^2=2.7593, df=1, p=0.097).
[19] Chi-squared test was not significant (χ^2=0.5225, df=3, p=0.914).

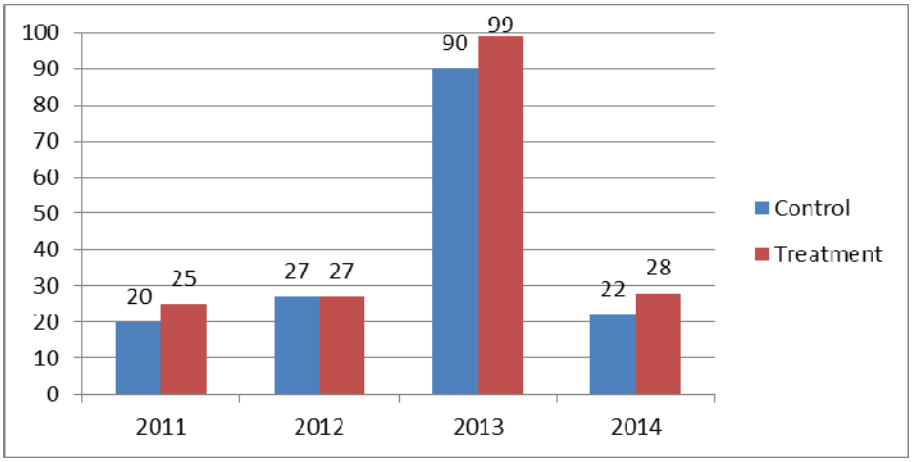

Figure 34. Respondents that visited police posts, by last year visited.

Almost all of the respondents in communes with new police posts who visited their police posts found them easy to access (96.1%). This was higher than the respondents reporting easy access in control communes (93.7%), but the difference between the two groups was not significant.[20] Among the few people in treatment areas who said it was difficult to access the police post, the only reason given was that the police would ignore their requests if they did not give them an additional payment.

In control areas, the reasons for difficulty in access were more varied, and included: distance of the police post from the village; inconvenient opening hours; unavailability of policemen; long wait times; and the low commitment/interest of police if they think the complainant does not have any money. Thus, it seems that the construction of police posts has helped to reduce difficulties in community members accessing their police posts, although problems with unofficial payments still occur.

Respondents in areas with new police posts were more impressed with the condition or state of their commune police posts than people in control communes. Nearly three-quarters (72%) of police post visitors in treatment communes described their police posts as "clean" (Figure 35), while "acceptable" was the most common answer in control communes (58%). The two populations are statistically different on this point ($p<0.01$).[21]

[20] Chi-squared test was not significant ($\chi^2=0.9974$, df=1, p=0.318).
[21] Chi-squared test was significant ($\chi^2=80.6466$, df=2, p=0.000).

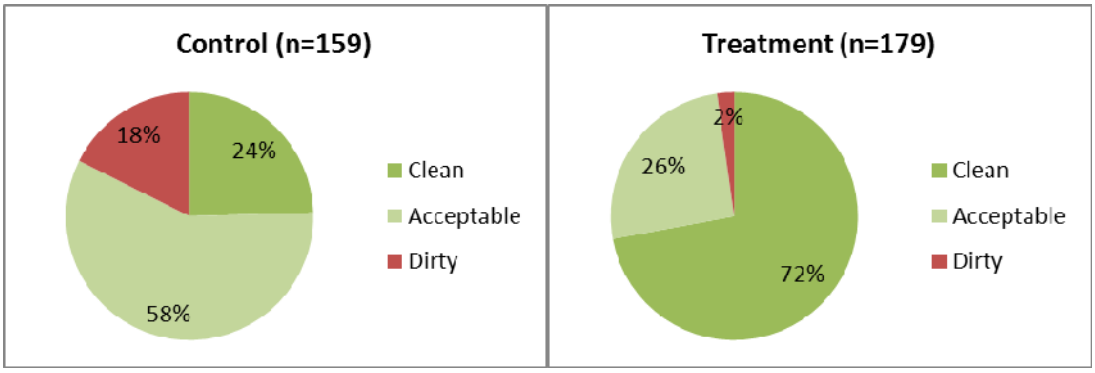

Figure 35. Perceived police post cleanliness among police post visitors.

Respondents in treatment areas were also more impressed with the attitudes of police officers at their posts. When asked to assess the politeness of police officers when they visited their police posts, 58% of concerned respondents were welcomed politely by police in the treatment area, whereas only 42% of the control group considered that they received a "good" reception (Figure 36). The two groups are statistically different in this aspect as well ($p<0.01$).[22]

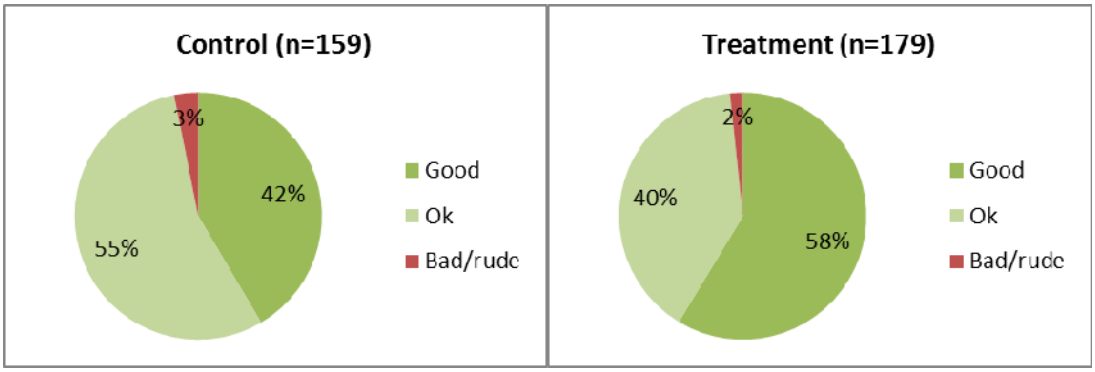

Figure 36. Perceived police politeness among police post visitors.

Although more respondents in treatment communes visited police posts, it does not appear to have affected the wait times at the new posts. 70% of respondents in both groups were satisfied with the times they waited before meeting with a police officer. Only 8% of the respondents in both groups mentioned they their waits were long or very long. The difference between treatment and control communes for this metric is not significant.[23]

Attitude of police

Respondents then assessed the attitude of police using a scale from 1 to 10, with 10 being very good. Only people who had contact with the police in a specific year were included in this metric for that year (Table 22).

[22] Chi-squared test was significant ($\chi^2=10.0642$, df=2, $p=0.007$).
[23] Chi-squared test was not significant ($\chi^2=2.6212$, df=4, $p=0.623$).

Table 22. Respondents who had contact with police, by year.

	2011	2012	2013
Control	154	153	188
Treatment	158	159	197

In general, respondents in treatment villages were more satisfied with the attitudes of their police officers than respondents in control communes (Figure 37). Respondents reported being increasingly satisfied with police attitudes from 2011-2013, with a 3.3% improvement in areas with new police posts, and a 4.4% improvement in the control group, although the difference is not statistically significant ($p>0.1$). Possibly because the two groups rated police attitudes so similarly, the effect of police post construction on this indicator was not significant.

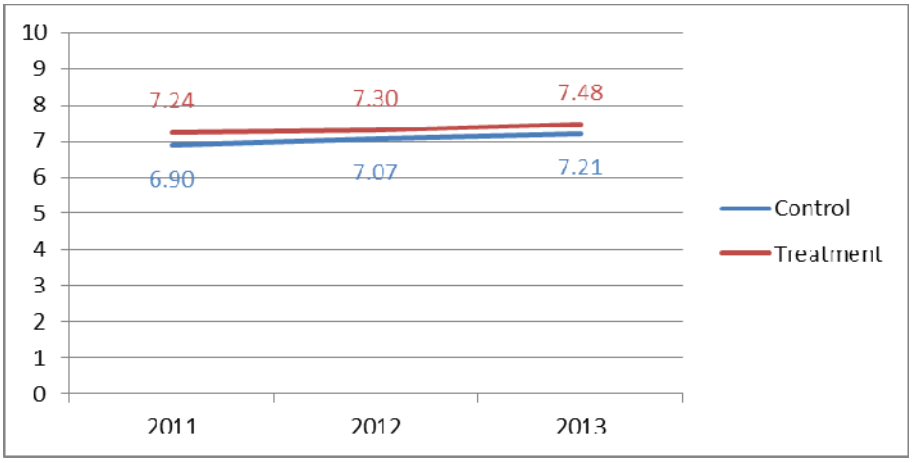

Figure 37. Assessed mean scores for police attitude.

General satisfaction with police

Finally, respondents were asked to rate their satisfaction with the police, on a scale from 1 to 10, with 1 being low satisfaction and 10 being high satisfaction. Respondents in treatment communes were, on average, more satisfied with their police than people in control communes. This satisfaction also increased more in communes with new police posts than in areas without posts over the 3 years studied (3.6% and 2.6% increases, respectively; Figure 38). These differences are statistically significant in all 3 years ($p<0.1$), however DID analysis indicates that there is no significant impact of police post construction on respondents' overall satisfaction with the police.

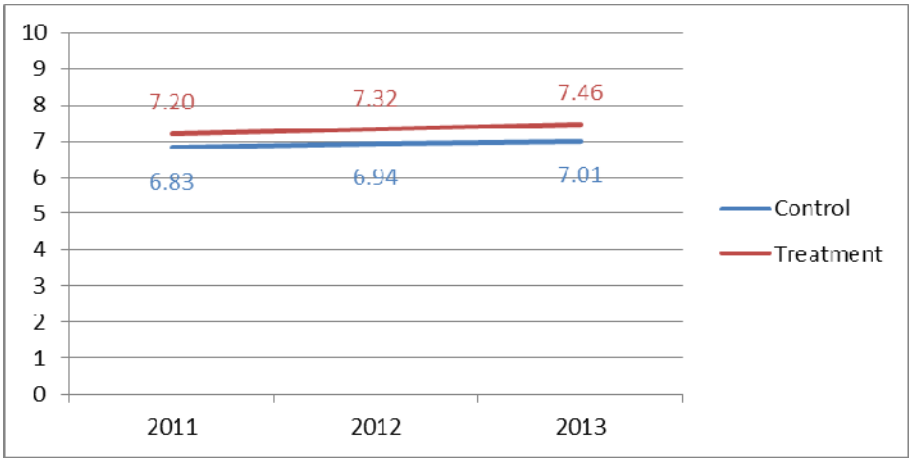

Figure 38. Satisfaction with police (n=800).

Conclusions

We have seen in this section that respondents in communes with new police posts report statistically higher levels of overall satisfaction with their police posts, as well as higher levels of cleanliness and the politeness of police when they visit the posts. Possibly because of these factors, more respondents in treatment communes visit police posts than in communes without new post buildings. Respondents in treatment communes also find the new posts more accessible, and have fewer complaints about the posts. They also observe more frequent police patrols in their communities. However, none of these differences can be statistically attributed to the construction of police posts.

Although not significant, treatment respondents reported that their police had better attitudes, and that they were generally more satisfied with police overall than respondents in control communes.

However, informal payments are still a problem in both treatment and control communes.

The DID analyses in this section also showed that there is no significant impact from police post construction on the involvement of police in the communities ($p>0.1$ for all DID indicators measured). This is possibly due to the limited sample size (number of observations). The tests conducted affirm that the control and the treatment groups are not different in the last time respondents contacted the police, where they contacted the police, the delay before they reported, and whether or not respondents have seen police patrols in their village.

Qualitative Analysis: Satisfaction with Police Posts

Several open questions were included in the questionnaire, for respondents to say what they like about their police posts, what they do not like and what could be improved. After analysis and recoding of the various answers given, the results are presented here.

After analysing over 2,000 responses, six important criteria for police posts were identified:

- Aesthetics. People want their police posts to be more attractive. An old police post does not encourage victims to go and visit the police, as it can reflect the lack of police motivation and ability to work properly.
- Welcome area. A reception room with seats for people to wait seems to be a minimum requirement for respondents. People also think that a bathroom and/or a kitchen could improve the comfort of both police officers and visitors.
- Size. Police posts need to be fairly large. Sometimes crowded (according to respondents), the buildings need to be able to welcome visitors, detain criminals (holding cells), provide private space for confidential matters, and have some space for administrative work.
- Cleanliness/maintenance of the post. People are obviously more willing to go and visit police posts if they feel more comfortable there. A poorly maintained and dirty police post could also reflect the attitude of the police officers stationed there.
- Suitable location. Many respondents wished to see the police offices separated from local authorities and political party offices. They do not want the police to share the commune hall buildings. Moreover, police posts are sometimes considered too far from other villages in the commune, and thus difficult to access.

Respondent likes

Over two-thirds (68%) of respondents in treatment communes noticed at least one point that they liked about the police posts (12 respondents were missing and 7 said they did not know). These respondents gave a total of 315 answers about the police posts, which is more than double the amount of positive responses received in control communes (n=150). This possibly shows that people in treatment communes appreciate their police posts much more than people in control communes. Figure 39 shows that, as in the perceptions of police posts, aesthetics is the most often mentioned response (the post looks new, is beautiful, etc.), with almost 50% of the positive answers given. The remaining answers are more varied, but include the large size of the new police posts (10%), the nice reception area, the overall cleanliness, and the good organization of the posts (8% each).

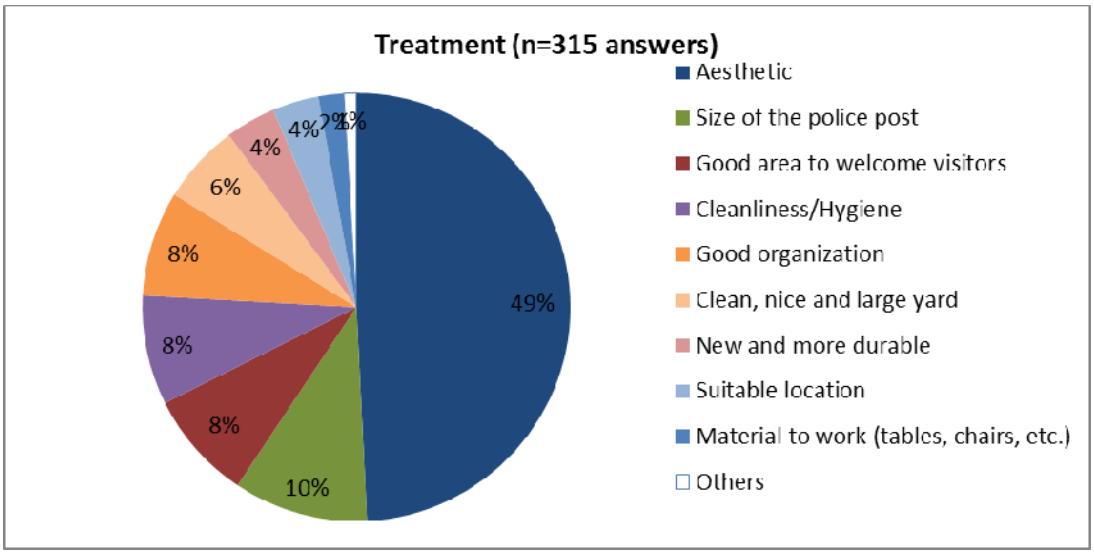

Figure 39. What people like about their police posts (treatment).

242 respondents (60.5%) in control communes could not say what they liked about their police posts. The remaining 140 respondents (5 respondents did not answer the question, and 13 said they did not know) mentioned 150 aspects of their police posts that they liked (Figure 40). As with the treatment communes, the building aesthetics were the most common answers (41% of the positive aspects mentioned), followed by the reception area (19%). Other positive aspects were the size of the post its cleanliness.

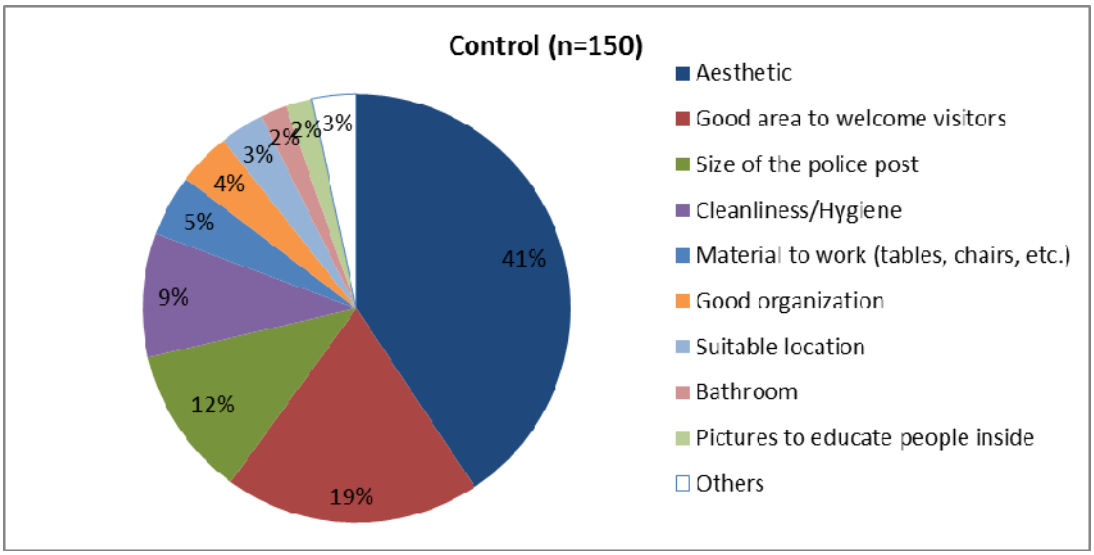

Figure 40. What people like about their police posts (control).

Respondent dislikes

319 respondents in treatment communes (79.75%) did not have anything negative to report about the new police posts in their communes (12 answers were missing, and 7 reported that they do not know). Only 62 people mentioned a negative aspect of the police posts, which shows once again that police posts in

treatment areas are more appreciated by respondents than the locations where police are stationed in control communes.

69 answers were given by treatment commune respondents, and are described in Figure 41. The main complaints are a lack of cleanliness/maintenance of the post (23%), small size (16%), and unsuitable location. Surprisingly, some respondents said that these posts were too old. We saw previously that not all people are aware that new police posts had been built in their communes, and we can suppose that people who gave the answer "too old" may not know about the new posts. Among the answers given for "unsuitable location", one of the respondents explained that the police post was built on land that often floods. Another respondent complained that the new police post was built behind the commune hall and the Cambodian People's Party (CPP) commune headquarters. This meant that anyone in these two buildings (i.e., commune officials and representatives of this political party) would be able to see who visited the police post, possibly leading to a conflict of interest.

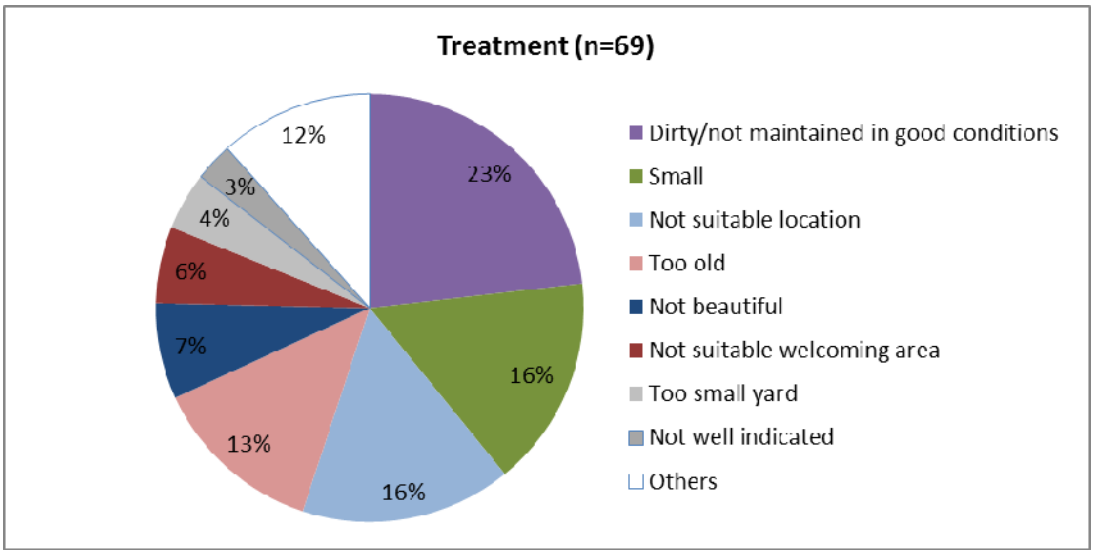

Figure 41. What people dislike about their police posts (treatment).

175 respondents in control areas (43.8%; 5 respondents were missing and 13 reported that they did not know) gave a total of 194 points that they dislike about where their police are stationed (since these communes do not have independent police posts). Figure 42 shows that 55% of the responses are about the building's condition, including its age, low quality and durability; some of the buildings do not have walls, and others are made of wood and are in disrepair. Some of the respondents even compared the police offices to a rice porridge restaurant (i.e., a small wooden shack) and a cow stable.

16% of the dislikes are about the building's small size, 8% about its external aesthetics and 7% about its cleanliness. 6% of responses are about the unsuitable location ("police chief uses his house as the police post", "not good to have police post next to the commune office", etc.).

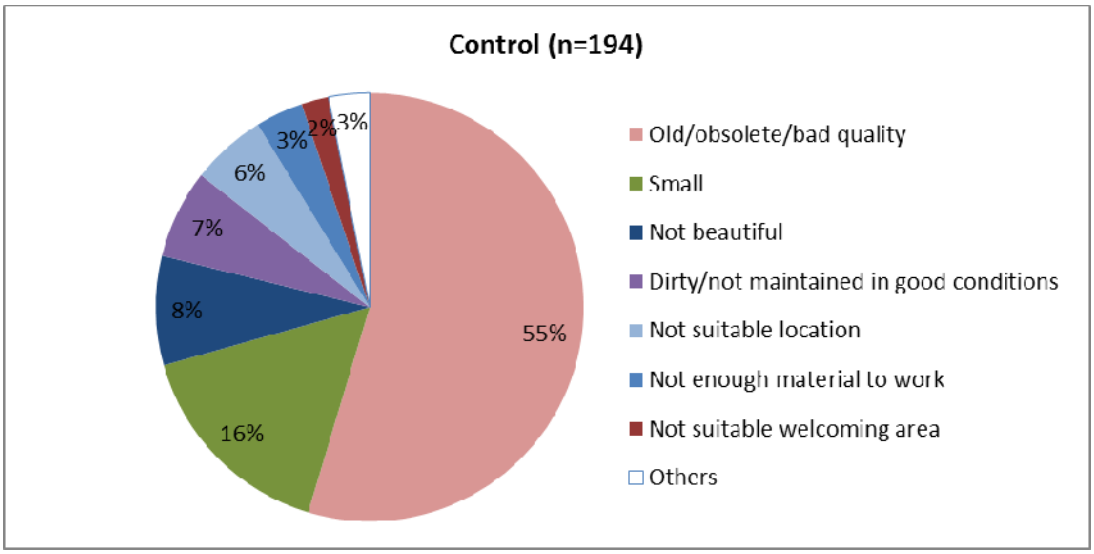

Figure 42. What people dislike about their police posts (control).

Respondent recommendations

In keeping with their high satisfaction with the new police posts, 75% of respondents in treatment areas did not have any recommendations to improve police posts in their communes. 81 households (20.3%) asked for modifications to the existing police posts (Figure 43), such as making it bigger (24% of responses), cleaner (19%), adding more rooms (e.g., kitchen, bathroom, holding cells, offices, etc.), and improving the yard/outside area. Following the complaints about the unsuitable location, many respondent recommendations involved moving the post to a better site (14%). There were also 13 missing and 6 "do not know" responses

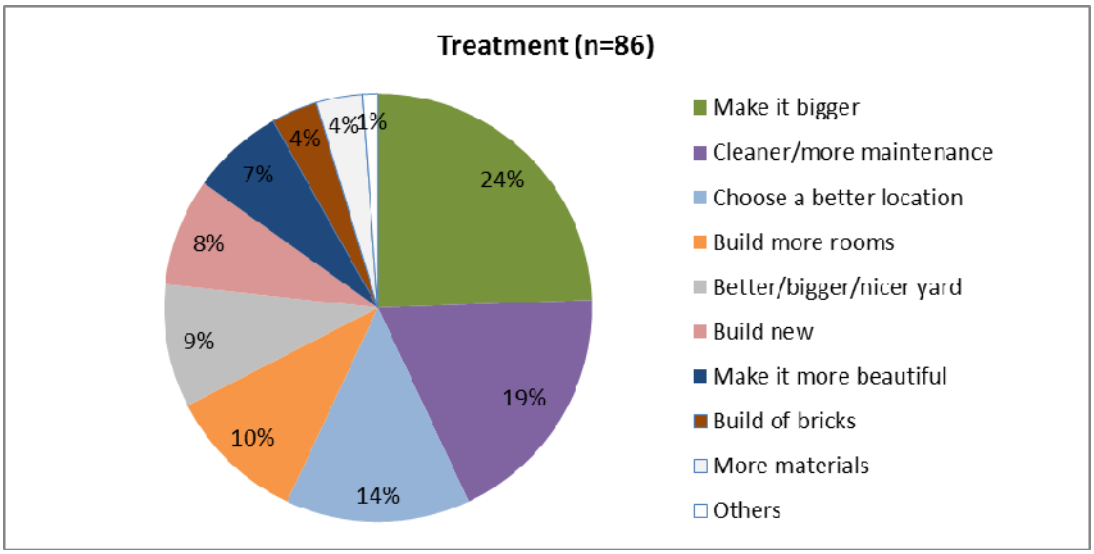

Figure 43. Respondent recommendations to improve police posts (treatment).

174 households (43.5%) in the concerned villages gave a total of 284 recommendations (Figure 44), more than three times as many recommendations as in the treatment communes. After the numerous complaints about the age and condition of the current police building, it is logical that many people simply want a new post to be built. 39% of responses called for a new police post to be built, while an additional 20% added they would like the new post to be made of brick. Improved aesthetics and a larger size were mentioned in 11% and 7% of the answers, respectively.

For people who want a better location for their police posts, the most common reason was that they would like the police to be separated from "politics", that is, from the commune offices, which is where police in control communes are often stationed. "Build missing components" refers to the simple need for additional equipment, such as a doors, solid walls, lights, etc. Finally, "others" includes the answers given by 3 respondents who would like the police to be more accessible ("easy to contact", "available 24 hours"), and to patrol more frequently. There were also 5 missing and 15 "do not know" responses.

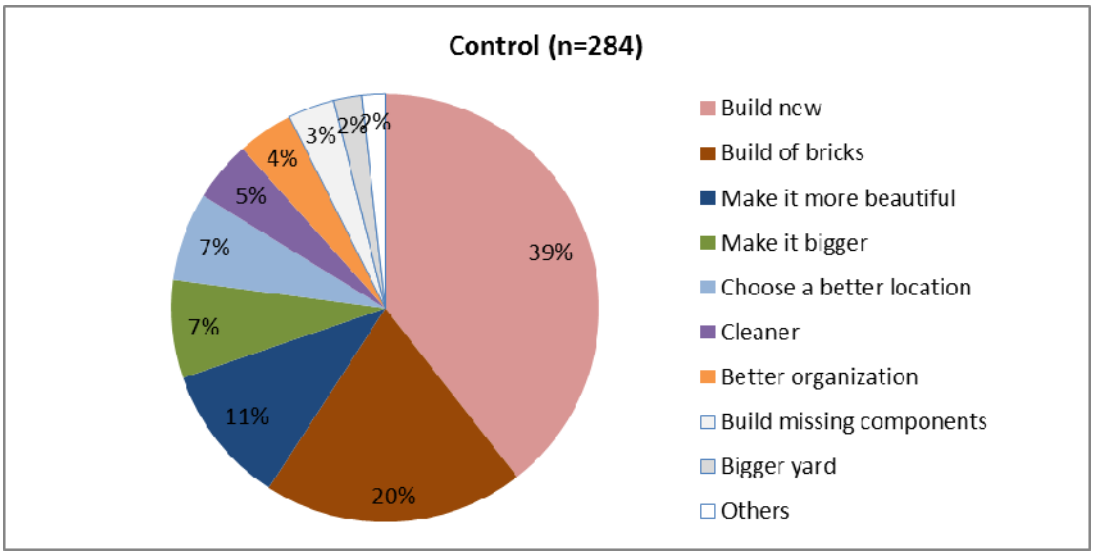

Figure 44. Respondent recommendations to improve police posts (control).

Conclusion

In terms of open-ended responses, we can see that respondents from treatment communes like more aspects of their posts than control commune respondents, and have less aspects they dislike and recommendations to improve their posts. This shows that the new police posts have been well accepted by the population in target areas. Although much less than in control communes, the most frequent recommendations in treatment communes relate to the size and aesthetics of the police posts. The location is also a concern for many respondents, who occasionally found the posts difficult to access (in a flooded area, far from other villages, or too close to commune authorities /political party offices).

General Conclusions and Recommendations

Mostly because of the limited sample size, the low number of crimes recorded, and the similar perceptions between treatment and control communes concerning crime and safety, the difference-in-difference analysis did not show a statistically significant impact attributable to the construction of police posts. However, this study demonstrates several interesting conclusions which highlight the trend of reduced crime, increased reporting, improved perceptions of safety and police attitudes, especially in communes with new police posts.

The total number of crimes has decreased since 2011. From 2011 to 2012, there was a considerable drop in crime, but the number of crimes rose again from 2012 to 2013. This trend is particularly true for the categories of violent crime, dangerous behaviour, threats and property damage, for which there is little improvement from 2011 to 2013. The biggest positive changes were observed for fraud and theft crimes, which steadily decreased from 2011 to 2013, especially in treatment areas.

There are many possible reasons for increases in crime in 2013, including socio-political events, such as the national elections and ensuing political turmoil in 2013, possible economic changes in the communities, and inherent cognitive bias in remembering events that occurred over the last three years (such as the primacy or recall effect).[24]

The percentage of crimes reported has improved relative to the number of crimes committed, especially in treatment communes where this ratio has increased 63.6% from 2011 to 2013. This indicates that respondents feel more confident that police will welcome them and address their complaints. This was confirmed by respondents, who reported that the effectiveness of local authorities, mostly police and village chiefs, to resolve these reported crimes has also improved in communes with new police posts, at the same time that it has declined slightly in control communes. The DID analysis found that police post construction may be responsible for increasing reporting by 50% in treatment communes. However, no significant change could be observed concerning the number of victims reporting crimes; more than 80% of the victims of any kind of crime do not report the crime to authorities.

In general, control respondents perceived themselves to be safer and were less fearful of crime, especially in 2011 where this difference was statistically significant ($p<0.1$). This suggests that CCJAP targeting of the initial communes to receive additional support was appropriate. After police posts were built, fear of crime decreased more in treatment areas than in control areas (13.3% vs. 10.9% decrease, respectively), suggesting that the new police posts improved community perceptions of safety. Alcohol-related problems were perceived as the highest risk to respondents' safety in all communes surveyed.

Respondents who lived in communes with new police posts were significantly more satisfied with their police posts than respondents in control villages ($p<0.1$). Treatment commune respondents also observed

[24] Also called the serial position effect, this cognitive bias suggests that items most recently encountered are more likely to be recalled, followed by items at the beginning of a list. Thus, it may be that there is not less crime in 2012 (the middle of the list), but that respondents are remembering the most recent crimes (in 2013) and the initial crimes (in 2011) better.

significantly more police patrols in 2012 and 2013 ($p<0.1$), and the number of patrols has increased each year. Respondents in communes with new police posts also visited the posts more (this difference was significant at $p<0.1$), and were more satisfied with the appearance of the post (cleaner) and the attitudes of the police officers. However, control communes found their posts were just as easy to access, and had the same wait times.

Six criteria are important to respondents for their police posts: its aesthetics; welcome/reception area; location; cleanliness; organization; and, its size. In treatment communes, people appreciate the fact that their new police posts look nice, are clean, and include a welcome area (with seats). The main reported problems concern the police post maintenance (not kept clean), the size (which is not big enough, according to some respondents), and the location (with some people complaining about the distance from their villages, or the proximity of the police to the commune hall and political party offices). Although there are not many, most recommendations ask for the new police posts to be expanded (with more rooms), kept clean, provided with a larger yard, and situated in a better location.

In control communes, few respondents found positive points of their police posts, but more noted a wide range of problems such as the age and condition (obsolete, old), the size of the post, and that it was not suitable for the police to work properly. Their recommendations are thus about building a new police post, preferably from brick (because it is nicer and more durable), and in a convenient, politically neutral location.

Recommendations

Based on all of the findings in this report, it is clear that police post construction helps to fulfil the second strategic objective of CCJAP, by reducing crime, improving perceptions of safety, and increasing community involvement with local law enforcement. Although the DID analysis was not statistically significant, we are confident that a larger sample size would have increased the statistical confidence in the findings, while providing the same general conclusions.

Based on the findings in this report, there are a number of ways to target new police post construction to maximize the effect of the posts at the commune level. When constructing new police posts, the government should target communes where:

- There is an above average rate of crime, especially violent crimes, fraud and theft (police posts were shown to reduce rates of these crimes more than others);
- Local people feel unsafe or are very afraid of crime in their communities;
- There is no police post building, and current conditions for police are not conducive to positive engagement with community (e.g., where police are stationed under a private house, in a small shack, or in a politically sensitive location);
- Residents have highly negative views of their commune police officers.

Based on recommendations from the respondents, there are certain criteria in the design of new police posts which increase community receptiveness. The Cambodian government should be aware of these, and incorporate them into the planning, design and construction of new posts. These criteria include:

- A large, aesthetically pleasing building made of brick/concrete;
- A sufficient waiting area, large yard, and appropriate rooms for everyday use (bathroom, holding cell, private interview room, administrative area, etc.);
- Sufficient equipment to conduct routine functions (tables, chairs for both visitors and police, report forms, etc.);
- A suitable location (close to most residents, easy to access in all seasons, on politically neutral land).

After construction, the police posts should be kept clean and in good repair.

Reporting of crime is still very low in communities; less than one-fifth of victims report any crimes to the police. As the police posts have been shown to improve police abilities to resolve crimes reported to them, the next step after building new posts is encouraging households to report crimes to the local police. There are a number of ways to encourage this, including:

- Promotion of a behaviour change communication (BCC) campaign, to increase awareness of the new posts (location, new building, contact information, possibly the names and photos of the local police officers, etc.) and encourage people to report crimes there. Local community events could also be planned to increase informal community engagement with the police, such as a volleyball tournament sponsored by the police (or featuring a police team in the tournament); this could be held in the yard of the new police post.
- In addition, because respondents in both groups indicated that informal payments are a problem, a list of official fees for specific services should be made, and posted in a highly visible area (e.g., in front of the post or in the waiting area). This idea, which has been promoted in local health centres as a way of reducing informal payments in that sector, would help to reduce people's confusion about the costs associated with specific police activities, and cut down on requests for other payments. Knowledge of actual costs will improve residents' knowledge of the reporting system, and increase their likelihood of utilisation.

Third, activities can be implemented in local communities to address the ability of police to resolve crimes, especially violent crimes, threats and fraud. These crimes had lower rates of satisfactory resolution by police than others. Increasing police awareness of these crimes, and their ability to resolve them satisfactorily, will help to decrease crime rates overall and improve community safety.

Lastly, respondents in all communities were most afraid of alcohol-related problems in their communities. Thus, activities should be planned to address alcohol issues in local communities, educating both police and community members about the dangers of excessive alcohol consumption, and proposing preventive/dissuasive measures.

Annex 1: Wealth Ranking Methodology

The index used to estimate household wealth is computed from basic information on socio-economic characteristics of households.

We categorised respondents into three groups to assess possible inequities in health. Cut-off values are percentile values of a wealth score computed on the sample.

We defined wealth categories (poorest, poor and better off) using the following data: housing type and rooms, assets, animals, and toilets. Interviewers also observed and ranked each household in three categories, from poorest to richest. We then used the algorithm below to attribute points for each answer and compute a wealth score for each respondent using the formula below.

Housing type index (from 0 to 4):

- 4 if they have a brick or concrete house;
- 3 if they have a wooden house and tiled roof;
- 2 if they have a wooden house and a tin roof;
- 1 if they have a wooden house with palm leaf roof;
- 0 if they have a house of palm leaves/thatched roof.

Room index (from 1-3):

- 3 if they have more than 2 rooms for sleeping;
- 2 if they have 2 rooms for sleeping;
- 1 if they have 1 room for sleeping.

Asset index (from 0 to 4):

- 4 if they have a car;
- 3 if they have a boat and/or ox-cart and/or motorbike;
- 2 if they have a TV, bicycle and/or refrigerator;
- 1 if they have a radio/phone;
- 0 if they have none of the above.

Toilet index (from 0-3):

- 3 if two or more toilets;
- 2 if one toilet;
- 1 if share with another family;
- 0 if no toilets.

Animal ownership index:

The value of animal ownership was calculated by using the following formula:

Animal = round((poultry/2+pig+goat)/2+(cow+buffalo+horse)/2)

Subjective wealth category (as rated by surveyor):

- 2 if least poor group;
- 1 if middle group;
- 0 if poorest group.

The wealth score is computed by adding the computed values of house type, animals, assets, toilets and subjective wealth category:

Wealth Score = housing index(0-4) *+ room index*(1-3) *+ asset index*(0-4) *+ subjective wealth index*(0-2) *+ animal index*(0-3) *+ toilet index*(0-3)

Scores range from 1 to a maximum of 19 points. We then establish two cut-off points, such that the "Poorest" category corresponds as closely as possible to the lowest quintile (20%), and the "Better-off" category corresponds to the highest quintile (20%).

Annex 2: Difference-in-Difference Analysis

There are a number of steps involved in this process. First, we plotted the trends for both the treatment and control communes over the three years measured by the survey (2011, 2012 and 2013) for the various metrics. Assuming that the treatment and control communes would have similar crime and safety trends over time, any changes in control communes can be considered to reflect changes in the treatment communes if there had been no police post construction (or CPCS activities). We then examined what might have happened in treatment communes in the absence of police post construction, by creating a "counterfactual", which is the trend in control groups applied to the treatment communes at baseline (see Figure 1).

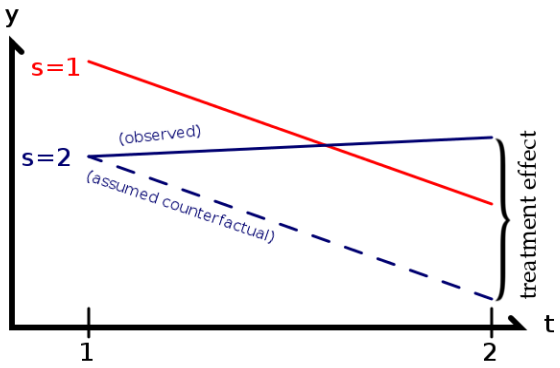

Figure 45: A model of difference-in-difference analysis, where s=1 is the control group at baseline, and s=2 is the treatment group at baseline. (Source: Wikipedia. Used under Creative Commons license.)

If the actual trend in treatment communes is different from the counterfactual, it means that something has had an impact on the treatment communes (the treatment effect, or the difference of the differences between treatment and counterfactual at endline). Assuming that all other variables are equal between the treatment and control groups, this effect can be attributed to the construction of police posts. If the counterfactual is the same or close to the actual trend in the treatment communes, it means that the treatment and control communes have progressed in a similar manner since the baseline, and that police post construction has had no additional impact on the treatment communes.

Figure 46 helps to understand better about the difference-in-difference (DID) analysis. This figure displays the absolute trends in the average number of crimes per all respondent households, in both treatment and control communes, from 2011 to 2013. The counterfactual line represents the crime rate in treatment communes if no police posts had been built in 2011. The potential effect of police post construction, the DID, is then the difference between the treatment and the counterfactual values in 2013, and is a 0.203 decrease in this case. The DID is calculated as follows:

$$DID = (\bar{y}_{Treatment/2013} - \bar{y}_{Control/2013}) - (\bar{y}_{Treatment/2011} - \bar{y}_{Control/2011})$$

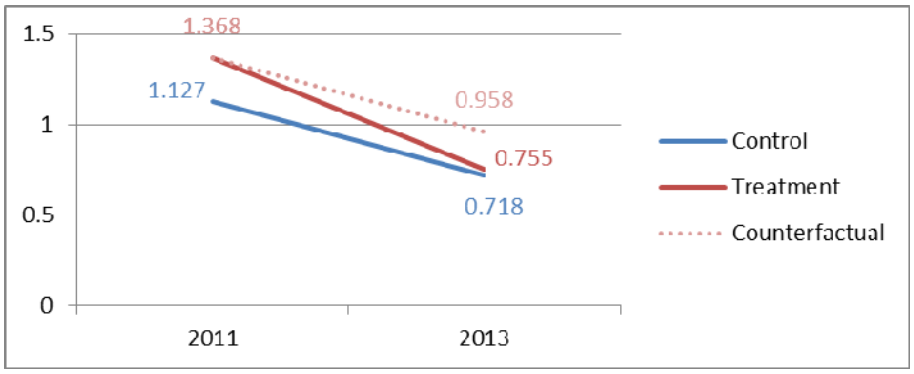

Figure 46. Average crime rate per household, 2011 to 2013, with counterfactual (n=800).

Annex 3: Questionnaire

Section 1: Respondent background First, I'd like to ask you some questions about your household.			
1.	Is the head of your household a man or a woman?	Man Woman	1 2
2.	Are you the head of the household?	No Yes	0 1
3.	How old are you?	Years	
4.	How long has your household lived in this village? ***After 2012 (2 years or less) are not eligible (conclude interview).***	Years	
5.	Have you ever gone to school?	No **(Skip to Q7)** Yes	0 1
6.	What was the highest grade you completed? ***If university, code '13'.***	Grade	
7.	What assets does your family own? ***Prompt by reading the list.*** ***Multiple answers possible – circle all answers given.*** ***Check your own observations as well.***	None Radio Television Bicycle Refrigerator Motorcycle Oxcart Boat Car/koyun/tuk-tuk Telephone	0 1 2 3 4 5 6 7 8 9
8.	What farm animals does your family own?	None	0

	Prompt by reading the list. ***Multiple answers possible – circle all answers given.*** ***Check that they do not mind the animals for someone else.***	Chickens/ducks Pigs Goats Cows Horses Buffaloes	1 2 3 4 5 6
9.	How many toilets does your house have?	No toilet Share with other family One toilet Two or more	0 1 2 3
10.	How many bedrooms does your house have?	Number:	
11.	Is anyone in your family a police officer or other government official?	No **(Skip to Q13)** Yes	0 1
12.	Which are they? ***Multiple answers possible – circle all answers given.***	Police Military police Government official Other	1 2 3 88

Section 2: Experience of Crime

Now I would like to ask you some questions about your experiences with crime in your community.

A: Violent crime

First I want to ask you about violent crime in your community. By violent crime I mean crimes like assault, murder and rape.

13.	In **2011**, was your family the victim of violent crime? ***Prompt by reading the list.*** ***Multiple answers possible – circle all answers given.***	No **(Skip to Q19)** Shot family member Killed family member Stabbed family member Raped family member Hit with hand/kick	0 1 2 3 4 5

		Hit with something	6
		Other……	88
		Other……	89
14.	How many times was your family a victim of violent crime? ***Check with Q13 and record number of times for each crime.*** ***Multiple answers possible.***	Shot family member	
		Killed family member	
		Stabbed family member	
		Raped family member	
		Hit with hand/kick	
		Hit with something	
		Other……	
		Other……	
15.	Did you report these crimes to the police or local authorities?	No **(Skip to Q19)**	0
		Yes, all	1
		Yes, some	2
16.	How many crimes did you report? ***Check with Q13 and record number of times for each crime.*** ***Multiple answers possible.***	Shot family member	
		Killed family member	
		Stabbed family member	
		Raped family member	
		Hit with hand/kick	
		Hit with something	
		Other……	
		Other……	
17.	Who did you report the crime(s) to? ***Multiple answers possible – circle all answers given.***	Village chief	1
		Police	2
		Other government staff	3
		Any court	4
		Military police	5
		ADHOC NGO	6

		Other……	88
18.	Did ……help to solve the problem for you?	No	0
		Yes, help to solve all	1
		Yes, help to solve some	2
19.	In **2012**, was your family the victim of violent crime? ***Prompt by reading the list.*** ***Multiple answers possible – circle all answers given.***	No **(Skip to Q25)**	0
		Shot family member	1
		Killed family member	2
		Stabbed family member	3
		Raped family member	4
		Hit with hand/kick	5
		Hit with something	6
		Other……	88
		Other……	89
20.	How many times was your family a victim of violent crime? ***Check with Q19 and record number of times for each crime.*** ***Multiple answers possible .***	Shot family member	
		Killed family member	
		Stabbed family member	
		Raped family member	
		Hit with hand/kick	
		Hit with something	
		Other……	
		Other……	
21.	Did you report these crimes to the police or local authorities?	No **(Skip to Q25)**	0
		Yes, all	1
		Yes, some	2
22.	How many crimes did you report? ***Check with Q19 and record number of times for each crime.***	Shot family member	
		Killed family member	
		Stabbed family member	

	Multiple answers possible.	Raped family member	
		Hit with hand/kick	
		Hit with something	
		Other……	
		Other……	
23.	Who did you report the crime(s) to? ***Multiple answers possible – circle all answers given***	Village chief	1
		Police	2
		Other government staff	3
		Any court	4
		Military police	5
		ADHOC NGO	6
		Other……	88
24.	Did ……help to solve the problem for you?	No	0
		Yes, help to solve all	1
		Yes, help to solve some	2
25.	In **2013**, was your family the victim of violent crime? ***Prompt by reading the list.*** ***Multiple answers possible – circle all answers given.***	No **(Skip to Q31)**	0
		Shot family member	1
		Killed family member	2
		Stabbed family member	3
		Raped family member	4
		Hit with hand/kick	5
		Hit with something	6
		Other……	88
		Other……	89
26.	How many times was your family a victim of violent crime? ***Check with Q25 and record number of times for each crime.*** ***Multiple answers possible.***	Shot family member	
		Killed family member	
		Stabbed family member	
		Raped family member	
		Hit with hand/kick	
		Hit with something	
		Other……	

		Other……	
27.	Did you report these crimes to the police or local authorities?	No **(Skip to Q31)** Yes, all Yes, some	0 1 2
28.	How many crimes did you report? ***Check with Q25 and record number of times for each crime*** ***Multiple answers possible***	Shot family member Killed family member Stabbed family member Raped family member Hit with hand/kick Hit with something Other…… Other……	
29.	Who did you report the crime(s) to? ***Multiple answers possible – circle all answers given***	Village chief Police Other government staff Any court Military police ADHOC NGO Other……	1 2 3 4 5 6 88
30.	Did ……help to solve the problem for you?	No Yes, help to solve all Yes, help to solve some	0 1 2
B: Theft Now I want to ask you about theft in your community. That is, any theft that has impacted your family.			
31.	In **2011**, was your family the victim of a theft? ***Prompt by reading the list.*** ***Multiple answers possible – circle all answers given.***	No **(Skip to Q37)** Money/gold Chicken/duck Cow/buffalo/pig Farm land Bicycle/moto	0 1 2 3 4 5

		Cloth/silk	6
		Rice	7
		Farm produce	8
		Rubber	9
		Farm/fishing tools	10
		Battery (car/machine/etc)	11
		Dog/cat	12
		Boat	13
		Koyun	14
		Oxcart	15
		Kitchen tools/appliances	16
		Telephone	17
		Other……	88
		Other……	89
32.	How many times was ……. stolen? ***Check with Q31 and record number of times for each crime.*** ***Multiple answers possible.***	Money/gold	
		Chicken/duck	
		Cow/buffalo/pig	
		Farm land	
		Bicycle/moto	
		Cloth/silk	
		Rice	
		Farm produce	
		Rubber	
		Farm/fishing tools	
		Battery (car/machine/etc)	
		Dog/cat	
		Boat	
		Koyun	
		Oxcart	
		Kitchen tools/appliances	

		Telephone	
		Other……	
		Other……	
33.	Did you report these crimes to the police or local authorities?	No **(Skip to Q37)**	0
		Yes, all	1
		Yes, some	2
34.	How many crimes did you report? ***Check with Q31 and record number of times for each crime*** ***Multiple answers possible***	Money/gold	
		Chicken/duck	
		Cow/buffalo/pig	
		Farm land	
		Bicycle/moto	
		Cloth/silk	
		Rice	
		Farm produce	
		Rubber	
		Farm/fishing tools	
		Battery (car/machine/etc)	
		Dog/cat	
		Boat	
		Koyun	
		Oxcart	
		Kitchen tools/appliances	
		Telephone	
		Other……	
		Other……	
35.	Who did you report the crime(s) to? ***Multiple answers possible – circle all answers given***	Village chief	1
		Police	2
		Other government staff	3
		Any court	4
		Military police	5

		ADHOC NGO	6
		Other……	88
36.	Did ……help or solve the problem for you?	No	0
		Yes, help to solve all	1
		Yes, help to solve some	2
37.	In **2012**, was your family the victim of a theft? ***Prompt by reading the list*** ***Multiple answers possible – circle all answers given***	No **(Skip to Q43)**	0
		Money/gold	1
		Chicken/duck	2
		Cow/buffalo/pig	3
		Farm land	4
		Bicycle/moto	5
		Cloth/silk	6
		Rice	7
		Farm produce	8
		Rubber	9
		Farm/fishing tools	10
		Battery (car/machine/etc)	11
		Dog/cat	12
		Boat	13
		Koyun	14
		Oxcart	15
		Kitchen tools/appliances	16
		Telephone	17
		Other……	88
		Other……	89
38.	How many times was ……. stolen? ***Check with Q37 and record number of times for each crime*** ***Multiple answers possible***	Money/gold	
		Chicken/duck	
		Cow/buffalo/pig	
		Farm land	
		Bicycle/moto	

		Cloth/silk	
		Rice	
		Farm produce	
		Rubber	
		Farm/fishing tools	
		Battery (car/machine/etc)	
		Dog/cat	
		Boat	
		Koyun	
		Oxcart	
		Kitchen tools/appliances	
		Telephone	
		Other……	
		Other……	
39.	Did you report these crimes to the police or local authorities?	No **(Skip to Q43)**	0
		Yes, all	1
		Yes, some	2
40.	How many crimes did you report? ***Check with Q37 and record number of times for each crime*** ***Multiple answers possible***	Money/gold	
		Chicken/duck	
		Cow/buffalo/pig	
		Farm land	
		Bicycle/moto	
		Cloth/silk	
		Rice	
		Farm produce	
		Rubber	
		Farm/fishing tools	
		Battery (car/machine/etc)	
		Dog/cat	
		Boat	

		Koyun	
		Oxcart	
		Kitchen tools/appliance	
		Telephone	
		Other……	
		Other……	
41.	Who did you report the crime(s) to? ***Multiple answers possible – circle all answers given***	Village chief	1
		Police	2
		Other government staff	3
		Any court	4
		Military police	5
		ADHOC NGO	6
		Other……	88
42.	Did ……help or solve the problem for you?	No	0
		Yes, help to solve all	1
		Yes, help to solve some	2
43.	In **2013**, was your family the victim of a theft? ***Prompt by reading the list*** ***Multiple answers possible – circle all answers given***	No **(Skip to Q49)**	0
		Money/gold	1
		Chicken/duck	2
		Cow/buffalo/pig	3
		Farm land	4
		Bicycle/moto	5
		Cloth/silk	6
		Rice	7
		Farm produce	8
		Rubber	9
		Farm/fishing tools	10
		Battery (car/machine/etc)	11
		Dog/cat	12
		Boat	13

		Koyun	14
		Oxcart	15
		Kitchen tools/appliances	16
		Telephone	17
		Other……	88
		Other……	89
44.	How many times was ……. stolen? ***Check with Q43 and record number of times for each crime*** ***Multiple answers possible***	Money/gold	
		Chicken/duck	
		Cow/buffalo/pig	
		Farm land	
		Bicycle/moto	
		Cloth/silk	
		Rice	
		Farm produce	
		Rubber	
		Farm/fishing tools	
		Battery (car/machine/etc)	
		Dog/cat	
		Boat	
		Koyun	
		Oxcart	
		Kitchen tools/appliances	
		Telephone	
		Other……	
		Other……	
45.	Did you report these crimes to the police or local authority?	No **(Skip to Q49)**	0
		Yes, all	1
		Yes, some	2
46.	How many crimes did you report? ***Check with Q43 and record number of times for each crime***	Money/gold	
		Chicken/duck	

	Multiple answers possible	Cow/buffalo/pig	
		Farm land	
		Bicycle/moto	
		Cloth/silk	
		Rice	
		Farm produce	
		Rubber	
		Farm/fishing tools	
		Battery (car/machine/etc)	
		Dog/cat	
		Boat	
		Koyun	
		Oxcart	
		Kitchen tools/appliances	
		Telephone	
		Other……	
		Other……	
47.	Who did you report the crime(s) to? ***Multiple answers possible – circle all answers given***	Village chief	1
		Police	2
		Other government staff	3
		Any court	4
		Military police	5
		ADHOC NGO	6
		Other……	88
48.	Did ……help to solve the problem for you?	No	0
		Yes, help to solve all	1
		Yes, help to solve some	2
C: Danger to others Now I want to ask you about crimes that cause danger to others in your community. By danger to others, I mean behaviors like driving too fast, which have affected your family.			
49.	In **2011**, was your family in danger because of the behavior	No **(Skip to Q55)**	0

	of others? ***Prompt by reading the list.*** ***Multiple answers possible – circle all answers given.***	Other driver cuts you off Moto/car drives too fast/close Shout at you when you drive moto/car Moto/car crash Other…… Other……	1 2 3 4 88 89
50.	How many times was your family in danger? ***Check with Q49 and record number of times for each crime.*** ***Multiple answers possible.***	Other driver cuts you off Moto/car drives too fast/close Shout at you when you drive moto/car Moto/car crash Other…… Other……	
51.	Did you report these crimes to the police or local authority?	No **(Skip to Q Q55)** Yes, all Yes, some	0 1 2
52.	How many crimes did you report? ***Check with Q49 and record number of times for each crime.*** ***Multiple answers possible.***	Other driver cuts you off Moto/car drives too fast/close Shout at you when you drive moto/car Moto/car crash Other…… Other……	
53.	Who did you report to? ***Multiple answers possible – circle all answers***	Village chief Police Other government staff Any court Military police ADHOC NGO Other……	1 2 3 4 5 6 88
54.	Did ……help to solve the problem for you?	No	0

		Yes, help to solve all	1
		Yes, help to solve some	2
55.	In **2012**, was your family in danger because of the behavior of others? ***Prompt by reading the list*** ***Multiple answers possible – circle all answers given***	No **(Skip to Q61)**	0
		Other driver cuts you off	1
		Moto/car drives too fast/close	2
		Shout at you when you drive moto/car	3
		Moto/car crash	4
		Other……	88
		Other……	89
56.	How many times was your family in danger? ***Check with Q55 and record number of times for each crime*** ***Multiple answers possible***	Other driver cuts you off	
		Moto/car drives too fast/close	
		Shout at you when you drive moto/car	
		Moto/car crash	
		Other……	
		Other……	
57.	Did you report these crimes to the police or local authorities?	No **(Skip to Q61)**	0
		Yes, all	1
		Yes, some	2
58.	How many crimes did you report? ***Check with Q55 and record number of times for each crime*** ***Multiple answers possible***	Other driver cuts you off	
		Moto/car drives too fast/close	
		Shout at you when you drive moto/car	
		Moto/car crash	
		Other……	
		Other……	
59.	Who did you report to? ***Multiple answers possible – circle all answers given***	Village chief	1
		Police	2
		Other government staff	3
		Any court	4
		Military police	5

		ADHOC NGO	6
		Other……	88
60.	Did ……help to solve the problem for you?	No	0
		Yes, help to solve all	1
		Yes, help to solve some	2
61.	**In 2013**, was your family in danger because of the behavior of others? ***Prompt by reading the list*** ***Multiple answers possible – circle all answers given***	No **(Skip to Q67)**	0
		Other driver cuts you off	1
		Moto/car drives too fast/close	2
		Shout at you when you drive moto/car	3
		Moto/car crash	4
		Other……	88
		Other……	89
62.	How many times was your family in danger? ***Check with Q61 and record number of times for each crime*** ***Multiple answers possible***	Other driver cuts you off	
		Moto/car drives too fast/close	
		Shout at you when you drive moto/car	
		Moto/car crash	
		Other……	
		Other……	
63.	Did you report these crimes to the police or local authority?	No **(Skip to Q67)**	0
		Yes, all	1
		Yes, some	2
64.	How many crimes did you report? ***Check with Q61 and record number of times for each crime*** ***Multiple answers possible***	Other driver cuts you off	
		Moto/car drives too fast/close	
		Shout at you when you drive moto/car	
		Moto/car crash	
		Other……	
		Other……	
65.	Who did you report to? ***Multiple answers possible – circle all answers given***	Village chief	1
		Police	2
		Other government staff	3

		Any court	4
		Military police	5
		ADHOC NGO	6
		Other……	88
66.	Did ……help to solve the problem for you?	No	0
		Yes, help to solve all	1
		Yes, help to solve some	2

D: Threats

Now I want to ask you about threats in your community.

67.	In **2011,** was your family the victim of a threat? ***Prompt by reading the list.*** ***Multiple answers possible – circle all answers given.***	No **(Skip to Q73)**	0
		Fire from work	1
		Take something from you	2
		Kill you	3
		Hit you	4
		Say something bad about you	5
		Other……	88
		Other……	89
68.	How many times was your family a victim of these threats? ***Check with Q67 and record number of times for each crime.*** ***Multiple answers possible.***	Fire from work	
		Take something from you	
		Kill you	
		Hit you	
		Say something bad about you	
		Other……	
		Other……	
69.	Did you report these crimes to the police or local authority?	No **(Skip to Q73)**	0
		Yes, all	1
		Yes, some	2
70.	How many crimes did you report? ***Check with Q67 and record number of times for each crime***	Fire from work	
		Take something from you	
		Kill you	

	Multiple answers possible	Hit you	
		Say something bad about you	
		Other……	
		Other……	
71.	Who did you report to? ***Multiple answers possible – circle all answers given***	Village chief	1
		Police	2
		Other government staff	3
		Any court	4
		Military police	5
		ADHOC NGO	6
		Other……	88
72.	Did ……help to solve the problem for you?	No	0
		Yes, help to solve all	1
		Yes, help to solve some	2
73.	In **2012** was your family the victim of a threat? ***Prompt by reading the list.*** ***Multiple answers possible – circle all answers given.***	No **(Skip to Q79)**	0
		Fire from work	1
		Take something from you	2
		Kill you	3
		Hit you	4
		Say something bad about you	5
		Other……	88
		Other……	89
74.	How many times was your family a victim of these threats? ***Check with Q73 and record number of times for each crime.*** ***Multiple answers possible.***	Fire from work	
		Take something from you	
		Kill you	
		Hit you	
		Say something bad about you	
		Other……	
		Other……	
75.	Did you report these crimes to the police or local authority?	No **(Skip to Q79)**	0

		Yes, all	1
		Yes, some	2
76.	How many crimes did you report? ***Check with Q73 and record number of times for each crime.*** ***Multiple answers possible.***	Fire from work Take something from you Kill you Hit you Say something bad about you Other…… Other……	
77.	Who did you report to? ***Multiple answers possible – circle all answers given.***	Village chief Police Other government staff Any court Military police ADHOC NGO Other……	1 2 3 4 5 6 88
78.	Did ……help to solve the problem for you?	No Yes, help to solve all Yes, help to solve some	0 1 2
79.	In **2013** was your family the victim of a threat? ***Prompt by reading the list*** ***Multiple answers possible – circle all answers given***	No **(Skip to Q85)** Fire from work Take something from you Kill you Hit you Say something bad about you Other…… Other……	0 1 2 3 4 5 88 89
80.	How many times was your family a victim of these threats? ***Check with Q79 and record number of times for each crime*** ***Multiple answers possible***	Fire from work Take something from you Kill you Hit you	

		Say something bad about you	
		Other……	
		Other……	
81.	Did you report these crimes to the police or local authority?	No **(Skip to Q85)**	0
		Yes, all	1
		Yes, some	2
82.	How many crimes did you report? ***Check with Q79 and record number of times for each crime*** ***Multiple answers possible***	Fire from work	
		Take something from you	
		Kill you	
		Hit you	
		Say something bad about you	
		Other……	
		Other……	
83.	Who did you report to? ***Multiple answers possible – circle all answers given***	Village chief	1
		Police	2
		Other government staff	3
		Any court	4
		Military police	5
		ADHOC NGO	6
		Other……	88
84.	Did ……help to solve the problem for you?	No	0
		Yes, help to solve all	1
		Yes, help to solve some	2
E: Fraud Now, I want to ask you about fraud in your community.			
85.	In **2011**, was your family the victim of fraud? ***Prompt by reading the list.*** ***Multiple answers possible – circle all answers given.***	No **(Skip to Q91)**	0
		Provide less money than promised (repay debt, etc.)	1
		Sell something more expensive than normal	2
		Deceive about something	3

		Borrow money and leave village	4
		Other……	88
		Other……..	89
86.	How many times was your family a victim of fraud? ***Check with Q85 and record number of times for each crime.*** ***Multiple answers possible.***	Provide less money than promised (repay debt, etc.) Sell something more expensive than normal Deceive about something Borrow money and leave village Other…… Other……..	
87.	Did you report these crimes to the police or local authorities?	No **(Skip to Q91)** Yes, all Yes, some	0 1 2
88.	How many crimes did you report? ***Check with Q85 and record number of times for each crime.*** ***Multiple answers possible.***	Provide less money than promised (repay debt, etc.) Sell something more expensive than normal Deceive about something Borrow money and leave village Other…… Other……..	
89.	Who did you report these crimes to? ***Multiple answers possible – circle all answers given.***	Village chief Police Other government staff Any court Military police ADHOC NGO	1 2 3 4 5 6

		Other……	88
90.	Did ……help to solve the problem for you?	No Yes, help to solve all Yes, help to solve some	0 1 2
91.	In **2012**, was your family the victim of fraud? ***Prompt by reading the list.*** ***Multiple answers possible – circle all answers given.***	No **(Skip to Q97)** Provide less money than promised (repay debt, etc.) Sell something more expensive than normal Deceive about something Borrow money and leave village Other…… Other……..	0 1 2 3 4 88 89
92.	How many times was your family a victim of fraud? ***Check with Q91 and record number of times for each crime*** ***Multiple answers possible***	Provide less money than promised (repay debt, etc.) Sell something more expensive than normal Deceive about something Borrow money and leave village Other…… Other……..	
93.	Did you report these crimes to the police or local authorities?	No **(Skip to Q97)** Yes, all Yes, some	0 1 2
94.	How many crimes did you report? ***Check with Q91 and record number of times for each crime*** ***Multiple answers possible***	Provide less money than promised (repay debt, etc.) Sell something more expensive than normal Deceive about something	

		Borrow money and leave village	
		Other……	
		Other……..	
95.	Who did you report these crimes to? ***Multiple answers possible – circle all answers given***	Village chief	1
		Police	2
		Other government staff	3
		Any court	4
		Military police	5
		ADHOC NGO	6
		Other……	88
96.	Did ……help to solve the problem for you?	No	0
		Yes, help to solve all	1
		Yes, help to solve some	2
97.	In **2013**, was your family the victim of fraud? ***Prompt by reading the list*** ***Multiple answers possible – circle all answers given***	No **(Skip to Q103)**	0
		Provide less money than promised (repay debt, etc.)	1
		Sell something more expensive than normal	2
		Deceive about something	3
		Borrow money and leave village	4
		Other……	88
		Other……..	89
98.	How many times was your family a victim of fraud? ***Check with Q97 and record number of times for each crime*** ***Multiple answers possible***	Provide less money than promised (repay debt, etc.)	
		Sell something more expensive than normal	
		Deceive about something	
		Borrow money and leave village	
		Other……	

		Other……..	
99.	Did you report these crimes to the police or local authorities?	No **(Skip to Q103)** Yes, all Yes, some	0 1 2
100.	How many crimes did you report? ***Check with Q97 and record number of times for each crime*** ***Multiple answers possible***	Provide less money than promised (repay debt, etc.) Sell something more expensive than normal Deceive about something Borrow money and leave village Other…… Other……..	
101.	Who did you report these crimes to? ***Multiple answers possible – circle all answers given***	Village chief Police Other government staff Any court Military police ADHOC NGO Other……	1 2 3 4 5 6 88
102.	Did ……help to solve the problem for you?	No Yes, help to solve all Yes, help to solve some	0 1 2
F: Property Damage Now, I want to ask you about damage to your property in this community. By damage to property I mean damage like cutting your tree/fruit tree, burning your house, other damage, etc.			
103.	In **2011**, was your family the victim of property damage? ***Prompt by reading the list.*** ***Multiple answers possible – circle all answers given.***	No **(Skip to Q109)** Cut your trees Hit/burn your house Hit/burn car, moto, bicycle	0 1 2 3

		Burn your farm produce	4
		Hit/poison your pet/animal	5
		Abuse farm (let animals eat your produce, cut rice, etc.)	6
		Other……	88
		Other……	89
104.	How many times did this property damage occur? ***Check with Q103 and record number of times for each crime*** ***Multiple answers possible***	Cut your trees	
		Hit/burn your house	
		Hit/burn car, moto, bicycle	
		Burn your farm produce	
		Hit/poison your pet/animal	
		Abuse farm (let animals eat your produce, cut rice, etc.)	
		Other……	
		Other……	
105.	Did you report these crimes to the police or local authorities?	No **(Skip to Q109)**	0
		Yes, all	1
		Yes, some	2
106.	How many crimes did you report? ***Check with Q103 and record number of times for each crime.*** ***Multiple answers possible.***	Cut your trees	
		Hit/burn your house	
		Hit/burn car, moto, bicycle	
		Burn your farm produce	
		Hit/poison your pet/animal	
		Abuse farm (let animals eat your produce, cut rice, etc.)	
		Other……	
		Other……	
107.	Who did you report these crimes to?	Village chief	1
		Police	2

	Multiple answers possible – circle all answers given.	Other government staff	3
		Any court	4
		Military police	5
		ADHOC NGO	6
		Other……	88
108.	Did ……help to solve the problem for you?	No	0
		Yes, help to solve all	1
		Yes, help to solve some	2
109.	In **2012**, was your family the victim of property damage? ***Prompt by reading the list*** ***Multiple answers possible – circle all answers given***	No **(Skip to Q115)**	0
		Cut your trees	1
		Hit/burn your house	2
		Hit/burn car, moto, bicycle	3
		Burn your farm produce	4
		Hit/poison your pet/animal	5
		Abuse farm (let animals eat your produce, cut rice, etc.)	6
		Other……	88
		Other……	89
110.	How many times did this property damage occur? ***Check with Q109 and record number of times for each crime.*** ***Multiple answers possible.***	Cut your trees	
		Hit/burn your house	
		Hit/burn car, moto, bicycle	
		Burn your farm produce	
		Hit/poison your pet/animal	
		Abuse farm (let animals eat your produce, cut rice, etc.)	
		Other……	
		Other……	
111.	Did you report these crimes to the police or local authorities?	No **(Skip to Q115)**	0
		Yes, all	1
		Yes, some	2
112.	How many crimes did you report? ***Check with Q109 and record number of times for each crime.***	Cut your trees	
		Hit/burn your house	

	Multiple answers possible.	Hit/burn car, moto, bicycle	
		Burn your farm produce	
		Hit/poison your pet/animal	
		Abuse farm (let animals eat your produce, cut rice, etc.)	
		Other……	
		Other……	
113.	Who did you report these crimes to? ***Multiple answers possible – circle all answers given.***	Village chief	1
		Police	2
		Other government staff	3
		Any court	4
		Military police	5
		ADHOC NGO	6
		Other……	88
114.	Did ……help to solve the problem for you?	No	0
		Yes, help to solve all	1
		Yes, help to solve some	2
115.	In **2013**, was your family the victim of property damage? ***Prompt by reading the list.*** ***Multiple answers possible – circle all answers given.***	No **(Skip to Q121)**	0
		Cut your trees	1
		Hit/burn your house	2
		Hit/burn car, moto, bicycle	3
		Burn your farm produce	4
		Hit/poison your pet/animal	5
		Abuse farm (let animals eat your produce, cut rice, etc.)	6
		Other……	88
		Other……	89
116.	How many times did this property damage occur? ***Check with Q115 and record number of times for each crime.*** ***Multiple answers possible.***	Cut your trees	
		Hit/burn your house	
		Hit/burn car, moto, bicycle	
		Burn your farm produce	
		Hit/poison your pet/animal	

		Abuse farm (let animals eat your produce, cut rice, etc.)	
		Other……	
		Other……	
117.	Did you report these crimes to the police or local authorities?	No **(Skip to Q121)**	0
		Yes, all	1
		Yes, some	2
118.	How many crimes did you report? ***Check with Q115 and record number of times for each crime.*** ***Multiple answers possible.***	Cut your trees	
		Hit/burn your house	
		Hit/burn car, moto, bicycle	
		Burn your farm produce	
		Hit/poison your pet/animal	
		Abuse farm (let animals eat your produce, cut rice, etc.)	
		Other……	
		Other……	
119.	Who did you report these crimes to? ***Multiple answers possible – circle all answers given.***	Village chief	1
		Police	2
		Other government staff	3
		Any court	4
		Military police	5
		ADHOC NGO	6
		Other……	88
120.	Did ……help to solve the problem for you?	No	0
		Yes, help to solve all	1
		Yes, help to solve some	2

Section 3: Perceptions of Crime

Now I would like to ask you some questions about your understanding of crime in your community.

Now, I want you to give a score for crime in your community. The scores range from 1 to 10, 1 means the lowest crime risk and 10 is the highest crime risk. Please answer according to your own opinion.

121.	How scared were you that criminals would make problems in your family, in **2011**? What score would you give this?	Number

122.	How scared were you that criminals would make problems in your family, in **2012**? What score would you give this?	Number
123.	How scared were you that criminals would make problems in your family, in **2013**? What score would you give this?	Number
124.	How scared were you that crime would happen in your village, in **2011**? What score would you give this?	Number
125.	How scared were you that crime would happen in your village, in **2012**? What score would you give this?	Number
126.	How scared were you that crime would happen in your village, in **2013**? What score would you give this?	Number
127.	How scared were you of cruel crime in **2011**? What score would you give this?	Number
128.	How scared were you of cruel crime in **2012**? What score would you give this?	Number
129.	How scared were you of cruel crime in **2013**? What score would you give this?	Number
130.	How was crime generally in your village in **2011?** What score would you give this?	Number
131.	How was crime generally in your village in **2012?** What score would you give this?	Number
132.	How was crime generally in your village in **2013?** What score would you give this?	Number
133.	Do you think that levels of crime have changed in your community since **2011**?	No **(Skip to Q136)** 0 Yes 1
134.	How has crime changed?	Increased a lot 1 Increased a little 2 Decreased a little 3 Decreased a lot 4
135.	Why do you think it changed? ***Record only the most important reason.***	Strict laws 1 Police on duty at night 2 Police often patrol 3

		Local authorities provide education/advice	4
		Village chief on duty at night	5
		NGO provides education	6
		Police handle complaints	7
		Family/community help	8
		Increase in alcohol consumption	9
		Increase in youth gangs	10
		Economic changes (poverty, migration, etc.)	11
		Increase in drug use	12
		Ineffective police / local authorities	13
		Other…….	88
136.	How were problems with drunkenness in your village in **2011?**	Number	
137.	How were problems with drunkenness in your village in **2012?**	Number	
138.	How were problems with drunkenness in your village in **2013?**	Number	
139.	How were problems with drugs of addiction in your village in **2011?**	Number	
140.	How were problems with drugs of addiction in your village in **2012?**	Number	
141.	How were problems with drugs of addiction in your village in **2013?**	Number	

Section 4: Community Safety

Now I would like to ask you some questions about safety in your community.

Now, I want you to give a score for safety in your community. The score ranges from 1 to 10, 1 mean that it is very unsafe and 10 it is very safe. Please answer according to your own opinion.

142.	How safe did you feel **in your home at night** in **2011**? What score would you give this?	Number
143.	How safe did you feel **in your home at night** in **2012**? What score would you give this?	Number
144.	How safe did you feel **in your home at night** in **2013**? What score would you give this?	Number
145.	How safe did you feel **sending your children to school** in **2011**? What score would you give this?	Number No children at school 99
146.	How safe did you feel **sending your children to school** in **2012**? What score would you give this?	Number No children at school 99
147.	How safe did you feel **sending your children to school** in **2013**? What score would you give this?	Number No children at school 99
148.	How safe did you feel **in the rice fields or at other work** in **2011**? What score would you give this?	Number
149.	How safe did you feel **in the rice fields or at other work** in **2012**? What score would you give this?	Number
150.	How safe did you feel **in the rice fields or at other work** in **2013**? What score would you give this?	Number
151.	How safe did you feel **travelling in your area** in **2011**? What score would you give this?	Number
152.	How safe did you feel **travelling in your area** in **2012**? What score would you give this?	Number
153.	How safe did you feel **travelling in your area** in **2013**? What score would you give this?	Number
154.	How safe did you feel **attending a party or ceremony at night in your village** in **2011**? What score would you give this?	Number
155.	How safe did you feel **attending a party or ceremony at night in your village** in **2012**? What score would you give this?	Number
156.	How safe did you feel **attending a party or ceremony at night in your village** in **2013**? What score would you give this?	Number
157.	How safe did you feel **generally in your community** in **2011**? What score would you give this?	Number

158.	How safe did you feel **generally in your community** in **2012**? What score would you give this?	Number
159.	How safe did you feel **generally in your community** in **2013**? What score would you give this?	Number

Section 5: Police Post

Now, I would like to ask you some questions about the police post in your community.

160.	Does your commune have a police post now?	No **(Skip to Q172)** Yes	0 1
161.	Have you visited the police post in your commune **since 2011?**	No **(Skip to Q168)** Yes	0 1
162.	When was the last time you visited the police post?	2011 2012 2013 2014	1 2 3 4
163.	Was it easy or difficult to access?	Difficult Easy **(Skip to Q165)**	1 2
164.	What made it difficult to access the police post?	Police post is far away Police post is never open Police post is open a few hours a day No police available Police ignore people without money Other……..	1 2 3 4 5 88
165.	Was the police post clean, acceptable or dirty? ***Prompt by reading the list.***	Clean Acceptable Dirty	1 2 3
166.	How did the staff at the police post speak to you? ***Prompt by reading the list.***	Good Okay Bad/rude	1 2 3
167.	How long did you wait to speak to the police?	Very long	1

	Prompt by reading the list.	Long Average Short Very short	2 3 4 5
Satisfaction with the Police Post			
168.	In general, how would you rate your satisfaction with the police post in your commune? **Rank score from 1 to 10 (10 is very good).**	Number	
169.	What do you **like most** about the police post?		
170.	What do you **not like most** about the police post?		
171.	What do you recommend to make the police post more effective?		
Section 6: Police Involvement in the Community Now I would like to ask you some questions related to police involvement in your community.			
172.	Have you had any contact with the police since **2011?**	No **(Skip to178)** Yes	0 1
173.	How did you contact the police the last time?	Visit police post Telephone call Police came to my home Others ……..	1 2 3 8 8
174.	During your last contact with the police, how many days did you wait to take action? ***Less than 1 day, code 0***	Days:	
175.	How was the attitude of the police in 2011?	Number	

	How would you rank, on a score from 1 to 10 (10 is very good)?	No contact	99
176.	How was the attitude of the police in 2012? **How would you rank, on a score from 1 to 10 (10 is very good)?**	Number No contact	 99
177.	How was the attitude of the police in 2013? **How would you rank, on a score from 1 to 10 (10 is very good)?**	Number No contact	 99
Now I want to ask about police patrol in your village.			
178.	Did you see the police patrol in your village in **2011**?	No **(Skip to Q180)** Yes	0 1
179.	How many times did police patrol in your village in **2011**?	Number	
180.	Did you see the police patrol in your village in **2012**?	No **(Skip to Q182)** Yes	0 1
181.	How many times did police patrol in your village in **2012**?	Number	
182.	Did you see the police patrol in your village in **2013**?	No **(Skip to Q184)** Yes	0 1
183.	How many times did police patrol in your village in **2013**?	Number	
Now, I want you to give a score for the police in your opinion. The score ranges from 1 to 10, 1 means that it is very poor and 10 it is very good. Please answer according to your own opinion.			
184.	In general, how would you rate your satisfaction with the police in your village **in 2011?**	Number	
185.	In general, how would you rate your satisfaction with the police in your village **in 2012?**	Number	
186.	In general, how would you rate your satisfaction with the police in your village **in 2013?**	Number	

187.	**Interviewer comments:** ***Please note anything different or unusual about this interview.***