

Researching livelihoods and
services affected by conflict

Mapping village variability in Afghanistan: The use of cluster analysis to construct village typologies



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List of acronyms

AREDP	Agriculture Rural Enterprise Development Programme
CDC	Community Development Council
CDD	Community-Driven Development
CSO	Central Statistics Office
MP	Member of Parliament
MRRD	Ministry of Rural Rehabilitation and Development
NGO	Non-Governmental Organisation
NRVA	National Risk and Vulnerability Assessment
NSP	National Solidarity Programme

1 Introduction

Darra-i-Nur is located in a side valley of the Kunar river valley system about 25 miles from Jalalabad in Nangarhar province, close to the Pakistan border. Writing of the rebellion of the inhabitants of Darra-i-Nur in Afghanistan against the communist government installed by Taraki and Amin in 1978, Keiser (1984) noted the successful resistance of the Pashai mountain people in contrast with that of the inhabitants of the valleys. The Pashai people proved able to establish strategic alliances and an effective joint opposition to the new government with the Pashto-speaking Safis of the Kunar valley floor. Not only had the Safis been their traditional adversaries, but also Keiser was puzzled as to how a previously unknown person in the figure of one Mir Beg from a marginal mountain village was able to politically and militarily organise so effectively, uniting previously diverse forces.

The explanation Keiser offered lay in the contrasts between the landed elite of the mountains and the valleys and the social and economic structures underpinning each. In the lower valleys, which were land- and water-rich, rice could be cultivated intensively, generating substantial surpluses, and villages were characterised by a small landed elite (Khans) with large landholdings, economic independence and numerous tenant clients. Villages existed as independent political units that competed more than they collaborated. In contrast, in the mountains, with complex and diverse economies, agriculture was subsistence and marginal. Even those with more land were not economically independent, and cooperation both within and between villages over scarce resources had created socioeconomic interdependencies and effective forms of dispute resolution.

These differences in landed elite and village 'behaviour', underpinned by ecology and practices of collective action, Keiser saw as central to the differential ability of mountain and valley people to organise and wage war in 1979-1980. Such differences in village 'behaviour', what underlies these differences and whether or not different 'types' of villages can be more systematically characterised was the central interest of the field research on which this paper is based.

In part, this interest was driven by the empirical observation that programming in Afghanistan since 2001 that is designed to bring about changes in village-level government – such as the National Solidarity Programme (NSP) through the formation of Community Development Councils (CDCs) – or promote collective action, as in the case of the Agriculture Rural Enterprise Development Programme (AREDP) – has rarely, if ever, taken account of preconditions in the villages with respect to how villages organise and manage their affairs (Pain and Kantor, 2011a). Rather, it has been assumed that there is a landscape of identical villages with few legacies from the past, and that new interventions to reorder village government would simply displace what was there before. Yet, as the final report of the randomised impact evaluation of NSP notes, reflecting on the ambitions of some for NSP to reorder village government, NSP's creation of CDCs has had few lasting effects on the identity or affiliation of customary village leaders (Beath et al., 2013). A separate review (King, 2013) of community-driven development (CDD) programmes in conflict-affected contexts was also doubtful about the effects of such programming on village-level governance and argued, among other things, for the need to pay greater attention to context. King concluded CDD was better 'at generating more tangible economic outcomes [than] [...] generating social changes related to governance and social cohesion' (p.3). Further changes found could be more associated with the intervention or project rather than with deeper changes in village life and its structures. Nevertheless, ambitions for a role for the CDCs still remain in Afghanistan (Islamic Republic of Afghanistan, 2014), and many programmes, for example AREDP, see them as the point of entry.

This research is not directly concerned with what the intentions of NSP were in the past or present; nor does it focus directly on the question of whether or not CDD-type interventions do or do not drive deeper changes in village governance, although the evidence that is reported supports King's conclusions. Rather, it focuses on the variability of village 'behaviour' and whether or not this can be characterised more systematically in order to guide programming according to context and to account for villages' development experience. The rationale for the research draws not only from Keiser (1984) but also from a wider body of empirical Afghanistan evidence (Pain and Kantor, 2011b), which has found significant differences between villages with respect to their capacity to generate public goods. Key public goods that villages can generate are seen to be capacity to support dispute resolution, ensure security and provide basic welfare for inhabitants. These 'old' public goods can be distinguished from the 'new' public goods related primarily to infrastructure (roads, schools, etc.) NSP has brought in.

This approach of focusing on existing village- and inter-village-level and non-state forms of governance is rooted in an investigation of the conditions that generate collective action and accountability (Leonard, 2011). This is in contrast with the focus on individual rights and accountability that has accompanied efforts to 'democratise' village-level governance in Afghanistan. Empirical observations from Afghanistan and comparative evidence from China (Tsai, 2007) suggests there can be important synergies between village-level collective capacities to generate public goods and external interventions to supplement these.

Attempts to construct village typologies to explain inter-village variation are not new, and the study of long-term rural change in southern India (see Srinivasan, 2004 for a review) has been a notable effort to understand the reasons for variation between villages in terms of their development trajectories. This paper draws in part from this work in its use of principle component analysis and hierarchical cluster analysis techniques to group or cluster villages based on their dissimilarity.

1.1 Outline of report

The paper starts, however, with a brief justification for taking the village as a focus of study before outlining the methods the research followed in Section 2. The discussion of the findings in Section 3 is broken down into two parts. First, in Section 3.1, there is a descriptive analysis of what the survey of the 92 villages covered in the investigation found. Section 3.2 presents the summary findings of the statistical analysis, an identification of three distinct clusters of villages and a characterisation of the villages found in each cluster. Summary conclusions are drawn from this and the paper concludes in Section 4 by drawing out some of the implications of the findings and an outline of what programmes could do in terms of undertaking a better characterisation of the villages in which they work prior to, during and in evaluating the impacts of interventions.

It should be emphasised that the primary purpose of this paper is to investigate whether or not village typologies can be constructed and how this might be done, and draws on an earlier methods paper (Pain, 2013). The next step will be to develop, in consultation with potential users of the approach, a framework for conducting village context analysis. This will lead at the end of 2015 to an applications paper. Readers should therefore not expect from this paper a method for undertaking village context analysis. Rather, this paper seeks to make the case that it is possible to construct village typologies, identify what the basic features are that might underlie different village types and show that village preconditions do vary and that there are patterns to this variation that can be characterised.

1.2 The village as unit of analysis

A focus on the village as a unit of analysis needs justification. In Afghanistan's institutional landscape, four key institutions can be identified: the state, the market, the community and the household. The term 'community' is commonly used within Afghanistan as an equivalent to a 'village', but the village is not the only socio-spatial structure that exists between the household, the state and market. There are various intermediate structures, such as ethnicity, tribe, qawm and mantega, which can, depending on the circumstances, join people across space and impose norms and expectations of behaviour. Villages can therefore be embedded in other informal institutions and may not be necessarily be the most significant institution at the local level.

Caution must be exercised in the application of the very term 'village' (Mielke and Schetter, 2007). For NSP implementation, for example, there is a very clear need to fix the village boundaries and define its place and its population. But such a categorical prescription of what the village is does not necessarily reflect how the inhabitants of the village would see their boundaries or the use of geography and territory to define it. Rather, it may be more of a space defined by social networks and institutions. The village, like the market, has a physical identity and exists as a place. However, it also, like markets, contains bundles of institutions that establish rules of behaviour and norms of practice. Thus, the village can be talked of as an institution in the sense that one can talk of village norms or social order while recognising its other identity as a physical place.

There also needs to be caution in isolating the village from its wider world. What happens within a village is driven in part by the way the village needs to engage with the wider world. As companion papers (Ashley, 2014; Minoia et al., 2014) on the political and economic marketplaces of Nangarhar (one of this study's provinces) make clear, villages exist in an environment of acute risk and uncertainty, and managing external relationships is crucial to village survival and success.

1.3 The relevance of village-level analysis to development actors

Since 2001, there has been a major effort by development actors – government, donors and non-governmental organisations (NGOs) – to bring the village into developmental and political processes. Several views or assumptions have driven these efforts. On the one hand is the position that either villages lack institutional structures, governance systems and accountability or, if they exist, they have been captured by the elite or the politically powerful to serve their own ends.

Thus, programmes such as NSP have sought to introduce new democratic structures into the village based on assumptions of the primacy of individual rights and a vacuum of 'democratic norms'. NSP's promoters have also seen it as central to building linkages between the village and government, supported by funding to increase public goods delivery at the village level. It has been assumed that NSP, through the establishment of the CDCs, will build accountable governance capacity at the village level and in so doing displace any pre-existing governance structures.

However, a number of empirical studies both from elsewhere in Asia and in Afghanistan have drawn attention to the durability of village-level organisations, their complexity and their changing nature over time. Such organisations in Afghanistan have been seen to include the shura (village council), the mullah (religious leader) and the malik or arbob (village representative), although the names and functions of these customary organisations vary considerably between regions and villages. There is also considerable evidence that these organisations play an important role in the provision of public goods within the village, particularly in relation to dispute resolution and basic welfare provision. The 2005 National Risk and Vulnerability Assessment (NRVA) (MRRD and CSO, 2007), for example,

provides evidence of just how significant shuras are seen to be in dispute resolution. Despite the international focus on formal justice system and its presumed dysfunction, the evidence (Coburn, 2011) shows informal justice systems play an important if variable but synergistic role in relation to dispute resolution.

It is common for NGO field workers, both in NSP programmes and in other activities, to talk of villages that have been easy to engage with or are receptive in contrast with those villages that are more difficult to work with. In many cases, this has owed to the challenges of dealing with powerful people who are more concerned with their interests than those of the village. Accordingly, it is possible to talk of villages behaving in different ways – those with more of a developmental perspective and keen to build public good provision and those where the landed elite acts to limit access to such public goods and capture them for its own interests.

Brick (2008), in an institutional account seeking to understand variability in governance outcomes, argues that village customary organisations in Afghanistan can often exhibit four key features that are supportive of the provision of public goods: the separation of powers among the key community structures; the existence of checks and balances between these structures; the presence of economic veto players who have sufficient influence to ensure there is no abuse of power; and the ability of these organisations to raise local revenues under conditions of budget constraints.

Differences between villages, Pain and Kantor (2011b) suggest, lie in the role of the veto players and their relative numbers. Where land inequalities are low, the landed elite is likely not only to have marginally more land than poorer households and also be food-insecure but also to be more numerous. Its members are therefore likely to have a shared interest in promoting and supporting social solidarity and ensuring the provision of public goods. In such villages, relationships between the better-off households and others may be more inclusive (Kantor and Pain, 2011). Where the elite is relatively small in terms of numbers, and where they are economically secure, often as a result of large landholdings, incentives to promote social solidarity and widen access to public good provision are likely to be more limited. The elite is thus likely to act more in its own interests than in those of the village population. Relationships between poorer households and the elite are more likely to be more patron-client-based, with adverse terms of incorporation for the poor (ibid.).

In using the term 'elite' in this study, we refer to a group of people, exclusively men, who are seen to have the most power and influence in a village. An empirical question this study investigates is the extent to which this elite is or is not linked to land ownership and whether a landed elite within a village holds power and influence. Sometime, as will be seen, there are major land inequalities, particularly in plain areas, and considerable differences in the amount of land owned by the largest and the smallest landowners. Under such circumstances, the landed elite may also be the village elite in terms of power and influence. In other villages, often in the mountains, the amount of land owned by the largest landowners may be only marginally more than that owned by the smallest landowners, and land inequalities are lesser. Thus, while land ownership may often confer elite status, it may not necessarily do so. A further consideration is the extent to which land ownership does or does not provide the foundation for economic security of this landed elite. As we will see, this is highly variable according to context.

It is also acknowledged, as noted above, that, since Keiser (1984) made his observations, the position of the traditional elite as reflected in the term 'Khan' has changed: the landed elite of the past is not necessarily the elite now, in terms of either land or power. The power and authority in the village has changed with new actors – some of them powerful through force of arms – some coming, some staying

and some going (Wilde and Mielke, 2013). NSP has also had effects and, again, as will be seen, this is particularly apparent in Badakhshan where the old elite (arbobs), by virtue of birth right, have given way to newcomers and, while they may still be influential, their influence may not be absolute. Villages are changing but the nature and pace of this change is context-specific, and it is this context specificity that this paper addresses.

2 Methods

This section outlines the method of developing the protocol for data collection, conducting the fieldwork and carrying out the quantitative analysis. The quantitative analysis is presented in two stages: Stage 1 (Section 3.1) presents and discusses the parameters of the dataset, offering descriptive statistics; Stage 2 (Section 3.2) presents the results of the cluster analysis that was carried out on the same dataset.

2.1 Data collection

2.1.1 Developing the data collection protocol

The first stage was the development of a draft protocol for the collection of relevant data drawing on existing and comparative literature. This was reviewed with various NGOs that had expressed an interest in the methods, primarily national and international organisations that had long-standing programmes in the districts or provinces of interest. This protocol was then field-tested in 10 contrasting villages (five in Takhar and five in Badakhshan). The lessons were reviewed (Sturge, 2014), leading to a refinement of the design.

The field protocol (see Annex 1) was divided into five basic sections for the collection of village-level information:

- **Assessment of the position of the village in relation to the outer world:** this addressed what could be seen as the foundational or given characteristics of the village, taking into account historical events and external connections; information on the perceived effects of the introduction of NSP was collected;
- **Information on the village economy and its resource structure:** this was designed to capture a description of resource richness and land distribution, assessing the degree of land inequality in the villages;
- **Information on customary village institutions and their performance:** this was designed to provide an assessment of the customary institutions and their membership and identification of the influential people in the village based on gender; this included information on the customary structures before NSP was introduced and the role they played and how the introduction of NSP was seen to have affected these, including changing representation of women in these structures;
- **Information on organisations introduced to the village by external actors since 2001:** this aimed to find out who the key people in the introduced organisations were and the extent to which membership of this overlapped or not with the people seen to be influential in the village;
- **Evidence on public good provision:** this sought to assess public good provision and the degree to which it had been driven by customary organisations and externally influenced actions; the primary data collected here focused on the dates of starting primary and secondary education for boys and girls and the percentage of boys and girls attending school; there is no assessment of the quality of education.

Thus, the protocol aimed to collect data that would allow an exploration of the relationship between variables (such as ethnic composition, distribution in landholdings, etc.) that might explain foundational or causal factors in village behaviour and the outcomes of that village behaviour as reflected in the level

and scale of village public goods provided. This exploration was based primarily on the more quantitative data collected. Note should be made of the fact, while the qualitative analysis in Section 3 examines socioeconomic differences based on landholdings, this analysis does not explore differential access to public goods, other than that based on gender in terms of access to education.

The analysis is complicated by the fact that NSP intervention may have changed or influenced some of the causal factors as well as the level of public goods provision. In particular, there may be effects of the subdivision of villages (or amalgamation of one or more villages) into CDCs. However, observational and other sources of evidence indicate that village-level behaviour is still explained largely by the behaviour of customary village organisations. Despite, and maybe because of, three decades of conflict and upheaval, out-migration, refugee movement and resettlement, in many villages, though not all, village organisations continue to play a strong role.

A point that should be emphasised is that we are fully aware that the data collected on land size or even village populations are approximate at best. Cadastral surveys in the main do not exist, and village populations fluctuate: as in the past, the rural landscape in Afghanistan is statistically unknown. Accordingly, definitions of land ownership, such as large, medium and small, are relative to the village rather than absolute or categorical. There is a heavy reliance on what village informants told us, and there are many reasons why the data collected may not be totally accurate. Caution is needed, therefore, in comparing these data with other sources. However, for the purposes of this exercise we believe the data are good enough – approximate maybe, but sufficiently coherent to support the analysis undertaken.

It will also be seen the position of women in relation to village-level behaviour is not very visible in the analysis. In part, this reflects the fact that, by custom, women have not been part of village customary authority or had title to land. This is not to say women have not had influence or power in village affairs, but the nature of the research prevented exploration of that dimension. Certainly, with the introduction of NSP, women have become more visible in formal structures, even if, as is reported, their presence is for the moment seen largely as symbolic.

2.1.2 Fieldwork

The study focused on two purposively selected contrasting provinces, Badakhshan and Nangarhar, both of which have mountain villages as well as those located in valleys or plains but in different cultural zones. Contrasting districts, five in each province (see Annex 2), were selected (in terms of terrain, distance from the provincial centre, etc.) within each province. Within each district, villages in contrasting altitudinal and landscape positions (plain, valley floor, valley side, mountain, etc.) with different resource bases in terms of irrigated and rain-fed land were purposively sampled. Inevitably security concerns limited travel to some of the remoter districts and villages, particularly in Nangarhar. Data were collected from 43 villages in Badakhshan and 49 in Nangarhar; Annex 2 summarises the key characteristics of these.

The survey team consisted of both men and women. In each village, discussions were held with focus groups and key informants according to availability. Usually at least two group discussions, consisting of two or more members, were held, with additional separate discussions with women, but this was not always possible. Interviews usually started with a group of village elders and additional informants then sought. Many more men than women were interviewed. The various interviews, including separate discussions with NGOs working in the village, were reconciled into a village report, along with observations by the interview team and notes on inconsistencies in what was reported.

Fieldwork was carried out in two stages – in October and November 2013 in Badakhshan and in April and May 2014 in Nangarhar.

2.2 Review of the data in terms of village economies, land ownership and customary structures

Once collected, the data were cleaned and checked for error before being analysed using tabulation of variables of interest. For the purposes of the analysis, three main landowning groups were identified – large, medium and small – with a fourth category identifying landlessness. The results of this phase of the analysis are given in Section 3.1. With the exception of landlessness, which is an absolute category, definition of large, medium and small was relative to the village and as defined by the informants.

2.3 Cluster analysis

2.1.3 Justification of approach

Section 3.2 is concerned with the clustering of villages into different ‘types’ based on the characteristics described in Section 3.1. Drawing on Keiser’s (1984) observations, it is hypothesised that, where the village elite is a small group and economically secure (say Type 1 villages), it has less incentive to support and foster collective action for public goods delivery in the village and will act largely to serve its own interests. However, where elites are economically insecure or a broad group (or both), the conditions for collective action may be better (say Type 2 villages). There may, of course, be other factors that will foster strong village collective action, such as being a minority ethnic group surrounded by villages with other ethnic identities, so not all Type 2 villages will, for example, have an economically insecure elite. In other words, there may be several ‘types’ of villages.

The typology of villages may well also be cultural zone-specific (and there is an overlap of this with agro-ecological zone – Badakhshan is more mountainous than Nangarhar and contains primarily Uzbek and Tajik people); thus, the way we cluster villages of different types may be different in Badakhshan compared with Nangarhar – but there may also be similarities or commonalities between them.

The core questions behind the attempt to cluster villages were therefore these:

- Are there systematic differences between different ‘types’ of villages that might allow some grouping of villages into village types (at its simplest this could be about the relation between altitude, irrigated land area and concentration of the landed elite)?
- If there are such differences, can these be related to the ways elites/villages behave as reflected in public goods outcomes?

The data collected from villages could be divided broadly into three categories: see Annex 3 for a list of the variables in each category that were used in the final analysis.

The first are those features of villages that could be seen as ‘foundational features’ in terms of defining the economic base and resource characteristics of the village elite, thereby setting the incentives for cooperation of the village elite with other villagers and the scope for collective action for public good delivery. This category also includes the position of the village in terms of ethnic identity in relation to surrounding villages and the degree to which villages are single ethnicity or multi-ethnic.

The second category of data (‘influential people’) concerns the extent to which the landed elite is represented in the customary authorities that have (and continue, as the data make clear) governed the village and provide core public goods (dispute resolution, security, etc.). This includes the extent to

which such customary authorities/influential people come to be 'elected' to the CDC under NSP, their gender and whether they continue to be elected in second or third rounds of elections.

The third category of data ('education') focuses specifically on education using the dates of start of primary and secondary education separately for boys and girls as a key indicator of behavioural outcomes of village elites. The argument goes that, the earlier the start of education for both boys and girls and the higher the proportion of boys and girls in education, the more this suggests actions of a village elite (that has had to deal with government) to support the 'development' of the village and widen public goods delivery. This draws on empirical observations from earlier work (Pain and Kantor, 2011), which the method field-tested, that village customary authority in the past played a major role in securing education provision for the village.

2.1.4 Cluster analysis method

This section draws from a full report on the methods and results of the cluster analysis (Sturge, 2014)¹ that includes a full discussion on the selection of the variables for inclusion in the analysis, the arguments for using principle component analysis and the choice of component retention rules and the cluster analysis techniques.

Cluster analysis is a technique used to aggregate variables into a specified number of groups based on their similarity on a given range of variables. The more variables included in the clustering model, the harder it can be to identify clusters. With a long list of variables, it is less clear which variables, if any, are most important in defining the overall measure of similarity (or, it would be more accurate to say, dissimilarity). Put simply, observations that might be very similar in one respect might be dissimilar in others. However, defining clusters using only one or two variables would have yielded too crude clustering arrangements for the purposes of this research.

In order to reduce the number of variables included in our analysis without compromising the richness of the dataset, principal component analysis was used prior to clustering. During the analysis process (described in Sturge, 2014), different methods of generating and retaining components were tested. In the end, it was most effective first to divide up the list of variables into different groups, corresponding to the categories described in the previous sub-section – 'foundational features', 'influential people' and 'education' – and then to perform principal component analysis on each sub-section separately. This technique yielded a list of variables neither too long nor too short, indicating that the final number of variables was much smaller than the full list we started with but still included at least one component representing each category of variables.

Following this, different clustering models were applied, allowing different clustering configurations to be explored. Ultimately, a clustering model yielding three clusters was the most convincing configuration of the villages into clusters (again, the longer report justifies these methodological choices).

The descriptive statistics in the first section of this report reveal some consistent differences between villages in Nangarhar and Badakhshan, thus the cluster analysis was also performed on each province separately. The final configuration of clusters that was chosen makes use of this separation of the two provinces.

¹ Available on application to Georgina Sturge at the Overseas Development Institute.

3 Findings

The findings from the fieldwork are discussed in two sections. Section 3.1 provides a narrative analysis of the evidence on village variability in terms of their physical and social dimensions, the role and significance of customary institutions and the interplay between these and new organisational arrangements instituted through NSP. Section 3.2, drawing on factor analysis and clustering techniques, considers the extent to which and on what basis, drawing from the sample, villages can be clustered according to shared foundational or causal factors and outcomes of that behaviour as reflected in the level and scale of village public goods provided.

3.1 Reviewing village variability: physical and social dimensions, customary structures and NSP committee features

First, we explore the nature of village economies and the extent to which elite status is derived from land ownership and how narrowly concentrated this is.

3.1.1 Village economies in terms of patterns of land ownership

On the basis of an earlier study (Pain and Kantor, 2010) drawing on five case study villages, three in Badakhshan and two in Kandahar, it was suggested that the behaviour of the village elite might be related to the extent to which it was economically secure or not. It was argued that the distribution of land ownership would underpin the position of the elite. Where it had sufficient land to be economically secure, it might be inclined to act largely in its own interests rather than in those of the wider population of the village. The observations of Keiser (1984) are consistent with this. So, a first question that arises relates to the nature of land distribution in the context study villages and the extent to which this makes the landed elite economically secure or not.

Data were collected from informants in each village on the total number of households and the proportion of these that were characterised as large, medium, small and landless. It should be remembered that the definitions of large, medium and small are relative to the village rather than absolute categories, so all we can state is how significant in terms of the proportion of total village households each landholding category is within a village. Tables 1 and 2 show how these proportions are distributed across all the villages sampled.

In Table 1 (Nangarhar), the data in column 2, row 1 show that, in about 42.5% of sample villages (with land), large landowners were reported to be less than 1% of households within each village; in only 8.5% of these villages were medium-size landowners (column 2, row 1) less than 1% of households.

In terms of the Nangarhar sample villages as a percentage of all households (Table 1 bottom row), about 2% of all households were classified as large landowners, 9% as medium and 25% as small; 64% of all households were classified as landless. But there is clearly considerable variation between the villages. In 42.5% of villages, what were defined as large landowners were less than 1% of all households, but in the remaining villages (57.4%) they were between 2.5% and 10% of all households. In contrast, in 8.5% of the sample villages, medium-sized landowners amounted to 1% or less of all households, whereas in over 38% of villages they were between 10% and 50% of all households. In just under 66% of Nangarhar villages, small landowners were between 10% and 50% of households. It is the degree of landlessness reported that stands out: in just under 64% of villages with land, more than 50% of all households were reported as landless, but there are a few villages where they are a minority of

households. It should also be noted that there were two villages in Nangarhar that were entirely landless, having been settled in the past 25 years by migrants from elsewhere.

Table 1: Percent of households by percent of villages according to four landowning classes in 47 Nangarhar villages (excluding 2 landless villages)

% of households	% of villages by landownership category			
	Large	Medium	Small	Landless
<=1	42.5	8.5		
>1-10	57.4	53.2	17.0	2.0
>10-25		31.9	36.1	12.7
>25-50		6.4	29.8	21.3
>50-75			6.4	23.4
>75-100			10.6	40.4
% of total households (N=21,323)	1.6	8.9	24.8	64.5

Thus, of those households with land, those that were reported as large landholders were a minority. In Nangarhar, however, there is an additional group of households termed *hamsaya* (Olesen, 1994): these are households that do not come from the village but whose members work as indentured labour for landlords and are housed and fed by them. Most Nangarhar villages reported at least 10 *hamsaya* households and a few reported substantially more. There are implications in terms of identifying the likely presence of patron–client relations in these villages, but there is insufficient evidence to explore this dimension further. However, we do note that the dependent nature of *hamsaya* households on landlords will certainly have effects on power relations within a village.

For Badakhshan (Table 2), large landowners constituted just over 4% of the total village household sample, middle-sized landowners just under 20%, small landowners about 35% and landless about 41%. The contrast between the levels of landlessness in Nangarhar and Badakhshan is striking. However, as with Nangarhar, there is variability between villages with respect to the proportions of the different land classes in Badakhshan, although the distribution is somewhat different. In addition, no *hamsaya* households were reported in Badakhshan villages. In sum, large landlords were reported to constitute a larger proportion of village households – in just under 8% of villages were they less than 1% of households. In over 15% of villages they were more than 10% of the population. Middle and small landowners were also more numerous – between 10% and 25% of households for about 59% of villages in the case of medium landowners and between 25% and 50% of households for just over 69% of villages in the case of the small landowners. About 8% of villages reported more than 75% of households being landless. Four of the Badakhshan villages were landless, reflecting recent settlement.

Table 2: Percent of households by percent of villages according to four landowning classes in 39 Badakhshan villages (excluding 4 landless villages)

% of households	% of villages by land ownership category			
	Large	Medium	Small	Landless
<=1	7.7		2.5	5.1
>1-10	76.9	10.3	5.1	7.7
>10 -25	15.4	58.9	12.8	23.1
>25 - 50		28.2	69.2	48.7
>50 - 75		2.5	10.3	7.7
>75 - 100				7.7
% of total households (N=10,039)	4.3	19.9	34.5	40.9

So there are differences between Nangarhar and Badakhshan in both the absolute proportions of the different landowning classes and the distribution of those landowning classes in different villages within each province. This is clearly shown if the villages are ranked in order from the village with the lowest percentage of large landowners to the village with the highest, and the values of for each quartile range compared between the two provinces (Table 3). This shows that there are more large landowners in Badakhshan villages than there are in Nangarhar villages.

Table 3: Quartile range of percentage of large landowners in a village by province

	1st quartile	2nd quartile	3rd quartile	4th quartile
Nangarhar (N=49)	0.24-0.63%	0.63-1.18%	1.18-2.00%	2.00-8.3%
Badakhshan (N=43)	0.6-1.8%	1.8-4.0%	4.0-7.0%	7.2-18.2%

Note: Quartiles are based on a ranking of village by percentage of large landowners from low to high.

The fact that large landowners are a relatively small proportion of the village population tells us something but it does not address the question of whether or not they are economically secure or the extent to which they are represented in customary authority and as part of the village elite.

Table 4 summarises the data on ownership of irrigated land by large, medium and small landowners in the sample villages in the two provinces, excluding the two landless villages in Nangarhar and the four landless villages in Badakhshan. There is almost no rain-fed agricultural land in Nangarhar, and in Badakhshan it is ownership of irrigated land that is critical to food production. Note should be made that these land ownership figures are based on the reported land size range (in *jiribs*) owned by each land class and therefore are at best estimates. The mid-point of the range was used and multiplied by the number of households in each landowning class to derive a value of the amount of irrigated land owned by each land class. The sum of the estimated irrigated land owned by each land class was checked against the value of the total amount of irrigated land in the village reported earlier. In about five cases, the top values of the landownership ranges had to be used to bring the estimates for all villages within 10 percentage points or closer of the total irrigated area reported for the village.

Table 4: Ownership of irrigated land by land class group by percent of villages by province

% of irrigated land	% of villages by landownership category		
	Large	Medium	Small
(a) Nangarhar (N=47)			
<=5	4.2		2.1
>5-<=10	10.6	8.5	6.4
>10-<=25	53.2	31.9	27.7
>25-<=50	27.7	40.4	43.0
>50-<=75	4.2	19.1	25.5
>75-<=90			4.2
>90-<=100			
(b) Badakhshan (N=39)			
<=5	5.1		5.1
>5-<=10	10.3	2.5	2.6
>10-<=25	30.8	12.8	30.8
>25-<=50	35.9	51.3	48.7
>50-<=75	10.3	20.5	
>75-<=90			2.5
>90-<=100	5.1	2.5	

In Nangarhar, in over 50% of villages large landowners owned between 10% and 25% of the irrigated land and in over 31% of villages they owned 25% or more of the irrigated land. In contrast, in Badakhshan, large landowners in 46% of villages owned 25% or more of the irrigated land and in two villages owned all the irrigated land. Middle-level landowners in Badakhshan also owned higher percentages of the irrigated land (in nearly 75% of villages they owned 25% or more of); in Nangarhar this was true for only 60% of villages. For small landowners in Badakhshan, in just over 50% of villages they owned 25% or more of the irrigated land whereas in Nangarhar this was true for over 70% of villages.

An examination of the quartile ranges for percentage of irrigated land owned by large landowners by village (Table 5) shows clearly the contrasts between the two provinces. While account has to be taken of differences in productivity in irrigated land between the two provinces – the warmer climate in Nangarhar at low altitude permits double-cropping with irrigation – it is clear that in both provinces in 50% of villages large landowners own 50% or more of the irrigated land.

Table 5: Quartile range of percent of village irrigated land owned by large landowners by province

	1st quartile	2nd quartile	3rd quartile	4th quartile
Nangarhar (N=47)	3.1-11.8	12.0-20.0	20.0-25.7	26.0-72.0
Badakhshan (N=39)	4.9-19.4	19.7-26.1	26.7-42.0	43.6-100

Note: Quartiles are based on a ranking of village by percentage of irrigated land owned large landowners from low to high.

However, account has to be taken of the absolute number of what were termed large landowners. In the top three quartiles – that is, in 75% of the village sample (Table 6) – the number of large landowners per village is clearly smaller in Nangarhar in comparison with Badakhshan. However, in the bottom 25% of villages in both provinces, large landowners are a relatively numerous class.

Table 6: Quartile range of the number of large landowners by province

	1st quartile	2nd quartile	3rd quartile	4th quartile
Nangarhar (N=47)	1-2	2-4	4-8	10-60
Badakhshan (N=39)	1-4	5-7	8-16	18-50

Note: Quartiles are based on a ranking of village by number of large landowners from low to high.

In summary, this analysis of land ownership patterns reveals considerable variability between different villages within provinces. There also appear to be different patterns between the two provinces: significant levels of landlessness in both, with higher values in Nangarhar (64.5% of households in villages with land) compared with Badakhshan (40.9%).

3.1.2 Landownership and food security in the village

What does being a large, medium and small landowner mean in terms of how possible it is to meet basic household food needs (self-provisioning) from own farm production? Table 7 summarises the data on what informants reported for each village for each land class. Being food secure is defined as having 12 months of self-provisioning from own land.

In over 80% of the Nangarhar villages, large landowners are food-secure. In only just under 10% of villages are the large landowners unable to provide for their basic grain needs for more than six months. In Badakhshan, large landowners are less food-secure, with only 60% of villages reporting that large landowners were able to meet a full year's supply of basic grains. There is also a major contrast between the two provinces, with over 40% of villages in Nangarhar reporting that medium-sized landowners were food-secure; this was true for only 7% of villages in the case of Badakhshan medium-sized landowners. Nearly 70% of villages in Badakhshan reported that small landowners met food needs for three months or less, and only 40% of villages in Nangarhar stated that small landowners could meet only three months or less of food needs. However, in both provinces, more than 85% of villages reported that small landowners were meeting only six months or less of food needs.

Table 7: Months of self-provisioning by landowning class by percent of villages for Nangarhar and Badakhshan (excluding villages without land)

Months of self-provisioning	% of villages by landowning class		
	Large	Medium	Small
(a) Nangarhar (N=47)			
<3	2.1	2.1	31.9
<=6	6.4	38.3	53.2
<=9	2.1	17.0	13.5
<12	6.4	2.1	2.1
>=12	83.0	40.4	2.1
(b) Badakhshan (N=39)			
<3		20.5	69.2
<=6	17.9	38.5	15.4
<=9	15.4	23.1	10.2
<12	7.7	10.3	5.1
>=12	59.0	7.7	0

3.1.3 Comparison of main income sources for different landowning classes

Crop production is, of course, not the only source of income in cash or kind (farm production consumed on farm), and respondents in each village were asked to rank the three major sources of cash income for each land class. These data, which were not gender-disaggregated, are summarised in Table 8.

For Nangarhar, the significance of crop sales in household incomes for large and medium landowners is clear, with a majority of villages ranking this as the first income source for these land classes.

Conversely, the significance of farm labour for small landowners and the landless is equally evident: in over 70% of villages this was seen to be their major source of income. However, employment in the police or army is also a major source of income for the landless group; large and medium landowners are employed more frequently in government and trade. While all landowning groups reported private employment as a source of income, this was for all groups relatively low down the ranking, suggesting it is not widely available to all or necessarily profitable. The details of this private employment are not known. Finally, note needs to be made of the significance of migration: a fifth of all large, middle and small landowning classes reported that they had migrant members; only just over about 10% of landless households did.

In contrast, in Badakhshan, nearly 40% of landless households reported that they had migrant members, and all of them reported farm labour as their major source of income. Indeed, in contrast with the other land classes, landless households' sources of income were confined almost exclusively to labour and migration. Equally clear was that sales from farm production were largely livestock- rather than crop-based; this is a key income source for large and medium landowners. However, the importance of labour as a source of income for both medium and small landowners should also be noted. Employment in the army and police, although accessed by all land classes, was most prominent among small landowners.

Table 8: Percent of villages reporting cash income sources by landownership class

	% of villages by landownership class			
	Large	Medium	Small	Landless
Nangarhar				
Crop sales	89.7	53.1	8.1	
Livestock	24.5	20.3	14.3	14.3
Labour	12.2	51.0	91.7	97.9
Sharecropping				2.0
Army/police	10.2	32.6	32.6	73.5
Business	2.0			
Government	38.7	36.8	4.1	4.1
Private employment	53.1	51.0	53	65.4
Trade	48.9	36.7		6.1
No. of households with migrants (% of households)	78 (22.9%)	389 (20.5%)	1065 (20.1%)	1771 (12.9%)
Badakhshan				
Crop sales	16.3			
Livestock	60.4	53.4	23.2	11.6
Labour	37.2	72.1	97.7	99.9
Sharecropping				
Army/police	4.6	4.6	18.6	4.6
Business				
Government	7.0	7.0	2.3	
Private employment	67.4	58.2	41.8	41.9
Trade	30.2	20.9	7.0	
No. of households with migrants (% of households)	95 (22.0%)	382 (19.2%)	771 (22.3%)	1529 (37.3%)

These provincial contrasts are consistent with the view of Nangarhar, at least in the plains, being a relatively rich agricultural area and Badakhshan being a relatively poor agricultural mountain economy. It also suggests that the more numerous landed elites in Badakhshan are likely to be more economically insecure (as are village populations in the province) than those in Nangarhar, although there is clearly variability. The significance of labour to household income to small and landless classes in both provincial economies is noteworthy and consistent with their limited ability to meet household food needs own farm production. Given that much of this labour is likely to be farm labour, most of which may be found within the village in which the household lives, although we have no data on this, the possible economic dependence of landless households on those with land is likely to have implications for social relationships between households with and without land (Kantor and Pain, 2010). This is, of course, particularly true for *hamsaya* households, but the fundamental role of social relationships in livelihood security underpins the significance of land in relation to power relations within the village.

The account has focused so far on examining the importance of landed elites in surveyed villages, their command of land resources and their degree of relative economic security. While there are clearly

significant differences between provinces in relation to these dimensions, the data suggest there is also considerable variability between villages within a province. We will return to examine this using the factor and clustering techniques.

3.1.4 Land ownership and customary authority

We can also review the evidence on what the relationship between land ownership patterns and customary authority in the villages might be. In each village, informants were asked who the influential people were in the village, what role they played, the reasons for them being influential, whether or not they were members of NSP CDCs and what landownership group they came from. Table 9 summarises the data for the first three listed influential individuals in each village (sometimes more were listed; in some Badakhshan villages fewer than three were reported), the landownership class from which they came and their membership or not of the CDC. There appeared to be little disagreement among the informants as to who these influential figures were.

Customary authority can be grouped into three major categories – that of the *arbob* or *malik*, who was the traditional village leader and representative in relation to district and provincial government; the village ‘whitebeards’, or elders, who play a key role in dispute resolution; and the *mullah*, who arbitrates on religious matters (Brick, 2008). By custom and therefore definition, these are all men; women formally have played little if any role in village government – although as will be seen there are exceptions.

Table 9: Customary authority and land ownership

Customary authority	All (N)	% by landownership class				% member CDC
		Large (%)	Medium (%)	Small (%)	Landless (%)	
Nangarhar (N=49)						
% total households	21,323	1.6	8.8	24.8	64.5	
All individuals with customary authority	147	21.8	29.3	33.3	15.6	59.2
<i>Malik</i>	50	26.0	40.0	24.0	10.0	70.0
Whitebeard	83	20.5	25.3	34.9	19.3	48.2
<i>Mullah</i>	10		20.0	60.0	20.0	60.0
Other	4	50		50		
Badakhshan (N=43)						
% total households	10,039	4.3	19.9	34.5	40.9	
All individuals with customary authority	110	49.1	26.4	10.0	14.5	39.1
<i>Malik</i>	10	80.0	20.0			40.0
Whitebeard	69	49.3	29.0	8.7	13.0	43.5
<i>Mullah</i>	13	7.7	30.8	23.1	38.5	15.4
Tribal leader	12	83.3	16.7			50.0
Other	6	16.7	16.7	33.3	33.3	

In Nangarhar, of the 147 individuals identified as occupying positions of customary authority or influence, about 50% were identified as coming from the 10% of households in the large and medium

landowning classes. In Badakhshan, almost 50% came from just the large landowning group (over 4% of households), with a further 26% from the more numerous medium group. Thus, 75% of influential people came from the large and medium landowners, comprising about 25% of all households. In other words, large landowners appear to be disproportionately represented in customary authority in Badakhshan in comparison with Nangarhar. It should be remembered, however, that 'large' is a relative rather than absolute category; nevertheless, large landowners are a clear minority of village households in total (1.6% in Nangarhar and 4.3% in Badakhshan), so in relation to their share of the population they are very well represented in customary authority.

In Nangarhar, the small landowners and landless as a class, although a major part of the population in all villages, provided about 50% of the representation in customary authority; this figure was only about 25% in Badakhshan. In Nangarhar, nearly 60% of customary authorities were also members of the CDC, in contrast with 40% in Badakhshan.

Disaggregating the data by specific position (*malik*, whitebeard and *mullah*), the data indicate clear differences between the two provinces. In Badakhshan, and confirmed by numerous informants, although the position of *arbob* (*malik*) had been prominent in the past, it declined in significance both during the war period (1978-1992) and subsequently under the introduction of NSP. There were villages where this was clearly not the case (see Cluster 3 villages in Badakhshan discussed in Section 3.2) and to some degree the category of tribal leader may have substituted for the *arbob* position. In both cases, over 80% of Badakhshani *arbobs* or tribal leaders were large landowners.

In contrast, in Nangarhar, the position of *malik* has remained prominent. A total of 70% of them are in the CDC and village reports indicated that the district administration actively supported their position. In numerous cases, it was reported that the district authorities continued to issue formal recognition of the *malik* (through the provision of stamps and certificates of authority) and to convene a district council of *maliks*. However, the *maliks* in Nangarhar are not concentrated among the large landowners: 30% percent of *maliks* come from the small and landless groups. This finding challenges a widespread perception that *maliks* come only from the landed elite.

Whitebeards – elderly men who have gained authority during their lifetime – are prominent among customary authorities in both provinces, although in Badakhshan nearly 50% of them come from the large landowning class, whereas in Nangarhar nearly 55% of them are either landless or from the small landowning class. *Mullahs* in both provinces come largely from the smaller landowning classes; in Badakhshan, nearly 40% of them are landless.

3.1.5 Customary authority, legitimacy and roles

How do customary authorities gain their position? In the case of the *mullahs*, religious knowledge and piety are likely to be the key attribute, and this is what was reported. In the case of village leadership (*arbob* or *malik* and tribal leader), inheritance of the position from a father or relative was widely reported, particularly in Nangarhar. Of the 36 *maliks* identified in Nangarhar, 22 were specifically reported as having inherited the position. The decline of *arbobs* in Badakhshan made inheritance a less important route to being head of a village, although it was reported in 12 of the 43 villages. It should be noted that *maliks* are not necessarily secure in their position and can be replaced if the village is

dissatisfied with them. Village NG10² reported, for example, that they had not been happy with their last *malik* and had replaced him. But many spoke of *maliks* as powerful people with good external connections; it is unlikely to be easy for a village to replace such individuals easily.

In three villages in Badakhshan, those now in position of authority within the village had backgrounds as commanders, and this was given as the reason for their gaining authority. This does not exclude others from having been commanders, either in Badakhshan or in Nangarhar. However, what stands out as the reasons for whitebeards gaining their positions – and it should be remembered that these are likely to be the largest group within the customary authority of any particular village – are the attributes of honesty, kindness and hard work. In other words, the status of whitebeard is gained through performance and reputation, and this is what underpins their legitimacy within the village.

Outside the religious role of the *mullah* within the village, customary authority was reported to fulfil two key roles. The first is ensuring and maintaining external connections and networks for the village with key district, provincial and other authorities, whether in formal positions or not. Many Nangarhar informants spoke of the *malik* as having a key role in providing these connections and of the specific connections their *malik* had. For example, in NG04 and NG06, they spoke of the specific connections between the *malik* and the provincial governor. In NG02, the *malik* was connected to a particular deputy-minister. All the Pashai villages spoke of their *malik*'s connection to their MP and its significance.

In Badakhshan, where the traditional role of *malik/arbob* had declined, explicit connections between the village leadership – whether customary or through the CDC – were less clearly reported. This is not to say external connections and having such networks were not important, but it was key people from the village who had moved out or were connected to government in some way who provided those networks. On the whole, the evidence from Badakhshan suggested that, while there were connections to provincial authorities, villages were not as strongly connected to Kabul as was the leadership of the Nangarhar villages. Nangarhar is much closer to Kabul than is Badakhshan, but there may also be a factor related to the province of origin of government officials.

Equally important is the role of customary authority within the village and its key task of dispute resolution. Almost without exception, the villages in both study provinces provided detailed cases of particular disputes – over water, land, inheritance, marriage and, in the case of Nangarhar, murders – that customary authorities were required to resolve; almost without exception, it was reported that in most cases they succeeded in doing this. Indeed, it would appear that part of the authority of traditional structures comes from their ability to resolve such issues; as informants in NG37 put it, 'It is shameful if the *malik* could not solve these problems.' The manner in which such disputes were resolved and the nature of the resolution is of course another matter, but the focus on conflict resolution rather than punishment is what characterises such processes.

In sum, what we can conclude from this, and it confirms what is widely reported, is that customary authority continues to play a critical role in village-level decision-making. The basis on which those who gain such customary authority to be in many cases history and inherited position, particularly in

² Nangarhar villages are coded as NG, Badakhshan villages as BD – see Annex 2

Nangarhar, and land ownership has a variable role in this. Other personal attributes, such as a reputation for honesty, are also significant in contributing legitimacy to the individuals concerned.

3.1.6 Customary authority and the effects of the CDCs

In each village, we asked questions about what effects the formation of CDCs was seen to have on the authority and functioning of customary authorities. NSP saw two key activities as essential steps in the formation of the CDCs: democratic elections and the inclusion of women in the CDC.

In Nangarhar, the view in general was that formation of CDCs had had no effect on customary authority. Either the customary authority had been absorbed into the CDC through election or nomination or the key decisions were taken by the *malik* whether or not he was in the CDC. For example, in NGO8, the *malik* was not in the CDC but was reported to have effective control of it. However, in many cases, as will be seen, the *malik* had become head of the CDC. In larger villages that had more than one CDC, for example NGO1 and NGO2, the power was reported to lie with the CDC, in which the *malik* was the head. Equally, when two villages were joined into one CDC because each village was below the minimum size to form a CDC on their own, as happened with BD37, BD39 and NG40, the power was reported to lie with the village that had the more powerful customary authority, either through the CDC or separate from it.

In Badakhshan, there was generally a more positive view of the introduction of the CDC but a distinction was made between the role of the CDC and that of the customary authority. The role of the CDC was often argued to be concerned solely with external relations and project and development activities, whereas that of the customary authority was concerned with its traditional role of dispute resolution. In some villages, there were views that the CDC system was better because it was more transparent or active than the village leadership had been before (BD05, BD06, BD09). On the other hand, in many cases, traditional authority had been absorbed into the CDC; sometimes, the *ex-arbob* was reported to be on the CDC as well. In sum, the findings are consistent with the view reported by Beath et al. (2013) that customary authority continues to play the key role in village governance within the village, even if NSP has had some effects. In other words, as the evidence from Badakhshan indicates, the CDCs are likely to have influenced customary authority, making it more transparent and allowing new players to emerge, while at the same time as having been heavily influenced by customary authority (ibid.). We return to this process of institutional 'bricolage' (Douglas, 1987) in the discussion

It is true that there is now wider representation of women in the CDCs, but in many cases where women were reported to be on the committee – and this was certainly not the case for a majority of villages – their representation was stated to be purely symbolic. This was thus seen as an outcome of the CDC formation requirement that women have a role. Beath et al. (2013) see the formal appearance of women on CDCs as likely to be one of the committees' more enduring effects, but women's presence was not seen to necessarily change practice. Interestingly, two villages in Nangarhar both reported a more active role by women, and in both cases these were villages where girls had been going to school since the 1970s. In NG24, a woman was reported to be the clerk of the committee and she was reported to refuse to authorise or stamp documentation unless she had been part of the discussion. In NG30, there were accounts of a group of influential women who had been key in pushing for girls' education. The reasons for this are not known.

Despite these examples, the evidence from the village transcripts is clear that the behaviour of customary authorities is critical to decision-making in the village. We turn now to examine whether statistical techniques can help us identify different types of villages according to the behaviour of village elites and the effects of the provision of public goods.

3.2 Cluster analysis: findings and proposed clusters

3.2.1 Proposed clustering configuration yielding two clusters

When clustering is applied to the full sample of villages (including both provinces), two very clear clusters emerge. The first and largest cluster (Cluster 1) contains villages with a governance structure dominated by a landed elite. There is overlap between customary and elected structures but there is some circulation into and out of the CDC and women are generally represented in the CDC, even if this was largely reported to be symbolic. These villages seem to tell a positive story: school access and attendance are good and on the whole it is perceived that the CDC has improved village governance. In these villages, the ethnic composition generally reflects that of the major group in the province.

The other major cluster (Cluster 2) and the one that appears more consistently to contain lowland, irrigated villages was where the governance structure appears to be dominated by smaller landowners. There is no female representation in these villages, CDCs and CDC membership have been slow to change and the CDC is perceived to have made no change to village governance. School access and attendance tends to be worse than in the other cluster. These villages were found in Nangarhar and at first sight they seem to challenge Keiser's (1984) analysis. However, as we discuss below, the presence of small landowners in CDCs may not necessarily indicate where the real power actually lies and this may be outside the CDCs.

3.2.2 Reflections on the need to cluster separately within the two provinces

Looking at the clustering analysis on the provincial level, it is clear that, among the variables of interest, some are tied very strongly to region. Altitude is the first; related to this are land size, share of irrigated land and percentage of landowners of various sizes in the village. Another, and perhaps the most challenging for the analysis, is perception of the CDC's impact – consistently positive in Badakhshan and more neutral to negative in Nangarhar.

Political dominance by either small or large landowners is not necessarily linked to province. Around half of the villages in Nangarhar appear to have small landowners well represented in governance structures – this cluster appeared consistently in every cluster analysis that involved Nangarhar. However, when looking at the provinces separately, Badakhshan villages are consistent in being governed by large and medium landowners; large landowners govern half of Nangarhar villages.

In the villages governed by a large-landowning elite, there is more diversity in the internal structure of governance institutions and more inclusion of women on CDCs (although this is likely to be symbolic in some cases). Small landowners and the landless tend to be seriously underrepresented in these village governance structures. There is a link between this type of governance and school quality (whether the school is in the village and how high the attendance rate), and this appears to be independent of province. There would seem to be a link between governance by a landed elite and a more positive perception of the CDC. However, on inspection, it is clear that perceptions are linked to region. This is a case of provincial differences confounding the results when we split the sample into two clusters without dividing it into two separate provinces.

3.2.3 Proposed clustering configuration yielding three clusters

Within the cluster 'governance by a landed elite' (Cluster 1), there does seem to be a legitimate further clustering along ethnic lines. Within this category, there is a sub-group of villages whose largest ethnic group is the same as that in the province and a sub-group of villages in which the largest ethnic group is different to the major ethnic group in the province. This bifurcation applies more to Badakhshan, where the cluster of villages with largely the same majority ethnic group as the province (in Badakhshan the most numerous ethnic group is Uzbek, followed by Tajik) tends also to have less common leaders of

customary structures, such as tribal leaders. School-going in such villages is a comparatively recent phenomenon. The picture that emerges is of upland villages that are particularly remote. By contrast, the cluster that has less similarity with the overall ethnic composition of the province would seem to be more diverse, possibly more modernised and more affected by internal and international migration.

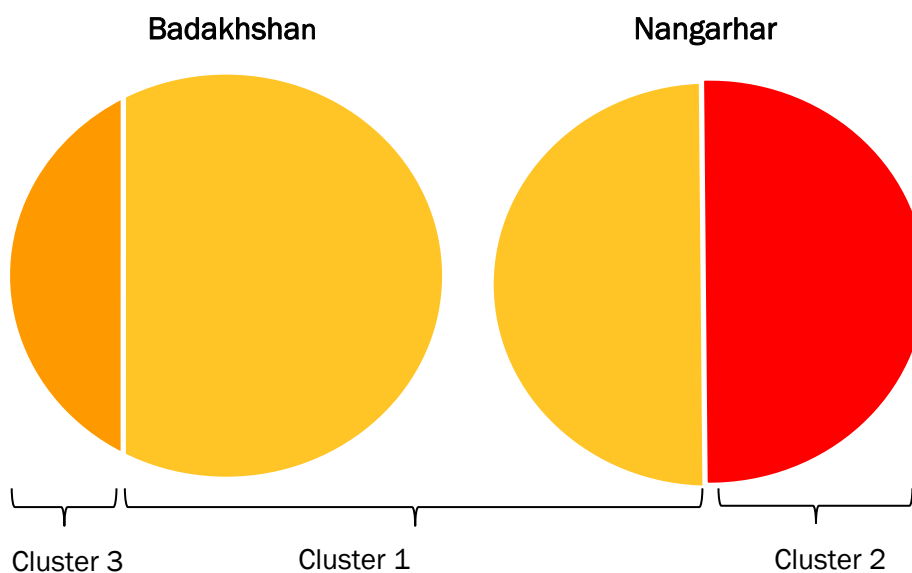
In Nangarhar, there is a strong case for clustering two groups of villages, since the two clusters found here have hardly any characteristics in common (the notable commonality would be in the perception of the CDC's impact). In Badakhshan, there is less of a case for clustering, since there is considerable overlap between the two clusters found there and indeed between these clusters and more than half of the villages in Nangarhar.

Aside from common sense and examining descriptive statistics, there is no way to test the robustness of these clustering models. Here, a three-cluster configuration is the preferred arrangement, with two major clusters being generated by clustering the whole sample (both provinces) and the third cluster being generated using a cluster analysis only including Badakhshan villages.

3.2.4 A first look at the final proposed clustering arrangement

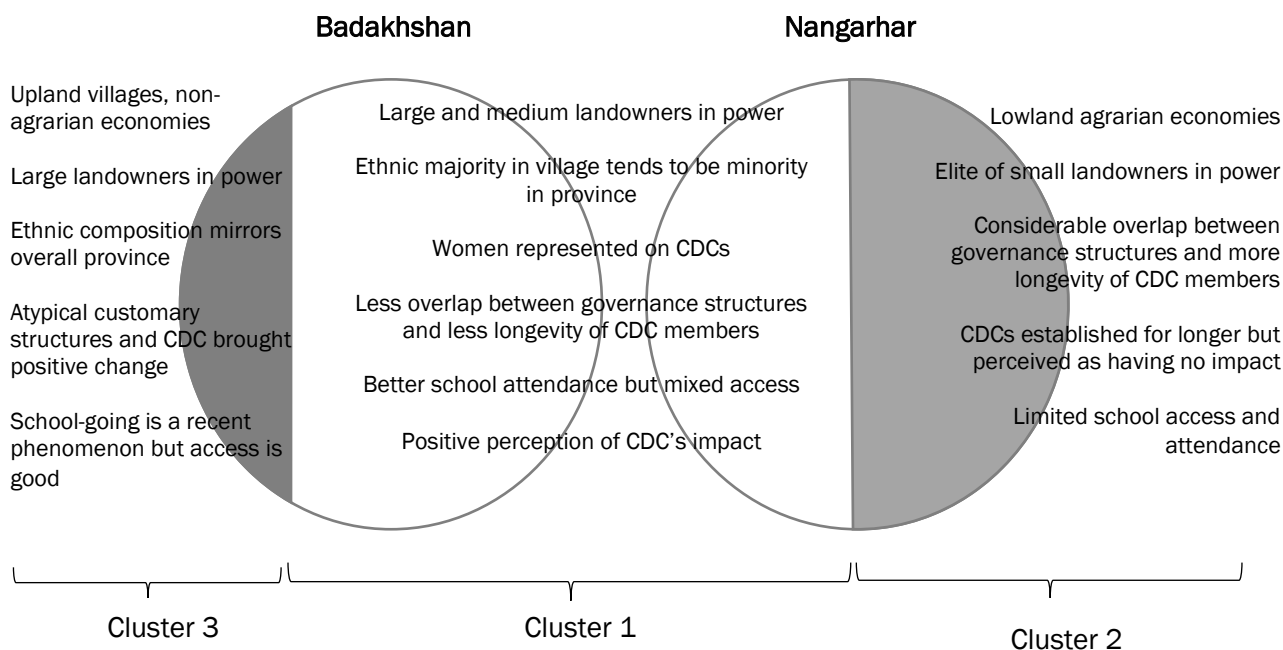
The following figures are intended to illustrate the proposed clustering arrangement and briefly describe the features of each cluster.

Figure 1: Cluster distribution across provinces



Note: Segments are not to scale of cluster size.

Figure 2: Distribution of clusters across provinces, with cluster descriptions



3.2.1 A comparison of the clusters using basic descriptive statistics

Tables A4.1-A4.3 in Annex 4 give descriptive statistics comparing the three clusters (and showing the average across all clusters) in terms of basic village features, governance structures and features of education. As concerns the geographical features of the clusters, Cluster 2 villages (which are exclusively in Nangarhar) are at a lower average altitude, occupy smaller areas and have by far the highest proportion of irrigated land (making them also the most food secure). These villages have by far the fewest large landowners and the most landless inhabitants. Cluster 1 stands out as containing generally higher altitude and larger villages in terms of land, with more large landowners and a greater likelihood of being an ethnic minority village. Cluster 3 villages are characterised by their high altitude (being exclusively in Badakhshan), large landholdings, low food security and ethnic homogeneity.

Turning to features of village governance structures, Cluster 1 villages tend to show less overlap between the CDC and customary structures, less longevity in membership, high representation of large landowners in power and mixed opinions of the impact of the CDC. Cluster 2 villages are the most likely to have small and medium landowners in positions of power, to have overlap between the two governance structures and for there to have been no perceived change since the CDC's establishment. Cluster 3 villages also show overlap between governance structures and longevity in position-holding but have more large landowners in power; CDCs were perceived to have had a positive impact.

Finally, looking at features of the village's education system, Cluster 1 has the most recently established girls' schools but by far the highest attendance rate of boys and girls. Cluster 2 villages have the longest history of school attendance but the lowest attendance rates and lowest likelihood of having a school in the village. Cluster 3 villages have a short history of school attendance for girls and boys but reasonable attendance rates and by far the highest likelihood of having a boys' and a girls' school in the village. Tables A5.1-A5.4 in Annex 5 contain a more detailed comparative discussion of the villages that lie within each cluster.

4 Discussion of findings

4.1 Discussion of case for using clustering analysis in this context and of the findings

The findings shown there is a legitimate case for dividing the sample into two clusters and a certain case for identifying a further third cluster. Based on the larger process of cluster analysis (not included in this report), it is deemed unnecessary to have four clusters or more. This section discusses some of the key points to be drawn from the analysis.

One thing that stands out from the findings is that altitude is linked to land size, share of irrigated land and percentage of landowners of various sizes in the village. The introduction to this paper noted that Keiser (1984), finding this same distinction, suggested a link between the type of village economy that emerged under these two different geographical conditions and the village government's capacity for dispute resolution. Here, we find some support for this connection. The villages that are usually placed in Cluster 2 (Figure 1) are situated in the lowland areas of Nangarhar and as such would be expected to rely on agrarian economies in which, according to Keiser, political elites can flourish. However, as Figure 1 clearly indicates, half of the villages in Nangarhar that were surveyed do not fall into this cluster. There is another factor that separates Cluster 2 from other Nangarhar villages, and that is that its governance structures are populated by *smaller landowners*.

Thus, while our evidence supports Keiser's characterisation of two types of village, it adds a further criterion to the distinction: the land ownership status of the political elite. We also differ from Keiser in that our evidence does not make a clear case that Cluster 2 villages have a more 'elitist' governance structure. There is not a sharp distinction between clusters as to the overlap between customary and elected structures and the longevity of political careers. Other indicators separate Cluster 2 from the rest of the sample – absence of female representation, poor school access and attendance – yet it can be no coincidence that it is only in this cluster that we consistently find smaller landowners to be so strongly represented in positions of power.

Or perhaps it can. Were we wrong to place so much importance in the analysis on the land ownership status of political representatives? Clearly, patterns of land ownership are linked to geographical location, thus it is to a degree inevitable that the governance structures will reflect the way land is divided up in the village. It may be spurious to infer that simply the presence of small, medium and large landowners in positions of power determines the 'type' of the village. We know different geographies necessitate different arrangements of landownership within the village; naturally, small landowners and the landless are more numerous in lowland villages so why would we not expect them to be better represented in those village governance structures? It is the case, however, that large landowners are always overrepresented and the landless always underrepresented, which is why we have looked at their representation in power relative to their representation in the village population.

On this point, returning to Figure 1, we can conclude that political dominance by either small or large landowners is not necessarily linked to region, since the largest cluster spans both provinces. Despite differences in land distribution depending partly on altitude, it cannot be denied that there is some type of relationship between the land ownership status of political representatives and village 'type'.

A final point that stands out is that there seems to be a link between village governance and school access. Villages in Cluster 2 consistently fare worse in comparisons with Cluster 1 of school accessibility and attendance. Returning to the introduction to this paper, the ultimate aim of this wider research

project is to test whether there is a link between a village's type and its capacity to provide public goods. This link between the availability of schooling and a certain type of village may suggest these villages are better at providing public goods.

Cluster 3 is more tenuous but it may be worth further exploration. The large Cluster 1 has considerably more diversity than Cluster 2, in particular when it comes to ethnic composition and the type of customary governance structures in place. In Badakhshan, there is a particularly clear link between a village being composed largely of the major ethnic group of the province and the persistence of older customary positions. If we do wish to separate this main cluster into two, the evidence suggests this endurance of traditional or less modern features would be the lines along which to do it.

4.2 Implications of the findings and conclusions from the research

The evidence and analysis reported in this paper point to important differences between villages in the ways village elite behaves and the consequences this might have for the generation of public goods, both old and new, within the village. Further, the evidence from the villages sampled in Nangarhar and Badakhshan and the cluster analyses reveals there are distinct types of villages and suggests what some of the underlying causal factors of this variation might be.

A first and very strong conclusion to be drawn from this analysis is that villages cannot be treated as if they are all the same in the design, implementation and evaluation of interventions designed to bring about change in the ways villages are governed or collective action is organised. Some villages are governed better than others, and there are reasons why this is so. Further, comparative evidence (Tsai, 2007) as well as empirical evidence from Afghanistan (Pain and Kantor, 2011b) indicates there can be important synergies between village-level collective capacities to generate public goods and external interventions to supplement these. Murtazashvili (2014) makes the case for the legitimacy of customary organisation and self-governance in Afghan villages and the practices of effective power-sharing between such structures and district authorities. Assumptions that 'democratisation' of village-level government with a focus on individual rights and accountability would displace existing collective action and such forms of accountability have been unrealistic. Equally, evaluation of the impacts of such interventions without taking account of what was already there and underlying patterns of difference (as shown by the cluster analysis) may have missed some important lessons to be drawn from the intervention.

Second, and drawing from the above point, there is clearly a need to have a much more nuanced view of working with village elites. Elites fulfil important functions in village-level governance, given the broader institutional landscape of risk and uncertainty in which villages are located, and they clearly in many cases have considerable legitimacy. But a distinction can be made, to simplify, between 'good' and 'bad' elites – between those who are inclined to work for the common good and those who are self-interested. What the empirical evidence presented in this paper indicates is the very variable nature of elite behaviour in villages, and of the factors that confer elite status. Land ownership may be part of what confers elite status, but it may not necessarily be the only or even the most important factor. Inequality is a fact of village life, but it is the form and shape of that inequality and what it generates that is the critical issue.

The village, despite its shifting boundaries, remains for most of its inhabitants the pre-ordinate institution in which they will lead their lives. Given the limits of penetration of the external world into village life, although this is changing, collective action at the village level will continue to play a primary

role in ensuring public good provision. Working with good elites that may or may not derive their status from land or inheritance but more from performance and reputation will remain another fact of life for external interventions. Further, as NSP found (Beath et al, 2013), external interventions do not necessarily make things better: the authors reported that, in a test of whether or not CDCs improved local governance outcomes through an examination of food distribution to food-insecure households, customary systems distributed food more equitably.

The 'good' elites are the easy ones to work with but what do you do with a 'bad' elite? A first step, of course, is to specifically identify where village conditions are such that the elite is self-interested and likely to attempt to capture for its own benefit external resources. Does this mean such villages should simply be avoided? Or does it suggest an entirely different way of working with them? They cannot be ignored and will be difficult to coerce or displace. This argues for a much more graduated approach of both supporting the non-elite in specific ways and at the same time working with such elites to bring them to a view that it might be in their interests to broaden access to public goods provision in the village. It is a question of incentives related to pressures and rewards and building step-by-step processes of change reflecting Grindle's (2011) arguments about 'good enough governance'. However, the specifics of how this can be done are not the primary objective of this paper; this requires further research but will be returned to later in the applications paper.

Third, external interventions have effects and, as has been seen in the case of NSP in Badakhshan, this seems to have led to greater accountability of customary leaders. However, rather than seeing new organisational structures such as the CDC running in parallel to existing customary structures, as Beath et al. (2013) appear to do, greater attention needs to be paid to the process of institutional 'bricolage' (Douglas, 1987), whereby the old (customary structures) and the new (the CDCs) borrow from and mutually reshape each other's ways of thinking and practices. Thus, customary structures may become more 'democratic' in content as CDCs may depart from design and become more informal. Change comes slowly and gradually but fundamental to understanding it is knowing what is there in the first place.

A fourth but important conclusion is that understanding the ways in which different villages work and why is not easy, and there is no simple recipe or formula to generate such an understanding. But, as Bennet and D'Onofrio (2015) argue, a clearer understanding of the ways different villages or communities work and the reasons for this is fundamental to understanding the sorts of change processes that might be brought about by external interventions and how. The method and approach used in this research does provide some guidelines about how implementing agencies in Afghanistan – whether NGOs or national programmes – might understand the village context more analytically and systematically and use such understanding in the design, implementation and evaluation of programmes. It is unknown at present whether the basis of the village typology constructed here will necessarily be appropriate or sufficient for other parts of Afghanistan. This will need investigation. But any approach will require basically paying attention to what have been called 'foundational' features and using these to characterise villages. It will not require the statistical approach that has been used in this paper to cluster village types, which has essentially been an analytical exercise to see if village typologies can be constructed. This paper has concluded that they can be.

The findings from this paper also indicate that key factors to take account of in grouping villages that are similar or dissimilar would include:

- Altitude, grouping villages into higher and lower altitude according to location;
- Land ownership distribution patterns and the degree of concentration of irrigated land ownership;
- The identity of customary authority in the village and how this is linked to landownership;
- Village ethnic identities in relation to surrounding villages;
- The history of public goods provision in the village and its effects.

Few villages have escaped being targeted by programmes, and villages have histories. As Li (2007) puts it with respect to Indonesia, 'the will to improve' and the practices of development have a habit of repeating past mistakes and ignoring both history and context. There is a need to think harder and deeper in engaging with Afghan villages, with fewer normative views on what is better.

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Annex 1: Village context analysis protocol

Annex 1: Village context analysis protocol

Village name	
District	
Province	
Informant name(s)/group and position	
Interviewers	
Note-taker	
Date of interview	

1. Position of village in relation to the outer world

Altitude of village (<i>metres above sea level</i>)	
Village name and identity	
When was the village settled?	
Name of village (<i>as defined by village</i>)	
Number of mosques in the village	
Number of households in the village	
Are there any internally displaced persons settled within the village? If so, how many households, where did they come from and when did they settle?	
Social identity <ul style="list-style-type: none"> • Identity of the main ethnic group in the village and number of households • Number of households of main ethnic group • Other ethnic groups in the villages and number of households 	
Ethnic identity of surrounding villages	
Mantega	
Mantega (discuss how this worked/was used before NSP was introduced)	
Name of <i>mantega</i> to which village belongs	
Number of villages in <i>mantega</i> and its coverage	
Role/significance of <i>mantega</i> (e.g. <i>collective resource management, dispute resolution, elections, other</i>)	
Since the introduction of NSP have there been any changes in the role and function of the <i>mantega</i> ? If so, what has changed and what effects has this had?	
Village landscape position (<i>irrigated plain/rain-fed plain/main valley floor/main valley edge/side valley floor/side valley edge/hillside or hilltop</i>)	
Irrigation	
<ul style="list-style-type: none"> • Does the village share an irrigation source with other villages? • What is the irrigation source 	

(spring/qarez/seasonal stream or river/permanent stream or river canal/irrigation canal)?	
<ul style="list-style-type: none"> • Is this water supply reliable? • If so is the village upstream, midstream or downstream from these other villages? 	
Distance to district centre <i>in terms of travel time</i> (hours) by specified means (car, horse, foot) of transport)	
Road access (number of months a year that it is normally connected)	
History: what have been the key historical connections of the village to the outside world (through trade, migration, refugee experience, etc.)	
Village networks/connections: who are the key people the village connects to at various levels (e.g. district, province and beyond, e.g. Kabul), what is the role of these key people, who in the village has or can use the connections, what is the basis/origin for that connection and what are those connections used for?	
District level (yes or no)	
If yes at district level what is the connection and who has it?	
Provincial level (yes or no)	
If yes at provincial level, what is the connection and who has it?	
National level (yes or no)	
If yes at national level what is the connection and who has it?	
Has the district or <i>mantega</i> to which the village belongs one representative or more in the Provincial Council (yes or no)?	
If yes to the Provincial Council, who are they and what is made of this connection and by whom?	
Has the district or <i>mantega</i> to which the village belong one representative or more in the National Parliament (yes or no)?	
If yes to the National Parliament, who are they and what is made of this connection and by whom?	
Are there other powerful actors in the <i>mantega</i> /district, e.g. commanders who are influential (yes or no)?	
If yes who are they and what role do they play?	

2. Village economy and structure

Total area (<i>jiribs</i>) of agricultural land in village	
Area of rain-fed land (<i>jiribs</i>)	
Area of irrigated land (<i>jiribs</i>)	
Area of orchard land with irrigation (<i>jiribs</i>)	

Check: Total area = rain-fed + irrigated + orchard

Land distribution (% of large, medium, small and landless households and households that share-crop; large, etc. will be relative to villages but landholding ranges will be needed)

Landholder types	Irrigated landholding range (<i>jiribs</i>)	Rain-fed landholding range (<i>jiribs</i>)	Livestock holdings range	Estimated no. of households in each
------------------	---	--	--------------------------	-------------------------------------

				category
Large				
Medium				
Small				
Landless				
Check value for irrigated/rain-fed land consistent with above figures			Total	

Check total number of households equals the number of households given in Section 1

	Months of food security in good year	First source of cash income by size	Second source cash of income	Third source of cash income	No. of households with migrant labour
Large					
Medium					
Small					
Landless					

Note: If landless give agriculture as source of income, check if they are share-croppers and what proportion of the landless are share-croppers. Also check if they actually sell produce or simply grow it.

Note: Agriculture is not specific enough as an answer as source of income – find out which crops or livestock are sold.

Are there any **hamsaya** households in the village (landless from other villages working on a landlord's land and living in his housing) (yes or no). If yes, how many, where did they come from and how long have they been in the village?

3. Customary village organisations

Before NSP was introduced, please describe the customary organisation (*arbob/malik*, whitebeards, mosque/*mullah*, etc.) that existed in the village, what role they played and how the people who were active in them were selected.

Note: Space is given for up to five customary organisations but there may be fewer. If there are more, insert additional rows.

Customary Institution 1 Name:	
What effect ¹³ if any has NSP had on the role Customary Institution 1 plays and the selection of people to fulfil these roles?	
Customary Institution 2 Name:	
What effect if any has NSP had on the role Customary Institution 2 plays and the selection of people to fulfil these roles?	
Customary Institution 3 Name:	

³ In asking this question, we are interested if the formation of CDC has meant the customary organisation does not exist any more and its role has been absorbed into the CDC or if the CDC has made no difference – it is still there and still functions as before – or if the leadership of the customary organisations has simply moved into the CDC and continues to play the same customary role as well as the new role of CDC chair, etc.

What effect if any has NSP had on the role Customary Institution 3 plays and the selection of people to fulfil these roles?	
Customary Institution 4 Name:	
What effect if any has NSP had on the role Customary Institution 4 plays and the selection of people to fulfil these roles?	
Customary Institution 5 Name:	
What effect if any has NSP had on the role Customary Institution 5 plays and the selection of people to fulfil these roles?	
What positions if any did women hold in any of the above customary organisations? Were women members of other customary organisations not mentioned above?	

Customary structures/influential people in the village: (fill in table below)

- List the most influential people (up to 10 if they identify 10) in the village in order of influence (most influential first) **before NSP was introduced**
 - What is the influence that they have/what do they do/what is their role?
 - What is the basis/source of their influence in the village/why are they influential?
 - Do they have a traditional/ customary position in the village; if so, what is it?
 - Are they now a member of the CDC; if so, in what position?
 - Which landholding group do they come from?
 - Do they have influence/connections outside the village and if so what is it and with whom?
- (Assessment to be done separately with at least two different village groups)

Name Influential Person 1	
What is the role they played in the village?	
How did they come to have this role - why were they selected?	
Are they a member of customary structure and if so which one?	
Are they a member of the current or a past CDC	
Landholding group	
Do they have outside village influence	
Name Influential Person 2	
What is the role they played in the village?	
How did they come to have this role - why were they selected?	
Are they a member of customary structure and if so which one?	
Are they a member of the current or a past CDC	
Landholding group	
Do they have outside village influence	
Name Influential Person 3	
What is the role they played in the village?	
How did they come to have this role - why were they selected?	
Are they a member of customary structure and if so which one?	

Are they a member of the current or a past CDC	
Landholding group	
Do they have outside village influence	
Name Influential Person 4	
What is the role they played in the village?	
How did they come to have this role – why were they selected?	
Are they a member of customary structure and if so which one?	
Are they a member of the current or a past CDC	
Landholding group	
Do they have outside village influence	
Name Influential Person 5	
What is the role they played in the village?	
How did they come to have this role – why were they selected?	
Are they a member of customary structure and if so which one?	
Are they a member of the current or a past CDC	
Landholding group	
Do they have outside village influence	
Name Influential Person 6	
What is the role they played in the village?	
How did they come to have this role – why were they selected?	
Are they a member of customary structure and if so which one?	
Are they a member of the current or a past CDC	
Landholding group	
Do they have outside village influence	
<i>Mirab</i>	
<ul style="list-style-type: none"> • Does the village have a <i>mirab</i> or share a <i>mirab</i> with other villages? • If yes, who is the current <i>mirab</i> and does he come from this village? • If not, which village does he come from and why was he selected? • How long has the <i>mirab</i> been in position? • Who was responsible for his selection? 	

4. Public goods provision by village customary organisations

Village-based actions: ***note this relates to actions initiated by the village, not by NGOs, although NGOs might have been asked to assist.***

Dispute/conflict resolution (*what sort of conflicts, resolved by whom*)

- When there are conflicts in the village, who are the key people in the village engaged to seek conflict resolution?
- Does the nature of the conflict determine who will be engaged to seek resolution (*e.g. differences between internal household conflicts, conflicts between a few*

<p><i>households, conflicts between many households)?</i></p> <ul style="list-style-type: none"> • How are those conflicts addressed and resolved (give examples)? • Are there examples of conflicts that have not been solved within the village (yes or no)? • If yes, what are these and how have they been addressed? 	
<p>Informal welfare/ social protection (<i>grain banks, food provision</i>); <i>please pay particular attention to the role of the mosques, whether or not they raise money, etc.</i></p>	
<p>If a household faces major difficulties through illness, economic hardship or food insecurity, how does the village respond?</p> <ul style="list-style-type: none"> • Leaves it to the household to find help • Leaves it to other individual households to help out • Takes village-level action (give examples) <p>If village level, who organises this?</p>	
<p>Collective action (<i>public good provision, common pool resources, etc.</i>)</p>	
<p>Have there in the past 10 years been any major natural disasters (drought, floods, landslides)? If yes:</p> <ul style="list-style-type: none"> • What were these disasters and when? • How many households were affected • What actions if any did the village take to help the affected households? 	
<p>What joint activities/actions can be remembered that village households worked together with in the village?</p> <ul style="list-style-type: none"> • What was the activity/action? • Who organised it? • What was the benefit of the activity/action? • Who benefited from the activity/action? 	
<p>What joint activities/actions can be remembered that village households worked together with households from other villages over the past 10 years?</p> <ul style="list-style-type: none"> • What was the activity/action? • Who organised it? • What was the benefit of the activity/action? • Who benefited from the activity/action? 	
<p>If before the NSP was established food aid was delivered to the village, who decided how the food should be distributed and how was that distribution done?</p>	

<p>5. Introduced organisations</p>	
<p>(a) Village NSP CDC</p>	
<p>Which NGOs have worked in the village, what have they done and when and which NGO was responsible for NSP?</p>	
<p>Year village joined NSP</p>	
<p>How many elections have been held for the CDC since it first started?</p>	
<p>Has the NGO clustered this village/CDC with other village CDCs; if so, how many other village/CDCs has it clustered it with, do these include the villages that were in the <i>mantega</i> and if not what were the changes?</p>	
<p>Number of CDCs in the village:</p> <ul style="list-style-type: none"> • CDC shared with one other or more villages; if so, give number 	

of villages that are a member <ul style="list-style-type: none"> • 1 CDC in the village • If more than 1, number of CDCs in the village • If more than 1, how do they fit with the number of mosques? 				
If the CDC is shared with another village, what effects has this had on village customary structures and the role of influential people? Do they still fulfil their traditional role? How are the roles shared between the new CDC and the old customary structures in the different villages and influential people? How were candidates selected from the villages sharing the CDC and did this create any problems? How were these solved? How were the key positions in the CDC (head, deputy, treasurer and clerk) shared between the villages? How were projects under NSP identified and what negotiations took place in choosing these?				
If the village has been divided into two or more CDCs, what is the basis on which this was done? What effects has this had on village customary structures and the roles and activities of influential people? With several CDCs, how does this affect decision-making and action at the level of the old village (before the CDCs)? After the creation of several CDCs in the village, which CDC/head of CDC was more influential and why? What was the process of project selection under NSP? Was this done independently by each CDC or jointly and if jointly which CDC/who had the most influence?				
How has the establishment of the CDCs changed the presence of women in decision-making structures in the village?				
If after the NSP was established food aid was delivered to the village, who decided how the food should be distributed and how was that distribution done? How did this differ in any way from before NSP was established? (<i>Pay particular attention to the effects where a CDC joined two or more villages or where a village was divided into several CDCs</i>)				
What other activities/actions and role has the CDC undertaken since it was established?				
Complete for each CDC in the village				
CDC 1 Name:				
Who are the current members of NSP and what are their roles?				Fill in the box below
Name	Position	Member of previous CDC (yes/no)	Landholding group	Tick if on list of influential people
Individuals who were members of earlier CDCs but were not re-elected				
Name	Position	Landholding group	Tick if on list of influential people	Any specific reason why they were not re-elected?
What activities/actions and role has the CDC undertaken since it				

was established?				
How would you describe the differences and similarities between the past role of customary structures and the CDC?				
Has the NGO made an assessment of the CDC's performance?				
<ul style="list-style-type: none"> • If so, what is that assessment based on? • What is the assessment? 				
Have there been other associations/organisations introduced into the village by outside agencies (yes or no)?				
If yes, please list them and complete a separate form for each				
(b) Introduced organisation – complete a form for each organisation				
Introduced Organisation 1: e.g. WUA/Agricoops				
Date organisation introduced/established				
Name of NGO that introduced the new organisation				
Purpose/role of new organisation				
How was membership of the organisation selected				
How many of the households are members of the organisation?				
Who are the current members of the leadership of the organisation and what are their roles?				
Name	Position	Member of NSP CDC (yes/no)	Landholding group	Tick if on list of influential people
Has the NGO made an assessment of the organisation's performance?				
<ul style="list-style-type: none"> • If so, what is that assessment based on? • What is the assessment? 				

6. Externally supported action by government/NGOs, etc.

Schools (<i>when started for boys, girls, what % attending</i>)	
<ul style="list-style-type: none"> • What year did boys in the village first go to primary school and where was this school? • What year was the first primary school for boys started in the village? • Who initiated/was responsible for the idea of having the school? • If the school was established before 1978, did it continue to function between 1978 and 2001? • What proportion of primary age boys in the village go to primary school? • What year did boys in the village first go to secondary school and where was this school? • Does this village have a secondary school and if it does when was it built? • What proportion of secondary age boys in the village now go to secondary school? 	
<ul style="list-style-type: none"> • What year did girls in the village first go to primary school and where was this school? • What year was the first school for girls started in the village? • Who initiated/was responsible for the idea of having the school? • If the school was established before 1978, did it continue to function between 1978 and 2001? • What proportion of primary age girls in the village go to primary school? • When did girls in the village first go to secondary school and where was this school? • Does this village have a secondary school for girls and if it does when was it built? • What proportion of secondary age girls in the village now go to secondary school? 	
Health facilities	
<ul style="list-style-type: none"> • Does the village have any health facilities? • If so, when were these established? • Who initiated/was responsible for the idea of having the health facility? 	
Other public goods (<i>e.g. drinking water supply, electricity, roads, irrigation canals, etc.</i>)	
<ul style="list-style-type: none"> • Does the village have? • If so, when were these established? • Who initiated/was responsible for the idea of having the? 	

7. Debriefing points for assessment team: this must be done on completion of village assessment

First review the information from the different informants and complete an overall village assessment form to ensure there are no gaps in information. Where there are differences in views from different informants either seek to reconcile these or recognise and include the range of views. Then discuss the following issues, both focusing on your conclusions and thinking through the evidence/observations that have led you to these conclusions.

In your view, who are the key actors in village decision-making now?	
What evidence can you provide to support this view?	
What do you see as the relative role of village customary structures and the CDC in decision-making and action in the village?	
What evidence can you provide to support this view?	
How would you compare the level of public goods provision in this village with that in other villages?	
What in your view explains any differences?	
What evidence do you have to support this view?	
Any other comments / observations with supporting evidence	

Annex 2: Basic characteristics of villages within clusters

Table A2. 1: Badakhshan villages

District	Village code	Masl	No. of households	Ethnic groups	% irrigated land	% large landowners	% landless	CDC/village
Argo	BD01	815	120	1	23.5	8.3	33.3	1
Argo	BD02	960	200	1	100.0	1.5	0.0	0.33*
Argo	BD03	839	220	1	29.1	1.8	45.5	1
Argo	BD04	3,066	300	1	2.7	1.0	16.7	1
Argo	BD05	1,051	210	3	31.0	1.9	5.2	1
Khash	BD06	1,876	180	1	50.0	3.3	41.1	1
Argo	BD07	1,225	55	1	22.7	18.2	9.1	1
Argo	BD08	1,765	300	1	38.4	2.0	78.0	1
Argo	BD09	1,771	95	1	22.7	8.4	23.2	1
Argo	BD10	1,090	160	1	9.1	3.1	59.4	1
Baharak	BD11	1,410	43	3	100.0	7.0	23.3	1
Baharak	BD12	1,461	61	1	95.2	1.6	49.2	1
Baharak	BD13	1,404	110	1	81.8	0.9	53.6	1
Baharak	BD14	1,369	120	2	83.1	15.0	36.7	1
Baharak	BD15	1,433	220	2	100.0	3.2	44.1	1
Baharak	BD16	1,360	120	3	75.0	13.3	28.3	1
Baharak	BD17	1,473	170	2	83.3	17.6	36.5	3
Faizabad	BD18	1,184	165	2	2.7	1.8	22.4	1
Faizabad	BD19	1,139	110	2	0.0	0.0	100.0	1
Faizabad	BD20	1,151	165	2	0.0	0.0	100.0	1
Faizabad	BD21	1,208	95	1	25.4	5.3	47.4	1
Faizabad	BD22	1,180	130	2	1.1	0.8	99.2	1
Faizabad	BD23	910	260	1	0.0	0.0	100.0	1
Faizabad	BD24	914	360	2	0.0	6.9	20.8	1
Faizabad	BD25	1,219	650	2	37.1	4.6	30.8	3
Khash	BD26	2,089	83	1	33.3	7.2	38.6	1
Khash	BD27	2,172	240	2	30.0	2.1	47.9	2
Khash	BD28	1,995	210	1	40.0	4.8	11.9	2
Khash	BD29	2,069	700	1	20.0	0.6	50.0	4
Khash	BD30	2,136	300	1	60.0	6.7	20.0	2
Khash	BD31	2,105	540	1	23.5	9.3	46.3	2
Khash	BD32	2,077	130	2	55.6	15.4	42.3	1
Kishim	BD33	1,172	180	1	53.8	13.9	0.0	4
Kishim	BD34	834	230	3	39.5	5.7	46.5	1
Kishim	BD35	1,122	167	1	1.8	4.2	24.0	1
Kishim	BD36	963	280	1	3.9	2.9	53.6	1

Kishim	BD37	2,069	50	1	0.0	0.0	100.0	1
Kishim	BD38	972	305	1	39.4	3.3	8.2	1
Kishim	BD39	980	105	1	41.9	4.8	38.1	1
Kishim	BD40	881	300	1	30.1	4.0	26.0	2
Kishim	BD41	887	400	1	15.5	1.5	43.5	1
Kishim	BD42	985	500	1	17.5	5.0	84.6	3
Kishim	BD43	899	700	2	47.6	1.4	20.0	2

Note: * A fraction of a CDC indicates the village is clustered with others to make up one CDC; note the four landless villages in Badakhshan.

Table A2.2: Nangarhar villages

District	Village code	Masi	No. of households	Ethnic groups	% irrigated land	% large landowners	% landless	CDC/village
Kama	NG01	481	600	1	98.7	0.67	56.0	2
Kama	NG02	573	360	1	88.2	0.28	76.4	2
Kama	NG03	486	300	1	94.9	5.00	28.3	2
Kama	NG04	524	150	1	90.9	2.00	46.7	0.33
Kama	NG05	472	250	1	86.7	3.20	16.0	2
Kama	NG06	497	80	1	76.9	3.75	15.0	1
Kama	NG07	503	235	1	95.2	0.43	80.4	1
Kama	NG08	499	670	2	100.0	0.45	39.9	1
Kama	NG09	510	1,000	1	100.0	1.00	33.0	6
Kama	NG10	498	335	1	96.8	1.49	65.7	1
Surkhrod	NG11	627	656	3	100.0	0.91	68.6	8
Surkhrod	NG12	624	400	2	100.0	2.50	22.5	1
Surkhrod	NG13	565	596	2	100.0	0.67	80.9	7
Surkhrod	NG14	575	250	2	70.0	0.40	15.6	2
Surkhrod	NG15	573	1,000	3	93.7	6.00	77.0	7
Surkhrod	NG16	532	520	2	100.0	0.77	78.1	1
Surkhrod	NG17	543	400	1	100.0	5.00	43.8	1
Surkhrod	NG18	550	4,300	1	98.9	0.70	88.8	7
Surkhrod	NG19	548	250	1	100.0	1.20	82.8	1
Surkhrod	NG20	620	270	2	95.2	7.41	44.4	0.5
Behsood	NG21	530	100	3	100.0	1.00	90.0	1
Behsood	NG22	510	250	1	95.2	0.80	71.2	0.5
Behsood	NG23	508	800	2	84.6	0.63	96.8	2
Behsood	NG24	517	480	2	100.0	0.42	93.8	1
Behsood	NG25	506	150	3	100.0	0.67	85.3	2
Behsood	NG26	525	300	1	0	0.00	100.0	1
Behsood	NG27	490	500	2	76.9	0.40	69.2	2
Behsood	NG28	548	330	3	0	0.00	100.0	3
Behsood	NG29	508	400	1	100.0	1.75	23.3	1
Behsood	NG30	515	500	1	99.3	2.00	68.0	1
Behsood	NG31	510	350	2	100.0	0.57	93.7	1

Kuzkonar	NG32	557	120	1	100.0	8.33	41.7	2
Kuzkonar	NG33	559	421	1	92.3	0.24	33.3	1
Kuzkonar	NG34	497	255	1	99.2	1.18	75.3	1
Kuzkonar	NG35	550	180	1	100.0	2.78	75.0	1
Kuzkonar	NG36	511	350	1	99.2	1.43	54.3	2
Kuzkonar	NG37	553	350	1	100.0	2.00	11.4	1
Kuzkonar	NG38	564	200	2	95.0	2.00	61.5	1
Dar-i-Noor	NG39	521	120	1	10.4	1.67	78.3	1
Dar-i-Noor	NG40	734	75	1	88.2	1.33	82.7	1
Dar-i-Noor	NG41	521	300	1	75.5	1.67	48.3	1
Dar-i-Noor	NG42	1416	200	1	83.3	0.50	2.0	1
Dar-i-Noor	NG43	530	300	1	99.3	1.00	47.3	1
Dar-i-Noor	NG44	892	160	1	84.6	0.63	87.5	1
Dar-i-Noor	NG45	1548	350	2	98.4	1.71	0.0	1
Dar-i-Noor	NG46	534	300	1	57.1	0.67	0.0	1
Dar-i-Noor	NG47	1,830	200	1	100.0	5.00	55.0	2
Dar-i-Noor	NG48	1,850	300	1	83.3	0.67	69.3	2
Dar-i-Noor	NG49	1,740	360	1	92.6	8.33	80.6	1

Note: * Note the two landless villages in Nangarhar.

Annex 3: List of variables used in principal component analysis, by category

Table A3. 1: List of variables used in principal component analysis

Category	Variable name	Description	Type	Mean	Min	Max
Foundational features: geography	hhld	Number of households	Continuous		43	4,300
	masl	Altitude	Continuous	1001	472	3,066
	noeg	Number of ethnic groups	Categorical	1.5	1	3
	ethnic	Ethnic majority is also majority in province	1=Main ethnic group in village same as main ethnic group in province; 0=Main ethnic group in village is not main ethnic group in province	0.57	0	1
	total_land	Total land in village	Continuous	1601	0	18,000
	irrigated_percentage	% of land that is irrigated	Continuous (%)	64	0	100
Foundational features: land ownership	percentage_large_landholders	% of large landowners	Continuous (%)	3	0	18.2
	ll_perc_of_irrigated	Large landowners holdings as % of irrigated land	Continuous (%)	25	0	100
	percentage_small_landholders	% of small landowners	Continuous (%)	32	0	98
	sl_perc_of_irrigated	Small landowners' holdings as % of irrigated land	Continuous (%)	29	0	87.5
	percentag_landless	Percentage landless	Continuous (%)	51	0	100
	mfs_average	Average months of food security	Mean of months of food security from large, medium and small landowners	7	0	12
Influential people: customary	cs1_1	Customary structure position holder 1= <i>Malik</i>	Binary	0.46	0	1
	cs1_2	Customary structure position holder 1= <i>Whitebeard</i>	Binary	0.37	0	1
	cs1_3	Customary structure position holder 1= <i>Mullah</i>	Binary	0.07	0	1

Category	Variable name	Description	Type	Mean	Min	Max
structure position 1	cs1_4	Customary structure position holder 1=Tribal leader	Binary	0.07	0	1
	cs1_5	Customary structure position holder 1=No title/no structure	Binary	0.04	0	1
	cs1_cdc	Customary structure position holder is also in CDC	Binary	0.62	0	3
	cs1_lg	Landowner status of customary structure position holder 1	0=Landless (/there is no CS1); 1=Large; 2=Medium; 3=Small; 4=Landless		0	3
Influential people: CDC position 1	m1_precdc	First member of CDC was in a previous CDC	Binary	0.37	0	1
	m1_lg	Land ownership status of first member of CDC	0=Landless (/there is no CDC position 1); 1=Large; 2=Medium; 3=Small; 4=Landless		1	4
	m1_inflist	First member of CDC also on list of influential people (customary structure)	Binary	0.84	0	1
Influential people: CDC position 2	m2_1	Second member of CDC = CDC deputy (reference group: treasurer)	Binary	0.98	0	1
	m2_gender	Second member of CDC is female	Binary (0=Male, 1= Female)	0.28	0	1
	m2_precdc	Second member of CDC was in a previous CDC	Binary	0.47	0	1
	m2_lg	Land ownership status of second member of CDC	0=Landless (/there is no CDC position 2); 1=Large; 2=Medium; 3=Small; 4=Landless		0	4
	m2_inflist	Second member of CDC also on list of influential people (customary structure)	Binary	0.50	0	1
Influential people: CDC position 3	m3_3	Third member of CDC=Treasurer	Binary	0.74	0	1
	m3_4	Third member of CDC=Clerk	Binary	0.24	0	1
	m3_5	Third member of CDC=Member	Binary	0.02	0	1
	m3_gender	Third member of CDC is female	Binary (0=Male, 1= Female)	0.08	0	1
	m3_precdc	Third member of CDC was in a previous CDC	Binary	0.50	0	1
	m3_lg	Land ownership status of third member of CDC	0=Landless (/there is no CDC position 3); 1=Large; 2=Medium; 3=Small; 4=Landless		1	4

Category	Variable name	Description	Type	Mean	Min	Max
	m3_inflist	Third member of CDC also on list of influential people (customary structure)	Binary	0.26	0	1
Influential people: CDC context	years_NSP	Years since CDC was formed	Continuous	6	0	10
	e_per_year	Number of elections per year since CDC was formed	Continuous	0.36	1	1
	cdcchange	In what way has CDC has changed governance structure?	1=No change; 2=Better; 3=Worse		1	3
Education	bp_year	Years since boys started going to primary school	Continuous	52	1	93
	bp_where	Boys' primary school in village	Binary	0.37	0	1
	bp_percent	% of boys attending primary	Continuous (%)	92	30	100
	bs_village	Boys' secondary school in village	Binary	0.41	0	1
	bs_percent	% of boys attending secondary	Continuous (%)	88	20	100
	gp_year	Years since girls started going to primary school	Continuous	27	1	79
	gp_where	Girls' primary school in village	Binary	0.46	0	1
	gp_percent	% of girls attending primary	Continuous (%)	86	10	100
	gs_village	Girls' secondary school in village	Binary	0.40	0	1
gs_percent	% of girls attending secondary	Continuous (%)	76	0	100	

Annex 4: Comparative descriptive statistics of clusters

Table A4.1: Descriptive statistics of clusters – village features

Village features	Cluster 1	Cluster 2	Cluster 3	All clusters
Number of villages per cluster	48	28	16	92
Province	Nangarhar and Badakhshan	Nangarhar	Badakhshan	Nangarhar and Badakhshan
Average number of households per village	261	521	264	341
<i>Min</i>	43	80	95	43
<i>Max</i>	1,000	4,300	700	4,300
Average altitude of villages (masl)	1,108	536	1,490	1,001
<i>Min</i>	472	481	815	472
<i>Max</i>	2,172	627	3,066	3,066
Average size of village (<i>jiribs</i>) of land)	1,586	824	3005	1601
<i>Min</i>	0	80	0	0
<i>Max</i>	18,000	5,000	12,400	18,000
Average % of village land that is irrigated	55	95	36	64
<i>Min</i>	0	57.1	0	0
<i>Max</i>	100	100	100	100
Land ownership				
Average percentage of inhabitants who are ...				
Large landowners	4	2	5	3
<i>Min</i>	0	0	0	0
<i>Max</i>	18	8	15	18
Small landowners	30	29	41	32
<i>Min</i>	0	2	0	0
<i>Max</i>	95	98	75	98
Landless	52	60	30	51
<i>Min</i>	0	0	0	0
<i>Max</i>	100	97	100	100
Food security				
Average months of food security	6	9	5	7
<i>Min</i>	0	4	0	0
<i>Max</i>	11	12	11	12
Ethnicity				
Largest ethnic group in village is the same as largest ethnic group in province (%)	44	68	75	57
Average number of ethnic groups	1.42	1.54	1.44	1.46

Table A4.2: Descriptive statistics of clusters – governance features

	Cluster 1	Cluster 2	Cluster 3	All clusters
Overlap between CDC and customary structure				
Customary structure leader is also in CDC	54%	82%	50%	62%
First member of CDC also in customary structure	79%	89%	88%	84%
Second member of CDC also in customary structure	31%	82%	50%	50%
Third member of CDC also in customary structure	25%	21%	38%	26%
Longevity of CDC members				
First member of CDC was in a previous CDC	33%	46%	31%	37%
Second member of CDC was in a previous CDC	40%	46%	69%	47%
Third member of CDC was in a previous CDC	44%	54%	63%	50%
Average years since CDC was formed	5.6	5.9	6.8	5.9
Land holdings of CDC members				
First CDC member is ...				
Landless	19%	11%	6%	14%
Large landowner	52%	18%	69%	45%
Medium landowner	19%	36%	25%	25%
Small landowner	10%	36%	0%	16%
Second CDC member is ...				
Landless	29%	18%	25%	25%
Large landowner	29%	39%	63%	38%
Medium landowner	25%	39%	13%	27%
Small landowner	17%	4%	0%	10%
Third CDC member				
Landless	23%	4%	13%	15%
Large landowner	33%	18%	69%	35%
Medium landowner	21%	61%	19%	33%
Small landowner	23%	18%	0%	17%
CDC members who are female				
First CDC member	0%	0%	0%	0%
Second CDC member	35%	0%	56%	28%
Third CDC member	6%	0%	25%	8%
In what way has the CDC changed governance structure?				
No change	48%	75%	13%	50%
Better	48%	18%	69%	42%
Worse	4%	7%	19%	8%

Table A4.3: Descriptive statistics of clusters – schooling features

	Cluster 1	Cluster 2	Cluster 3	All clusters
History of school-going				
Average years since boys started going to primary school	47	66	39	52
Min	1	33	10	1
Max	93	93	70	93
Average years since girls started going to primary school	25	32	26	27
Min	1	11	10	1
Max	77	79	68	79
Access to school				
Boys' primary school in village	31%	25%	75%	37%
Boys' secondary school in village	50%	18%	56%	41%
Girls' primary school in village	46%	25%	81%	46%
Girls' secondary school in village	46%	18%	63%	40%
School attendance				
Average % of boys attending primary	96%	85%	93%	92%
Min	70%	30%	50%	30%
Max	100%	100%	100%	100%
Average % of boys attending secondary	92%	79%	91%	88%
Min	50%	20%	50%	20%
Max	100%	100%	100%	100%
Average % of girls attending primary	93%	71%	93%	86%
Min	50%	10%	50%	10%
Max	100%	100%	100%	100%
Average % of girls attending secondary	84%	61%	77%	76%
Min	10%	3%	0%	0%
Max	100%	100%	100%	100%

Note: Average refers to mean.

Annex 5: Description of villages in each of the three clusters

Cluster 1 villages

Cluster 1 villages are discussed separately for Nangarhar (Table A5.1) and Badakhshan (Table A5.2). Column 1 gives the village code (as noted earlier the prefix NG indicates that the village is in Nangarhar and BD indicates Badakhshan) and column 2 the altitude of the village in metres above sea level. Columns 3 and 4 provide data on the percentage of large landowners and of irrigated land they own and columns 5 and 6 provide similar data for medium-size landowners. Column 7 lists the first-ranking influential figure in terms of customary authority, column 8 the land group from which they come and column 9 their position in the CDC. Column 10 notes the number of CDCs within the village.

Fourteen of the 21 Cluster 1 villages (66.7%) in Nangarhar are not Pashtun, which is the major ethnic group of the province.⁴ Seven of the villages lie at about 630 metres above sea level, which is the highest altitude of the Cluster 2 villages. The number of villages in which the *malik* is the most influential customary authority is also less than in the Nangarhar Cluster 2 villages (57% of villages in contrast with 82% of Cluster 2 villages). However, just under half of the customary village leadership comes from the largest landowning group in this village. On the other hand, under half of the first-ranking influential people in the village are not in the CDC.

⁴ In contrast with the nine of the 28 villages (32%) in the Nangarhar Cluster 2 villages.

Table A5. 1: Selected features of Cluster 1 villages, Nangarhar (N=21)

1	2	3	4	5	6	7	8	9	10
Village code	Masl	% LL	LL_ % total	% ML	ML_ % total	Customary authority	Land group	CDC position	CDC/ village
NG03	486	5.00	17.5	16.7	31.7	Khan	1	1	2
NG04	524	2.00	15.0	3.3	12.5	Whitebeard	2	0	0.33
NG05	472	3.20	24.6	12.0	30.0	Malik	1	1	2
NG08	499	0.45	4.1	29.9	71.4	Whitebeard	4	0	1
NG10	498	1.49	20.0	3.0	13.3	Malik	3	0	1
NG14	575	0.40	10.7	4.0	18.6	Malik	3	0	2
NG15	573	6.00	64.9	5.0	23.0	Tribal leader	3	1	7
NG19	548	1.20	40.7	4.0	21.4	Whitebeard	2	0	1
NG24	517	0.42	42.9	0.8	19.0	Whitebeard	3	0	1
NG26	525	0.00	0.0	0.0	0.0	Malik	4	2	1
NG28	548	0.00	0.0	0.0	0.0	Malik	4	1	3
NG37	553	2.00	14.0	11.4	20.0	Whitebeard	2	0	1
NG39	521	1.67	40.0	3.3	40.0	Malik	2	1	1
NG40	734	1.33	20.0	5.3	53.3	Malik	1	3	1
NG41	521	1.67	3.1	3.3	6.3	Whitebeard	1	3	1
NG42	1,416	0.50	8.0	2.5	10.0	Malik	1	1	1
NG44	892	0.63	20.0	7.5	73.0	Whitebeard	1	0	1
NG45	1,548	1.71	9.6	12.9	43.2	Malik	1	0	1
NG47	1,830	5.00	20.0	37.5	75.0	Malik	1	3	2
NG48	1,850	0.67	26.0	13.3	40.0	Malik	1	1	2
NG49	1,740	8.33	72.0	5.6	16.0	Malik	1	1	1

In contrast, in the 27 Cluster 1 Badakhshan villages (Table A5.2), which all lie above 840 masl, in not one of these villages is the most influential person reported as being an *arbob*, although, in common with the Nangarhar Cluster 1 villages, about 50% of the influential people (55% of villages) come from the largest landowning group. However, just under half of the most influential people are in the CDC.

Table A5. 2: Selected features of Cluster 1 villages, Badakhshan (N=27)

1	2	3	4	5	6	7	8	9	10
Village code	Masl	% LL	LL_ % total	% ML	ML_ % total	Customary authority	Land group	CDC position	CDC/ village
BD03	839	1.8	23.3	20.9	61.3	<i>Mullah</i>	4	0	1
BD07	1,225	18.2	60.0	36.4	36.0	Whitebeard	1	1	1
BD08	1,765	2.0	21.8	11.7	63.6	<i>Mullah</i>	1	0	1
BD10	1,090	3.1	20.0	12.5	40.0	Whitebeard	1	1	1
BD11	1,410	7.0	37.5	23.3	25.0	Whitebeard	2	0	1
BD12	1,461	1.6	12.5	16.4	60.0	Whitebeard	1	0	1
BD13	1,404	0.9	4.9	18.2	40.0	Whitebeard	1	1	1
BD14	1,369	15.0	67.7	23.3	21.1	Whitebeard	1	1	1
BD15	1,433	3.2	27.6	11.8	27.4	Whitebeard	1	1	1
BD16	1,360	13.3	32.0	25.0	40.0	Whitebeard	1	0	1
BD17	1,473	17.6	42.0	29.4	45.0	Whitebeard	1	0	3
BD18	1,184	1.8	96.0	27.3	0.0	Whitebeard	2	3	1
BD19	1,139	0.0	0.0	0.0	0.0	Whitebeard	4	3	1
BD20	1,151	0.0	0.0	0.0	0.0	Whitebeard	4	0	1
BD21	1,208	5.3	26.7	15.8	34.0	Whitebeard	2	2	1
BD22	1,180	0.8	100.0	0.0	0.0	Whitebeard	4	2	1
BD26	2,089	7.2	43.6	24.1	42.4	Whitebeard	3	1	1
BD27	2,172	2.1	37.5	8.3	26.7	Whitebeard	1	0	2
BD31	2,105	9.3	45.0	14.8	28.0	Whitebeard	1	1	2
BD35	1,122	4.2	70.0	35.9	0.0	Whitebeard	1	0	1
BD36	963	2.9	22.9	11.8	23.6	Whitebeard	2	0	1
BD37	2069	0.0	0.0	0.0	0.0	Whitebeard	4	3	1
BD38	972	3.3	17.7	62.3	65.8	Whitebeard	1	0	1
BD40	881	4.0	19.7	33.3	64.3	Whitebeard	1	0	2
BD41	887	1.5	6.5	5.0	13.0	Whitebeard	2	1	1
BD42	985	5.0	60.0	2.4	9.6	Whitebeard	1	0	3
BD43	899	1.4	5.0	35.7	62.5	Whitebeard	4	1	2

Cluster 2 villages

As discussed above, the different clustering tests generated a distinctive cluster (Cluster 2) in Nangarhar. The 28 villages that fell within this cluster were predominantly lowland and characterised by the presence of smaller landowners in the customary and introduced governance structures. They were also characterised by poorer outcomes in terms of education and presence of women on the CDC structures. Table A5.3 summarises selective features of the villages that were found in Cluster 2.

Table A5. 3: Selected characteristics of Cluster 2 Nangarhar villages (N=21)

1	2	3	4	5	6	7	8	9	10
Village code	Masl	% LL	LL_ % total	% ML	ML_ % total	Customary authority	Land group	CDC position	CDC/ village
NG01	481	0.67	7.5	10.0	36	Malik	2	2	2
NG02	573	0.28	12.0	1.1	19.2	Malik	3	1	2
NG06	497	3.75	11.8	18.8	28.9	Malik	2	1	1
NG07	503	0.43	23.8	8.5	47.5	Malik	3	1	1
NG09	510	1.00	14.0	33.0	72.6	Malik	2	1	6
NG11	627	0.91	16.5	15.2	55.0	Malik	3	1	8
NG12	624	2.50	23.6	25.0	63.6	Malik	2	3	1
NG13	565	0.67	20.0	1.7	21.9	Family	1	0	7
NG16	532	0.77	18.0	1.9	18.3	Mullah	3	3	1
NG17	543	5.00	38.0	11.3	22.5	Malik	2	1	1
NG18	550	0.70	26.7	3.5	31.7	Malik	1	0	7
NG20	620	7.41	47.5	11.1	33.8	Mullah	3	3	0.5
NG21	530	1.00	25.0	3.0	33.8	Malik	2	3	1
NG22	510	0.80	20.0	12.0	52.5	Mullah	3	0	0.5
NG23	508	0.63	40.9	0.8	23.6	Malik	3	0	2
NG25	506	0.67	50.0	0.7	30.0	Malik	3	2	2
NG27	490	0.40	18.0	0.4	6.0	Malik	4	3	2
NG29	508	1.75	10.5	25.0	50.0	Malik	2	3	1
NG30	515	2.00	26.7	10.0	43.3	Malik	1	1	1
NG31	510	0.57	33.3	2.9	50.0	No	1	0	1
NG32	557	8.33	22.9	25.0	42.9	Malik	1	1	2
NG33	559	0.24	10.0	9.5	50.0	Malik	3	1	1
NG34	497	1.18	25.7	7.8	28.6	Malik	3	1	1
NG35	550	2.78	25.5	11.1	42.6	Malik	4	1	1
NG36	511	1.43	10.0	20.0	56.0	Malik	2	1	2
NG38	564	2.00	21.1	1.5	3.9	Malik	4	1	1
NG43	530	1.00	15.0	3.3	15.0	Malik	2	1	1
NG46	534	0.67	20.0	1.3	20.0	Malik	2	1	1

Of the 28 villages in Cluster 2, in 23 of them the *malik* was listed as the most influential individual within the village customary authority and only three of these *maliks* came from the top landowning category (Class 1). Only two of the 23 Maliks were not in the CDC, and, of the 21 who were, 15 (70%) were the head of the CDC. In all the villages, the middle landowning group was numerically more numerous than the largest landowning group and this group in many of the villages also commanded a larger proportion of the irrigated land than did the largest landowning group. However, in only just over half of these villages were those who were middle-level landowners self-sufficient in grain for 12 months.

What was commonly reported in the interview transcripts for these villages was that the role of customary authority had not been affected by the introduction of CDCs and that the positions of the *malik* had remained all-powerful. In many cases, the *maliks* were occupying a hereditary position (e.g.

NG02, NG06, NG07, NG11) and their father or uncle had been the *malik* before them; many had been in post for many years: the *malik* of NG11 has been in post for 35 years. Thus, although the *maliks* in this group were not in the main from the largest land group, through the land resources they had, the external connections they maintained – many of these villages reported that the *malik* was the key external link for the village – and their customary position they clearly held significant power in their villages. The clustering suggests they have been a conservative influence in relation to education but in one case, NG34, a Pashai village, the *malik* was reported to be liberal with respect to women: their education had started in the early 1940s. Equally, there were examples (e.g. NG36) where the introduction of the CDC was reported to have led to a power struggle but the customary authority had won that. There were suggestions in a number of villages (e.g. NG43) that the assumption of the *malik* to the head of CDC had simply given him even more power.

Cluster 3 villages

However, in the 16 villages that lie within Cluster 3 in Badakhshan (Table A5.4), 12 of them reported the most influential person as either an *arbob* or a tribal leader, showing the enduring effects of tradition on leadership. Eleven of the most influential individuals came from the largest land group but only eight of them were within the CDC.

Table A5. 4: Cluster 3 villages in Badakhshan (N=16)

1	2	3	4	5	6	7	8	9	10
Village code	Masl	% LL	LL_ % total	% ML	ML_ % total	Customary authority	Land group	CDC position	CDC/ village
BD01	815	8.3	25.0	25.0	45.0	Tribal leader	1	1	1
BD02	960	1.5	6.0	23.5	47.0	<i>Mullah</i>	1	1	0.33*
BD04	3,066	1.0	7.2	19.3	92.8	<i>Arbob</i>	1	1	1
BD05	1,051	1.9	11.9	28.6	44.4	<i>Arbob</i>	1	1	1
BD06	1,876	3.3	21.6	16.7	48.0	<i>Arbob</i>	1	1	1
BD09	1,771	8.4	25.6	26.3	40.0	Whitebeard	2	0	1
BD23	910	0.0	0.0	0.0	0.0	None			1
BD24	914	6.9	0.0	27.8	0.0	Whitebeard	2	2	1
BD25	1,219	4.6	26.1	18.5	36.5	<i>Arbob</i>	1	0	3
BD28	1,995	4.8	22.5	11.4	30.0	<i>Arbob</i>	1	0	2
BD29	2,069	0.6	9.0	20.9	51.1	<i>Arbob</i>	2	0	4
BD30	2,136	6.7	26.7	23.3	38.9	Tribal leader	1	0	2
BD32	2,077	15.4	40.0	30.8	40.0	Tribal leader	1	1	1
BD33	1,172	13.9	35.7	22.2	34.3	Tribal leader	2	3	4
BD34	834	5.7	38.1	13.0	24.0	Tribal leader	1	0	1
BD39	980	4.8	19.4	38.1	55.6	<i>Arbob</i>	1	0	1

Note: * BD02 is a small village and has been combined with three other village to form one CDC.

The suggestion in the transcripts from these villages was that the CDCs were seen to have brought positive change. The introduction of CDCs appears to have been more recent than in the Cluster 1 Badakhshan villages and, as noted earlier, access to education is also more recent. Although there is no clear discrimination between these Cluster 3 villages and Cluster 1 Badakhshan villages in terms of altitude, they do appear to have relatively marginal agrarian economies and may be more remote. This may be reflected in the persistence of customary leadership in the form of an *arbob* or tribal leader.



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