Chapter 7
Constraints and Barriers to Better Land Stewardship: Analysis of PRAs in Tajikistan

Barno Kurbanova

Abstract This chapter reports on a PRA survey of 710 people in 10 separate rural villages in five *districts* of south central Tajikistan. This is a mountainous country in Central Asia, with 93% of its surface area taken up by a complex of east-west and north-south ranges. Almost half of the country is at altitudes of more than 3,000 m. Tajikistan is an agrarian country with a rural population more than 75% of the total and in which the agricultural sector accounts for 65% of employment and around 25% of GDP (averages for 1995–2009). Tajikistan remains the poorest country in Central Asia with a high level of rural poverty. Many rural people live below the poverty line ($2.15 per day).

The results of the PRA have provided a solid understanding of the situation throughout these five *districts* and of the community perception of the current problematic situation on pasture management and livestock. The main constraint relates to the uncertainties about access to grazing land and to security of land tenure. Legislation relating to issues of land use and tenure is in constant flux, and the measures to implement the existing laws are not consistent or transparent.

Keywords Land tenure • User rights • Equity and inequity • Poverty • Gender issues • Remittances • Legislation • Regulations • Implementation • Pastures • Livestock • Land degradation • Land stewardship • Barriers • Sustainability

Key Points

- Participatory rural appraisal (PRA) is a way to provide the means to bring farmers "voices" to the forefront on a range of issues surrounding pasture and livestock management and to identify barriers to livestock management as perceived by farmers themselves, as well as possible solutions or priorities for assistance.

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- There are many barriers to better land stewardship in Central Asia as evidenced by this study of 2,700 respondents in Tajikistan. The principal impediment is the lack of security of access to grazing lands and failings in the land tenure arrangements
- The main barrier to better land management is *poverty.* Recurrent themes from the PRA survey, across all villages, were a lack of a clear awareness of land user rights and a lack of perception of the nature, extent, and full implications of the inequitable distribution of pastureland.
- PRA participants rated the other barriers to sustainable land use as the degradation of pastureland; shortage of winter feed for livestock; limited access and lack of pastures; the shortage of water in the pasture; overgrazing; and lack of effective local institutions. The lack of local institutional support on pasture management, animal husbandry, and livestock health were especially noted.
- The results of the gender analysis demonstrate that women are involved in every aspect of livestock care and management, with the only significant underrepresentation in vaccination, slaughtering, long-medium distance shepherding, and shearing. However, women are as equally active in treating sick animals as men.

1 Introduction

1.1 Brief Outline of Participatory Rural Assessment (PRA) Approach

PRA is an approach used for many years by nongovernmental organizations (NGOs) and other agencies involved in international development. The approach aims to incorporate the knowledge and opinions of rural people in the planning and management of development projects and programs. PRA involves use of methods that involve rural people in examining their own problems, setting their own goals, and monitoring their own achievements. The PRA approach enables identification of the main constraints to improving land management from the perspective of farmers themselves while at the same time encouraging participatory identification of solutions. It involves use of semi-structured interviews conducted with rural householders (Hua, Chap. 14). PRA surveys were conducted in 10 villages from 5 pilot *districts* (Rogun, Rudaki, Faizabad, Vahdat, and Varzob) of the Region of Republican Subordination of Tajikistan. A total of 30 PRA surveys were conducted between October 2010 and April 2011.

1.2 Expected Outcomes of PRA

The *primary outcomes* of the PRA were to provide the means to bring farmers' "voices" to the sector assessment on a range of issues surrounding livestock management, according to representatives from a variety of groups who are involved

with livestock ownership and grazing management practices. Barriers to livestock management were identified, as perceived by farmers themselves, as well as possible solutions or priorities for assistance. The *secondary outcomes* were to use this community-based analysis to form the basis for the demonstration activities implemented under the project to improve their likelihood of being accepted and adopted.

1.3 Characteristics of Farmers/Farm Workers and Farms Included in PRA Survey

1.3.1 Variables of Groups

In general, there are two broad categories of land users in villages (See Box 7.1):

Box 7.1 Land Reform in Tajikistan: Categories of Tenure Arrangement

***(i) Permanent heritable land use*:** Permanent heritable land use is governed by Land Code (as amended by 2009). *Dehkan* farms (literally *peasant farms*) may be established by individuals, families, or by groups (partnerships) based on shared ownership. In each case, the farm has a head, who holds the land certificate, and shareholding members who should hold share documents to a physical plot of land. The head is responsible for reporting and tax collection, but decisions on reorganization or changes to contracts between members may only be decided at a general meeting. Members may legally secede from the *dehkan* farm without permission of other members, establishing their own individual or family *dehkan* farm on their land share, with the same permanent heritable land rights. However, this is an expensive process.

Individual or family dehkan farms: When applying to establish a *dehkan* farm, former *Sovkhoz* or *Kolkhoz* workers may apply for a share of the former entity for which they worked. Areas allocated should be based on norms calculated from the area of available land and the number of former *Sovkhoz* or *Kolkhoz* members. Other Tajik citizens may apply for land from the state fund (see below).

Collective dehkan farms: Legally these are close to the group/partnership form of *dehkan* farm given in the law but were not specifically foreseen in the legislation as in fact they comprise the entire former territory of a *Sovkhoz* or *Kolkhoz*. These structures appeared in response to government targets to restructure all state farming entities by the end of 2005 and due to the high transaction costs of forming individual and family *dehkan* farms. The collective *dehkan* farm head holds the land certificate for the

(continued)

Box 7.1 (continued)

whole area, but in GBAO for example, each shareholding household farms individually and should hold a legal share document for a physical parcel. Legally, the same principles apply to that pasture which is *permanently* allocated to the former *Sovkhoz* and *Kolkhoz*, but until 2009 in GBAO this pasture continued to be used in common by all members. In 2009, the Land Registration and Cadastre System for Sustainable Agricultural Development Project (LRCSP) facilitated the conversion of a selection of collective *dehkan* farms to individual *dehkan* farms with provision of full certification for c household. This greatly improves security of tenure for those households. According to the law, each member should receive legal title both to equal shares of both arable land and the "permanent use" pastureland allocated to the now defunct collective, regardless of the number of animals owned.

(ii) Land allocated from the state land fund for long-term use: In some districts most pasture used by collective *dehkan* farms is accessed by members up to 20-year "long-term use" agreements made between farm management and the district land committee. Pasture tax is charged per hectare, but farm management usually gets around this by splitting the overall sum of tax payable so that each household pays a proportion corresponding to the number of livestock owned. Thus the *de facto* pasture management regime corresponds to common property with fixed boundaries and a fixed user group. As long as this land is not permanently allocated to collective *dehkan* farms, members do not automatically receive a share if the collective is dismantled. In the meantime, individuals may apply separately to the land committee for a permanent share of this pasture. Some officials indicated that in order to privatize pasture on long-term use land, an individual must obtain the written permission of the members of the collective *dehkan* farm to which that land was formally allocated. However, in Tajikistan, this is unlikely to constitute an effective guarantee of common user rights. It should be noted that collective *dehkan* farms may also apply to have this land transferred from long-term use to permanent use, in which case it becomes eligible for distribution to individual households upon restructuring of the collective.

***(iii) Lease of state land fund*:** Many remote pastures remain unallocated and remain part of the state fund. Any party (individual, collective *dehkan* farm, or state enterprise) Land Code (2009) allows up to 20 years, though in practice the leases often are short term and informal. As mentioned above, such land may also be privatized and incorporated into *dekhan* farms by application, at which point it ceases to be available for lease.

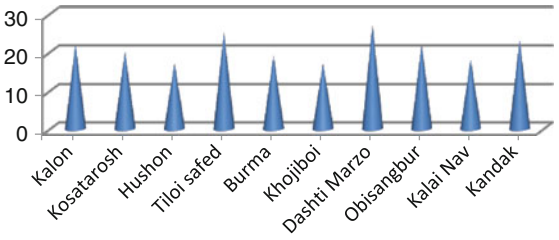

Fig. 7.1 Number of PRA participants/% of households (HHs) represented

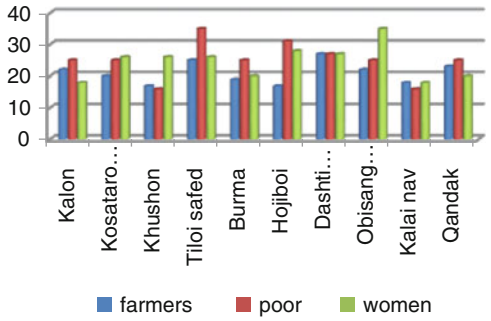

Fig. 7.2 Number of PRA participants/proportion of target groups

- Shareholders in collective farms who received lifetime heritable user rights to land after the restructuring of *Sovkhoz* or *Kolkhoz*
- Individual dehkan farms[1] and households, with their small household plots (300 m^2) and small areas of land (>1 ha) for crop, orchard, or pasture use (so-called presidential land), and who also use the land of shareholders on a rental basis

In PRA, the survey area land users can be further subdivided as dehkan farmers[2] (DF), individual DF, collective DF, cooperative farms, and family DF and landless livestock owners.

In this PRA process, three target groups were involved:

Group 1: dehkan farmer/richer farmer/shepherds/owners of larger ($n>50$) (herds of livestock)LS/male.

Group 2: nondehkan farmers, poorer farmers/owners of small LS herds ($n<50$)/mostly male.

Group 3: women farmers/mostly nondehkan farmers/owners of small LS herds ($n<50$)/some heads of households and dehkan farmers. Totally 710 participants were involved (Figs. 7.1 and 7.2).

[1] See discussion below on land reform and origin of dehkan farms in Tajikistan.

[2] Dehkan (literally peasant) farms were created after the breakup of large state farms and livestock enterprises following the collapse of the Soviet Union. They can be quite large (up to 3,000 ha) or small and may be under the control of individuals, families, cooperatives, or collectives (see Halimova, Chap. 13 for more explanation).

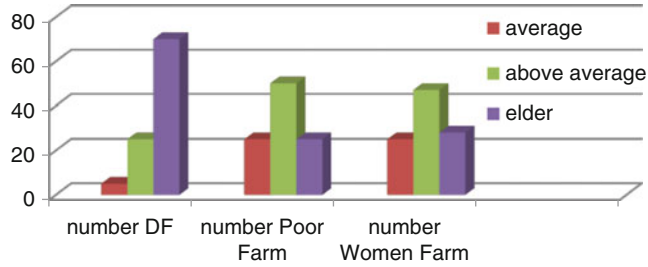

Fig. 7.3 Demographic variables in PRA groups

In some cases, the dehkan farm group included sub-certificate holders rather than private dehkan farmers (PDFs), and in some cases, the women's group included wives of wealthier dehkan farmers along with representatives of HHs with no livestock. In general however, these three groups were considered, according to local indicators, to represent the wealthier (group 1) and poorer (group 2) sections of the community. The inclusion of a separate group of women was specifically designed to allow them to participate more fully in the discussions in an informal and relaxed atmosphere to ensure they were free to voice their concerns and analyses of the issues from their own perspectives. In only one village (Khushon) did the 2nd (poorer group) include a mixture of men and women at their request. Representatives of all forms of DF accounted for 30% of all number of participants.

Demographic variables – people of middle age, older than average, as well as elderly folk – were included in the PRA groups.

As Fig. 7.3 shows, the highest participation rates (70%) were the elderly in DF group of farmers, and the lowest participation rates (5%) were people of average age. Older than average people were well represented in the other two groups (Table 7.1).

2 Knowledge of and Attitudes Toward Changes in Land Use Rights, Tenure, and Land Reform

According to the constitution, all lands in Tajikistan are the exclusive property of the government. The land tenure issue in Tajikistan is very problematical, because only 7% of the entire country is suitable for cropping and only part of the remainder is suitable for livestock raising (mostly where the elevation is

Table 7.1 PRA sites and agroclimatic zones

District	Jamoats	Village	Predominant pasture vtype	Elevation of settlement area (asl)	Elevation of predominant pasture (asl)
Varzob	Ziddee	Khalon	Summer	2,000	**>2,000**
	Luchob	Kosa Tarosh	Summer	1,820	1,850–2,500
Vahdat	Romit	Khushon	Summer	1,200–1,300	2,000
	Guliston	Tiloi Safed	Winter	957	1,200
Rudaki	Sultanabad	Burma	Spring/ autumn/winter	1,200	1,300
	Esanboy	Hojiboi	Winter	1,000	1,200
Faizabad	Kalai Dasht	Dashti Marzo	Summer	1,931	1,950
	Javonon	Obisangbur	Summer	1,200	1,600
Rogun	Kadi Ob	Kalai Nav	Summer	1,200	1,200–1,500
	Obigarm	Kandak	Spring/autumn/ summer	1,200–1,500	1,800

from 1,200 to 2,500 m (asl)). If we consider that more than 75% of the population lives in rural areas, this issue is very relevant (Lerman, Chap. 8; Robinson Chap. 11).

2.1 Land Reform, Land Use Right, Tenure, and Pasture Management

Land reform began at the start of the transition to the market economy by Resolution of Government 16.09.1992 № 357 "about measures on land reform in Republic of Tajikistan." The purpose of this document was to create conditions for future development of various types of methods of management, organization of a multi-sector economy, and increase agricultural production. But land legislation was amended several times in the last 15 years. Government resolution on 31.08.2004 № 349, as well as the Land Code of the Republic of Tajikistan № 326 from 13.12.1996 (on redaction law of RT № 498 from 12.12. 1997 y., № 746 from 14.5. 1999 y., № 15 from 12.5. 2001 y., № 23 from 28.2 2004 y., № 199 from 28.07.2006 y. № 357 from 5.01.2008 y. № 405 from 18.06.2008 y. (Halimova, Chap. 13)).

Land in Tajikistan is state property and provides for long-term use by dehkan farms and households. Private farms were formed on the basis of the reorganized *Sovkhoz* or *Kolkhoz*-collective farms. The legal basis for the organization and activities of dehkan farm in the Republic of Tajikistan was set down in 1992 and is regulated by law of the Republic of Tajikistan "On Dehkan (farms)." Later, a new version was introduced as № 48 from 10.05.2002; the latest version of the law was from 2009 (Halimova, Chap. 13).

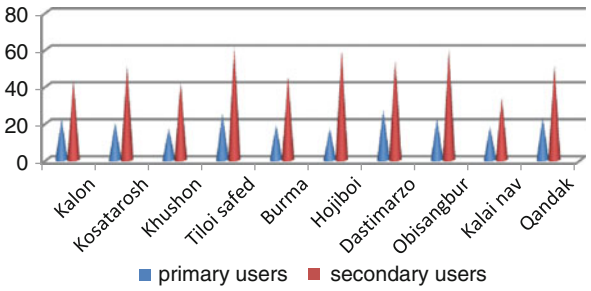

Fig. 7.4 Type of land users

2.2 *Land User Right*

Land users in Tajikistan are physical and judicial persons. Physical and judicial persons can be either (or both) primary and secondary land users. The primary users are judicial and physical individuals who use land in perpetuity (lifetime inheritable use). Secondary users are individuals and legal persons receiving land under lease agreement (Law of RT from 5.01.2008. № 357).

The primary users receive the right to obtain a certificate of land tenure on a particular land plot. Registration of tenure is through the State Committee of Land Management, Geodesy and Cartography.

The PRA process involved several types of users, primary and secondary (Box 7.1). Primary users are representatives of collective and individual dehkan farms, which have certificates. Secondary users are representatives who do not have certificates and rent land from primary users by agreement (collective and individual dehkan farms) (Fig. 7.4).

2.3 *Pasture Use and Tenure*

Pastures are the dominant component of all agricultural land. Pasture areas are used according to seasons: summer pasture, winter pasture, spring-autumn pasture, and perennial pasture. The total number of pasture hectare used (ha) was estimated for each village as follows (Fig. 7.5):

2.4 *Land Tenure*

Land tenure is regulated by the Land Code of Republic of Tajikistan. During the last 10 years, there have been amendments to better aid the development land reform process (Halimova, Chap. 13). But the current process of reform has many complications and is still not so affective.

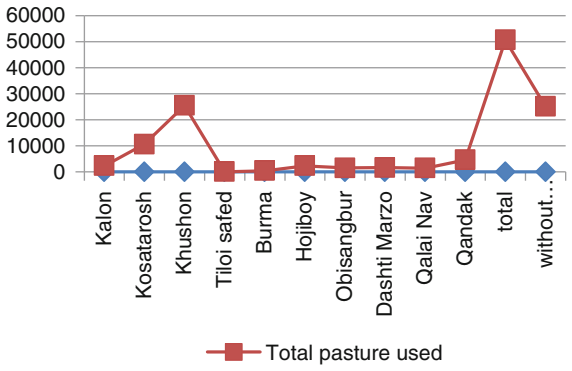

Fig. 7.5 Estimated area of pasture used by the village

Documenting the types of tenure to pasture areas utilized by the village was a complex undertaking, with often conflicting and incomplete information provided as the privatization process gathers momentum. In some instances, where people had received land certificates, the situation was straightforward. In others, people commented that they did not know their rights as former *Kolkhoz/Sovkhoz* workers and were working on the land as laborers and providing a percentage of their crop or paying rent without yet receiving sub-certificates. They were also unaware that they could create private DFs from their shares. People referred to some of the larger dehkan farms (DFs) as "collective" or "state" farms when in fact they are large private farms, allowing use of their land through various rental arrangements, often coordinated by the mahalla leader who collects the rent on behalf of the DF. Where large areas of pasture were thought to have been privatized by "influential individuals" from outside the Rayon, people often had no information at all.

In summary, the user right status of the 2,730 HHs in the project villages in relation to pastureland in particular was as follows:

- 11 collective DFs (CDFs), with a total of 372 shareholders. Of these, 225 (60%) were reported to have sub-certificates.
- A further 350 HHs were said to be "members" of a DF there, but their status was unclear with regard to certificates.
- 159 individual or private DFs with certificates are established (total number of HHs estimated at 448).
- 262 HHs are waiting for certificates to private DFs (253 of these may be entitled to sub-certificates to CDF land).
- 942 HHs are not members/owners of any type of dehkan farm (or 34% of total HHs in the PRA village). These are typically households who were not workers on the *Kolkhoz/Sovkhoz* and have no rights to "shares" (and therefore sub-certificates) or families recently established (i.e., after the *Kolkhoz/Sovkhoz* dec-ollectivization process) and will therefore never had rights to this land.
- Khushon has no DFs at all but rents all pasture from the Forestry Department and private DFs in other areas (197 HHs).

It is important to note that dehkan farm land does not always include pasture for example (Burma: 12 DFs and Tiloi Safed: 57 DFs have no pasture), or the pasture area is too small for productive use (Obisangbur: 11 DFs share 46 ha pasture), necessitating rental agreements with larger DFs. The percentage of non-members/owners of DF HHs corresponds roughly to the number of nonlivestock HHs; however, the link between land rights and livestock ownership is not so straightforward, with many HHs that currently rent pasture. In addition, the pastureland distributed to smaller DFs was anecdotally of poorer quality than that going to the larger farms of "influential" individuals – especially hay lands.

> *Kalon Village, woman 43 years old: We do not know of any case where issues of ownership of pastures were settled in an equitable manner. Every year, there are more and more limited opportunities for acquisition or use of grazing land for poor people.*

2.5 According to PRA Results, Knowledge About the Changes in the Law is Very Weak

Land reform in Tajikistan has been in place for nearly 20 years since independence. It directly or indirectly affects the interests of farmers, but lack of public awareness on land use issues is impeding assignment and proper registration of land rights. Laws on the dehkan farmers are defined. General provisions on the establishment of farms, definition of their powers, rights of shareholders, and so on are set out. In accordance with the law, a significant number of farms were established. This process not always followed when *Kolkhoz and Sovkhoz* were restructuring. Instead some people set up joint-stock farms and private farms, apparently in contravention of the land laws.

Since 1996, when the process of restructuring of *Kolkhoz* began, many, smaller, private farms were set up. Due to the increasing level of poverty, especially in rural areas, the government allocated land to household's so-called presidential land to help people cope with the deteriorating economic situation. These plots were covered by the provision of an inherited right to long-term use. There was no opportunity to transfer or sell this land. There is a law that authorizes and empowers dehkan farms. Indeed, many of the large farms were created by people who had access to information and to the loopholes in the laws. They immediately took action to secure their rights over large tracts of land. Owners of large farms are now major shareholders in dehkan farms. These shareholders have significant benefits, with considerable areas of land. In addition to their own agricultural enterprises and grazing their own livestock, they rent part of their land to others including those with small dehkan farms (some of which have no pastureland (see Table 7.2 above)) on an annual contract basis. The lease arrangements (often in oral form) yield significant profits. Typically, the lessee pays 30% of the harvest from the leased land (hay, livestock products), as well as payment for the number of livestock grazing on their land holdings.

Table 7.2 Estimated area of pasture used by villagers on private dehkan farms (PDF) or collective (CDF)

Village	Pasture (CDF) (ha)	Pasture (PDF) (ha)	Pasture (public) (ha)	Pasture (other) (ha)	Total pasture used
Kalon	2,250	100			2,350
Kosatarosh	10,604 (some in other District)		107 of CDF		10,604 (incl. winter pasture)
Khushon			500	25,000 owned by others/forestry	25,500
Tiloi Safed	70				70
Burma	350	100			450
Hojiboi		2,035	300	1,600 rented from other *districts*	3,935
Obisangbur	1,113	46		400	1,559
Dashti Marzo	1,177	426	(427 from CDF)	25	1,628
Kalai Nav	254		343	860 leased	1,457
Kandak	1,375			700 hay (a portion 2,565 rented from other village)	4,640 (not all 2,565 rented)
Total					50,700
Without Khushon					25,200

2.6 Tax and Rent Paid

The tax is paid by the primary user land, and rent is paid by the secondary users who rent land from primary users. Rate of tax or rent is not uniform.

- None – some villages mentioned that they used CDF or *mahalla* land (common land) and do not pay money
- 1 ha pastureland tax 4–6 som 50 diram/year
- 1 ha pastureland rent 15–24 som/year
- 1 cow 4–20 som/month
- 1 sheep 1–7 som 50 diram/month
- 1 cow 1 som/per day additional to rent
- 1 sheep 50 diram/per day additional to rent

Consider this, the primary user land pays tax to the state for the use of 1 ha of land at a rate, on average of 5 somoni *per year,* but receives rent of 20–25 somoni *per month* for grazing one head of cattle during the grazing season and 30% of the cost of harvest in cash or in kind. It is not difficult to calculate what benefit the large-scale dehkan farms have.

Sometimes, participants were confused with the payment of social taxes, payment of land taxes, and rent payment (Fig. 7.6).

Fig. 7.6 Kosatarosh village, Varzob District

Inoyat, 34 years old, jobless:*"For the social protection funds they are charging us 180 Somoni. We don't know whether it is right or wrong. We are not given an explanation why. But we want to know. Do we have a right to know or not?"*

Boboi Zainiddin, 80 years old: *"1 ha land is mine and 0.5 ha is from my son. For 1.5 ha, we pay 260 Somoni in one year season to the chairman of the Mahalla, and he transfers all collected funds to the head of Dehkan Farm Salim Ibrokhim but for improvement of lands no fund is ever allocated for that purpose."*

In addition, there are questions about the land area – not always a clear distinction between arable and pasture grazing land. Often, PRA participants noted that an assumption at the time of redistributing land from the former collective farms was that those people who were villagers and members of a collective farm were therefore entitled to a share. But in reality, this was not so. Many villagers who might otherwise be entitled to land missed out because of their absence at the time. Absence on the day of allotting land for any reason (labor migration to neighboring countries, moving to another village, disease, or in any other valid reasons) resulted in loss of land use rights without the possibility of transferring it to their family.

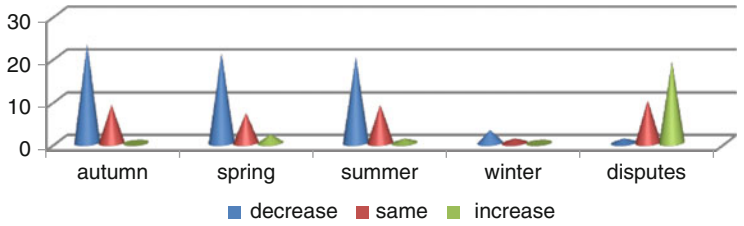

Fig. 7.7 Opinion about likely land disputes relating to access to pasture by 2020

Their land shares were redistributed among those already allotted land, that is, who were present in the village at the time of land allocation.

Often discussants noted the injustice of land distribution.

> *Abdukahor, 40-year-old Hojiboi*: "*All lands privatized by dehkan farms. What can us – poor people do? The day will come when we find we don't have land to graze our livestock. How to establish better husbandry and increase the number of the livestock? For this reason all our options are becoming more limited day by day.*"

It was also noted that there had been cases where the shareholder pays rent to the head of the dehkan for what is his own land. This confirms that members of the farms (shareholders) often do not clearly understand the implications of the transformation from collective to dehkan farm and do not have an opportunity to use their rights.

> *Hojiboi village, 49-year-old male: "Many numbers of village people are counted as shareholders, but why don't they inform the people? The head of Jamoat complains that we do not pay tax, but for what kind of land should we pay tax? Who requires payment from us that we refuse to pay? If information would be provided to us about that we are shareholders then we would follow up according to that rule or information."*

The discussions showed that the real-life situations in the next 10 years will tend to increase land disputes among the population and decrease access to pastureland (Fig. 7.7).

The land area allotted to the majority of shareholders is small and is located on the slopes of the foothills near the place of residence. It cannot be irrigated which limits the possibilities for increasing productivity. On the one hand, there is a law creating an investment authority to relate to dehkan farms; on the other hand, there are limitations and barriers to exploit the full potential of these small farms.

The process to receive the land user certificate is a very long and bureaucratic process. Sometimes, this process takes not only months but years, for example, in village Obisangbur, Faizabad District. This example (see below) is not unusual; the same situation can apply in other villages.

> During the Soviet era, Obisangbur village land was in the territory of Faizabad Sovkhoz. Up until 2006, it was a collective farm of Faizabad and almost 100% of the population worked there. In 2006, this collective farm was divided into 5 dehkan farms. In the territory of Obisangbur, dehkan farm "Salim Ibrohim" (farm's name) was created. For Obisangbur village, 400 ha of pasture was given. At that time, out of 46 farms, only 21 farmers had certificates. Now, out of 21 farmers, there are 11 individual dehkan farmers approved by the decision of the Chairman of Faizabad Hukumat, and only 2 farms have certificates for land tenure. The remainder is in the process of completing documentation. During the Soviet era, Faizabad Sovkhoz had winter pasture in Dangara district of Khatlon, but today these pastures are not available and they are privatized by other individuals.

Each level of PRA participants had a different attitude to changes in land use right, tenure and land reform. Several participants mentioned that unfair allocation of pasturelands and high rents is the main barrier to taking a more conservation-minded approach to land use. The fact that all higher-quality lands are already in the hands of principal shareholders and bureaucrats means that nothing will change. Other participants believe that they also have user rights for higher-quality land. The primary users believe that they will strengthen their privileges as the government policy favors "privatization." Some villagers believe that in the future, they can lose their user right, especially those who have not yet received the certificate.

2.7 Patterns of Information Exchange and Awareness

Discussions with villagers showed that most of the information they get is from each other. The mosque, where the men of the village make a prayer service, is important. At the end of a prayer service, in the process of dialogue and conversation, information is exchanged. Also, the process of exchange of information proceeds during celebration holiday, when people visit each other as guest, at weddings, or other traditional events (funerals).[3]

[3] Funerary practises are not only a way to pay the last respects to the deceased and to soothe the affliction of the bereaved; they are collective events during which the social identity of the living is affirmed.

Usually in rural areas from October to April each year, for many years all over the country, there is a limited provision of electricity, and villages have electricity 2 h in the morning and 2 h in the evening. This has a direct effect on the limitations in obtaining any information.

In the village, dissemination of new information on important issues is a very rapid process. Every village knows about what happened. Everybody knows who the primary users of pasture around the village are. But information about user rights and how to deal with bureaucracy to receive a certificate is not widely known.

Discussions with villages also showed their understanding that all the issues related to land use rights can only be solved through local authorities – Jamoats at the village level and Hukumats at the district level – but if those bureaucracies have a vested interest in maintaining the status quo, then they are unlikely to be too helpful.

The PRA confirmed that there is a need to spend a lot of time and patience in order to receive a certificate (even when the claim for user rights is clear). As mentioned above, many villagers are waiting to receive the land tenure certificates several years after lodging their applications (e.g., Obisangbur, and Kandak). Sometime, villagers despair and are pessimistic that they can ever receive land tenure rights, because most of the quality land has been distributed to higher bureaucrat officials already. The majority of arable and pastureland was transferred to large dehkan farms (approximately about 60–70%). Most villagers have small household plots (300 m^2) and small areas (<1 ha) of additional land for use for crops, hay, or grazing (presidential land) and access to land of primary users on a rental basis.

3 Attitude Toward and Perceptions of Land Degradation

PRA results confirmed that most villagers know about the changes – the loss of fertility of the land from year to year, significantly changed climatic conditions due to dry summers, and abundant mud flows in the spring.

Yoqub, 43 years old, driver: "There is very high snow in winter. Landslides are frequent. Recently, due to big floods, several heads of small livestock and two boys died. We couldn't do anything."

Amriddi, Kalai Nav: "Before sending livestock for grazing we are giving them two bundles of hay early morning and after coming back in the evening we are giving them two bundles of hay again. If not do that, my wife complains about the reduced quantity of milk."

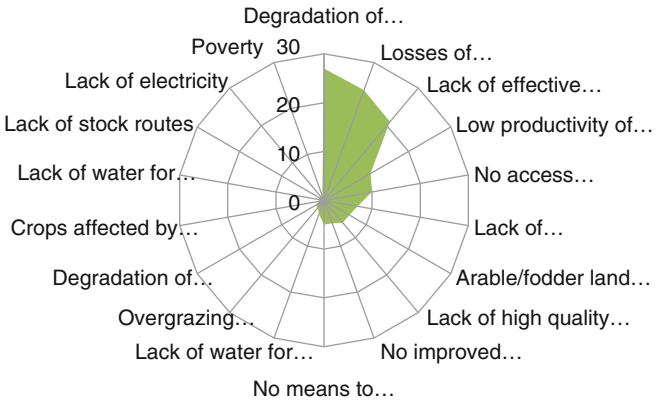

Fig. 7.8 Priority issues identified by PRA participants

Without exception, the overall condition of the pastures was believed by all groups in all villages to be in varying states of degradation, with the type and quality of pasture grasses reducing, weeds increasing, top soil being lost, rodents increasing, flooding and damage caused by droughts, wind storms increasing, and water springs drying (Dashti Marzo). Nine villages reported the disappearance or marked decrease of medicinal herbs and useful grasses and shrubs. Livestock graze all day but come back hungry because there is so little forage on offer.

Among the 18 priority issues identified in the PRA, 90% of participants indicated that the degradation of pasture and forest lands was the most significant. The reasons for degradation are marked: overgrazing (around village settlements), intensive trampling of soil along the path by herds of watering livestock during the day, limited access to winter and summer pastures, the lack of activities for the improvement of pastures, and discontinuation of the practice of rotational grazing (Fig. 7.8).

In the main, villagers and representatives of dehkan farms did not express particular concern about the real situation. During PRA discussions, some participants expressed their understanding that if they do not take into account the rapid pace of land degradation that after 10 years, the situation of the degradation will be much worse. To determine the importance of this issue, we asked leading questions, for example, the conditions of grazing lands in the Soviet Union time 20 years ago, in the period after the Civil War, at the present time, and what to expect in 10 years. The process of land degradation coincided with decreased productivity of pasture, decreased productivity of fruit trees, and perennial grasses an increase in biomass of poisonous plants resulting in worsening health of livestock through toxicity and a reduction in the yield of useful forage. Almost 100% of PRA participants noted that the condition of pastureland 20 years ago was much better. They are now considerably deteriorated, and after 10 years, the situation is likely to be even worse (Fig. 7.9).

Concerning “pasture restoration” – villagers understand that it is necessary but argue that it can only happen if there was large-scale irrigation, mechanized planting, and use of chemical fertilizers. Doubtless a legacy of Soviet-style thinking as the concept of small-scale self-help projects is not widely accepted.

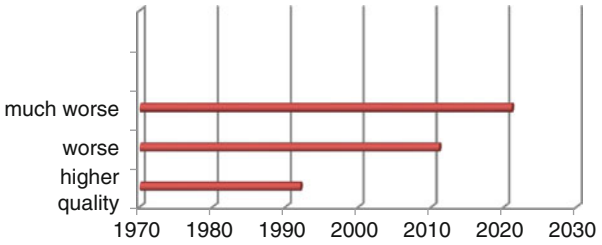

Fig. 7.9 Perceived change in pasture conditions over the past 50 years

In general, with significant benefits from the use of pastureland, users of large, private farms do not have enough experience and enough understanding to take responsibility to find ways to take action against the continuing process of land degradation. Because, not having absolute confidence in the future that they may lose rights to land, they are more interested in getting more and more benefits and profits from land today. In this regard, activities to reduce land degradation in rural areas are almost nonexistent. Many respondents referred to the fact that these restoration activities are very expensive and that people do not have such funds. Only in extreme situations is there an attempt to apply the most urgent interim measures. There is a clear understanding of reality and consequences of land degradation, but it is not possible to use expensive techniques to reverse the situation. In implementation of action, the entire community as a whole must be involved in an integrated program. Such an action requires awareness rising of the damage cost of land degradation, a clear definition of what techniques and procedures will work, and motivation of HHs to get involved. Development of the program requires commitment and a clear understanding of the importance of timely start of work in this aspect. It is unlikely to happen while primary users exploit the situation, get rich, and fail to do anything to arrest land degradation. Government intervention to improve security of land tenure (for all those with user rights for a start) would go a long way to provide the enabling environment. No one will want to spend time and money on land restoration when there is no certainty that access to the improved land will remain with those who did the repair work.

4 Livestock

Of the 2,730 households in the 10 PRA village, between 70 and 98% of HHs were reported to own at least some livestock. Those who did not own livestock were thought to be either too poor or to be newly formed household who did not have access to land. Herd sizes ranged from 1 cow to large herds of several hundred sheep, with the average herd size reported to be 2–4 cows and 5–10 sheep/goats. Most HHs have at least one donkey for transport of agricultural produce and hay from the fields to home. Horses are less common as they are expensive to keep. Although the PRA originally attempted to estimate animal numbers for each area of pasture, this proved impossible in the time allowed for the following reasons: the distribution of pastures between dehkan farms themselves varied greatly in most

Table 7.3 Estimated numbers of livestock owned by villagers

Village	Cattle	Sheep/goats	Donkeys	Horse	Total	Beehives	LS units[a]
Kalon	790	4,597	258	6	5,651	134	1,973
Kosatarosh	1,086	5,800	135	56	7,077	8	2,437
Khushon	N/A	3,600	N/A		3,600	800	720
Tiloi Safed	800	2,000	19	15	2,834	36	1,234
Burma	891	2,015	105	352	3,363		1,751
Hojiboi	547	5,300	130	50	6,027		1,787
Obisangbur	400	630	40	–	1,070		566
Dashti Marzo	1,317	4,883	6	63	6,269	57	2,362
Kalai Nav	600	300	59	–	959	905	719
Kandak	678	2,212	220	56	3,166	45	1,396
Total					40,016	1,985	14,945
Without Khushon							14,225

[a]LS unit crudely calculated as 1 cow, 1 horse, 1 donkey = 1 LS unit, 1 sheep/goat = 0.2 LS unit as used in Tajikistan

village, with many farms having a small amount of pasture and a few large farms having a lot; livestock numbers fluctuated seasonally; pastures are used jointly by herds from other villages and Jamoat within the same *district* and, in some cases, from other *district*; but most importantly, people did not always have an accurate knowledge of the situation in pastures other than the ones they used – and even then the information between groups using the same pasture was often contradictory. Nevertheless, the total number of livestock for each PRA village according to the official Jamoat statistics for 2010/2011 was recorded, and where this was unavailable, community estimates were used. Jamoat statistical data did not always coincide with date obtained from the villagers. However, it would be misleading to attempt to draw conclusions on this livestock/pasture ratio as the data on livestock distribution across the various pasture tenure arrangements and seasons is not known in detail. In addition, pasture quality is not known for each pasture area (Fig. 7.10 and Table 7.3).

4.1 Health Status

Health status of livestock depends of conditions in which livestock are housed and fed. Discussions in PRA showed that most of cattle in pens are sick during winter. During winter, animals in pens are fed a ration mainly composed of hay and various additives. Mostly they do not have enough feed, and coupled with the low nutritional value, loss of liveweight is inevitable, and this is reflected in the general health of livestock.

In spring time, a lot of livestock from the transhumance area move from other district*s* from winter to summer pastures through the pastures of PRA villages.

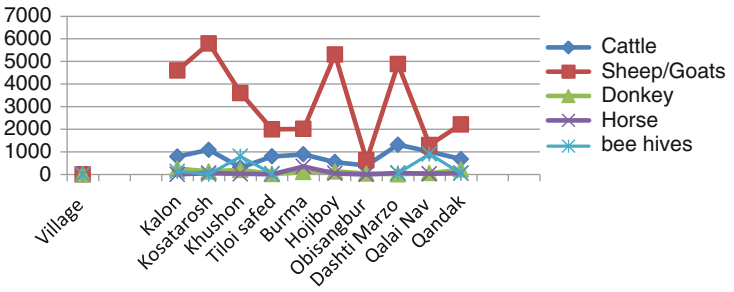

Fig. 7.10 Number of livestock in villages

In theory, transhumance livestock are meant to follow specifically designated stock routes away from villages where there are places for livestock rest and lodging for night. But usually these transhumance herds pass across village land because of (a) bad conditions of bridges and roads, (b) occupation of the transhumance place by individuals through permission of local authorities (who collect a fee), and (c) privatization of land on the former stock routes. As a result, many livestock from villages began to be infected with diseases or infested with parasites brought by the traveling stock that pass through without veterinary inspection.

"…When the village community of Obi Sangbur is going to stop the shepherd's transhumance for changing their itinerary, they immediately inform the owners of herds through mobile phone. The shepherds are telling that the owners of the livestock which we are pasturing are from "influential individuals" from outside the district. *After phone call immediately will be given permission and nobody can stop them.* ***Musoeva R. Obisangbur****: the big transhumance herds coming from Yovon, Jirgatol, Qabodiyon, Qurghonteppa, and Shahritus go by the top of our village. Last year the herds went near our house. This year, it has gone by the other side of the village".* ***Orifova:*** *"The truth will not be gained. Our words are not worth even one diram (coin). At that moment they immediately call the owners of herds and get permission. The shepherd tells us if you want, talk to them by phone. The community can't do anything against them."*

Firdavs 37 years old, teacher. *"Transhumance – this is the government service. We can't change anything. However, herds from transhumance come to our village (during move from winter to summer pastures) at night and during one day they stay here. Herds eat all young grass, trample down all around and damaging the roots of this young grass. After these herds leave our village, the land condition is terrible. How can we feed our livestock? Where we can graze? What should we do?"*

By the way, PRA participants gave examples from Soviet Union time when prevention of infectious diseases of livestock was the norm, and veterinary inspections of traveling were subject to strict regulation.

> ***Taghoeva Anor, 57 years old**: "Before the civil war many village women were working in the farm of Devonabegi village. There was a foot bath in the entrance of the farm which was supplied with medicines. Every day before entrance to the farm the livestock went through it and there was no hoof rot or oral infections. In advance there were vaccinations for all diseases. Now no measures will be taken against any other diseases."*

In addition to deteriorating livestock health, there are other problems relating to the conditions of grazing. Usually livestock are grazing on pasture near village on daily basis from March to April until the first frosts of autumn. There has been over severe grazing on the same pasture, far exceeding their carrying capacity. Instead of 1–2 sheep/ha there are now 15/ha. As a result, grass does not have time to grow. Additionally, there is a problem with watering the livestock. Usually for watering, the cattle return to the village, after watering and rest, they go back up to the pasture. In the evening the herd returns home not quite full and tired. All this walking and lack of feed affects the animals and contributes to poor livestock health.

4.2 Small Business Activities

According to PRA results, every household keeps poultry. During meetings with villages and visits of their household plots, we saw approximately 10–15 chickens in every garden. Twenty percent villages are farming turkey, for example, Burma and Kosatarosh.

Beekeeping is also one of the profitable sources of income from several villages in mountains area in 70% of total villages. Most income from beekeeping has come from villages like Kalai Nav and Khushon. Their bees receive nectar from flowers – from spring and summer pasture located in mountains area. Villagers of Kandak started beekeeping not long ago. Women would like to learn about beekeeping and would attend properly conducted training courses if they were available.

Feed supply. Results of PRA confirm that all 10 PRA villages are laying in of fodder for winter fattening. Laying in of fodder is collection from haymaking pastureland. But this laying in of fodder cannot provide enough fodder for winter feeding. For the rational feeding of livestock, in general without exception, all households purchase an additional concentrated feed, hay, and oats.

In general, very little fodder is planted by any of the PRA villages, and hay is cut from natural, unimproved pasture grasses. Four villages only grew hay. Others grew corn (6), alfalfa (4), and esparcet (*Onobrychis* spp.) (2) but only in very small amounts according to participants. The predominant crop residue is wheat stalks

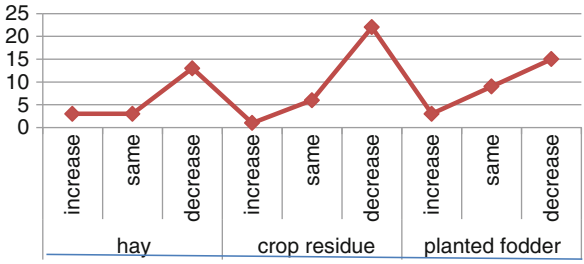

Fig. 7.11 Future predictions for fodder production trends

and wheat bran. Various villagers also mentioned barley (1), potato (3), flax, fruit peels, and vegetables and leftover human food. This was generally chopped, mixed together with hay, and salt was then added. Only one village (Tiloi Safed) produces silage from wheat stalks, alfalfa, and corn.

Recent experience with attempting to increase fodder production has not been profitable for the few households who have reportedly tried. Lack of irrigation and low-quality seeds were thought to be the main reasons for failure. This is not to say that there are no examples of successful fodder crop production. People generally think in terms of the large Soviet-style operations and tend to discount examples of smaller, individual areas planted, such as in Khushon's enclosed garden plantations on forestry land along the riverbed. Fodder production may therefore be underreported by communities.

> ***Jurabek.*** *"It is autumn for the shepherds that is the most important season, as well-fed animals are a guarantee of a happy winter. At this time it is necessary to make high-quality feed stocks. If now it is hard to do, what will happen in 10 years?"*

Very few groups admitted to selling any fodder but clearly they did (see Sect. 5.1.2 below). According to the PRA survey, when asked directly, only a few individual households and the big DFs were thought to sell fodder. However, in the economic survey, people in 15 of the groups (including non-DF groups) reported deriving at least some income from the sale of hay. Owners of larger areas of hay land "lease" it to shareholders or nonshareholders and charge 15–30% of the hay collected which is either provided in cash or crops and is sold to cover the cost of land tax plus profit.

Very few farms however are thought to be self-sufficient in fodder. Naturally, those with the most and best hay land and arable land come closer to producing their own fodder needs. In general, all farms buy at least some fodder, particularly for lactating cows, with hay being the most common (despite it being mostly produced on farms, the majority appear to have limited user rights to hay land and therefore have to buy at least some), followed by cotton/oil cake, bran, oats, alfalfa, silage, corn, and barley.

Figure 7.11 shows the trends of future fodder production – the opinion of most respondents was that hay production, the amount of crop residue, and the area planted to fodder will decrease.

4.3 Selling Livestock

Basically, buying, fattening, and selling cattle involved villages from Tiloi Safed. This is their constant trade and business. As reported by PRA participants during discussions, this is a good advantage. Ability to fatten cattle and sell – for this practice they learned from Soviet Union time, when they worked in a large livestock *Sovkhoz* Telman. People in other villages usually sell livestock only when there is an urgent need to counter various emergencies.

> *Zuhuriddin: "If I'm going to give my daughter to marry, or marry my son, of course I need a certain amount of money. Consulting with my wife, I decide how much we should sell livestock for in order to cover the expenses."*

5 Income and Expenditure

5.1 Income Sources

We tried to analyze the methods used to identify the allowed level of estimated economic contribution of the household. Initially the participants themselves have identified sources of income: livestock, crops, pasture/fire wood, and employment. The results showed that the group in different categories, as well as in various villages in the proportion of income, is not the same. In general, most of the population receives income from their own seasonal employment and from remittances sent from relatives working in Russia – 34%. In the villages Obisangbur and Kalai Nav, the figure was more than half of revenues – 57%. For some categories of groups, this figure in village Burma (poorer farmer group) was 80%, and in village Dashti Marzo (poorer farmer and women's groups), it was 68 and 60%, respectively.

Next importance to income generated was the income received from livestock – 33.3%, food, tree, and crop production – 25.4%; just a small part of household cash income is obtained from pastures – 7.3%.

5.1.1 Income from Livestock

Among farmers groups, the highest rate of income occurred in village Dashti Marzo (59%); even among poorer farmer groups, a higher proportion of income (51%) in Burma village was from sale of livestock or their products. Totally in 50% of villages, the proportion of income from livestock in poorer farmer group has higher rate than in farmer group. Data show that the farmers do not always derive the higher proportions of income from livestock, although the analysis should

Fig. 7.12 Images from an exercise on estimating proportions of sources of household income and mapping in the PRA survey in (**a**) Dashti Marzo, (**b** and **d**) Kandak, and (**c**) Kalon villages

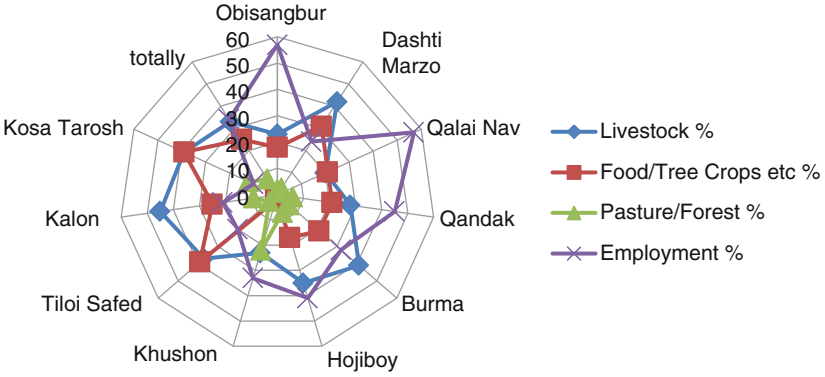

Fig. 7.13 Contribution of various economic sectors to HH income (%)

Table 7.4 Comparison of the contribution of livestock sales to income in selected PRA villages

	Proportion of household income derived from livestock %		
Name of village	Farmer group in Khushon shepherds group	Poorer households	Women group
Kalon	41	47	33
Kosatarosh	44	45	45
Khushon (Kokhu)	20	28	21
Tiloi Safed	43	47	26
Burma	39	51	32
Hojiboi	46	48	19
Obisangbur	36	17	15
Dashti Marzo	59	32	37
Kalai Nav	25	10	23
Kandak	42	18	23

take into account the fact that the proportional relationship does not mean that the nominal incomes of the poorer categories exceed the nominal income of farmers (Figs. 7.12, 7.13 and Table 7.4).

5.1.2 The Income from Pasture

The income from pasture in general was hay, wood, beekeeping, medicinal herbs, and wild rose. This proportion of income was usually very small (>8%), but in some villages like Khushon – this proportion was as high as 24%. Most incomes are from beekeeping and collection of medicinal herbs. In Khushon (Kokhu), Kalon, Kandak, and Kosatarosh, 80% of the HHs reported significant income from selling hay.

6 Constraints and Barriers to Better Land Stewardship

The results of the PRA have provided a solid understanding of the situation throughout these five *districts* and of the community perception of the current problematic situation on pasture management and livestock. The main constraint relates to the uncertainties about access to grazing land and to security of land tenure. Legislation relating to issues of land use and tenure is in constant flux, and the measures to implement the existing laws are not consistent nor transparent. As noted above, on the one hand, the government aimed at resolving land use issues, and on the other side, the process of implementing these laws, especially those relating to registering claims for user rights, constitutes significant barriers. According to the Constitution of the Republic of Tajikistan, land is the exclusive property of the government, and land use rights to it can be assigned by the government (Halimova, Chap. 13). This suggests that existing laws are not sufficiently comprehensive or consistent enough to deal with problems that arise on a day-to-day basis.

It is a fact that many large state and collective farms in the process of reorganization after independence went into the possession of a few individual and collective dehkan farms. The majority of the best pasturelands are in this category (user rights to large tracts of pastureland already assigned to a very small portion of the population). According to government statistics, over 73% of Tajikistan's population are living in rural areas. Most rural households have 300 m^2 household plots, but not many of them have the presidential land. At national level, about 44 thousand hectares, of which 25,815 ha irrigable, were granted to 409 thousand rural households as supplemental plots per 0.15 arable or 05 ha rainfed based on president's decrees in 1995 and 1997. According to statistics of State Land Committee of December 2010, by 2010, about 409,000 HHs have presidential land based on formal statistics. Many of the PRA respondents are very poor. It should be noted that the main barrier to better land stewardship is *poverty.*

The environment, economic development, and poverty – these are three concepts that are closely interrelated. The main part and especially the rural population depend on environmental factors. It is damaging water sources, natural disaster – droughts, landslides, and desertification. In addition to natural processes and phenomena which are to some extent the result of irresponsible human activities, mismanagement of land and natural resources is generally an obstacle to further development of agriculture. Cutting down of trees and perennial shrubs, overgrazing

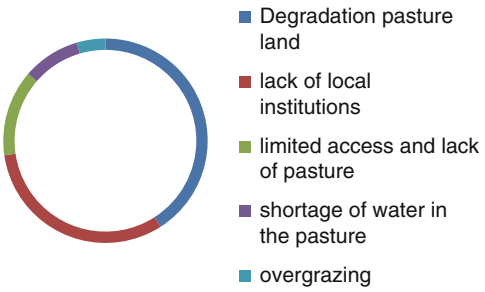

Fig. 7.14 Barriers to better land use

on the same pastures, improper watering, and lack of maintenance of technology impedes progress. The degradation of pasturelands, the lack of watering, and diseases of animals and plants are not a complete list identified in the course of PRA, to some extent related to the environment, marked by all in the pilot area.

PRA participants rated the other barriers to sustainable land use as the degradation of pastureland – 9%, lack of effective local institutions – 7%, limited access and lack of pasture – 3%, the shortage of water in the pasture – 1.5%, and overgrazing – 1%. Recurrent themes from the PRA survey, across all villages, were:

- Lack of a clear awareness of land user rights
- Lack of perception of the nature, extent, and full implications of the inequitable distribution of pastureland
- Perception that there was a negative impact of large dehkan farms on both for pasture management and livestock productivity
- Lack of local institutional support on pasture management, animal husbandry, and livestock health (Fig. 7.14).

7 Human Welfare and Poverty Alleviation

7.1 Human Welfare

The government has identified the 12 most important priorities for achieving the Millennium Development Goals in the long term and fostering social and economic development, including poverty reduction[4] – environmental sustainability was one of these 12 priorities. So far, there is little evidence of progress in this. Results from the PRA surveys showed widespread overgrazing, inefficient use of pastureland, and limited access to drinking water for pasturing livestock, especially in summer pastures. These factors lead to changes in vegetation cover and as a consequence

[4] The most important documents of the Government and International Development Partners, aimed at structural reforms – the Government Investment Program, 2010–2012 Poverty Reduction Strategy

environmental instability. Socioeconomic reforms aimed at creating an enabling environment for human well-being and development also receive priority.[5] The degree of human development in society is determined by the Human Development Index (HDI), which reflects the life expectancy, literacy coverage of education, access to resources (clean water, land), and opportunities to live a long and healthy life, to be educated, and to have enough material prosperity. Human Development Index is a qualitative measure of the degree of the country's progress in human development – a planned growth rate of GDP and average income. HDI is also determined by the degree of poverty. The higher the score, the lower the poverty of human rights and the greater the level of literacy and opportunities to decide how to live. Reduced access to services such as education, health, and social welfare and to resources such as land and water is often associated with lower HDI scores. Despite the increase in government spending on social services, progress in macroeconomic indicators, and the significant contributions of donors, the HDI score in Tajikistan of 0.58 places it among the lowest of 112 countries with a medium level of human development.

7.2 Poverty Alleviation

The process of transition to a market economy has caused changes in the socioeconomic system. Under these conditions, it became inevitable that there would be a stratification of society into rich and poor.

Material well-being of families is one of the factors in the development of society. It is determined by the basic vital factors such family income, access to health care, access to education, occupation, housing conditions, and availability of the property.

The National Development Strategy (NDS) of the country until 2015, along with in-depth analysis forecast increase in living standards and poverty reduction. Despite the fact that the poverty rate fell from 80% in 2000 to 72% in 2003 to 47% in 2009, the World Bank figures[6] showed that one-third or 34% are extremely poor, and Tajikistan remains the poorest country in Central Asia. The number of people in poverty is significantly affected by the global finance crisis. Families in rural areas survive mainly on remittances sent by relatives (father, sons, husbands, brothers) who work for wages in neighboring countries. Remittances as a proportion of household income have increased, and families survive on the meager income derived from livestock, crops grown on their small plots of land, and any arable and pastureland they can use and by small business (such beekeeping) (Table 7.5).

[5] Millennium Development Goals, National Development Strategy, the Framework Program UNDP on the provision of development assistance to Tajikistan in 2010–2015 years.

[6] http://data.worldbank.org/country/Tajikistan Poverty headcount ratio at national poverty line % of population.

Table 7.5 The percentage of vulnerable categories of the total number of household in the PRA villages

District	Village	Total poor % (income of one person is from 60 to 100 TjS/month)	Including very poor % (income on one person is <61TjS/month)	Woman-headed household – women % (includes category of vulnerable poor)
Varzob	Kalon	98	83	2
	Kosatarosh	30	3	6
Vakhdat	Khushon	80	51	9
	Tiloi Safed	64	38	17
Rudaki	Hojiboi	54	30	5
	Burma	50	10	5
Faizabad	Obisangbur	42	13	2
	Dashti Marzo	66	37	15
Rogun	Kalai Nav	48	21	3
	Kandak	51	12	6

TJS = Tajik somoni In 2012 $1USD = 4.8 somoni

7.3 The Vicious Circle of Poverty

Tajikistan and other Central Asian countries suffer from a growing divide between the rich and the poor that is causing social conflicts. The income gaps between urban rural residents, different social classes, and different regions both within countries and between countries in Central Asia *sens. lat.* are all widening. There are millions of people living below the poverty line (about $2USD per person/day). So the challenge is to improve the current poverty alleviation policies (and actions) to fit the new economic conditions created by 20 years of independence and the shift to the market economy.

Governments need to pay more attention to comparative poverty, which is more serious than absolute poverty, because it is a matter of social justice. This means a change in how we define and understand poverty. Poverty is more than just low income and weak consumption ability. It is also an inability to change one's situation for the better, as it also means poor education opportunities, inadequate healthcare, unstable employment, and poor housing. In other words, poverty alleviation efforts should focus more on services and opportunities for the poor and wider social insurance (pensions and concessions). More investment is needed to create opportunities for both poor people and the impoverished regions because in Central Asia the problem of poverty is related to place – some oblasts are notoriously poorly endowed with natural resources, lack comparative advantage over other regions, and are poorly served by the state.

Therefore, in the coming years, each state should reform its poverty alleviation policy and expand its measures so that not only more people are lifted out of poverty but more people are prevented from falling into it. There should be a combination of poverty alleviation measures with national income distribution and redistribution policy. With a widening income gap, the state has no real choice. It must ensure that income distribution is fairer.

There are a great number of people in the world living slightly below the poverty line, who cannot get any government assistance, although their conditions are not much better than those living below the poverty line. There are people living on the edge of poverty, because their opportunities and personal development options are the same as those living below the poverty line.

It is responsibility of the state to prevent these people from falling into the ranks of the poverty-stricken population The experience in China and in other countries shows that poverty is vicious cycle, as children living in poverty-stricken families are more likely to be poor and deprived as adults, and their own children are likely to grow up poverty-stricken. This further curbs the mobility between different categories, which is already weak.

The various governments of Central Asia at all levels should give support to ensure that the poverty-stricken population has and can participate in social affairs, after all they are citizens and have the same right a fulfilling life as their rich compatriots.

8 Defining the Role of Women

Before any explanation of women's role, it would be appropriate to describe the social status of rural women. Social relations between male and female permeate all spheres of life. It is necessary to understand the reasons why there is inequality.

According to prevailing stereotypes, the rural woman is mostly occupied by a household duties within her plot, her traditional role, and her duty – cooking; caring for children, the elderly, and sick relatives; cleaning; washing; fetching water; gather firewood; working in the garden; sewing; and other activities. On average, women spend 6 h per day on household work. Those who do work outside the home face discrimination. From PRA information, it is clear that some women, who work in the collective dehkan farms, do so at a salary level that is lower than that of male workers doing the same job.

Typically, rural women are limited in many ways especially level. In general, they complete secondary education and the education process finishes at this time (15–17years of age). In the PRA, from the total number of women attending, 96% completed only basic school education, 3.9%, the overall secondary, and only 0.9% undertook higher education.

In everyday life, women spend time in the daily care for livestock in the stall-feeding, cleaning, milking, production of dairy products, treatment of livestock, and supervision of grazing in the pasturelands. Women's role in the process of decision-making for the care of livestock, the purchase, or sale of livestock is variable. In the majority of cases reported in the PRA, decisions were taken jointly but in some cases solely by men.

During the transition to a market economy, complicated social and economic crisis, civil war, and its consequences have changed the role of women. Women in Tajikistan more and more are engaged in search of livelihood. This is mostly due to the increasing number of women widowed by the civil war and the role of male

population (between 16 and 60 years) as migrant labor in Russia and other countries to work either as permanent or seasonal labor. The absence of a male in households invariably increases the responsibilities of women for the livestock on the one hand, but on the other hand, the remittances sent back by the absent men provide funds for their families to pay for shepherding services and buy food for livestock, veterinary care, and other expenses.

More and more women are head of households and assume the role of breadwinner. Women took an active role in discussions and debates during the PRA. In general, female-headed households are risk prone and vulnerable to sliding into poverty. They are largely dependent on remittances, and they need all-round social development. Women have limited access to the productive land resources as well as to financial resources. When there was breakup of Soviet era farms, the area of land allocated to women was much less.

For the most part, this is due to traditional views, low level of awareness among women about their rights, as well as specific gender role stereotypes. The realities of life are such that women often have to bear the burden of both housekeeping and production for own consumption. It almost does not leave them much time or opportunities to address issues such as access to productive assets. These obstacles are difficult to be eliminated because they are depending with certain traditional values.

> ***Tojiniso, 45-year-old Khushon****: "Only by changing the mentality of men against women can we make a difference. Because my daughter-in-law is from the city of Dushanbe, she has a university education and began to work after marriage in the school. A man said something to my son about this, and he was forced to forbid his wife to work. She is with the higher education but sits at home, and men without higher education work in the school."*

More equitable distribution of the land use rights would not only improve the efficiency of production but could also serve as a starting point for creating their own business enterprise. Women are now dependent on their husbands for economic reasons; these options to improve their lot are limited or even impossible to realize.

According PRA each group was asked to list all of the activities undertaken by household members related to livestock husbandry. They were then asked to discuss who was responsible within the household unit for doing the work associated with each task, as well as making decisions about the task, such as when and how to do it. This joint analysis was done to encourage greater acknowledgement of women's role in livestock husbandry and ideally their greater participation in decision-making when eventually forming the proposed pasture user groups[7].

[7] One of the objectives of the rural development project and the PRAs was to facilitate the creation of pasture user groups within each village as a means of rationalizing pasture use and improve productivity and HH incomes.

The results of the gender analysis demonstrate that women are involved in every aspect of livestock care and management, with the only significant underrepresentation in vaccination, slaughtering, long-medium distance shepherding, and shearing. Vaccination may be problematic for women as it most likely means dealing with a male veterinarian, or it is done during longer distance migration of flocks and herds at remote veterinary points (if it is done at all). However, women are as equally active in treating sick animals as men. Women may be precluded from slaughtering, consistent with halal requirements, although there was an example from Kalon Village where women who took their cattle to *ailoq* also slaughtered animals on occasion.

> ***Barfi 46, female:*** *"We are doing not only women's work but a man's work too. For example, there is a case when we slaughter the cow, also fence out wolves, jackals, and catch snakes. It means during this period we are converted to men, hunters, and butchers."*

The only activity done exclusively by women is milking and processing and sale of milk products. Interestingly, sale of milk products was one of the activities where five groups indicated that although women were exclusively responsible, men and women were equal in decision-making over where and when it is sold. Men dominated the sale and purchase of livestock, with only four groups indicating an equal role and another four indicating a secondary role; however, 14 indicated that although men had the exclusive role in physically buying and selling livestock, women participated equally in making decisions about when and what to buy and sell. Again, restrictions on associating with men may preclude more direct involvement of women in the market place. Five groups also indicated that men made decisions over treatment of livestock despite both men and women being involved in actual treatment. This highlights the need to provide information on treatment directly to women to ensure that they are better able to make decisions on when and how treatment is sought, paid for, and administered.

> ***Tojiniso, 37 years, female****. "My husband a few years ago went to work in Russia. Initially he could not find work so, we managed here as best we could. Then, when he got a job, he has not had the opportunity to send us money each month. So I decided to start breeding livestock. I became more confident and solved many problems. Sale of livestock brought to my house more or less wealth. All the problems of livestock lie on my shoulders, I have a very hard time but what to do? Without a male in the house, I have to ask for help from neighboring males or my brothers when it comes to the purchase or sale or slaughter."*

The gender analysis in general indicates a fairly even contribution of men and women in day-to-day livestock management, especially around the household plot and nearby pasture areas. This would of course vary between families depending on the amount of male labor currently in Russia or working off-farm.

Additionally, every women's group mentioned that they do think about future life (their own and that of their children). They are concerned about poverty, and they would like their children to have access to higher education as a way to get qualifications as quality specialists and thus guarantee gainful employment in a worthy occupation.

9 Summary and Conclusions

Results of PRA showed that in these rural areas of the five *districts* that the quality of life of the population is dependent upon more secure access to productive land. The existing system of land use rights is not supportive of social and sustainable development. Large areas of better lands have been assigned to individuals or joint-stock companies with inheritable right to use. People from outside the Jamoat were successful in receiving rights to reserved pastureland. The perception of unequal and unfair land distribution was a recurring view expressed by all PRA groups.

The rights of the majority of small livestock owners have been violated. Violation of the principles of equality and social justice may adversely affect the access of poor rural population to land and challenge the efforts of government and aid partners (donors) poverty reduction strategies.

In the Soviet era, there were clear guidelines and a high level of awareness about what constituted effective use pastureland. Today's use of pastureland is not sustainable. Predictions about the future of the livestock sector are very pessimistic to the point that it can affect national food security. The principal reasons for the pessimism are:

- Underutilization of much productive pastureland within large privatized farms with few livestock.
- Limited access to pasture by owners of small numbers of livestock.
- High costs
- Increasing number of household (and therefore animals).
- Lack of concerted and coordinated efforts reverses land degradation in the pasturelands.
- Inadequate veterinary services and poor animal health.

At the same time, PRA villagers mentioned that crop farming is one of the good sources of income, but that arable land is limited in area and most is not irrigable.

Many poor HHs who are members of dehkan farms have access to only small areas of poor quality pasture that are often difficult to access, while large areas of better quality land were given to "influential individuals" as collective dehkan farms.

The village communities in every village surveyed have limited knowledge of their rights and entitlements and hope to receive external support. They understand that they do not have enough capacity now to independently implement better pasture and livestock management.

Finally, for regulation of all problems on land user rights especially pastureland, the following conclusions are relevant. There is a need to:

- Speed up the preparation and adoption of pasture law; this should provide the principles of sustainable land use rights of all, without exception, and acknowledge the specifics of the rural population and the existing ecological situation.
- Improve the legal awareness and transparency in the allocation land in the future in order to mitigate potential conflict as the process of land privatization occurs.
- Develop technology for pasture restoration and management.
- Develop the mechanism of pasture management through empowerment of the rural community on the use of public pastureland.
- Establish and strengthen the capacity of local public management institutions and community organization, for example, pasture user committees.

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Finally, our hope is that this work will contribute to the process of improving the system of land stewardship and living conditions, opening up more alternatives and opportunities for rural population of Tajikistan.

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