Aid, Mind and Hearts:
The Impact of Aid in Conflict Zones

Paper prepared for presentation at GROW-Net conference in Zürich
September 18 – 20, 2008

Do not quote without author’s permission

Christoph Zürcher, Free U Berlin and U of Ottawa
czuercher@web.de

Jan R. Böhnke U of Trier
boehnke@uni-trier.de
Abstract

We investigate the impact of development aid on peace building in conflict zones. The chances of successful peace building are higher when attitudes towards foreign actors are more positive, the legitimacy of the state higher and when the local population feels less threatened. We empirically investigate the impact of development aid on these three dimensions, using original data from 77 communities in North East Afghanistan. We find a small, positive effect of aid on attitudes and state legitimacy, but not on threat perception. We use objective measurements of aid (the number of projects) and subjective measurements (the perceived usefulness of aid). We find that subjective measurements have a large impact on state legitimacy and on attitudes towards international actors. By contrast, threat perceptions are unaffected by perceived usefulness. Electrification and drinking water projects seem to have a larger impact on respondent’s perceptions of usefulness than roads, bridges, and schooling projects. As development and security concerns increasingly converge, there is a need for better impact assessments of development aid on peacebuilding. The logistical challenges in conflict zones have often made conducting evaluations impossible due to budget and time constraints. This paper presents a method which could help overcoming these challenges.

Introduction: Aid and Peace Building

It is a distinct feature of global politics at the beginning of the 21st century that the international community engages more often and more robustly in peace building and state building missions than ever before in history. This is partly so because shifting international norms and expectations make it more difficult for the international community to ignore humanitarian disasters which are caused by states in conflict. But perhaps much more importantly, robust peace building missions are launched because it is widely acknowledged that conflict ridden, fragile or failed states cause “public goods” and threatened international security: Civil violence may spill over to neighboring territories and destabilize a whole region, failed states may become a hub for clandestine, illegal
economic activities, or they may become a safe haven for terrorists, as the examples of Afghanistan, Sudan, Somalia, Pakistan’s Eastern Provinces, or the Philippines show. Shifting international norms, the high costs of state failure, and the risks that fragile states pose to global security add up to sharply falling opportunity costs for external involvement. This explains the rise in external involvement in what have been, until recently, domestic affairs.

At the most basic, international engagement in such states aims to fix three fundamental problems that plague states in or after conflict. First, such states usually do not deliver the most basic services. Substantial parts of the population lack access to water, food, electricity, transportation or housing. Second, governments are typically weak, they lack legitimacy, and there are no political institutions in place that may generate political legitimacy for the government. And third, government in conflict state have lost control over the monopoly over the means of violence. Parts of their territory may be controlled by rebels, and there is typically a general a lack of everyday security of the population. Hence, international interventions aim to increase security, to increase the legitimacy and authority of the government, and to increase the provision of basic goods.

The remedies for these deficiencies that international actors have at their disposal are typically the distribution of aid and the deployment of military forces. International military forces can help to stabilize the situation by protecting the government from rebels and by preventing infights between militias under which civilians suffer most. Military involvement may thus buy the time that is needed for the government to gain strengths. But military involvement alone is hardly ever sufficient in order to address the complexities of peace and state building missions. In recent peace building missions such as Bosnia, Kosovo, East Timor or Afghanistan the military component of the mission is complemented by vast aid flows. For example, the mission in Kosovo has been supported by 3,012 billion in official development assistance (ODA) from 1999 until 2005 (2006 RIMS database, MEF-PISG); Bosnia has between 1995 and 2000 received an estimated 22 billion, \(^1\) and the international community has pledged to support the mission in Afghanistan with 12 billion through 2012. With these high figures come high hopes.

Does aid help peace? The evidence that the vast macroeconomic literature provides is rather ambiguous. Some authors maintain that aid could help peace by spurring growth. Higher growth rates and higher levels of economic development make states less prone to civil war. (Collier et al. 2003; Fearon and Laitin 2003). Unfortunately, many scholars claim that the impact of development aid on growth is limited (for an excellent overview see Hudson 2004, also Easterly 2006, Calderisi 2006, Boone 1996). Other scholars argue that aid effectiveness depends on good policies within recipient countries (Collier and Dollar 2002, Collier and Hoeffler 2004). In addition, aid may help peace indirectly by increasing the quality of political institutions, either by building up capacity in cases where elites lack to means to build up viable institutions, or by providing incentives for a policy change in cases where predatory elites deliberately weaken institutions for their private gains. Chauvet and Collier 2007 show that aid can help to bring about a turn around in policy in weak states, measured as a substantial increase of the World Bank’s Country Policy and Institutional Assessment (CPIA). Other scholars maintain that foreign aid can have a positive impact on the democratic quality of a regime (Finkel, Pérez-Liñán and Seligson 2006). This finding relates to the literature on the (domestic) democratic peace which states that democracies are less prone to civil war than other types of regime (Hegre et al. 2001).

But whether aid unfolds it beneficial impact through growth, or by fostering institutional change, its impact will be felt only after a considerable amount of time. Furthermore, the causal links that connect aid to growth or to institutional change are far from obvious. Consequently, recent studies by leadings development actors stress the need for better insights in how aid contributes to peace building. (Oecd - Dco 2005;Smith 2004). A report of the DAC (Development Assistance committees of the OECD) summarizes the concerns of many development actors:

“As a growing share of aid resources is being allocated to conflict prevention and peacebuilding and interventions, more evidence demonstrating their effectiveness is essential. Hence, there is a growing interest among donors and practitioners to learn more about what works, what does not, and why? This quest to improve the understanding of what contributes positively to peace in the conflict prevention and peacebuilding field is motivated by the desire to develop more coherent, coordinated and effective interventions”. (Oecd - Dco 2005).
This call, however, has gone largely unheard, and not without reasons: the challenges for conducting an impact assessment of development aid in conflict zones are considerable: Such an assessment requires that data is disaggregated to regional or local level, because data that is aggregated at the national level is usually not fine grained enough to trace causal links between aid and peace. But local level data is usually not available, and it is very hard to collect in most post-conflict environments, where simply getting from A to B in reasonable time and good health is often quite difficult. In this paper we describe one way of addressing these challenges.

Hypotheses

How can aid contribute to peace building on the regional and local level in conflict zones?

We do not claim that the tools that development actors usually have at their disposal have an immediate effect on the security situation. Development aid in poor post-conflict countries first and foremost intends to increase the provision of basic services for the population. It is the objective of humanitarian and emergency aid to ensure that the livelihoods of people affected by crisis and war are not threatened. In particular, development actors aim to increase access to food and drinking water, and to rehabilitate or build basic infrastructure.

Presumably, drilling wells will not disarm warlords, and refurbishing schools not increase counterinsurgency capacities of the government. But consider this instance: In the spring of 2006, forces hostile to the Afghan government and international actors started to attack schools. Many recently refurbished buildings were burned, and some teachers shot. In one community, however, the local population sided with the international forces and prevented the burning of their school. Some local residents had knowledge of the planned attack, and they alerted local authorities which in turn asked foreign forces for help. Instances like this demonstrate that the local population, under certain circumstances, chooses cooperation with international actors over cooperation with spoilers, despite the risks associated with opposing armed gunmen. Hence, the spoils that the local communities receive from continued cooperation with development actors out weighted the risks of opposing spoilers.

This example underlines what might be self-evident: the success of the mission depends to a large extent on the attitudes of local population to the international military forces and the development actors, and sustainable peace will not be possible as long as substantial segments of the population are neutral or even hostile towards the state building project.
Hence, the population needs to be convinced that it is ultimately beneficial for them to become a stake-holder in the peace-building process and to engage in prolonged cooperation with the peace builders and the state. The rationale for distributing development aid in post-conflict situation is therefore not only to address the needs of the population, but also to make cooperation with the peacebuilders more attractive. Aid, it is hoped, will help capture hearts and minds and increase local support for the mission. More support among the local population then may translate into a better security environment, which reduces the costs of the political transition that international actors seek to support.

It is in this context that development actors often maintain that substantial humanitarian aid and emergency relief per se increase the visibility of international engagement and signal a high commitment of international actors for the peace process, which may help shape expectations of domestic actors and induce them toward cooperating with international actors. Development aid, it is hoped, could lead to a higher acceptance of international actors, both civilian and military, among the local population, and this in turn would increase cooperation and reduce the cost associated with peace building.

In addition, development actors operating in fragile conflict zones hope that development aid also increases the legitimacy of the government and thus helps to stabilize the situation. There are two ways by which this can happen: Aid may increase state capacity which leads to a better provision of basic services. This requires that aid agencies work through the state administrations, helping them to make a better job. Or, aid agencies directly distribute aid, but the population attributes increased service delivery also to the state. The gains in acceptance and legitimacy are then shared by aid agencies and state administration. Either way, higher levels of received development aid should lead to increased legitimacy of the government.

We can now translate these assumptions, on which the international engagement in conflict zones is based, into three testable hypotheses:

H1: Development aid leads to more positive attitudes towards international actors

H2: Development aid leads to higher levels of legitimacy of the government

H3: Development aid leads reduced threat perceptions
In what follows we begin by describing the peace-building mission under way in Afghanistan, and by pointing out major trends in the North East of Afghanistan, as reflected in our survey data. We then test the hypotheses, using data from an original mass survey, conducted in spring 2007 in North East Afghanistan. The paper concludes with a discussion of the results.

The Peace-Building Mission in Afghanistan

In 2001 international peacebuilders launched one of the most ambitious peacekeeping and peacebuilding operations ever. After more than two decades of war, Afghanistan was a very poor, highly fragmented country. Most infrastructures had been destroyed. The state was completely decimated. The union of military forces that produced the victory could not mask the significant political cleavages that threatened to boil to the surface. The Taliban continued to exist and could play spoiler, and most societal groups were mistrusting of any state-building process.

Under the auspices of various international sponsors, four central Afghan factions met in Bonn, Germany, in late fall, 2001, to discuss the country's interim political authority and the process of establishing a new government. The resulting agreement created an Afghan Interim Authority and a road map for political and economic prosperity. A major task of the Afghan Interim Authority was to convene an Emergency Loya Girga (Grand Assembly of Elders), which would select a transitional government until national elections for a permanent government. Presidential elections occurred on October 9, 2004, and Hamid Karzai, who had become the international community's critical partner, was elected with 55.4 percent of the vote. To complete the Bonn agreement, parliamentary elections occurred on September 18, 2005.

Compared to other peace building missions, support for the reconstruction of Afghanistan has been unusual generous, both in terms of finance and military manpower: Although its exact numbers have varied since late 2001, there were usually around 30,000 U.S. troops and 7000 ISAF troops on the ground. With regard to aid, the relative generosity became apparent at the first donors conference in January 2002, when $4.5 billion was pledged for post-conflict reconstruction; at a subsequent donors conference in March 2004 in Berlin, there were pledges of $12 billion through 2007. The latest international pledging conference was the London Conference in January 2006, resulting in international pledges
of $15 billion for the period of 2006 to 2010. At the London Conference the Afghanistan Compact was officially presented as the development-focused successor to the institution-building centered Bonn Agreement.

Despite these massive efforts, development activities were slow to reach out beyond Kabul. Only by 2004 began development actors to work in earnest in the North Eastern region. The North East consists of the four provinces Kunduz, Takhar, Baghlan and Badakhshan. Two German-led PRTs (Provincial Reconstruction Teams) have been established to foster a secure environment for the international reconstruction and rehabilitation effort. After the end of the Taliban regime commanders of the Northern Alliance swiftly took control over the region. Recently, the influence of local commanders is decreasing, not least due to the foreign military presence, but local strongman continue to be influential.

Today, many international actors are active in the region among them major players such as World Bank, UNDP, USAID, and the German GTZ, and numerous international NGOs. A close study of aid portfolios of major organizations reveals that the programs are fairly typical for rural areas in post-conflict settings. There is a clear focus on water and sanitation, irrigation, electricity, rehabilitation of schools, and on building roads and bridges.

According to our survey data, a clear majority (76%) of households in North East Afghanistan thinks that security has very much increased over the last two years (2005–2006). Most respondents credit foreign forces as well as the Afghan government with this progress. Despite substantial progress in security one fifth of all households feel that their physical security is threatened. They feel that the main threat does not stem from Taliban or other armed forces but from organized crime. Five percent also said that they feel threatened by foreign forces. International development agencies are widely credited by Afghans for bringing along positive and widespread positive changes in basic services for many communities, most notably with regard to drinking water, roads and schooling. Progress in other fields seems to be slower. Afghans tend to think that international development agencies have had little impact on progress in the agricultural sector and in improving access to electricity. Despite these positive assessments of foreign involvement, many Afghans remain cautious. 43% of households thought that the presence of foreign

\[\text{http://www.fco.gov.uk/servlet/Front?pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1132599285324}\]

\[\text{http://www.afghanorganisation.com/AfghanAgreementBonn.htm}\]

\[\text{3 For this paper, aid portfolios of major development organizations were extensively reviewed. In addition, we collected original data on number of projects, sectors, and modes of delivery for all surveyed communities.}\]

\[\text{4 We present the descriptive results of the survey in Koehler and Zürcher 2007.}\]
troops in general posed a threat to the local way of life and Islamic values in the community, and 21% of respondents thought that foreign developmental aid threatens the local way of life and Islamic values. Taken together, this is still a supportive environment for development cooperation, because most Afghans seem to value the concrete benefits of the foreign presence, despite widespread cultural or ideological wariness.

Data

The analysis presented in this paper is based on original data from a mass survey of households. We surveyed 2034 households in 77 communities. The communities are located in four districts in North East Afghanistan: Imam Sahib, Aliabad, Warsaj and Taloqan. The size of the sample varied according to the size of the community in order to ensure that the sample was representative for the community. The survey was conducted in April 2007. Response rates were above 95%. This is perhaps due to the Afghan hospitality. Respondents treat surveyors as guests. Half of the communities were selected by random sampling. The remaining communities were selected in order to make sure that the sample reflects geographic, climatic and ethnic diversity of the four districts. The survey was designed to generate data on the perceptions of respondents on coverage and usefulness of development cooperation, everyday security, attitudes towards international actors, perception of state legitimacy, and communal organizational capacities.

An additional data source is what we call communal profiles. A team of enumerators compiled data on the 77 communities according to standardized questions, based on their expert knowledge and on in-depth interviews with community authorities, community councils, or community elders. These communal profiles contain information on the history, demography, ethnic composition, political and social organization and resource endowment of the surveyed communities.6

6 It should be noted that in other settings much of this data would be readily available from statistics and censuses. In the Afghan context, however, we had to collect this data on our own. The logistical difficulties of a country like Afghanistan are formidable. Apart from the predictable difficulties related to transportation and communication, we were surprised to learn that many villages had no names, or various names; maps were rare and not up-to-date; district borders were constantly changing. In order to identify our 77 communities, we ended up preparing own maps (based on Soviet maps) and used GPS data to locate villages. Another problem was that without data on community population size it was not possible to devise a sampling plan beforehand. Before conducting interviews in a community, the interview teams hence had an initial meeting with members of the village council, elders and other local representatives. During that meeting they established
In order to be able to crosscheck our statistical findings we also conducted 52 open interviews with Afghans and international stakeholders in April, July, August and September, 2007, and we conducted 10 open interviews with village elders in June, 2007.

**Operationalization**

*Independent variables: Aid*

Our main independent variable is aid. There are different ways of measuring development aid. One way is to take the money spent per unit of analysis as a measure for aid. However, such data is not available on regional level. The budgets of most development agencies do not break down figures to districts or community level, their data is often of poor quality, many development organizations are far from being transparent, and finally it would be hardy feasibly to compile complete data, because there are dozens of largely uncoordinated actors on the grounds.

Another, alternative way is to measure development aid not on the spending side, but where it is actually received. This is logistically demanding, since it requires that one actually counts projects at the communal level, but it has the advantage that aid is directly attributable to units of analysis. For this paper, we measure development aid at the receiving end.

We use different measures for aid: One is based on the number of projects that a community received. This measure is based on data from various development organizations. We compiled a list of implemented development projects, located the projects on a map and attributed them to the communities in the sample, using GIS (Geographic Informational System). Such a measurement reflects objective levels of aid. We name the variable *Number of Projects*.

We also use two perception based measures of aid that reflect the perception of respondents with regard to how much the household or community, in a given sector, had profited from the number of households in the village. Once the teams had this information, they calculated the number of interviews that were needed in order to get a representative sample. Households were then assigned number, and the households to be surveys were chosen randomly. After having experienced the challenges of polling in Afghanistan, we understood why there are so few (actually, we are aware of none) quantitative impact assessments of development aid in conflict zones.
aid projects. Such measurements are by default subjective; but we argue that it is justified in so far as the remembered aid actually reflects the utility of a given project to the community better than numbers of projects or amount of money spent on the project. For example, the utility of a school to the community is not increased if the school is expensive to build, nor is the utility of a well reduced if the well is cheap. It might be argued that for our purpose it is more useful to know whether most respondents remember that a well has been built in their community than knowing that this well has cost 10,000 or 20,000 USD: After all, minds are won not by expensive, but by useful and visible projects.

The first such subjective measure seeks to capture the utility of aid to the community, according to respondents’ perception. Data exploration revealed that communities received quite different mixes of development aid.⁷ We grouped the respondents’ answers in five categories, reflecting the mix of projects which the communities, according to respondents, benefited from by using Latent Class Analysis (LCA).⁸ Based on results of the LCA we created a dummy variable for each class, reflecting the specific mix of development aid that a community received during the last two years \((\text{Aidclass1} - \text{Aidclass5})\)

In the first class \((\text{Aidclass1})\), expected class size is 30%) the number of respondents that see their communities having profited from projects related to drinking water, schooling and electricity is above the mean. With regard to roads and bridges, communities received less than the mean, and they received no projects related to irrigation and food aid at all. Finally, the number of projects related to extension services and training is close to the

---

⁷ For example, 5.9% of the communities received food aid (112 of 120 cases in Warsaj); 5.5% training/advice/capacity building (50 cases Aliabad; 2 in Imam Sahib; 28 in Talooqan; 32 in Warsaj), 46.5% of communities profited from schooling projects, 14.2% from electricity (269 of 289 cases in Warsaj); 65.9% from projects relate tot roads and bridges; 2.5% from projects aimed at creating jobs. 16% received projects in agricultural extension services; 65.9% reported having received projects related to drinking water, and 24.1% related to irrigation (mostly in Imam Sahib). We also found clear regional patterns: Food aid, electricity and jobs are predominately found in Warsaj, whereas irrigation projects are predominately found outside Warsaj. Training and advice is underrepresented in Imam Sahib. All other variables seem to be free from severe regional accumulations.

⁸ LCA is a statistical method for finding subtypes of related cases (latent classes) from multivariate categorical data. (Mccutcheon 1987). LCA has the advantage over factor analysis/cluster analysis that no scaling properties have to be assumed. LCA estimates different classes of units of analysis that can be characterized by a common pattern of category probabilities. The easiest case is the so called “one class solution” that corresponds to the usual sample-mean based analytic methods. In this solution it is assumed that all units of analysis stem from the same distribution. In most cases this mean-based solution does not yield the most accurate description of the data. In LCA solutions with an ascending number of classes, class belongings are estimated and their fit to the data is evaluated via the probability that the estimated model produced the data (so called “likelihood”). This fit is compared to the number of parameters needed to estimate this solution. The solution which indicates the best fit with the least possible parameters is the number of classes to be used to describe the data most effectively. For this analysis we used the BIC (Schwarz 1978 ) as a fit measure.
mean. Summing up, respondents in this class report that their communities have profited mainly from drinking water, roads and bridges, and schooling projects.

The second class (Aidclass2, expected size 24%) consists of respondents reporting lesser development projects in any sector than the mean, except for irrigation projects which is close to the mean. No respondent in this class reports projects related to electricity, food aid or training.

The third class (Aidclass3, expected size 18%) consists of an above average number of respondents reporting development projects in the sectors of drinking water, roads and bridges, schooling and irrigation, as well as a slightly above average rate for extension services. They also report only very few projects related to electricity and food aid. Communities in this class receive a high amount of projects. This class is very similar to class 1.

The fourth class (Aidclass4, expected size 17%) consists of respondents reporting that their communities profited from drinking water and (near to) average rates in roads and bridges, extension services and training. No project in the sectors schooling, irrigation, and electricity and food aid was reported.

The fifth class (Aidclass5, expected size 13%) consists of communities that have higher than average numbers of projects related to electricity and food aid, and also road and bridges. The number of drinking water projects is less than average, and there is no irrigation project. The number of projects in schooling, extension services and training is close to the mean.

The five aid classes represent not only different mixes, but also different quantities of development projects. In terms of mix and quantity, aidclass 1 and aidclass 3 show relatively small differences. Both classes received more projects than aidclass4. Aidclass3 received the least number of projects. Aidclass5 finally shows a quite distinct mix, with above average number of projects related to electricity and food aid, and below average in other sectors.

The distribution of the five classes is correlated with the four districts. For example, 91.7% of all cases belonging to class 5 are located in Warsaj, which probably reflects the fact that Warsaj is a remote and mountainous region with no shortage of water, hence the lack of irrigation and drinking water projects, and the relatively large number of electrification, hydropower projects.
Our second subjective measure for aid captures whether individual households, rather than the community as a whole, directly benefited from household level development projects (for example food aid, training or advice, salary, rents). We asked respondents whether their household had been a direct beneficiary of development aid during the last two years, and if so, to specify the type of aid from which the household profited. 9 Based on the answers we constructed a score, coding „0“ when no help was received by the individual household, „1“ if projects in one sector were received, „2“ if projects in two or more sectors were received (Direct Aid).

**Dependent Variables: Attitudes, state legitimacy, security**

Attitudes towards the activities of the peace builders are proxied by an index that was calculated based on six value statements designed to catch respondents’ attitudes towards gender equality, secular schooling, and presence of armed forces and development organization. These issues lie at the heart of the liberal peace building mission and they affect local communities in their daily life; hence we treat higher scores as an indicator that the values and norms of respondents are compatible with what the peace builders do. Factor analysis showed that all six indicators derived from the six value statements pull in the same direction, suggesting that they all measure the same underlying concept (Attitudes; the one factor solution explains 49% of the variance in the respondents’ answers; Cronbach-α = 0,72). 10

We proxy state legitimacy by satisfaction with government as measured by index that is based on respondents rating of the performance of district and provincial government (State Legitimacy). Respondents were asked to rate whether the district government took often or rarely care of the needs of the communities. Hence, this is a strictly output oriented measure for legitimacy that assesses the state’s capacity as a service provider. While we

---

9 For the household, the sectors were: food aid; training/advice; salary/rent; credit; others; for the community: food aid; training/advice; schooling; electricity supply; jobs; agricultural extension services; roads & bridges; drinking water; irrigation.

10 The index is based on how much respondents agreed with these six statements: (1) Education of boys in schools has a positive impact on our community. The state should therefore improve the availability of schooling for boys in our community. (2) Education of girls in schools has a positive impact on our community. The state should therefore improve the availability of schooling for girls in our community. (3) Wage labour is becoming more and more important for the financial well-being of households. It would be good for the community if off-farm job opportunities would increase for both men and women. (4) Stateschooling is complementary to local customs and Islamic values. I think it has a positive impact on the moral constitution of the community. (5) I feel that foreign development aid is threatening our local way of life and Islamic values in our community, although it may bring material benefits. (6) The presence of foreign troops is threatening local customs and Islamic values in our community. We dropped answers from questions 1, 2 and 4, because variance was too small.
acknowledge that this variable does not capture more subtle procedural-based concepts of legitimacy, we maintain that, in conflict zones, the states legitimacy first and foremost depends on its ability to provide basic public services.

We proxy security by the threat perception of respondents (Threat Perception). For this we created an index based on how much respondents said they were afraid of various groups such as the Taleban, armed militias, organized crime, afghan security forces and foreign military forces. Factor analysis showed that these indicators all pulled in the same direction (the one factor solution explains 57,3% of the variance in the respondents’ answers; Cronbach-α = 0,85).

Control variables

We created seven variables that proxy various characteristics of the households and communities:

We created variables coding the ethnic belonging (Pashtu, Uzbek, Tajik, Nomad, other1) of respondents. Some scholars argue that attitudes toward foreign presence differ between ethnic groups, and that especially among Pashtu the mistrust towards the international peacebuilders may be greater than among minority groups. Creating dummies for ethnic belonging allows for testing this assumption.

To control for the households material well-being we asked the respondents to indicate if it was hard for them to buy even simple food products, if they could spend money for clothes and social obligations, if the could buy luxury goods or even anything they want (Material Well Being).

Finally, we control for the respondents individual perception of the security situation, by asking respondents to rate whether security, in their opinion, had increased or decreased during the last two years. (Security Change)

We created a variable (Periphery), indicating whether a community was easy accessible, or remotely located. One way of thinking about the impact of peripheral location is that the more remote a village is, the more cautious it may be toward the peace building mission. On the other hand, it could also be remote villages are more in need of development aid,

11 Strictly speaking Nomad is not an ethnic group, but a socio-professional group, defined by the livelihood. Most are Pashtu.
and less exposed to propaganda efforts by anti-western, or anti-central government forces. Hence we wanted to empirically investigate whether peripheral location was a valid predictor.

We also created a variable for vulnerability (Vulnerability), indicating how much a community is threatened by natural disasters\(^\text{12}\), and a variable indicating the size (Size) of the village.

We created a dummy for the four districts (Aliabad, Imam Sahib, Taloqan and Warsaj). There is not one specific hypothesis that we expect to test with the district dummies. Rather, we take the district dummy as a black-box for the combined effect of other, unobserved influences. If one or all district dummies are significant, as we expect it to be, we take this as a marker for an idiosyncratic combination of factors that is intrinsic to this given district and which then requires additional research. At the very least, significant district dummies signal that conditions differ across districts, hence development actors should study these differences and design policies accordingly.

**Empirical Findings**

Using hierarchical OLS-regression, we test the validity of our hypotheses. For all three hypotheses we chose the same regression procedure: we first enter the variables for the districts. We then enter the control variables (ethnicity, material well-being of the household, periphery and vulnerability) in one step. Next, we enter the variable for perceived security change (Security Change). Finally, we enter the three variables for aid. First we enter the variable denoting the number of projects at community level (Number of Projects), then we enter the perceived aid at community level (Aidclass) and then the perceived aid at household level (Direct Aid).

The advantage of such a stepwise procedure is that it allows estimating the additional predictive power of each set of variables added to the variables already considered in the step before. Hence, if subjective aid indicators remain step significant we know that they add additional information to the other predictors.

For estimating the impact on the dependent variable “State Legitimacy” we also use a probit regression model in addition to OLS-regression.

\(^{12}\) The vulnerability score was assigned by our survey teams to each community. It is standard procedure for development work to assess a community’s vulnerability to natural disasters.
The strongest effect on all three dependent variables has the variable for the district, followed by impact of structural variables (combined impact of ethnicity, material well-being of the household, location and vulnerability of the community). Ethnicity has significant but small impact on threat perceptions. We find that Tajik and Uzbek feel slightly more threatened than Pashtu people and show slightly more positive attitudes towards international actors.

Aid has a small and positive impact on attitudes towards international actors. The model is significant and explains 48% of the variance. All three indicators of aid combined explain 3.9% of the variance. (Subjective indicators alone explain 2.3%). Security Change (respondents perceived security change over the last two years explains 4.5%). Households that are better off (higher values on Material Well Being) show slightly more positive attitudes towards international actors. The regression coefficients of all aid variables are significant and with the expected sign, with the exception of Number of Projects (wrong sign) and aidclass3 (not significant).

We conclude that development aid has a small, positive and significant impact on attitudes, especially when the security situation is seen to move into the right direction. Subjective measurements seem to matter more than objective measurements.

With regard to state legitimacy we find that the three indicators of aid combined explain about 3.5% of the variance. Subjective measures of aid alone explain 3%. The model explains 25% of the variance and is significant. Most variance is explained by structural variables such as village location and size. The results remain the same, whether we use hierarchical OSL-regression or ordinal probit regression. The coefficients for number of projects, aidclass2 and aidclass4 are significant, but number of projects has the wrong sign.

Similar results are found for the impact of aid on threat perceptions. All three aid variables explain about 3% of variance. The model is significant and explains 22% of variance. The subjective measures explain less than 1% of the variance. Only the coefficients for number of projects and aidclass2 are significant. The sign for number of projects is wrong.

Data exploration revealed that, according to respondents perceptions, communities have benefited from different mixes of aid. These differences are captured by the four aidclass dummy variables. Comparing the impact of the regression coefficients will give us some first ideas about the impact of different mixes. Aidclass1 (our reference class for dummy coding) and Aidclass3 both represent mixtures where respondents perceive their villages having benefited from project across many sectors. Both classes received more than average amount of projects. The insignificant coefficient for Aidclass3 in all three
regressions suggests that when the number of project is high, the distribution across sectors does not seem to have an impact: By contrast, respondents in Aidclass4 and especially Aidclass2 reported that their communities benefited from few projects in relatively few sectors (compared to the reference class Aidclass1). This results in a negative coefficient for attitudes towards foreign actors score and the perceived legitimacy of the state. The intuition for these findings is that, broadly speaking, more aid across more sectors has a higher impact.

Our model for predicting attitudes is better (48% explained variance) than the models for predicting state legitimacy (25%) and threat perception (22%). This probably reflects the fact that aid has a (comparably) more direct effect on attitudes towards international actors, whereas the causal chains between aid and state legitimacy, and aid and threat perceptions, are more complex. Subjective and objective measurements of aid equally contribute to predicting attitudes. State legitimacy is predicted above all by subjective measurements. By contrast, threat perception is explained by objective measurements.

How are objective measurements and subjective measurements of aid related? What is the relation between what is being done by aid agencies, and what is being perceived by rural households? We run ANOVA tests in order to check whether the objective and subjective measures of aid were positively correlated, as one would assume. The number of projects correlates with the expected sign with the perceived usefulness of development aid at the community level (the mean of question 57, see Appendix), but the relation is very weak. When disaggregating by sector, an interesting picture emerges. We used the number of projects by sector as a predictor for the mean fraction of respondents remembering any projects in that sector. All ANOVAs were highly significant (p < 0.02 and lower). However, for the sectors “roads and bridges”, “agriculture”, and “schooling and education” $r^2$ were low ($r_{adj}^2 = 0.02$ and lower). We also carried out planned contrasts assuming that a higher number of projects per community would lead to a higher fraction of respondents remembering any projects. The contrasts were either insignificant or with the wrong sign.

Only for the sectors “water and sanitation” and “energy” $r^2$ were higher (water: $r_{adj}^2 = 0.13$; energy: $r_{adj}^2 = 0.59$) and the contrasts showed the expected sign. We conclude that the correlation between objective measures and subjective measures (or, in other words, between what has been done and what has been positively remembered) becomes stronger and clearer when aid has a direct impact on daily lives, and when aid provide goods that can be consumed by households, such as energy, or clean water. While this may not be a very surprising result, it nevertheless reminds us that mind and hearts are best won by providing goods or services with a tangible short term impact.
Before we proceed to a discussion of these results, we have to address the issue of causality. Unless we conduct a follow-up survey in order to compare changes over time, our data identifies correlations rather than causality. However, we are reasonably confident that the arrow of causality actually points into the right direction, that is, that aid actually leads to more positive attitudes, rather than positive attitudes attract more aid. Our confidence is based on evidence from qualitative work.

First, we conducted 52 semi-structured interviews with international and Afghan development actors on the ground, in April, June, August and September 2007. We found no evidence that the allocation of development aid was influenced by criteria other than needs assessments (when conducted) or bureaucratic routine. Furthermore, allocating aid based on such subtle categories as attitudes towards international actors would require excellent knowledge of the situation. Most aid agencies simply lacked this information when they came to the region. We would argue that this knowledge is still lacking today.

Second, we also conducted focus groups interviews in ten Afghan communities. In six communities the village council had successfully applied for a small grant from the so called provincial development fund (created by the German government); four communities had applied without success. We could not find significant differences within these communities with regard to attitudes towards international actors.

Third, we looked into the spatial distribution of aid projects, using Geo Informational System (GIS). While we found clear regional patterns, most of these can be attributed to geographical conditions. For example, most electricity projects are carried out in mountainous Warsaj, where water for hydropower plants is abundant, whereas most irrigation projects are carried out in the arid plains.

Fourth, we also checked whether communities that were thought to be potentially more hostile towards foreigners received less aid. We identified ten “difficult” communities, based on the assessment of the intelligence unit of a PRT in the region. We found that these communities received similar amount of aid (by comparing the means of number of projects), which leads us to think that aid distribution was not influenced by preexisting attitudes.

Finally, we checked whether communities that are closer to the regional centers and closer to the main roads attracted more aid. The assumption was that such communities receive more aid simply because it is logistically less challenging to reach these communities. Hypothetically it is possible that communities which are easier to reach also are traditionally more positively inclined towards international actors, and receive more aid.
because they are easy to reach. If this was true, then the more positive attitudes would not be result of aid, but rather of preexisting beliefs. However, neither did better located communities receive more aid, nor are attitudes in such communities more positive.

**Discussion and Conclusion**

Our empirical findings suggest that development aid indeed has a positive influence on how the local population in conflict zones perceives foreign actors. We also find that development aid has an impact on how respondents see their state, although the impact seems to be smaller, and mainly driven by perceptions.

This in itself is good news for those who argue that development aid has to play a role in peacebuilding missions. The impact, however, is rather weak in both cases. Structural factors such as size and location of the community and the material well-being of the household have a much bigger impact. The fact that the district dummies have the largest impact underpins our assumption that attitudes toward international actors and state officials, and even more so threat perceptions, are influenced by regional idiosyncrasies. The intuition for this result is that localized political arrangements seem to be important – a finding which is much in line with qualitative, case-study literature on Afghanistan (cf. Schetter, Glassner and Karaokhail 2006).

On the other hand, the fact that the impact of aid seems to be statistically rather small needs to be put into perspective: First, most development aid was and still is concentrated on Kabul. The bulk of aid is still spent on long-term, capacity building projects or infrastructural projects. Hence, the small impact may also be due to the fact that only a fraction of overall aid is actually spent on quick impact projects in rural regions. Second, one should perhaps not overestimate the impact of aid on attitudes in general. After all, all externally induced change of attitudes is in itself act of social engineering which is always a slow process. It usually takes a long time for attitudes and cultural beliefs to change, or for viable institutions to grow. In addition, there is no particular reason to assume that development aid should have a larger impact on attitudes than, say, tax breaks for parents on birthrates or subsidies for biofuel on CO2 emissions. Seen in that perspective, the observed impact may be small, but still respectable.

Whereas we found that aid has a modest positive impact on attitudes and state legitimacy, its impact on the threat perception of the population is marginal. Development aid does not
seem to lead to a significantly lower threat perception, which means, by implication, that aid does not have a direct impact on the security situation. This is perhaps also not surprising. Drilling wells or repairing schools will not disarm warlords, and aid cannot be a substitute for more robust measures in regions where the everyday security of the population is threatened by organized violence, be it criminal or ideological. However, aid, as we have seen, can influence how people perceive international actors and the state. More positive attitudes can then help to create an environment in which the likelihood for cooperation between the local population and international community increases. This also may increase the tolerance for measure which may be very unpopular – for example, in the context of Afghanistan, poppy eradication. In short, cooperation is needed in order to change those structures and institutions that contribute to fragile states, and aid may facilitate the emergence of such cooperation.

An increased and beneficial cooperation may then also have an indirect impact on security and overall stability. Assume that one contribution that communities have to offer to the security situation is self-policing: communities can attempt to control radicals within their rank. When a majority of the local population prioritizes cooperating with international actors rather than with the spoilers, it will engage in self-policing, in order to not lose the spoils form development aid. And this, in turn, may reduce insecurity for international actors. However, there is a big caveat here: self-policing rarely works beyond the community. Communal self-policing will usually not help when spoilers are from outside the communities. Winning hearts and minds of local communities may have little impact in security in a situation in which security threats stem predominately from armed groups with loose or connections to the rural communities which are the beneficiaries of development aid. Winning hearts and minds of local communities may still by a worthy goal in itself, but it will not help to reduce the security threats.

If this is all true, the one implication from our work is that aid may be helpful for preserving stability in regions on the brink, such as North Afghanistan, which is still relatively calm, but by no means stable. Especially projects with a quick impact on daily life’s may help winning hearts and minds of the population. More positive attitudes towards peacebuilders and towards the state may help to build peace.

But aid may be of little help when organizers of violence come largely form outside the communities (e.g. from Pakistan, or Al-Quaida mercenaries). Given its relatively small impact, aid may perhaps also not help to bring along a turnaround in regions in which the population is already hostile or neutral at best, and where spoilers from outside the communities operate, as it is the case in Southern Afghanistan. In such a situation increasing aid, for which some observers and politicians call, may actually mean throwing
good money after bad. Rather, military operations would have to create an environment in which aid could be implemented.

Summing up, our results seem to confirm hypothesis 1 (development aid leads to more positive attitudes towards the international actors) and hypothesis 2 (development aid leads to higher levels of legitimacy of the government. The overall impact is weak, and subjective measurements (the perceived usefulness of aid) have statistically more impact than objective measurements (the number of projects). This may be caused by the quality of our data. Or, one could argue that this proves the powers of mind over matter. Winning heart and minds might then be not only a matter of numbers, but might also require a sound communication strategy. We reject hypothesis 3 (development aid leads to reduced threat perceptions). Although we did find a statistically significant negative impact of aid on threat perceptions, we consider this influence to be much too small to be relevant: perceived usefulness as well as direct aid each explain less than 0.5% of the variation in threat perceptions. This does not mean that development aid has no impact on the security situation; it means, however, that development aid has probably no direct, short-term impact. What our works shows is that aid has a positive impact on how the local population in conflict zones perceives international actors and the state. How these positive attitudes might best be translated into more security should be subject of future research.
**Code Book**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Based on:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aidclass1</td>
<td>Dummy indicating group belonging estimated by latent class analysis using answers to the question “has your community as a whole been a beneficiary of development cooperation during the last two years? (Yes, no)</td>
</tr>
<tr>
<td>Aidclass2</td>
<td></td>
</tr>
<tr>
<td>Aidclass3</td>
<td>a. The community received food aid</td>
</tr>
<tr>
<td>Aidclass4</td>
<td>b. The community has profited from training, advice, and / or capacity building</td>
</tr>
<tr>
<td>Aidclass5</td>
<td>c. Schooling in the community was improved</td>
</tr>
<tr>
<td></td>
<td>d. Electricity supplies of the community have been improved</td>
</tr>
<tr>
<td></td>
<td>e. Jobs for persons from the community have been created</td>
</tr>
<tr>
<td></td>
<td>f. Extension services have been provided to farmers of your community</td>
</tr>
<tr>
<td></td>
<td>g. Roads and Bridges important to the community were built</td>
</tr>
<tr>
<td></td>
<td>h. The quality of the community’s drinking water has been improved</td>
</tr>
<tr>
<td></td>
<td>i. Irrigation for community fields has been increased</td>
</tr>
</tbody>
</table>

**Direct Aid** Based on the question “has your household been a beneficiary of development cooperation during the last two years” we constructed a score, coding „0” when no help was received by the individual household, „1“ if projects in one sector were received, „2“ if projects in two or more sectors were received. Sectors were food aid, training or advice, salary or rent, credit, other services.

**Number of Projects**

**Attitudes** Index constructed by factor analysis, based on how much respondents agree with the following three statements. (Fully disagree, rather disagree, rather agree, fully agree, don’t know, refused to answer)

1. Wage labour is becoming more and more important for the financial well-being of households. It would be good for the community if off-farm job opportunities would increase for both men and women.
2. I feel that foreign development aid is threatening our local way of life and Islamic values in our community, although it may bring material benefits.
3. The presence of foreign troops is threatening local customs and Islamic values in our community.

**Threat_Perception**

Index constructed by factor analysis, based on answers to “Please indicate, if you are afraid of the following groups. (Fully disagree, rather disagree, rather agree, fully agree, don’t know, refused to answer)“

Foreign forces, Taliban, armed men from within the locality, armed men outside the locality, criminal groups, others

**State_Legitimacy**

Answers to the question: “Do you think the wolliswoli or provincial government take care of the needs of your community’s population?” (never, rarely, sometimes, frequently, always, don’t know, refused to answer)

**Security_Change** Answer to the question “Has security increased or decreased over the past two years in your village?” (Decreased very much, Decreased somewhat, Neither decreased nor increased, Increased somewhat, Increased very much, Don’t know, Refused to answer)
**Material Well Being**

Answer to the question Please indicate, which of the following statements indicates best the material well-being of your household:

- a. It's hard for us to even buy simple food products
- b. We can buy food products, but it's hard for us to buy new clothes or pay for social obligations.
- c. We can buy food products, clothes, and pay for social obligations, but we cannot afford such things as, for example, a new TV or refrigerator
- d. We can buy food, clothes, pay for social obligations, and buy such things as, for example, a new TV or refrigerator
- e. We can buy almost everything we want
- f. Don’t know
- g. Refused to answer

**Periphery**

A score from 0 – 3, where 3 indicates the most peripheral location

**Vulnerability**

Binary variable, indicating whether a community is vulnerable to natural disasters

**Size**

The population of the community, in 7 categories: 1= 0-20; 2=21-55; 3=51-100; 4=101-200; 5=201-300; 5=301-1000; 7=more than 1000

**District**

Administrative district of respondent’s village: Imam Sahib, Taloqan, Aliabad, Warsaj

**Ethnicities**

Answer to questions “What is your ethnic belonging?” and “Are you a Nomad?”
Table 1: Summary of fit statistics for Attitudes (N = 1777)

<table>
<thead>
<tr>
<th>Step</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Standard Error</th>
<th>Change in R²</th>
<th>Change in F</th>
<th>Df1</th>
<th>df2</th>
<th>Change in Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.558(a)</td>
<td>.311</td>
<td>.310</td>
<td>2.11334</td>
<td>.311</td>
<td>266,801</td>
<td>3</td>
<td>1773</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>.637(b)</td>
<td>.406</td>
<td>.402</td>
<td>1.96735</td>
<td>.095</td>
<td>35,110</td>
<td>8</td>
<td>1765</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td>.671(c)</td>
<td>.451</td>
<td>.447</td>
<td>1.89157</td>
<td>.045</td>
<td>145,265</td>
<td>1</td>
<td>1764</td>
<td>.000</td>
</tr>
<tr>
<td>4</td>
<td>.683(d)</td>
<td>.467</td>
<td>.463</td>
<td>1.86410</td>
<td>.016</td>
<td>53,361</td>
<td>1</td>
<td>1763</td>
<td>.000</td>
</tr>
<tr>
<td>5</td>
<td>.696(e)</td>
<td>.485</td>
<td>.480</td>
<td>1.83455</td>
<td>.018</td>
<td>15,316</td>
<td>4</td>
<td>1759</td>
<td>.000</td>
</tr>
<tr>
<td>6</td>
<td>.700(f)</td>
<td>.490</td>
<td>.484</td>
<td>1.82867</td>
<td>.005</td>
<td>15,821</td>
<td>1</td>
<td>1758</td>
<td>.000</td>
</tr>
</tbody>
</table>

a (Intercept), Taloqan, Alibad, Imam Sahib  
b (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery  
c (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery, security_change  
d (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery, security_change, Number of Projects  
e (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery, security_change, Number of Projects, Aidclass2, Aidclass3, Aidclass4, Aidclass5  
f (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery, security_change, Number of Projects, Aidclass2, Aidclass3, Aidclass4, Aidclass5, Direct_Aid

Table 2: Summary of fit statistics for Threat Perception (N = 1777)

<table>
<thead>
<tr>
<th>Step</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Standard Error</th>
<th>Change in R²</th>
<th>Change in F</th>
<th>Df1</th>
<th>df2</th>
<th>Change in Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.293(a)</td>
<td>.086</td>
<td>.085</td>
<td>1.57079</td>
<td>.086</td>
<td>61,919</td>
<td>3</td>
<td>1973</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>.397(b)</td>
<td>.158</td>
<td>.153</td>
<td>1.51082</td>
<td>.072</td>
<td>20,968</td>
<td>8</td>
<td>1965</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td>.464(c)</td>
<td>.199</td>
<td>.194</td>
<td>1.47430</td>
<td>.041</td>
<td>99,562</td>
<td>1</td>
<td>1964</td>
<td>.000</td>
</tr>
<tr>
<td>4</td>
<td>.469(d)</td>
<td>.220</td>
<td>.215</td>
<td>1.45464</td>
<td>.022</td>
<td>54,449</td>
<td>1</td>
<td>1963</td>
<td>.000</td>
</tr>
<tr>
<td>5</td>
<td>.474(e)</td>
<td>.225</td>
<td>.218</td>
<td>1.45205</td>
<td>.004</td>
<td>2,751</td>
<td>4</td>
<td>1959</td>
<td>.027</td>
</tr>
<tr>
<td>6</td>
<td>.478(f)</td>
<td>.229</td>
<td>.222</td>
<td>1.44830</td>
<td>.004</td>
<td>11,156</td>
<td>1</td>
<td>1958</td>
<td>.001</td>
</tr>
</tbody>
</table>

a (Intercept), Taloqan, Alibad, Imam Sahib  
b (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery  
c (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery, security_change  
d (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery, security_change, Number of Projects  
e (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery, security_change, Number of Projects, Aidclass2, Aidclass3, Aidclass4, Aidclass5  
f (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery, security_change, Number of Projects, Aidclass2, Aidclass3, Aidclass4, Aidclass5, Direct_Aid
Table 3: Summary of fit statistics for State Legitimacy (N = 1935)

<table>
<thead>
<tr>
<th>Step</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Standard Error</th>
<th>Change in R²</th>
<th>Change in F</th>
<th>Df1</th>
<th>Df2</th>
<th>Change in Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.413(a)</td>
<td>.171</td>
<td>.169</td>
<td>.7939</td>
<td>.171</td>
<td>132,563</td>
<td>3</td>
<td>1931</td>
<td>,000</td>
</tr>
<tr>
<td>2</td>
<td>.467(b)</td>
<td>.218</td>
<td>.214</td>
<td>.77249</td>
<td>.047</td>
<td>14,584</td>
<td>8</td>
<td>1923</td>
<td>,000</td>
</tr>
<tr>
<td>3</td>
<td>.472(c)</td>
<td>.223</td>
<td>.218</td>
<td>.77035</td>
<td>.005</td>
<td>11,670</td>
<td>1</td>
<td>1922</td>
<td>,001</td>
</tr>
<tr>
<td>4</td>
<td>.478(d)</td>
<td>.229</td>
<td>.224</td>
<td>.76763</td>
<td>.006</td>
<td>14,647</td>
<td>1</td>
<td>1921</td>
<td>,000</td>
</tr>
<tr>
<td>5</td>
<td>.508(e)</td>
<td>.258</td>
<td>.252</td>
<td>.75363</td>
<td>.029</td>
<td>19,006</td>
<td>4</td>
<td>1917</td>
<td>,000</td>
</tr>
<tr>
<td>6</td>
<td>.509(f)</td>
<td>.259</td>
<td>.252</td>
<td>.75364</td>
<td>.000</td>
<td>.969</td>
<td>1</td>
<td>1916</td>
<td>.325</td>
</tr>
</tbody>
</table>

a (Intercept), Taloqan, Alibad, Imam Sahib
b (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery
c (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery, security_change
d (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery, security_change, Number of Projects
e (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery, security_change, Number of Projects, Aidclass2, Aidclass3, Aidclass4, Aidclass5
f (Intercept), Taloqan, Alibad, Imam Sahib, Nomad, Uzbak, Tajek, material_well_being, other ethnicity, Vulnerability, Size, Periphery, security_change, Number of Projects, Aidclass2, Aidclass3, Aidclass4, Aidclass5, Direct_Aid
<table>
<thead>
<tr>
<th></th>
<th>Attitudes towards foreign actors (OLS)</th>
<th>Threat Perception (OLS)</th>
<th>State Legitimacy (OLS)</th>
<th>State Legitimacy (Ordinal Probit Regression)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>[-2.38]*</td>
<td>[6.09]*</td>
<td>[.64]*</td>
<td>--</td>
</tr>
<tr>
<td>Aliabad</td>
<td>-.09*</td>
<td>.30***</td>
<td>-.06</td>
<td>-.19</td>
</tr>
<tr>
<td>Imam Sahib</td>
<td>.48***</td>
<td>.05</td>
<td>.32***</td>
<td>.88***</td>
</tr>
<tr>
<td>Taloqan</td>
<td>.14**</td>
<td>.22***</td>
<td>.04</td>
<td>.12</td>
</tr>
<tr>
<td>Nomad</td>
<td>.10***</td>
<td>-.02</td>
<td>.03</td>
<td>.17</td>
</tr>
<tr>
<td>Tajek</td>
<td>.20***</td>
<td>.10**</td>
<td>.18***</td>
<td>.53***</td>
</tr>
<tr>
<td>Uzbak</td>
<td>.09***</td>
<td>.08*</td>
<td>.07*</td>
<td>.16*</td>
</tr>
<tr>
<td>other_ethnicity</td>
<td>.04</td>
<td>-.01</td>
<td>.02</td>
<td>.06</td>
</tr>
<tr>
<td>material_well_being</td>
<td>.13***</td>
<td>-.18***</td>
<td>.12***</td>
<td>.20***</td>
</tr>
<tr>
<td>Size</td>
<td>.17***</td>
<td>-.10***</td>
<td>.09***</td>
<td>.11***</td>
</tr>
<tr>
<td>Periphery</td>
<td>.04</td>
<td>.02</td>
<td>&lt;.01</td>
<td>-.01</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>.07***</td>
<td>-.06**</td>
<td>-.03</td>
<td>-.06</td>
</tr>
<tr>
<td>Security_Change</td>
<td>.22***</td>
<td>-.22***</td>
<td>.06**</td>
<td>.20**</td>
</tr>
<tr>
<td>Number_of_Projects</td>
<td>-.16***</td>
<td>.18***</td>
<td>-.09***</td>
<td>-.09***</td>
</tr>
<tr>
<td>Aidclass2</td>
<td>-.10***</td>
<td>-.08**</td>
<td>-.15***</td>
<td>-.54***</td>
</tr>
<tr>
<td>Aidclass3</td>
<td>-.01</td>
<td>-.01</td>
<td>.03</td>
<td>.08</td>
</tr>
<tr>
<td>Aidclass4</td>
<td>-.12***</td>
<td>-.04</td>
<td>-.13***</td>
<td>-.39***</td>
</tr>
<tr>
<td>Aidclass5</td>
<td>-.09***</td>
<td>.03</td>
<td>-.02</td>
<td>-.08</td>
</tr>
<tr>
<td>Direct_Aid</td>
<td>.09***</td>
<td>-.09**</td>
<td>.03</td>
<td>.06</td>
</tr>
<tr>
<td>r^2_adj</td>
<td>.48</td>
<td>.22</td>
<td>.25</td>
<td>.26*</td>
</tr>
<tr>
<td>Significance</td>
<td>p &lt; 0.001</td>
<td>p &lt; 0.001</td>
<td>p &lt; 0.001</td>
<td>p &lt; 0.001</td>
</tr>
</tbody>
</table>

* non-standardized Intercept
^ Pseudo r^2 of Cox and Snell
* p < 0.05 ** p < 0.01 *** p < 0.001 *marginally significant
Factors in gray cells were reverse coded for SPSS probit regression routine to yield results in the same direction as the OLS estimates


Literature


http://www.loc.gov/catdir/enhancements/fy0634/2005056460-d.html
http://www.loc.gov/catdir/enhancements/fy0634/2005056460-t.html


http://www.loc.gov/catdir/enhancements/fy0721/2005055516-d.html


