

Improving Quality of Life in Remote Mountain Communities

Authors: Kanji, Nazneen, Sherbut, Graham, Fararoon, Romin, and Hatcher, Juanita

Source: Mountain Research and Development, 32(3) : 353-363

Published By: International Mountain Society

URL: <https://doi.org/10.1659/MRD-JOURNAL-D-12-00012.1>

The BioOne Digital Library (<https://bioone.org/>) provides worldwide distribution for more than 580 journals and eBooks from BioOne's community of over 150 nonprofit societies, research institutions, and university presses in the biological, ecological, and environmental sciences. The BioOne Digital Library encompasses the flagship aggregation BioOne Complete (<https://bioone.org/subscribe>), the BioOne Complete Archive (<https://bioone.org/archive>), and the BioOne eBooks program offerings ESA eBook Collection (<https://bioone.org/esa-ebooks>) and CSIRO Publishing BioSelect Collection (<https://bioone.org/csiro-ebooks>).

Your use of this PDF, the BioOne Digital Library, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Digital Library content is strictly limited to personal, educational, and non-commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne is an innovative nonprofit that sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Improving Quality of Life in Remote Mountain Communities

Looking Beyond Market-led Approaches in Badakhshan Province, Afghanistan

Nazneen Kanji¹, Graham Sherbut^{1*}, Romin Fararoon², and Juanita Hatcher¹

* Corresponding author: graham.sherbut@akdn.org

¹ Quality of Life Assessment Program, Aga Khan Development Network, c/o Aga Khan Foundation-UK, 210 Euston Road, London NW1 2DA, United Kingdom

² Aga Khan Foundation, AKF Compound, Faizabad Old Town, Faizabad City, Badakhshan, Afghanistan

Open access article: please credit the authors and the full source.



This article explores how physical remoteness influences the quality of life of people living in mountain communities in Afghanistan's Badakhshan Province. Basing its analysis on data obtained from a quality of life assessment

carried out in Badakhshan, the article compares how quality of life indicators differed between villages that are more remote in terms of their access to markets, services, and transport, and those that are closer to small urban economic hubs. Indicators in a range of domains including the household economy, built environment, health, and education were poorer in remote villages. However, less tangible aspects of life such as trust between people, social cohesion, cultural life, and people's own perceptions of the

quality of their lives were similar or better in these locations. Nevertheless, we argue that remoteness acts as an important barrier to improving many aspects of health and wellbeing in remote mountain villages. Market-led approaches by themselves are inadequate for helping to promote quality of life improvements in these communities. This research suggests that the holistic framework, mixed funding, and innovative approaches that the Aga Khan Development Network is pursuing as the main implementing partner of the National Solidarity Program in the province—including infrastructure development, strengthening local governance, and cross-border development programs with Tajikistan—stand a better chance of improving quality of life.

Keywords: Market-led development; mountain societies; quality of life; remoteness; Badakhshan; Afghanistan.

Peer-reviewed: May 2012 **Accepted:** June 2012

Introduction

In 2007, the Aga Khan Development Network (AKDN) initiated a quality of life (QoL) assessment program in selected geographical regions to which it has made long-term commitments and where it uses the combined expertise of its social, cultural, and economic development agencies to promote broad-based area development. The concept of QoL draws on Amartya Sen's (1993, 1999) work on capabilities and on more recent work on wellbeing (Alkire 2002; Diener et al 2003; Gough and McGregor 2007; White 2008; Layard 2010). Sen has argued that rather than measure "utilities," as economists tend to do, we should measure people's "capabilities," that is, what they are able to do and achieve in their lives. Human wellbeing can be conceived of in terms of the interplay of 3 dimensions: the material, relational, and subjective (McGregor and Sumner 2010). The authors' working definition of a "good" QoL encompasses these dimensions: "A state of being in society where people's basic needs are met, they can act effectively and meaningfully in pursuit of their

goals, and feel satisfied with their life." (McGregor et al 2007: 3).

Development policy has long tended to emphasize the material dimension and has underplayed the importance of relationships and people's own perceptions. This leads to a view of development that is not rounded nor aligned with people's own lived experience. The Sarkozy Commission on Measuring Societal Progress, set up in 2008, concluded that it was necessary to shift emphasis from measuring economic production to measuring people's wellbeing (Stiglitz et al 2009). Adopting the concept of QoL allows AKDN to think about and do development differently. AKDN's programs are more wide ranging, including areas such as culture and music, which communities regard as important in promoting their wellbeing.

Badakhshan (population 1 million), located in northeast Afghanistan between 36 and 38°N and 70 and 74°E, and with a surface area of 44,059 km², is mountainous, sparsely populated (23 people per km²), and relatively isolated. Villages in Badakhshan reflect the attributes common to mountain societies, including a

BOX 1: Migration in the context of increasing local opportunities

Although in previous decades many men from Osast and Deh Ghulaman left for both Pakistan and Iran because of fear of the draft, war, debts, poverty, or lack of food, at present very few migrants leave Afghanistan. In Osast cross-border migration “has lost its appeal” because of the presence of more jobs in the region (eg with NGOs) and the nation (eg the Afghan National Army and the police), along with more educational opportunities. In Deh Ghulaman both men and women similarly note that work and school opportunities have increased in recent years, and “the people’s lives have been improving.” Rather than go to Pakistan, some men from the village now migrate north into the Little Pamir region of the Wakhan, where they work as shepherds or construction workers for rich Kyrgyz (another ethnic group) during the summer months.

Source: interviews conducted during the survey

general reliance on livelihoods based on agriculture and livestock, experiences of migration and remittances, rudimentary education and health infrastructures, and limited access to markets and services (see Box 1). The region is ethnically, linguistically, and religiously diverse. However, the cultural separateness of Tajik-majority Badakhshan from Afghanistan’s Pashtun-majority heartland has led to a certain degree of political isolation from central government structures in Kabul. Badakhshan is comparatively secure in relation to other parts of Afghanistan, though the situation is by no means stable. Many lower-altitude parts of Badakhshan were sites for extensive opium cultivation, especially in the early to mid-2000s, although production declined greatly in the latter part of the decade because of factors such as a drop in the price of opium, eradication activities, and support for alternative livelihoods. Since 2010, however, there are indications that cultivation has increased slightly (Pain 2011).

Sixteen districts in the province (of a total of 28), most of which are located in the Hindu Kush and Pamir Mountains, are a focus for AKDN’s programs; in this area, AKDN is the main implementing partner of the government’s National Solidarity Program (NSP), the national framework for development. It is Badakhshan’s isolation, particularly away from its economic hubs, which is the province’s most striking characteristic. The implications of physical remoteness on economic and social wellbeing have been documented in both mountain (Jodha 2000; Kreutzmann 2001; Bird et al 2002; Ives 2004) and nonmountain areas (Ravallion and Wodon 1999; IFAD 2001; Stifel et al 2003; Kanbur and Venables 2005; Bird et al 2010). This literature tends to focus on economic growth and livelihoods, and has not sought to empirically demonstrate the influence of remoteness on

wide-ranging aspects of people’s lives, including relational and subjective elements. This article seeks to fill this gap by using disaggregated data relating to QoL, to show how key indicators differed between non-remote and remote villages in Badakhshan.

Methodology

The principal aim of the QoL assessments is to understand changes in QoL in an area over time, and to inform programming within AKDN and its partners. The domains examined in the QoL assessments are derived from asset-based frameworks and empirical exploratory studies in Syria, Tajikistan, and Mozambique. Using interviews and group discussions, the aim of the exploratory studies was to understand people’s own socially and culturally embedded perceptions of what is a good and poor QoL, and the domains and resources that they consider important. We also experimented with the Person-Generated Index of QoL (based on Ruta et al 2004), which asks individuals to choose 5 important areas of their lives and spend a maximum of 10 points on the various areas. The studies confirmed the importance of the following domains: livelihoods and the household economy, the natural and built environment, health and education, and social and cultural life, as well as voice and representation (Kanji 2007). Consultations with sector experts helped select a few key indicators in each domain that would best reflect progress or a worsening in that domain. These exploratory studies also highlighted the need for mixed methods, reinforcing the maxim that “not everything that counts can be counted.”

Assessments consist of a survey with a representative sample of households and qualitative research undertaken in 5 or 6 selected sites. Household heads and their spouses are interviewed to enable disaggregation by gender of relevant survey data. The qualitative research sites capture diversity in characteristics that influence QoL, and key informant interviews, focus groups, and individual interviews differentiated by gender and age are used to obtain in-depth and more sensitive information that is difficult to capture through a questionnaire. The mixed methods are also used to triangulate findings. Assessments are repeated every 3 to 5 years to assess changes in QoL in a specific context. Results are analyzed with local and national actors, including communities where possible. AKDN’s interventions are adjusted in light of the findings and feedback.

The QoL assessments highlight in which domains indicators are poor and where they are improving over time. The studies also reveal how people themselves think about their QoL and their priorities and aspirations to inform AKDN programs. Attributing particular results to AKDN’s work is difficult because there are many other influences on QoL, such as the work of other

FIGURE 1 Badakhshan Province, Afghanistan, with non-remote and remote areas. (Map by Anand Nandipati)



FIGURE 2 (A) Sooch: a non-remote village in Badakhshan; (B) Nushi: a remote village in Badakhshan. (Photos by Romin Fararoon)



TABLE 1 Differences in household income between non-remote and remote villages.

	Non-remote	Remote
Cash income	<i>N</i> = 490	<i>N</i> = 614
Median annual cash income (US\$)	1287	870
Range of cash incomes (1st quintile) (US\$)	30–580	17–394
Range of cash incomes (5th quintile) (US\$)	3109–26,950	1783–16,148
In-kind income	<i>N</i> = 550	<i>N</i> = 650
% of households receiving in-kind income	94	99

organizations in the same area and factors outside its control, such as global recession or climate change.

In 2010, AKDN carried out its first QoL assessment in Afghan Badakhshan. This consisted of a survey of 1200 rural households in 12 districts as well as a qualitative study of 5 villages. The villages were chosen, using local knowledge, to capture diversity in QoL related to remoteness from urban centers, ethnicity and religion, and agroecology, as well as livelihoods and access to services. The instruments used for the assessments were adapted and contextualized through discussions with local key informants and extensive piloting in communities. Insecurity and/or inaccessibility forced the survey to exclude 4 districts that were part of AKDN's programming focus.

This article's analysis of remoteness was motivated by the QoL qualitative study, which found important differences between villages depending on their access to basic services, markets, and transport. To see how representative these differences were, the QoL survey data set was disaggregated into 2 categories: "non-remote"

and "remote" villages. Based on local knowledge, a classification of remoteness was developed. Any village located 4 or more hours on foot from 4 hubs of economic activity—Baharak, Jurm, Ishkashim, or Faizabad—was defined as remote. This criterion was used because entire districts were considered remote, and the above classification captured this view (Figure 1). Distance-based criteria for categorizing remoteness have been used elsewhere (McCabe 1977; Minten and Kyle 1999; Jacoby 2000; Stifel et al 2003), though these classifications mainly used kilometer distances or travel time by car to economic centers. Using travel time by foot was seen to reflect the limited options for road transport in Badakhshan and may be relevant for other similarly isolated mountain areas. It is important to recognize that physical distance often brings with it noneconomic forms of isolation, such as a "lack of political capital" (Bird et al 2010) and difficulties in effectively voicing needs to far-off decision-makers.

A total of 26 sampled villages were classified as remote, and 22 villages were classified as non-remote (Figure 2).

TABLE 2 Household income sources and median annual cash incomes derived from these sources.^{a)}

Income source	Non-remote		Remote	
	%	Median annual cash income (US\$)	%	Median annual cash income (US\$)
	(<i>N</i> = 490)		(<i>N</i> = 614)	
Sale of livestock/poultry	30	352	56	224
Agricultural wage income	36	440	37	220
Nonagricultural wage income	25	264	32	220
Sale of agricultural products	32	330	23	220
Salary	23	1319	28	1266
Self-employment in nonfarm enterprises	36	1099	16	330
Remittances from migrants	14	1099	17	571
Aid/charities/relatives	2	176	5	110
Other sources	2	495	1	659

^{a)}Percentages exceed 100%, as households may have received income from more than 1 source.

TABLE 3 Differences in household ownership of durable goods between non-remote and remote villages.

Durable good type	Non-remote	Remote
	%	%
	N = 550	N = 650
Full floor-covering carpet (<i>mukhet</i>)	84	82
Carpet (machine made)	76	72
Sewing machine ^{a)}	68	41
Radio ^{a)}	56	39
Tape recorder ^{a)}	46	35
Mobile phone ^{a)}	62	16
Television	39	30
Carpet (handmade)	27	20
Satellite dish	28	18
DVD/VCD/CD player	16	11
Generator	12	4
Microhydel power generator, motorcycle, car, bicycle, electric fan, computer	<10	<10

^{a)}Denotes a statistically significant difference in ownership.

The data set upon which this analysis is based comprised 650 households in remote and 550 households in non-remote villages. All indicators were calculated separately for remote and non-remote areas. Univariate differences in proportions between non-remote and remote villages were tested using a modified chi-square test. Statistical significance was set at the 5% level, hereafter referred to as “significant.” The paper draws on this quantitative

analysis as well as the qualitative research to present the main findings.

Insights into QoL in non-remote and remote villages

Households in remote villages were worse off in terms of income and asset ownership

The characteristics of the households in non-remote and remote villages were similar in terms of household size (median of 8 persons), age of household head (average of 45 years), and percentage of households with migrants (around 22%). Dependence on livestock husbandry and agriculture was greater in remote villages, with about one half of men reporting it as their primary occupation compared with one third in non-remote villages. Higher percentages of women in remote villages reported housework as a primary occupation (86% versus 77%) but raising livestock and processing milk into butter, yogurt, and cheese in household compounds were also viewed as part of domestic work. The occupations data also showed that there were fewer opportunities for men in casual work and for non- and off-farm employment in remote villages.

Income: Income data are often inaccurate and do not alone represent a household’s wealth, but it is nevertheless worth noting that median cash income was significantly lower in remote villages, the income range was narrower, and the dependence on in-kind income in goods was almost universal (Table 1). Respondents were given the option of not disclosing their income, which is why the number of households responding to the cash income question is lower than the sample.

For remote households, 35% earned income from 3 or more sources, as compared to 26% of non-remote households. Greater income diversification is a necessary strategy for survival, especially as land gets subdivided

TABLE 4 Access to basic services for households in non-remote and remote villages.^{a)}

Indicator	Non-remote	Remote
	(N = 550)	(N = 650)
% of households with access to an improved water source ^{b)}	75	32
% of households with access to an improved water source within 30 min (cold/warm season)	65/66	25/26
% of households that have electricity	73	56
% of households above with access to electricity “all the time” (cold/warm season)	19/26	8/30
% of households with access to telephone communications	74	35
% of households with access to latrines (excluding shared facilities)	20	13
% of households without access to any toilet facility	31	65

^{a)}All differences are significant except for household access to electricity “all the time” in the warm season.

^{b)}Improved water sources include piped water, public tap, borehole or pump, protected well, protected spring, rainwater.

TABLE 5 Household shortages of main food groups in non-remote and remote villages.^{a)}

Food group	Non-remote		Remote	
	% of HHs with food shortages	Median no. of months of food shortage	% of HHs with food shortages	Median no. of months of food shortage
	(N = 550)		(N = 650)	
Staple food (wheat, barley, rice)	18	3	13	3
Vegetables/fruit	75	6	93	6
Beans, pulses/lentils	74	7	91	7
Animal protein (dairy products, eggs, or meat)	51	4	70	5

^{a)}HHs, households.

over time. Nevertheless, the median income from self-employment in nonfarm enterprises was 3 times less in remote villages, and there were also significant differences in agricultural wage income and in remittances from migrants (Table 2). Migrants in non-remote villages were more likely to migrate to Iran and Pakistan, which was more financially beneficial but often involved difficult and dangerous journeys as well as harsh treatment for migrants at their destinations. Migrants from remote villages were more likely to migrate within Badakhshan or to other locations in Afghanistan, including Kabul. Income from salaries was similar and such secure employment is coveted everywhere.

Assets: Almost all households in both non-remote (93%) and remote villages (95%) owned their own homes. However, levels of ownership of other assets differed. A significant difference was found in the percentages of non-remote and remote households owning second homes (14% versus 8%) and agricultural land (73% versus 91%). However, remote households owned smaller plots—an

average of 2 *jeribs* (one fifth of a hectare) of irrigated and 3 *jeribs* of rainfed land, versus 3 *jeribs* of irrigated and 4 *jeribs* of rainfed land for non-remote households. Across the board, there was a significant positive association between cash income and the amount of land owned. Higher percentages of remote households owned sheep, oxen, and goats—in higher median numbers, confirming a greater dependence on livestock than agriculture in remote villages. Ownership of trees was low in both village types, though non-remote households owned greater varieties of trees. Agricultural equipment was owned by more non-remote than remote households (36% versus 29%).

Significantly lower percentages of households in remote villages owned a range of durable goods (Table 3). Although 62% of households in non-remote villages owned 5 or more of the durable goods listed in the table, only 37% of remote village households did.

Households in remote villages had poorer access to basic services

Households in remote villages were more likely to lack access to water, electricity, telephones, and sanitation than were households in non-remote villages (Table 4). An exception was access to electricity “all the time” in the warm season. Here, it is possible that households in both village types made efficient use of microhydel powered by peak river flows and/or solar panels to obtain more reliable electricity supplies in the spring/summer.

Food shortages and selected health indicators were worse in remote villages

Major crops grown in Badakhshan include wheat, barley, fodder, and root vegetables such as potato. There was a minor difference in the percentage of households that experienced shortages of staple foods, but significant differences were found when it came to shortages of the other 3 food groups (Table 5). Diets were generally restricted, but households in remote villages fared worse, with serious implications for household nutrition. Remote households were less able to cope with food price inflation, were unable to access markets for agricultural

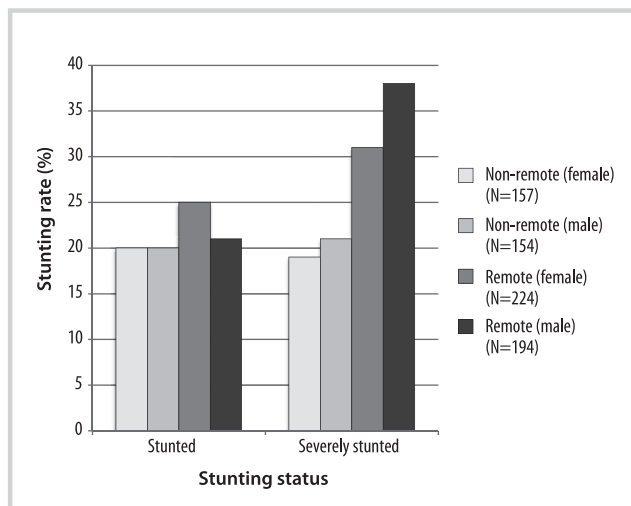
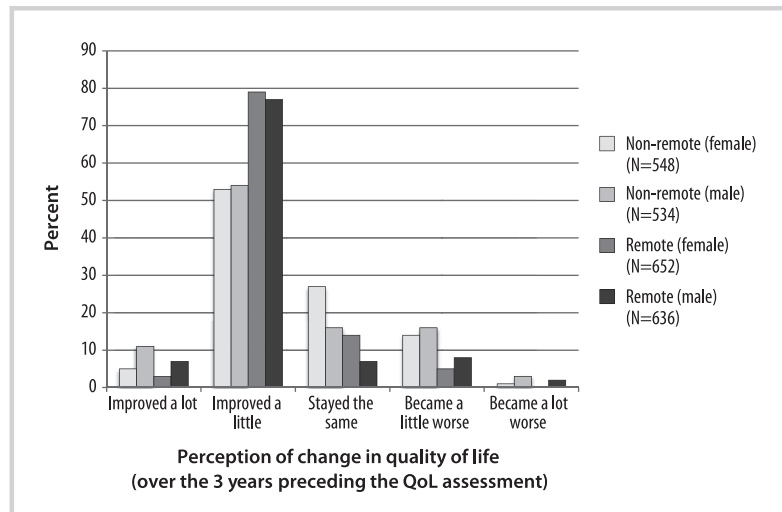
FIGURE 3 Child stunting rates in non-remote and remote villages.

FIGURE 4 Perceptions of change in QoL in non-remote and remote villages.

foodstuffs, and were more vulnerable to seasonal fluctuations in food availability.

Women's and children's health were adversely affected by remoteness. Over half of women in non-remote villages received antenatal care (from a community health worker, nurse, or midwife) during pregnancy, whereas just below one third of women in remote villages did so. Only 3% of babies were delivered by a skilled birth attendant (nurse or midwife) in remote villages compared to a still low 13% in non-remote villages.

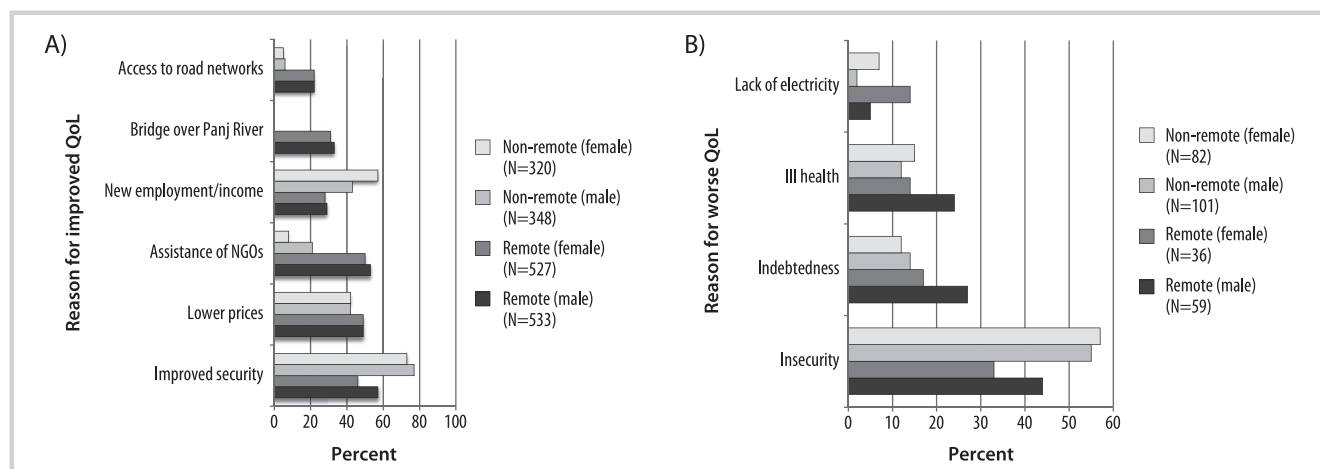
As a result of poor nutrition and health, about 50% of children under the age of 5 suffered from chronic malnutrition (stunting), but significantly more children in remote villages were "severely stunted" (Figure 3).

Perceptions of health status differed between non-remote and remote villages, with those in non-remote villages being significantly more likely to report that their

health had been "good" or "very good." Regardless of village type, however, significantly more women than men reported being ill in the 2 weeks preceding the QoL assessment. Of those who were ill and said that they did not visit a health center, men and women in non-remote villages were more likely to report the poor quality of care as a deterrent, whereas distance to health centers and lack of time were more common reasons given in remote villages.

Education outcomes were slightly better in non-remote villages

Education indicators were poor across Badakhshan, regardless of village remoteness. Illiteracy was significantly higher in remote villages at 63% compared to 56% in non-remote villages. However, parents across sites in the qualitative study expressed pride in their

FIGURE 5 (A) Main reasons for perceived improvements in QoL in non-remote and remote villages; (B) main reasons for perceived worsening in QoL in non-remote and remote villages.

children's recent achievements and valued having someone literate in their household. Levels of education were similar for males (around 45% had primary and just below 20% had secondary schooling), but females in remote villages were less likely to have primary schooling (27% versus 37%) and secondary schooling (5% versus 9%). Disruptions in schooling caused by prolonged conflict and inadequate and/or inaccessible schooling facilities contribute to these poor outcomes. On the positive side, a higher percentage of younger groups (15 to 24 years) had completed primary education: 60% of males and 51% of females. However, the qualitative study did document views that questioned the need for further education, even for males, given high levels of unemployment.

Social cohesion, trust, and QoL

Although this study shows that material wellbeing, health, and education outcomes were better for people living in areas with greater access to markets and services, there are some aspects of life that were reported to be similar or better in remote villages. Reciprocal community work known as *hashar* was found to be common across villages, and social cohesion was reported to be high across the board. The qualitative study revealed well-functioning village support systems where the poor were taken care of in times of need. This included the ritual distribution of food to the poor from the community mosque or *jamat khana* (Ismaili mosque). The practice of *ushor* or *dah-yak*, in which 10% of one's harvest is distributed to the poor, was also common. Levels of trust within villages were high regardless of remoteness, but interestingly, 90% of men and 75% of women in remote villages said that they trusted most people in neighboring villages, as compared to 76% of men and 61% of women in non-remote villages.

When asked about perceptions of their current QoL on a 5-point scale, over 60% of men and women in both village types reported that it was "good/very good." Men and women in remote villages were more inclined to say that their QoL was "neither good nor bad" and less inclined to report that their QoL was "poor/very poor." More interesting, perceptions of changes in QoL over the 3 years preceding the QoL assessment showed that men and women in remote villages were significantly more likely to report positive changes, even if it was to say that life had improved a little rather than a lot. Those in non-remote villages more often said that their QoL had either "stayed the same" or "became a little worse" (Figure 4).

These findings are surprising for remote households, given such poor material indicators, but they likely reflect some recent improvements and the importance of subjective and relational aspects of QoL, which in turn depends on expectations and comparisons with others.

What influences changes in people's QoL?

Changes in the security situation played a critical role in shaping QoL perceptions irrespective of remoteness (Figure 5A, B). More striking, however, is that the assistance provided by nongovernmental organizations (NGOs) and AKDN/NSP efforts to improve infrastructure (eg bridges and roads) were very important in shaping positive QoL perceptions for those in remote villages. However, fewer individuals in remote villages claimed that their QoL had improved because of accessing new employment or income-generating opportunities, and people in these villages were more likely to report that lack of access to basic services, debt, and, in the case of men, ill health, were negatively impacting their QoL. This reflects the real challenges of access to markets and services faced by remote communities.

The statistical relationships between a perceived good QoL and other variables in the household survey were investigated separately. A good QoL was associated with material, social, and health factors. For both men and women, it was associated with an annual household income of over 75,000 *Afghanis* (US\$ 1650), ownership of 5 or more durable goods (from the specified list of 17), and reported good health in the previous year. For men, a good QoL was also associated with owning a higher number of trees and for women owning a higher number of animals, reflecting their role in livestock husbandry. Associational life was found to be important to people. For men, a good QoL was associated with participating in *hashar*, and for women, membership in a community group. The richness of community life emerged clearly in the qualitative study, with people enjoying a range of religious and cultural events where special food is prepared and there is sport, music, dancing, and poetry. Where issues of voice and representation were raised in the qualitative study, perspectives were mainly informed by the perceived quality and effectiveness of village leadership. Remoteness affects these factors by shaping opportunities for leaders to establish political connections with more powerful patrons capable of garnering resources.

When community members were asked about their aspirations in individual interviews, nobody expressed the wish to migrate, but rather their hopes were for peace and the opportunities to improve life in their villages. This attachment to place is illustrated by people's preference to pursue local opportunities and improve their lives at home wherever possible (Box 1).

Strategies for improving QoL in Badakhshan

This research provides empirical evidence to show that people in Badakhshan's remote mountain villages face greater barriers in improving their health and wellbeing. Despite this, development aid (in Afghanistan and elsewhere) tends to be directed towards less remote rural

locations, with a belief that serving these more accessible areas will produce multiplier effects that will “trickle down” to all. In reality, remote locations lack comparative advantages and will almost always continue to lag behind (Bird et al 2010). As global integration has increased and market-led development has gained ground internationally, the need to recognize diversity in rural areas has become more important. Wiggins and Proctor (2001) sought to capture this diversity by dividing rural regions into distinct categories based on their access to urban markets: peri-urban, the middle countryside, and remote rural areas. In the latter locations, they argue, physical constraints to development are severe and subsidies are likely to be necessary to foster development.

Major development agencies such as the World Bank have recently come to recognize the need to address market failures by investing in core public goods such as physical infrastructure, education, and health, as well as the use of public policy to provide safety nets such as cheap access to credit, cash transfers, food aid, or secure land tenure, rather than emphasizing the immediate need for competitive markets built through private sector growth and operating on the basis of profits (Kanbur and Venables 2005; World Bank 2008). In many mountain locations, distance (physical or psychological) from the centers of political power within countries may hinder the allocation of these investments (Bird et al 2010). This may be particularly true in Badakhshan, where there are ethnic cleavages and a lack of political connectedness to political elites in Kabul. Nevertheless, there is evidence that road building, microcredit, and/or local skills development programs successfully reduce levels of outward migration and produce higher levels of local economic growth in remote areas even in the absence of well-developed markets (Jodha 2000; Bryceson et al 2008).

Given the low levels of infrastructure in Badakhshan, due to historical factors, the foundations of an enabling environment for markets to flourish are still being built. Yet the political leverage held by certain donors committed to market-led processes has led to initiatives like the Accelerating Sustainable Agriculture Program, where “pro-poor” investments in capacity building or the provision of key services such as credit to poor households has been neglected in favor of policies aimed exclusively at market efficiency and “trickle-down” growth (Pain and Shah 2009; Pain and Kantor 2011). These efforts run the risk of allocating resources to what Bird et al (2010) call “higher-potential” areas where opportunities for market growth already exist but do little for the “lower-potential” areas where material poverty is most prevalent and entrenched.

AKDN has worked in Badakhshan since 2002 and has employed a number of approaches that go beyond a market-driven strategy to promote wellbeing. Interventions have taken the form of public-private partnerships for investments in infrastructure and

services as well as grant-funded programs. Infrastructure development has included road building, energy provision, and development of mobile telecommunications through shareholder support of Roshan, the country’s leading telecommunications provider and largest private sector employer. However, there is no doubt that providing infrastructure and services for remote areas is challenging. Distance and difficult terrain increase technical complexity, and low population densities can create diseconomies of scale that will fail to attract private investors. Even in middle- and high-income countries, governments struggle with providing services and infrastructure for remote areas, and the political economy of justifying public investment in such areas can also be challenging.

Cost recovery from the provision of infrastructure and essential services in remote mountainous areas is low and accrues only over prolonged periods of time. An AKDN-supported health program in Pakistan’s mountainous Northern Areas, for example, recovered only 50% of its implementation costs over its first 20 years of operation (Walraven et al 2009). Given that the provision of infrastructure and services has been found to have broad positive effects on income and health, however, there are strong social justifications for bodies like AKDN to step in to provide these public goods in partnership with the government and the private sector. The same cannot be said for market actors seeking high and reasonably quick returns on their investments.

In common with many other NGOs, AKDN adopts a community-based approach to build technical capacity and improve local governance. Agricultural extension services, microfinance services to low-income households, supporting provincial and district education departments, and offering community health nursing and midwifery education are all part of the program. Perhaps the most important components, however, relate to building community-level institutions such as community development councils (CDCs) and community-based savings groups. The positive case studies of CDC work in Badakhshan, supported by AKDN, led to the approach being adopted at a national level in the third phase of the NSP. These groups, which strengthen associational life, can and do support governance processes that are more likely to promote development that meets people’s own aspirations.

AKDN’s cross-border program with Tajikistan’s Gorno-Badakhshan Autonomous Oblast (GBAO) addresses social and cultural as well as economic issues. This program takes advantage of historical legacies in Tajikistan of better developed infrastructure, health, and education, and aims to reconnect communities that were separated by an arbitrary border imposed by Britain and Russia in the 19th century. In this program, new roads and bridges have been built, cross-border markets have been developed, and energy has been supplied to Afghan

villages by Pamir Energy, a utility provider in Tajikistan, to improve services to Afghan villages that are closer to urban hubs on the Tajik side of the border. Cross-border health programs have also been introduced to improve health care in the areas close to GBAO (Walraven et al 2009). The Aga Khan Music Initiative supports talented musicians and music educators across Central Asia to preserve, transmit, and further develop their musical heritage. An annual celebration of dance and music—the Roof of the World festival—brings together musicians from 4 countries and promotes tourism.

The findings of the QoL assessment were used internally to review AKDN strategy with local field staff as well as staff at the national level. As a result, the constituent agencies of AKDN have developed a joint food security strategy, and child health and nutrition have been made a greater programming priority. The distinctive characteristics of a mountain economy have been further discussed and recognized, as well as the need to consider further strategies to target remote villages. The wide range of data collected through the QoL assessment has been useful in promoting policy coherence by bringing together AKDN staff and partners working in different sectors to look at how their

interventions are connected and how they can best complement each other. It has also encouraged staff to understand and analyze their interventions in light of the concerns and aspirations of program participants.

After improved security, the next most common reason given for improvements in QoL in remote villages is intervention by NGOs. This suggests that AKDN and others are reaching remote villages. For example, recently built bridges and roads have contributed to revenue from import-oriented trade with Tajikistan and have facilitated greater contact between communities. However, the gap in the indicators presented in this paper between remote and non-remote villages shows that the challenges are great and progress is slow. A long-term perspective is needed in this and other similar mountain societies, as is an in-depth knowledge of the local and regional context to identify development strategies that go beyond the short-term thinking and project time frames that are still too often adopted by international aid agencies. The disaggregation by remoteness highlights both the nonmaterial dimensions of life that are important to people and the limitations of depending on market-led approaches to improve QoL in Badakhshan Province.

ACKNOWLEDGMENTS

The authors would like to thank the communities involved in the QoL assessment, on which this article is based, for being so generous with their time and experience. Thanks are due to the field research teams that worked with real dedication under difficult conditions. We are very grateful for the full support of the Aga Khan Foundation in Afghanistan, in particular the monitoring and evaluation unit. Thanks also to all the AKDN agencies in Afghanistan for interesting discussions on the results and implications of this study. We

acknowledge the help of Zainul Nurani in data disaggregation and analysis. Finally, thanks to Gijs Walraven, Azim Lakhani, Keith Child, and Pam Hunte for their very useful comments on earlier drafts of this article. The authors acknowledge support from the University of Central Asia's Mountain Societies Research Centre for the publication of this article. The views expressed in this article are solely those of the authors and do not reflect the views of the Aga Khan Development Network.

REFERENCES

- Alkire S.** 2002. Dimensions of human development. *World Development* 30(2): 181–205.
- Bird K, Hulme D, Moore K, Shepherd A.** 2002. *Chronic Poverty and Remote Rural Areas*. CPRC Working Paper 13. Birmingham, United Kingdom: Chronic Poverty Research Centre.
- Bird K, McKay A, Shinyekwa I.** 2010. Isolation and poverty: The relationship between spatially differentiated access to goods and services and poverty. ODI Working Paper 322. London, United Kingdom: Overseas Development Institute.
- Bryceson DF, Bradbury A, Bradbury T.** 2008. Roads to poverty reduction? Exploring rural roads' impact on mobility in Africa and Asia. *Development Policy Review* 26(4):459–482.
- Diener E, Oishi S, Lucas RE.** 2003. Personality, culture, and subjective well-being. *Annual Review of Psychology* 54:403–425.
- Gough I, McGregor JA.** 2007. *Wellbeing in Developing Countries: From Theory to Research*. Cambridge, United Kingdom: Cambridge University Press.
- IFAD [International Fund for Agricultural Development].** 2001. *Rural Poverty Report 2001: The Challenge of Ending Rural Poverty*. Oxford, United Kingdom: Oxford University Press.
- Ives JD.** 2004. *Himalayan Perceptions: Environmental Change and the Well-Being of Mountain Peoples*. London, United Kingdom: Routledge.
- Jacoby H.** 2000. Access to markets and the benefits of rural roads. *Economic Journal* 110(465):713–737.
- Jodha NS.** 2000. Poverty alleviation and sustainable development in mountain areas: Role of highland-lowland linkages in the context of rapid globalisation. In: Banskota M, Papola T, Richter J, editors. *Growth, Poverty Alleviation and Sustainable Resource Management in the Mountain Areas of South Asia*. Feldafing, Germany: German Foundation for International Development, pp 541–570.
- Kanbur R, Venables A.** 2005. Introduction: Spatial inequality and development. *Journal of Economic Geography* 5(1):1–2.
- Kanjil N.** 2007. Assessing quality of life: Reflections from exploratory research in Syria and Tajikistan. Unpublished paper presented at the *Wellbeing in International Development Conference*. Bath, United Kingdom, 28–30 June. Available from corresponding author of this article.
- Kreutzmann H.** 2001. Development indicators for mountain regions. *Mountain Research and Development* 21(2):132–139.
- Layard R.** 2010. Measuring subjective well-being. *Science* 327(5965):534–535.
- McCabe J.** 1977. Regional product price differences and the sectoral distribution of labor in less developed countries. *Journal of Political Economy* 85(3):549–568.
- McGregor A, Sumner A.** 2010. Beyond business as usual: What might 3-D wellbeing contribute to MDG momentum? *IDS Bulletin* 41(1):104–112.
- McGregor JA, Camfield L, Masae A, Promphakping B.** 2007. A wellbeing perspective for understanding development in Thailand. Unpublished paper presented at the *International Conference on Happiness and Public Policy*. Bangkok, Thailand, 18–19 July. http://www.happysociety.org/ppdoconference/session_papers/session6_allister_mcgregor.pdf; accessed on 6 August 2012.
- Minten B, Kyle S.** 1999. The effect of distance and road quality on food collection, marketing margin, and trader's wages: Evidence from the former Zaire. *Journal of Development Economics* 60(2):467–495.
- Pain A.** 2011. *Opium Poppy Strikes Back: The 2011 Return of Opium in Balkh and Badakhshan Provinces*. Case Study Series. Kabul, Afghanistan: Afghanistan Research and Evaluation Unit (AREU).
- Pain A, Kantor P.** 2011. *Beyond the Market: Can the AREDP Transform Afghanistan's Rural Nonfarm Economy?* Briefing Paper Series. Kabul, Afghanistan: Afghanistan Research and Evaluation Unit (AREU).

Pain A, Shah SM. 2009. *Policymaking in Agriculture and Rural Development in Afghanistan*. Case Study Series. Kabul, Afghanistan: Afghanistan Research and Evaluation Unit (AREU).

Ravallion M, Wodon Q. 1999. Poor areas, or only poor people? *Journal of Regional Science* 39(4):689–711.

Ruta DA, Camfield L, Martin F. 2004. Assessing individual quality of life in developing countries: Piloting a global PGI in Ethiopia and Bangladesh. *Quality of Life Research* 13:1545.

Sen A. 1993. Capability and wellbeing. In: Nussbaum M, Sen A, editors. *The Quality of Life*. Oxford, United Kingdom: Clarendon Press, pp 30–54.

Sen A. 1999. *Development as Freedom*. Oxford, United Kingdom: Oxford University Press.

Stifel B, Minten B, Dorosh PA. 2003. *Transaction Costs and Agricultural Productivity: Implications of Isolation for Rural Poverty in Madagascar*. Markets and Structural Studies Division Discussion Paper 56. Washington, DC: International Food Policy Institute.

Stiglitz JE, Sen A, Fitoussi JP. 2009. *Report by the Commission on the Measurement of Economic Performance and Social Progress*. Paris, France: Commission on the Measurement of Economic Performance and Social Progress. http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf; accessed on 24 January 2012.

Walraven G, Manaseki-Holland S, Hussain A, Tomaro JB. 2009. Improving maternal and child health in difficult environments: The case for “cross-border” health-care. *PLoS Medicine* 6(1):17–21.

White S. 2008. But what is wellbeing? A framework for analysis in social and development policy and practice. Unpublished paper presented at *Regeneration and Wellbeing: Research into Practice*. Bradford, United Kingdom, 24–25 April. http://staff.bath.ac.uk/ecscsw/But_what_is_Wellbeing.pdf; accessed on 6 August 2012.

Wiggins S, Proctor S. 2001. How special are rural areas? The economic implications of location for rural development. *Development Policy Review* 19(4):427–436.

World Bank. 2008. *World Development Report 2008: Agriculture for Development*. Washington, DC: The International Bank for Reconstruction and Development/World Bank.