

Chapter 6

Extensive Livestock Production: Afghanistan's Kuchi Herders, Risks to and Strategies for Their Survival

Michael J. Jacobs and Catherine A. Schloeder

Abstract The focus in this chapter is on those Kuchi (Afghan nomads and transhumant herders) who are still engaged in extensive livestock production, and it explores the challenges that they face today in maintaining their livelihood with emphasis on their greatest livelihood risks: insecurity and conflict, land access and land appropriations, and diminishing water and winter fodder sources. A plan is presented for dealing with these risks that can be executed without delay.

Keywords Land user rights • Clans • De-mining • Water supply • Forage • Rents • Conflicts • Droughts • Land degradation • Fuelwood • Biodiversity • Poverty • Sedentarization • Policy • Risk • Vulnerability • Sustainable development

Key Points

- Afghanistan's rangelands, comprising 75–80% of the landscape, are quite diverse as a consequence of much variability in climate, soils, latitude, and elevation across the country. About 80% of the country's population still resides in rural areas, and of these, 5% is considered to be actively engaged in extensive livestock production. Afghanistan's extensive livestock producers, or herders, can be characterized as either nomadic or transhumant.
- Extensive livestock production in Afghanistan has historically been fraught with risks. Beginning in the 1980s with the civil war with the Soviets, however, the

M.J. Jacobs (✉)
Department of Ecosystem Sciences and Management,
Texas A and M University, Texas, USA
e-mail: mjjacobs@tamu.edu

C.A. Schloeder
Department of Ecosystem Sciences and Management, Texas A and M University,
PO. Box 445, Fortine, MT 59918-0445, USA
e-mail: c.schloeder@tamu.edu

Kuchi experienced new risks resulting from a breakdown in governance and civil order throughout the country and the widespread use of landmines. Today, efforts to rebuild the country's economy and judicial system are such that the Kuchi face new risks as well as many of the old ones. Of all the risks they experience, insecurity and conflict, and land conversion and land appropriations, ranked the highest in importance.

- The continued lack of governance and judicial mechanisms has made it impossible for Kuchi and villagers alike to file any grievances, seek compensation for their losses, or obtain justice. Furthermore, years of continual conflict have eroded many of the positive relationships that once existed between certain clans and village communities leading to further insecurity and conflicts, fewer opportunities for justice and an increase in human casualties. The Kuchi reported in 2009 that they can lose much or all of their herd each year to criminals and commanders charging illegal fees and that during times of drought, illegal fee assessments can increase by up to 50% when no other options available. They also face the possibility of new conflicts if they have to find an alternative migration route.
- Despite the Kuchi's invaluable contribution to Afghanistan's national economy, they continue to be one of the most marginalized cultures in the country today. Over half of the total population is now settled after massive livestock losses. For those families still engaged in herding, the risks they face have led to poverty and food insecurity being the norm for most. While periodic droughts will almost certainly continue to create risk for the Kuchi, preventing them from making their annual movements will lead to greater negative consequences for humans and animals alike.

1 Introduction

Afghanistan's rangelands, comprising 75–80% of the landscape, are quite diverse as a consequence of much variability in climate, soils, latitude, and elevations across the country (Breckle 2007; Thieme 2006). To date, over 4,000 plant species have been recorded for the country with these representing flora from a range of vegetation types including alpine, *Pistachia* woodlands, steppe, shrublands, and desert (Flora Iranica 2009; Schloeder and Jacobs 2010). A long history of extensive livestock production has no doubt played a role in shaping Afghanistan's vegetation types, but it is not clear when exactly this livelihood became common. It has been suggested that in Asia, livestock production may have begun as far back as 1000 BCE following the domestication of sheep and the collapse of irrigation systems (Khazanov 1984). Other anthropogenic influences of consequence are species eradications and habitat degradation resulting from the harvest of a variety of plant matter used for fuel, building materials, and traditional and medicinal uses, in part or in their entirety, and the settlement and cultivation of rangeland areas¹ (Bedunah 2006).

¹ Schloeder and Jacobs (pers. obs).



Fig. 6.1 Kuchi graze their flocks in the high altitude Hindu Kush and then return to lowlands for the winter

Due to the continued lack of development in Afghanistan, 80% of the country's population still resides in rural areas, and of these, 5% is considered to be actively engaged in extensive livestock production (de Weijer 2005; MRRD 2007). Afghanistan's extensive livestock producers, or herders, can be characterized as either nomadic or transhumant. The transhumant herders of Afghanistan are those that have permanent dwellings to return to with their livestock after spending the summer in the rangeland areas of the Hindu Kush Mountains (Fig. 6.1).

These Kuchi include clans from the Pashtun, Tajik, Uzbek, Arab, Aimaz, Hazara, Khirghiz, Turkmen, and Baluchi ethnic groups. In contrast, Afghanistan's nomadic herders include clans without permanent dwellings to return to and who often compete for prime wintering sites each year after returning from summer grazing areas in the mountains (Schütte 2012). These include clans of the Pashtun and Baluchi ethnic groups. With the exception of the Khirgiz, Afghanistan's extensive livestock producers are commonly referred to as Kuchi. Kuchi is a Farsi verb meaning *to move*. Not all Kuchi move, however, as a consequence of having lost their herds to drought, insecurity, and land appropriations (UNHCR 2006) (Fig. 6.2).

In this chapter, we will focus on those Kuchi who are still engaged in extensive livestock production and explore the challenges that they face today in maintaining their livelihood with emphasis on their greatest livelihood risks: insecurity and conflict, land access and land appropriations, and diminishing water and winter fodder sources. We will then present a plan for dealing with these risks that can be executed without delay. Much of the un-referenced data presented in this chapter are from our work with the Afghanistan PEACE project² (PEACE hereon). PEACE is a USAID-funded project initiated in 2006, with the mandate to improve extensive livestock production and range management in Afghanistan. It is a multiprogram project that includes the institutionalization of rangeland monitoring and livestock market price technologies; rangeland and flora assessments; community and risk management assessments; professional support for drafting legal frameworks, policies, and legislation; and a conflict

² PEACE: Pastoral engagement, adaptation and capacity enhancement see <http://www.afghanpeace.org>



Fig. 6.2 Kuchi on the move

resolution program. The programs were undertaken in collaboration with various Afghanistan government institutions, nongovernment organizations (NGOs), Kuchi leadership, and community leaders. The project is fully implemented by Texas A&M University under a subcontract agreement with the University of California-Davis.

2 Livestock Production and Its Challenges

In 2009, the Ministry of Rehabilitation and Rural Development reported that the Kuchi owned 75% of the livestock in Afghanistan (MRRD 2009). Also in 2009, we reported that the Kuchi were responsible for supplying over 72% of the shoats (e.g., sheep and goats) sold in Afghanistan's major livestock markets in 2008 (Schloeder and Jacobs 2009). Estimated income generated from the sale of these shoats was \$443 million suggesting that the economic contribution of the Kuchi to Afghanistan is not insignificant. The Kuchi are the primary suppliers of *qurut*, a dried yogurt product (Barfield 2004); skins and wool (de Weijer 2005); and young stock sold to farmers as they move through areas (Thompson 2007). Additionally, Tajik and Uzbek Kuchi are the main suppliers of the *qarakul* pelt industry which experienced a resurgence across northern Afghanistan in 2005 with an estimated \$20 million in generated income (MTND 2009). The Kuchi have been also known to play a major role in trade by bringing goods into remote mountainous areas in exchange for agricultural products (Barfield 2004).



Fig. 6.3 Conversion of the more productive rangeland to cropland is a big concern. It reduces forage supply and cuts off access to other land

Extensive livestock production in Afghanistan has historically been fraught with risks. Beginning in the 1980s with the civil war with the Soviets, however, the Kuchi experienced new risks resulting from a breakdown in governance and civil order throughout the country and the widespread use of landmines. Today, efforts to rebuild the country's economy and judicial system are such that the Kuchi face new risks as well as many of the old ones. Some of the more significant risks the Kuchi are encountering today include the following:

- *Insecurity and conflict* – thefts, abductions, attacks, assessment of fees, and earlier than normal departures from grazing lands
- *Land conversions/appropriations from cultivation, village expansion, (re)settlement programs (for IDPs and refugees), and greed on the part of commanders and warlords* – assessment of fees, loss of critical grazing lands, competition with villagers for remaining grazing lands, confinement of herds on grazing lands insufficient in size, earlier than normal departures from grazing lands, and the need to find alternative migration routes (prior to and during migration)
- *Diminishing access to water* – earlier than normal departures from grazing lands, and the need to find alternative migration routes (prior to and during migration)
- *Competition for winter fodder* – loss of fodder resource, armed conflicts, and assessment of fees

Of all the risks they experience, insecurity and conflict, and land conversion and land appropriations, ranked the highest in importance during a risk assessment exercise with different Kuchi groups (Desta 2009) (Fig. 6.3).

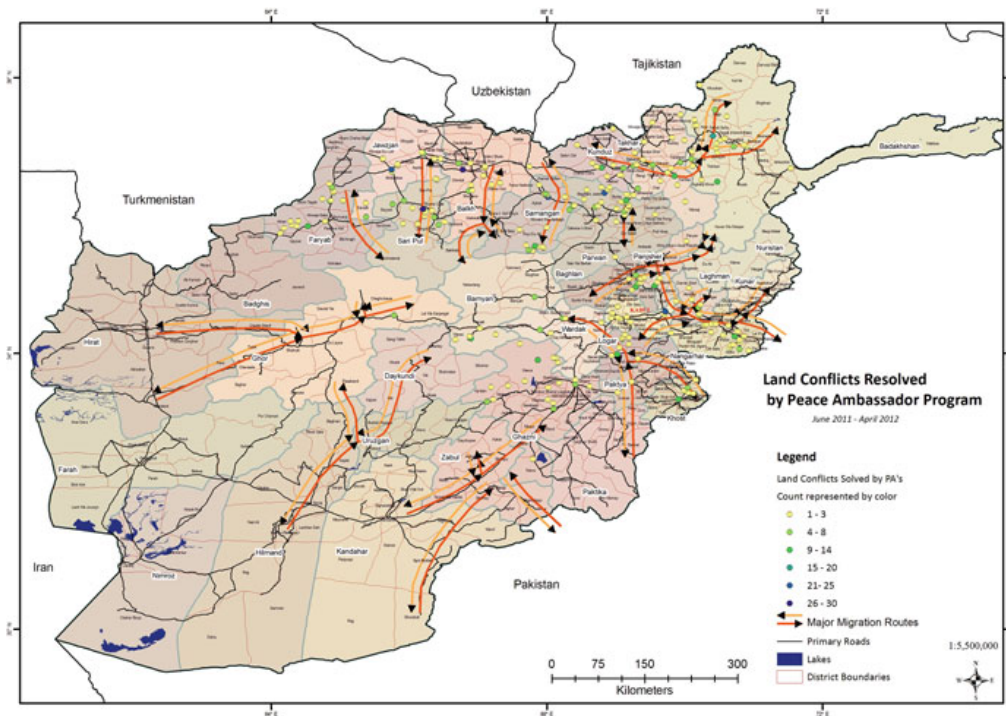


Fig. 6.4 Migration routes have changed and much negotiation has been involved in getting agreement about new routes. PEACE has negotiated these routes

The continued lack of governance and judicial mechanisms has made it impossible for Kuchi and villagers alike to file any grievances, seek compensation for their losses, or obtain justice. Furthermore, years of continual conflict have eroded many of the positive relationships that once existed between certain clans and village communities leading to further insecurity and conflicts, fewer opportunities for justice, and an increase in human casualties. The Kuchi have also had to deal with general insecurity as insurgent activity continues to plague the country. They are known to get caught up in night raids simply because of the Taliban having moved into areas near their residences or camps. They have also had to abandon areas prematurely and limit their movements during or in anticipation of a conflict. Conflicts between commanders are issues of concern as well because the victor may not always end up being the one in control previously. The risks in this instance range from the theft of one's entire herd, the assessment of an access fee, or the assessment of a higher than "normal" access fee. The Kuchi reported in 2009 that they can lose of up to 20% of their herd each year to criminals and commanders charging illegal fees and that during times of drought, illegal fee assessments can increase by up to 50% and that one can lose their entire herd if there are no other available options (Destra 2009). They also face the possibility of new conflicts if they have to find an alternative migration route (Fig. 6.4).

The lowland areas of Afghanistan are the main wintering areas for the Kuchi. Faryab, Badghis, Sar-e Pul, Kunduz, and Badakhshan provinces are the primary source of shoats for the larger rural and urban markets in Balkh, Nangarhar, and Kabul.

In the last 20 years, these provinces have been repeatedly hit by drought resulting in massive livestock losses, and in the last 15 years, large swaths of land have been appropriated at an unprecedented rate by farmers and commanders attempting rain-fed cultivation. The consequence of these events has been the loss of important winter grazing areas and the degradation of rangeland areas where cultivation is being attempted in areas with unsuitable soils and rainfall conditions. Degradation in the lowland areas takes various forms including a complete loss of plant cover to conversion to annual plant cover comprised of poor quality, early seral stage plant species, some of which are toxic.

In 2008, herders in Baghlan and Samangan provinces reported, during interviews in the field, that 90% of their does had spontaneously aborted during the previous winter after being fed dried native forages that had been collected for winter fodder. An examination of the remaining winter stockpile revealed an abundance of *Leptaliium filifolium*, a species in the Cruciferae family known to contain compounds leading to spontaneous abortions. A study conducted by PEACE on rangeland diet quality in Baghlan, Samangan, Faryab, Kunduz, and Balkh indicated that the percentage of crude protein and total digestible nitrogen were less than the minimum required for lactating ewes and does (Schloeder et al. [in prep](#)). Low milk yields affect offspring survival and future body condition as well as the families that own the animals because of their dependency on dairy products for food and revenue. Low milk yields also place an additional economic burden on the family to provide an alternative food source. Rangeland surveys in these same areas also indicated a preponderance of low quality and toxic species of the Brassicaceae, Euphorbiaceae, Papaveraceae, and Leguminosae families.³ Low quality diets and exposure to toxic plants can also lead to declines in body condition, increases in livestock mortality rates, and an increased susceptibility to parasites and diseases.

Currently, the bulk of drinking water for the Kuchi and their animals comes from rain and river sources.⁴ The choice of historical migration routes for any herder in the world is always strongly linked to reliable water sources in addition to reliable forage sources. The Kuchi's ability to access reliable water while en route to seasonal grazing areas is increasingly becoming more difficult as routes become blocked or more complicated to navigate with the consequence that some have seen their entire livelihood vanish in just a matter of days due to massive die-offs from dehydration. Others have resorted to moving their animals by truck around some of the more challenging conflict areas, including from the Jalalabad area to Dasht-e Lalai north of Kabul and the Kunduz area to Shewa Kalan in Badakhshan. This is an expensive endeavor, however, and one that often leads to stress in response to long transport times, high temperatures, and the lack of water and feed while en route. Elevated stress levels often present as health issues (e.g., pneumonia), declines in body weight, and, in the worse case, high mortality. Given the cost of transporting animals, this is an option that only a few herders have chosen to date. A related issue is that the lack of potable water can lead to chronic health issues for humans and

³ Afghanistan PEACE Project: <http://cnrit.tamu.edu/peace/surveys.html>

⁴ Afghanistan PEACE Project: <http://cnrit.tamu.edu/peace/kuchimaps.html>

animals alike. As a mobile society, this then becomes an issue of treating one's own health or the health of their animals. This is a challenging if not impossible undertaking given that government services are frequently unavailable along migration routes and in summering areas and more specifically, they are not set up to service the needs of a mobile society.

Afghanistan was once one of the most heavily mined countries in the world, with grazing land accounting for 75.6% of all mined areas (UNMAP 2009). De-mining efforts are prioritized according to the number of human and livestock casualties. As a consequence, the majority of de-mining efforts to date have focused on settlement areas, roads, and infrastructure where there is regular, frequent, and abundant human activity. The Kuchi remain vulnerable, as a consequence, because of their reliance on rangelands and because it can take time to reach the critical threshold of casualties triggering a de-mining response given that they tend to use most areas on a seasonal basis only. On well-known migration routes, the Kuchi know which areas to avoid. When forced to change routes, their vulnerability increases substantially with dire consequences for humans and livestock alike. Changing migration routes while in transit can also lead to new conflicts, an assessment of fees or higher than "normal" fees, and increase the herders' chances of encountering criminals or insurgent activity as a result of not knowing the new landscape they are forced to negotiate through. De-mining activities also take a toll in that many types of activities can result in rangeland degradation particularly if they involve large machinery turning and scraping the upper soil layers.⁵

3 Organization and Status of the Kuchi

The Kuchi are organized by clans with a clear leadership structure beginning at the clan level and extending first to the district and then the provincial level. It should be mentioned that often regional leadership does not fall neatly into districts or provinces (Barfield 2004). The extent of clan leadership is independent of geographic area and related instead to close family and political ties. In 2006, a more formal structure of organization was instituted by the president of Afghanistan, for the Kuchi. This involved the establishment of the Independent Department of Kuchi, since renamed to Independent General Directorate of Kuchi (IGDK), as a mechanism for facilitating government representation and for solving problems that extended beyond a clan's control. The IGDK operates as a quasi-ministry but one with the mandate of reporting to the president directly and a single agenda: to address all social, economic, and political issues affecting the Kuchi across Afghanistan, regardless of ethnicity. When IGDK was a newly formed institution, it had little capacity or capital to really help the Kuchi people; however, as of January 2010, it has 31 local Kuchi directors in place to serve as representatives for

⁵ Schloeder and Jacobs (pers. obs).

31 of the 34 provinces in Afghanistan. The Kuchi provincial directors (KPDs) manage business by shura, a meeting of clan and district leaders who meet on a monthly basis to discuss and manage issues related to the Kuchi within their jurisdiction. They also interact regularly with the IGDK through the transfer of information and planning and management purposes.

A risk assessment of herders still engaged in extensive livestock production revealed that working as field laborers was one of the primary main ways of generating additional income or food throughout the year, after the sale of animals and animal by-products, with total earnings from labor wages currently contributing only a little to annual income or daily diet (Desta 2009). Total earnings from the sale of animals and animal by-products were reported to be lower now than in the past because of a reluctance to sell as livestock numbers continue to dwindle, low market prices (for wool, cashmere, and hides), and lack of access to the markets. Some reported owning equipment which they rented out as they passed by communities, but this was considered the exception rather than the norm. The participants in the assessments also reported that when migrating, it was difficult to negotiate a fair price for live animals or hides because the lack of communications made it difficult to keep up with current market prices. Other issues the Kuchi encounter are lack of access to basic services including veterinary, education, clinics, emergency food aid, and limited winter forage stocks.

Despite the Kuchi's invaluable contribution to Afghanistan's national economy, they continue to be one of the most marginalized cultures in the country today (MRRD 2009; Bedunah 2006). Over half of the total population is now settled after massive livestock losses, and in 2006, the Kuchi represented 70% of the internally displaced populations (IDPs) in Afghanistan (MRRD 2007; UNHCR 2006). Without a livelihood, these IDPs are destined to become permanently dependent on donations, begging, and daily wages to survive. For those families still engaged in herding, the risks they face have led to poverty and food insecurity being the norm for most. While periodic droughts will almost certainly continue to create risk for the Kuchi, preventing them from making their annual movements will lead to greater negative consequences for humans and animals alike. Additionally, opportunities for villagers to economically diversify will decline or disappear entirely. The greatest threat, however, is the end of the Kuchi's livelihood entirely and consequently, the decimation of Afghanistan's small livestock industry.

4 Strategy to Ensure Endurance of Afghanistan's Extensive Livestock Production Sector

Livestock production plays a major role in the stability of Afghanistan's economy, and in terms of food security, meat and dairy represent an important source of nutrition. Governance and policy issues, access to basic public services and emergency aid, portfolio diversification, conflict management, and social and human capital development are crucial to ensuring the survival of the Kuchi's pastoral livelihood

and guaranteeing food security for them and the nation. Addressing these needs is also essential to the success of the government programs described by Emadi (Chap. 5) and here.

This plan is divided into two components: one for dealing with emergency situations and the other enabling the transition to a more sustainable livelihood. The foundation of this plan is that livestock production is the primary and most important livelihood of the Kuchi people and that the Kuchi people are the primary livestock producers in Afghanistan, and as such, maintaining this livelihood is critical to the economic security of Afghanistan as well as being critical to the cultural and social identity of the Kuchi people.

5 Emergency Plan: Climate-Related Coping Strategies

There are three activities designed to provide emergency assistance to the Kuchi people in the event that they experience an unexpected, climate-related risk (e.g., cold weather, drought, heat wave).

Emergency food distribution should occur in areas where nomadic herders are concentrated. Nongovernmental organizations (NGOs) and the World Food Programme (WFP) have been primarily responsible for emergency assistance, but reports suggest that the Kuchi are not being served in the same way that villagers have been served. Most likely, the reason for underserving the Kuchi community is that the NGOs and WFP tend to work with village shuras, most of which have poor if any Kuchi representation. The lack of Kuchi representation on shuras leads to an underestimate of the number of families and family size and their approximate location. Collaborating with the IGDK and KPDs will help alleviate this problem. In support, PEACE has compiled and mapped information from surveys that will prove useful.⁶ With this information, emergency responders should be able to improve the food distribution situation tremendously during climate-related emergency situations.

Winter livestock feeding should be conducted in areas that have a history of requiring emergency winter assistance and where Kuchi are known to concentrate when anticipating a bad winter. Advance knowledge of the numbers of livestock that will require feeding is also of utmost importance. PEACE has compiled and mapped information from surveys with the Kuchi on the location and approximate numbers of Kuchi livestock throughout the country, seasonally, that will be of help in this effort. Collaborating with the IGDK and KPDs will also be of help. Winter livestock feeding will require significant planning in advance in order to be effective. Critical components to consider when planning include (1) locating and purchasing feed/forage well in advance, generally no later than the end of September; (2) advance

⁶ Afghanistan PEACE Project: <http://cnrit.tamu.edu/peace/kuchimaps.html>

identification of distribution centers to maximize the effectiveness and ease of distribution; and (3) transportation of feed materials to the distribution centers in a timely manner to avoid weather-related transportation issues. Airdrops are an option for more isolated situations but would be more costly. This method should be considered when all other options are exhausted.

Commercial destocking of livestock is a practice that the Kuchi have mentioned that they are currently engaged in during adverse climatic conditions when they see no other alternative available left to them. Normally, the Kuchi do not sell animals during the winter or spring unless they find they are unable to feed them and know that they will die. When traders know that the Kuchi need to sell their livestock, they will naturally take advantage of this situation and offer very low prices for the animals. In general, the price received by traders is insufficient to buy enough forage for the remaining herd. One way to help Kuchi livestock producers in this instance would be to subsidize the purchase price of the animals so that they get a fair price. Subsidies have the additional advantage of giving an individual another means of income generation, whether they are Kuchi or not. Nomadic herder-assisted programs in Kenya and Ethiopia have adopted such a technique during emergency situations (Coppock 2010; Coppock et al. 2009). Subsidies can come in the form of no-interest loans or by covering transportation costs of the trader. To succeed, traders must be required to sign a binding agreement that guarantees a fair purchase price and that the animals will be purchased directly from a Kuchi herder, with the purchase location and herders specified in advance.

Noncommercial destocking is another viable option during an emergency situation. This method is a bit less challenging to accomplish in that it requires that animals are slaughtered and the meat dried for later consumption or sale. In southern Ethiopia and northern Kenya, partnerships have been developed between nomadic herders and government and nongovernment institutions that enable the herders to slaughter, dry, and sell the meat to local schools, charities, and other institutions at a fair price (Coppock et al. 2009).

Destocking and restocking elsewhere in Afghanistan is another method that could be adopted in an emergency situation. With this method, animals would be purchased at a fair price in areas where they are in need of emergency destocking and then transported to areas (where the risk is minimal or significantly less) and given to those Kuchi who are in need of restocking after losing their animals for various reasons (including climate-related and security and risks, to name a few) at a minimal cost. To undertake this effort, there are two issues that would have to be addressed prior to their transport: (1) the Kuchi receiving the animals would have to demonstrate that they have sufficient feed/forage to maintain the animals until the spring (the minimal cost), and (2) the transportation method would have to be agreed upon well in advance and ready to mobilize at a moment's notice. Given the lack of private commercial flights in the south, a military-assisted airlift would be the most efficient method available for this region. The IGDK and KPDs can assist in identifying the Kuchi that are being most affected and who would most benefit from restocking.

Veterinary services would need to be accelerated and have a focal point during emergency situations to avoid the spread of disease within a malnourished livestock population, and to avoid its spread to those areas where they might be relocated. Treatment would also be required prior to noncommercial destocking to ensure that the meat is fit for consumption.

6 Transition Plan: Risk Management - Prevention and Mitigation Strategies

There are four primary activities that will help the Kuchi people eliminate, limit, or manage the risks they face on a day-by-day basis with the result that they will become less likely to need to cope with emergencies when they arise. If successful, the risk management strategies detailed here will also serve to improve Afghanistan's livestock economy.

Economic Diversification in the form of outreach programs is one strategy for resolving the risks that the Kuchi face on a daily basis. Outreach programs are currently in effect in several other countries, with much success, with pastoralists facing similar risks (Coppock et al. 2009). Outreach programs involve the formation of collective action groups (CAG) whose mission is to identify and prioritize which functions are of import to the community that will lead to diversification. Typically, a savings-led credit function is the first to be adopted because this function serves as the primary means of capital for diversification. Literacy and numeration programs are typically another first function to adopt because of the low literacy rate among the Kuchi.

It is essential, however, that CAGs take on only a few functions at first in order to succeed and to have the opportunity to learn from their experiences without feeling overwhelmed by the process. In addition, those interested in forming CAGs must work to gain the trust of their own community. Once a CAG determines it has the necessary human and social capacity, in addition to demonstrating it has the start-up financial capital, it can expand its group to include government and nongovernment members with clear guidelines outlined and agreed upon in advance on the responsibilities and roles of each partner. Typical functions adopted at this stage include working collaboratively to devise strategies to improve the marketing of livestock and livestock-related products, the establishment of joint shuras for resolving conflicts, developing programs to add value to existing products, designing and adopting community-wide human capital programs, and the development of programs for the dissemination of information to the community, to name a few. To do these, CAGs will require the participation of donors and government stakeholders, in the form of materials, education, training, and mentoring, with guidance by the coordinating body.

Another responsibility of the CAG is to agree to a participatory action research (PAR) component. PAR is essential to the success of any action group because it provides valuable feedback to the group and to other groups as well. It is also a way

of imparting information to others who are attempting to form their own action groups and to the world at large on what ideas were chosen or rejected over others and why. By definition, it means the observation and documentation of the action-group decision-making process, problems encountered, and how they were resolved. It also involves the collection of baseline information followed by the monitoring of indicators to assess progress, failures, and successes. In essence, this is no different than any monitoring and evaluation process, with the exception that the information eventually gets published in refereed journals for the benefit of a much wider audience than just Afghanistan alone.

Improved marketing and value addition within the framework of economic diversification will improve the situation for the Kuchi by adding value to existing products through fattening programs, improvements in methods used to process and collect products (e.g., wool, cashmere), and improved marketing techniques to attract or engage traders who will engage in business partnerships that will ensure a higher value product.

Human Capital: Education and Health involves education and health programs to the general population and CAGs to not only improve the existing situation but to build the capacity of all Kuchi people over time. Programs that are needed at this time include general health programs, maternal and prenatal programs, and education programs for children, women, and the illiterate. To implement programs of this nature, implementing partners will need to work closely with the IGDK, its provincial offices, and the CAGs to identify the best methods for delivery of services and materials and training.

Adoption of Pro-extensive Livestock Development Policies involves a suite of activities aimed at improving management Afghanistan's rangeland areas, improvements in the delivery of standard veterinary services, strengthening of existing laws and adoption of laws which improve the situation of Afghanistan's rangelands.

- (A) Research and Monitoring – Research to collect information essential to the development of effective management plans, as are design, monitoring, and evaluation protocols; rehabilitation of areas back to productive rangeland; and improved fodder production. These activities will all involve both government and nongovernment institutions working in close collaboration. It will also involve active participation by the Kuchi, in the selection, design, and all implementation phases.
- (B) Rangeland Law – Afghanistan's rangelands are still being plowed under, at an alarming rate, despite evidence that they will not support any type of rain-fed agriculture. Afghanistan is in need of laws designed to protect its remaining rangelands, as described by Emadi (Chap. 5). To ensure the adoption of an effective law, there must be a coordinated effort to involve the Kuchi and other stakeholders during the drafting process, rather than only through the public comment process. This will require engagement and coordination with the IGDK and KPDs as soon as possible.

- (C) Veterinary and Extension – Access to veterinary services throughout Afghanistan regardless of ownership would ensure healthier livestock, delivery of a better product to the market, and more income to the seller. There are several organizations currently involved in developing the capacity of Afghanistan to deliver veterinary services to livestock producers. Unfortunately, the Kuchi have been largely overlooked to date, but there are some efforts under way to improve this situation. With respect to extension services, these are mostly lacking for the entire country. In order to reach the primary livestock stakeholder in Afghanistan, veterinary and extension programs need to adopt a policy of training Kuchi as veterinary technicians and extension workers, in addition to designing a program that ensures the delivery of quality pharmaceutical products to a mobile community. This will require engagement by the Kuchi in the selection and coordination process.

Conflict Management involves programs aimed at building the capacity of Kuchi and non-Kuchi leaders to solve some of their more immediate and challenging land access and appropriation issues. The idea is that if the leaders can solve most conflicts themselves, in collaboration with communities, then at least one barrier to improving livestock production and ensuring food security can be removed. PEACE initiated a conflict management program in 2007, and it continues today after evolving in stages (Jacobs et al. 2009a, b). It started with capacity building of KPDs, then expanded to include district and clan-level Kuchi leaders, and from there, it grew to include Kuchi and non-Kuchi leaders from specific conflict regions. Institutions involved in this effort included the IGDK, the Peace Commission – Office of Tribal Affairs (OTA), and the Sanayee Development Organization (SDO). The foundations of the program were simple – involve the government, involve respected local leaders, provide the necessary trainings and skills, keep the demands simple, and encourage equal representation during meetings. The goals were simple as well – build capacity of the participants to communicate more effectively, serve as a conflict resolution mediator, and encourage equal representation during meetings. The outcomes from the program to date are many (Fig. 6.5 and Table 6.1), and these will continue to grow with time and extension of the effort:

- Peaceful resolution of more than 1,000 social and land/resource-based conflicts
- Improved relations with local communities
- Improved relations with government and local officials
- Consensus that the government has created many of the problems they were experiencing over land tenure and the use of public rangelands
- Consensus that political leaders do not want them to settle land access issues at the community level, that high-powered Kuchi and Hazara government leaders were responsible for perpetuating the conflicts to further their own political agendas
- Acknowledgement that history and complexity of issues mean that a quick resolution is not possible
- Consensus that fighting has not helped them to solve any of their conflicts and should therefore be discouraged
- Improved relations with district and clan leaders

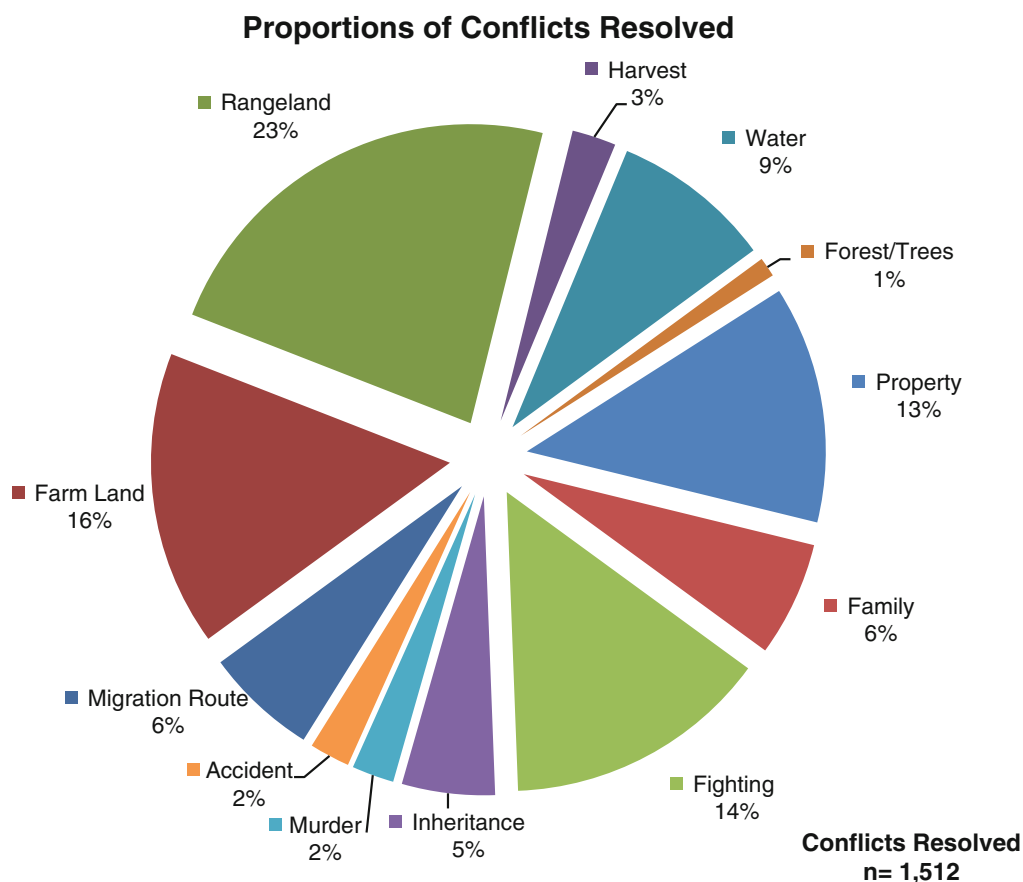


Fig. 6.5 Types and proportions of conflicts resolved by Peace Ambassador Program between June 2011 and April 2012. Types of conflicts: *land* (rangeland, farmland, migration route, harvest, water, forest/trees) and *social* (property, accident, murder, inheritance, fighting, family)

- Increased support for the role of the IGDK and its provincial offices
- Transfer of knowledge of Kuchi-related issues from the level of constituents to the IGDK
- Demonstration of knowledge of Kuchi-related issues and solutions to Afghanistan parliament and president

Success of the conflict management program is determined to be a function of the following:

- Training was adaptive, incorporating the needs of illiterate participants.
- Quarterly presentations and skits enabled participants to learn from each other.
- The mediators included respected leaders from both sides of the issue who were committed to a peaceful solution.
- The communities were the ones who chose which conflicts they wanted solved.
- Participants from both sides of the issue engaged equally in the process.
- Participants had a voice in finding and choosing the solution(s).
- Agreements were binding.

Table 6.1 Land-related conflicts, between different user groups, which have been resolved by Peace Ambassador Program between June 2011 and April 2012

Province	Between villagers	Between Kuchi	Between villagers and Kuchi
Badakhshan	49	3	23
Baghlan	22	24	47
Balkh	40	10	15
Bamyan	16	0	3
Faryab	24	23	15
Ghazni	29	4	14
Jalalabad	14	3	23
Jawzjan	34	6	8
Kabul	20	6	10
Kapisa	19	3	8
Khost	1	4	10
Kunduz	13	15	6
Laghman	7	6	3
Parwan	5	3	5
Samangan	27	12	41
Sar-e Pul	10	11	38
Takhar	37	14	19
Wardak	14	17	30
Total	381	164	318

This is a different approach to the traditional problem-solving method used in Afghanistan that of presenting your problem to the local shura, or assembly of leaders, and having the shura decide the outcome. While this system has proven to be of much use to Muslims around the world (UNDP 2007), it fails in Afghanistan when the issue involves multiple ethnic groups or identities. The reason is that most shuras are comprised of local representatives only. Additionally, Afghanistan's shura leaders tend to be political appointments with no formal training in conflict resolution. As a consequence, their judgments tend to be biased when the issue involves noncommunity members.

6.1 Strategy Issues

The Kuchi represent a largely mobile community 6–9 months out of the year. Currently, most programs in Afghanistan are designed for delivery to sedentary communities. In addition, most organizations work directly with local governments and shuras in each province, when designing and implementing a program. The Kuchi are now organized under the office of the IGDK; however, they are still unskilled in the design and implementation of programs specific to their needs.

There is also a lack of coordination and poor communication between the different government and nongovernment organizations for some of the interventions proposed here. All of these issues make delivery to the Kuchi generally challenging.

The programs described here are either designed to address these issues or will require mechanisms built into them to overcome them. One required mechanism is that this plan be implemented as a coordinated effort between all relevant government institutions, NGOs, the IGDK, and all Kuchi provincial offices. To participate, these organizations must agree to using a participatory process to identify, design, and implement any program. Another requirement is that one institution only, with experience and familiarity with the Kuchi situation such as the IGDK, function as the coordinating body under which the various stakeholders operate. Monitoring and evaluation of emergency and nonemergency efforts are also critical to assess success and to improve upon each intervention measure over time. In all of the situations described above, a monitoring and evaluation component should be built in to ensure the intervention measure is being implemented and adapted where needed.

Mentoring is another critical component. Until capacity building is achieved, support is needed to encourage participation and deal with frustrations and feelings of being overwhelmed.

7 Summary

Extensive livestock production in Afghanistan is currently at great risk. Access issues, appropriations of land, insecurity, conflict, and lack of winter fodder are at the heart of many of the Kuchi's problems. These same issues are responsible for many of the current environmental problems and threaten many ecosystem services in addition to their threat to food security for the country. There are numerous interventions that, if approached correctly, can improve the situation while providing opportunities for better land stewardship. Immediate interventions, such as emergency food distribution, winter livestock feeding, and destocking/restocking programs, are some of the more obvious solutions to help the Kuchi cope with their most urgent issues. Additional benefits from these include economic opportunities for Kuchi and non-Kuchi alike. Some of the longer-term solutions to eliminating, limiting, or managing risks include programs aimed at economic diversification, investment in human capital, development of pro-extensive livestock production policies, and conflict management. Collectively, these interventions will promote an industry which is vital to Afghanistan and its people; they will also promote efforts to improve land stewardship.

All interventions described here will require an investment in time, however, because of the need to transfer skills to Afghan communities and the local leadership. Likewise, earning trust takes time and much commitment. Mentoring is also a vital component to any program, as well as ensuring a participatory process. These constraints all highlight the need for donors to understand and commit to longer funding and program cycles. Sustainable development is rarely a short-term, high-impact

endeavor. The benefit will be that we will have provided a large number of Afghans with the skills needed to solve their own issues, at all levels of society and government. This will eventually translate to better human and environmental conditions in Afghanistan.

References and Further Reading

- Barfield TJ (2004) Nomadic pastoralists in Afghanistan: reconstruction of the pastoral economy. Bank Information Center, Washington, DC, 13 pp. Online: <http://www.bicusa.org/en/Region.Resources.5.aspx>
- Bedunah DJ (2006) An analysis of Afghanistan's rangelands and management issues for the development of policy and strategies for sustainable management. 5 January 2006, Chemonics International, Inc. Online: http://pdf.usaid.gov/pdf_docs/PNADG285.pdf
- Breckle SW (2007) Flora and vegetation of Afghanistan. *Basic Appl Dryland Res* 1(2):155–194
- Coppock DL (2010) Action research, knowledge and impact: experiences of the global livestock CRSP pastoral risk management project in the Southern Ethiopian rangelands. Global Livestock Collaborative Research Support Program, University of California, Davis
- Coppock DL, Desta S, Tezera S, Gebru G (2009) An innovation system in the rangelands: using collective action to diversify livelihoods among settled pastoralists in Ethiopia. In: Waters-Bayer A, Wettasinha C, Njuki J, Sanginga P, Kaaria S (eds) *Innovation Africa: enriching farmer's livelihoods*. EarthScan Publications, London, pp 104–119
- de Weijer F (2005) Conference on Afghanistan pastoralists (Kuchi). Report of proceedings 15–17 November 2005. United States Agency for International Development. Online: <http://cnrit.tamu.edu/peace/pdfs/AfghanPastorlistConference01.06.pdf>
- Desta S (2009) Risk management strategy for Kuchi Herders in Afghanistan. Afghanistan PEACE project. Online: <http://cnrit.tamu.edu/peace/pdfs/PEACE%20Risk%20Assessment%20Report%20Jan%202009.pdf>
- Desta S, Schloeder C (2010) Report on initiating a pilot community-based risk management project with the Kuchi in Northern Afghanistan. Available at: <http://cnrit.tamu.edu/peace/riskmgmt.html>
- Emadi MH (2012) Better land stewardship to avert poverty and land degradation in Afghanistan. In: Squires VR (ed) *Rangeland stewardship in Central Asia*. Springer, Dordrecht, pp 91–108 (Chapter 5, this volume)
- Flora Iranica (1963–2009) In: Rechinger KH (ed) *Flora Iranica* volumes 1–179. Graz, Akademische Druck- u. Verlagsanstalt
- Jacobs MJ, Naumovski I, Schloeder C, Dalili RM (2009a) Empowering Afghan Herders to build peace. Research brief 09-01-PEACE. Global Livestock Collaborative Research Support Program (GL-CRSP), University of California, Davis, California
- Jacobs MJ, Naumovski I, Schloeder C, Dalili RM (2009b) Peace ambassadors: an innovative approach to community-level conflict resolution in Afghanistan. Research brief 09-02-PEACE. Global Livestock Collaborative Research Support Program (GL-CRSP), University of California, Davis, California
- Khazanov AM (1984) *Nomads and the outside world*. Cambridge University Press, Cambridge
- MRRD: Ministry of Rehabilitation and Rural Development and the Central Statistics Office (2007 June) National Risk and Vulnerability Assessment 2005. Online: <http://home.wfp.org/stellent/groups/public/documents/ena/wfp193560.pdf>
- MRRD: Ministry of Rural Rehabilitation and Development and Central Statistics Office (2009) National risk and vulnerability assessment 2007/8: a profile of Afghanistan. ICON-Institute GmbH & Co KG Consulting Gruppe, Cologne
- MTND: Meat Trade News Daily (2009) http://www.meatradenewsdaily.co.uk/news/110609/afghanistanproblems_in_the_wool_industry.aspx

- Schloeder CA, Jacobs MJ (pers. obs) Afghanistan PEACE project. Online: <http://cnrit.tamu.edu/peace/>
- Schloeder C, Jacobs MJ (2009) Afghanistan livestock market assessment: report on Afghanistan livestock market dynamics October 2008–2009. Afghanistan PEACE project. Online: <http://cnrit.tamu.edu/peace/pdfs/PEACE%20Livestock%20Market%20Synthesis%20Report%20June%202010%20web%20version.pdf>
- Schloeder C, Jacobs M (2010) Complete list of flora of Afghanistan: compilation of records from various sources. Afghanistan PEACE project. Online: <http://cnrit.tamu.edu/peace/plantspecies.html>
- Schloeder CA, Jacobs MJ, Sherzad MD (In preparation) Analysis of rangeland diet quality in Afghanistan
- Schütte S (2012) Pastoralism, power and politics: access to pastures in northern Afghanistan. In: Kreuzmann H (ed) Pastoral practices in High Asia: agency of 'Development' effected by modernization, resettlement and transformation. Springer Science and Media, Dordrecht, pp 53–70
- Thieme O (2006) Afghanistan, country pasture/forage resource profiles. Food and Agriculture Organization, Rome. 19 pp. Online: <http://www.fao.org/ag/AGP/AGPC/doc/Counprof/PDF%20files/Afghanistan.pdf>
- Thompson E (2007) Water management, livestock and the opium economy: marketing of livestock. Applied Thematic Research into Water Management, Livestock and the Opium Economy October 2007
- UNDP (2007) Afghanistan human development report 2007: bridging modernity and tradition – the rule of law and the search for justice. Human Development Index, Kabul
- UNHCR: Office of the United Nations High Commissioner for Refugees (2006) Durable solutions for Kuchi IDPs in the South of Afghanistan: options and opportunities. Report, November. Asia International Consultants, Kabul and Kandahar
- UNMAP: United Nations Mining Action Program (2009) Online: <http://www.un.org/apps/news/story.asp?NewsID=29515&Cr=unmaca&Cr1>