

AGA KHAN RURAL SUPPORT PROGRAMME
BALTIKIAN



HIGH ALTITUDE INTEGRATED NATURAL RESOURCE MANAGEMENT

REPORT NO. 5

**GENDER, RESOURCE MANAGEMENT AND
LIVELIHOOD SECURITY**

**NAZIR AHMAD
INGRID NYBORG
GULCHEEN AQIL**

AKRSP - NLH, DECEMBER 1998

**HIGH ALTITUDE INTEGRATED NATURAL
RESOURCE MANAGEMENT**

REPORT NO. 5

**GENDER, RESOURCE MANAGEMENT AND
LIVELIHOOD SECURITY**

**NAZIR AHMAD
INGRID NYBORG
GULCHEEN AQIL**

AKRSP - NLH, DECEMBER 1998

HIGH ALTITUDE INTEGRATED NATURAL RESOURCE MANAGEMENT: This is report No 5 of seven progress reports presenting the activities and preliminary findings of joint research under an institutional cooperation programme between the Aga Khan Rural Support Programme, Pakistan, and the Agricultural University of Norway. The report addresses the sub-theme, *Gender, resource management and livelihood security*

ADDRESSES:

Aga Khan Rural Support Programme
Regional Programme Office, Baltistan
P.O. Box 610, Satpara Road, Skardu
Northern Areas, PAKISTAN

Telephone: 00 92 575 27 51/28 67
Telefax: 00 92 575 29 42

The Agricultural University of Norway:

Noragric, Centre for International Environment and Development Studies
P. O. Box 5001,
N-1432 As, NORWAY

Telephone: 00 47 64 94 99 50
Telefax: 00 47 64 94 07 60
E-mail: noragric@noragric.nlh.no; poul.wisborg@noragric.nlh.no
Internet: <http://www.nlh.no/Noragric/projects/akrsp/akrsp.html>
Library: Att. Liv Ellingsen, Librarian (liv.ellingsen@noragric.nlh.no)

TEAM MEMBERS

NLH: Ingrid Nyborg
AKRSP: Nazir Ahmad, Gulcheen Aqil

PROJECT REPORTS 1998

Report No. 1: Summary report
Report No. 2: Institutions and organisations in pasture and forestry management
Report No. 3: Pasture, livestock and biodiversity
Report No. 4: Natural forest inventory
Report No. 5: Gender, resource management and livelihood security
Report No. 6: Information and documentation
Report No. 7: Socio-economic survey of Basho (project site)

More copies of the reports may be obtained from AKRSP, Regional Programme Office, Skardu or Noragric's Library.

Preface

The Aga Khan Rural Support Programme (AKRSP) and the Agricultural University of Norway (NLH) have initiated a cooperation programme on alpine resource management. The programme was planned during mutual visits in 1997, and implementation started in March 1998. The programme is funded by the Norwegian Agency for Development Cooperation (NORAD) as an integrated part of Norwegian support to AKRSP's natural resource management programme in Baltistan. In 1998 the main activity was an integrated study of alpine resource management systems (pasture and natural forest) in the Basho watershed of Skardu district. Appendix 2 lists the main components and AKRSP - NLH counterparts.

The program was initiated in the spring of 1998, primarily through joint field research by visiting NLH staff and AKRSP counterparts. This component was originally referred to as Gender in Natural Resource Management, however we have chosen to adjust the title of the report to 'Gender, Resource Management and Livelihood Security' in order to better reflect the actual issues addressed. For this component, Ingrid Nyborg (PhD candidate) from NLH and Gulcheen Aqil (translator/assistant) from NLH/AKRSP lived in Skardu and Basho from 05.04 - 10.09. Nazir Ahmad, Program Manager for Monitoring, Evaluation and Research (MER), was AKRSP's team leader for this component, and in addition to the logistical support he provided, actively took part in the research process through combining his case study work for AKRSP's Training and Learning Program (TLP) with the work under this co-operative program. This report thus represents a synthesis of the contributions by all three authors, both in terms of field work and report writing.

Acknowledgements

During the first year of implementation participants have enjoyed the opportunity of carrying out field research in the Basho watershed of Skardu District. We thank the people of Basho, including their representative, the Basho Development Organisation (BDO), for a warm reception and permission to work in the area. Men and women of the eight villages of the watershed have contributed of their valuable time and knowledge to joint activities, such as participatory learning exercises, field trips, village meetings and interviews. Local people also made their school available for a researcher and her family. The village organisations and the Basho Development Organisation have shown exceptional hospitality and support. It has been agreed that all maps, reports and other documentation shall be made available to the BDO, when appropriate also for display in local schools.

We thank the District Commissioner, Skardu, Haji Sanaullah and other government officials, for their interest in the collaborative programme and for offering useful recommendations and advice, and in some cases active participation in the programme. The practical implementation of the field programme was made a lot easier by the generous offer from the Divisional Forest Officer, Skardu, Mr Sharif, that AKRSP and visiting researchers could use the Forest Department Guest House in Basho.

We thank NORAD and the Royal Norwegian Embassy, Islamabad, for the continued support and for the consistent good-will towards the cooperating institutions, as well as active interest in the challenges and development potential of Baltistan.

AKRSP made excellent arrangements for field research. All Norwegian participants sincerely appreciate the many efforts without which they would not have been able to carry out research in Baltistan.

Support by local people, government institutions and the donor agency will remain a condition for the project to achieve its goals. The partners appreciate with humility the good relations and many contributions they have enjoyed so far. We hope that the linkage programme may continue and grow to the benefit of local people, the co-operating institutions and relevant government authorities.

The authors would like to thank a number of people for their assistance in the implementation of the first year of this study. At AKRSP we thank first Khaleel Tetley, Program Coordinator for this collaborative project. His inputs in planning and coordination, and encouragement of mutual collaboration between AKRSP staff and NLH researchers were central in the implementation of this work. An extra thanks needs to go to the AKRSP staff who worked directly with us in the field, taking care we had everything we needed, and providing us with both professional and social support during a long field season. Thank you Dr. Abbas, Dr. Iqbal, Kulsoom Furman, Jawad Ali, and Wazir Shabir. We would also like to thank the rest of AKRSP staff in Skardu for assisting us when needed, particularly T.S., for facilitating transport and finding vehicles when there was no vehicle to be found...

We could never have gotten started in the village without the invaluable assistance of Wazir Ghulam Hedar, FMU Manager, Skardu. His work in negotiating with the villagers before our arrival and introducing us in such a positive light made our work not only easier, but possible. We would also like to express our thanks to Sheik Ali Hassan, Sultanabad's Mullana living in Skardu, for his critical support and keen interest in helping the people of his village. We would never had survived cultural challenges of Basho without such a positive ally.

Finally, we thank the villagers of Basho. The BDO was active in making our stay both pleasant and productive. We had the closest contact with the villagers of Nazimabad and Sultanabad, and perhaps the closest with our cook, Zahara, who not only helped around the house, but played an important role in introducing us to the village women of Sultanabad. We extend our deepest thanks to Master Hassan, who was our main contact person in Sultanabad and eagerly helped to arrange most of the meetings we had with the men and women of the village. We would also like to thank Haji Dolat Ali and Mirza, the elders of the village, for their warm support, cooperation and interest in our work. And last but not least, the women and men of Sultanabad, who offered their school for our use, and their time when they had none to participate our often lengthy discussions. Shukria.

As/Skardu,

Executive Summary

Gender, Resource Management and Livelihood Security

Experience from development initiatives in the Northern Areas and Chitral of Pakistan has shown great diversity in the roles women and men play in resource management and food or livelihood security. Knowledge of these roles, however, is mainly static and descriptive; there has been little work in studying the dynamic, interactive nature of men's and women's strategies within livelihood security and resource management. It is clear that the relationship between natural resource management systems and food security or livelihood systems is more complex than previously assumed, and not well enough understood in these rugged, remote areas. One key to understanding this linkage may be found in a better understanding of changing social relations, both within and between households, and how these relations, particularly gender, influence and are influenced by the management of resources and the strategies chosen to ensure food security. The broad objective of this study is thus to explore what effect changes in the gendered patterns of access to and control of resources has on food security and the environment in rural Baltistan.

This report represents some preliminary discussions of the issues introduced above based on the first year of fieldwork in Sultanabad in the summer of 1998. The immediate objectives relevant to this report are:

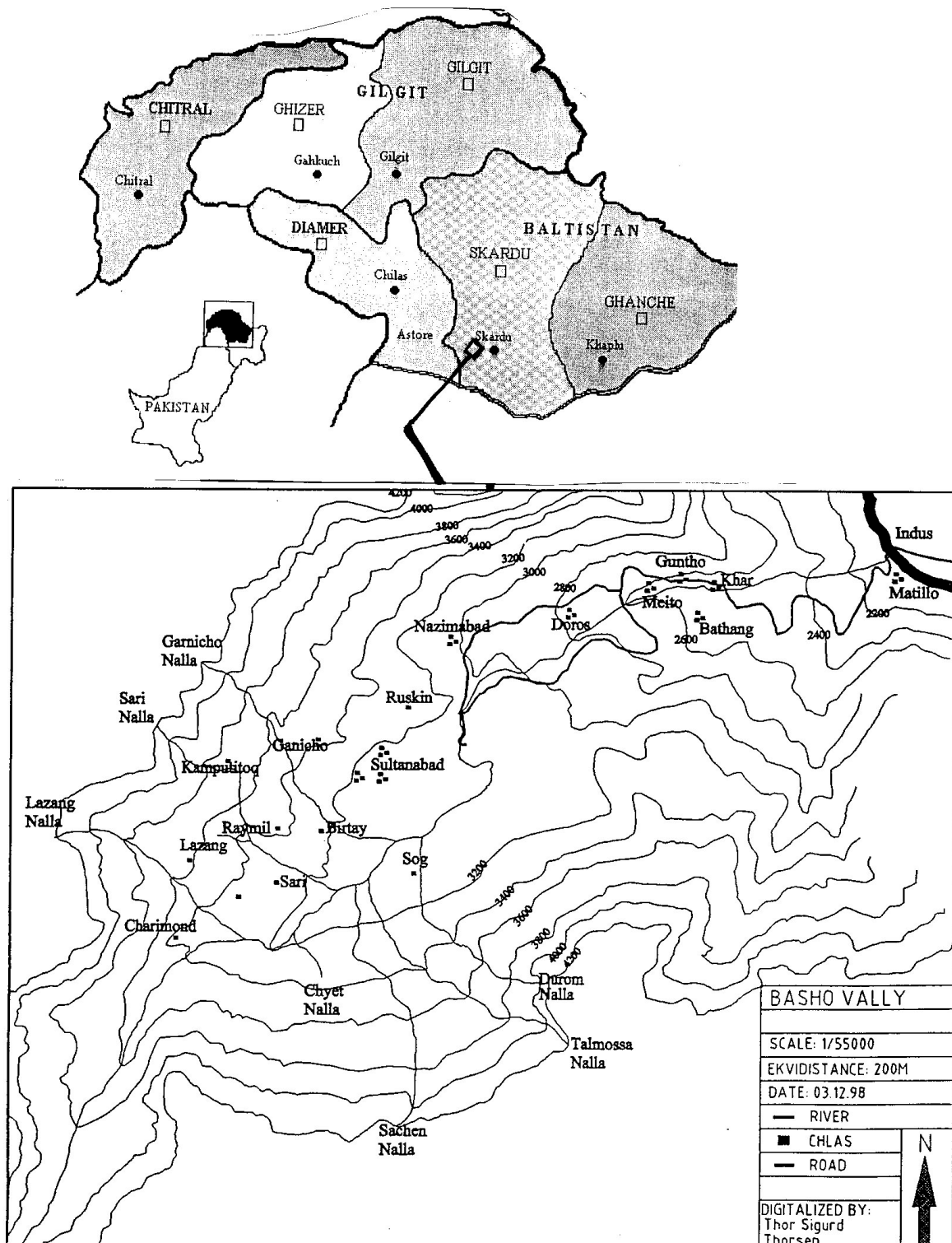
- to describe the social, cultural, production and resource management systems of the village, and changes in these systems in recent history (past 50 years),
- to develop preliminary ideas on the dynamics of livelihoods and resource management in terms of their gendered social and cultural environment.

Some of the specific themes focused on include changes in food and livelihood security, gendered roles and responsibilities in agriculture and resource management, gendered aspects of workload and health, and local perceptions of poverty and well-being.

In general, the well-being of the village (as defined by the villagers) seems to have improved over the last twenty years, but there are clear differences within the village. Not all households are improving, and the opportunities for further improvement are highly gendered. While there seems to be agreement on what constitutes the poor in the village, the concept of well-off or rich is less clear, and seems to be changing as livelihoods shift towards more income-based strategies. Women play central roles in agricultural production in both valley and high pasture areas, and water management in particular, as well as in animal care and firewood collection. Men are partially involved in agriculture, more heavily involved in animal herding, and are increasingly involved in wage labour and outside employment. Perceptions of health in the village are highly gendered, however, both men and women make clear connections between their health and their workload in agriculture and resource management.

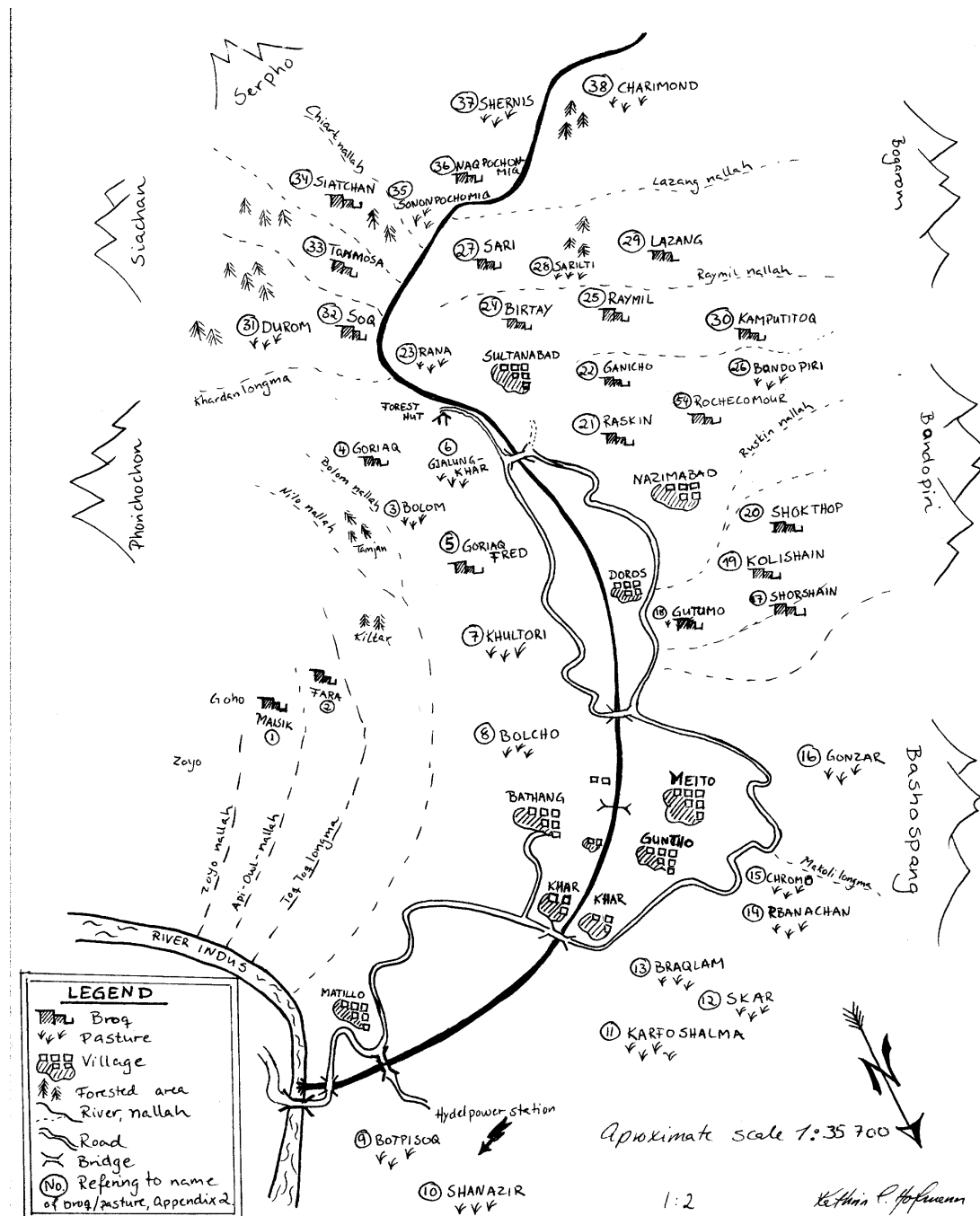
The next phase of the research will involve further analysis of the data collected during the 1998 season, and a re-visit to the field in 1999 for follow-up.

Map of the Basho Watershed and its location within Pakistan



Map of alpine pastures in the Basho Watershed

Based on participatory learning exercise with the BDO members of Basho (Basho Development Organisation), AKRSP- staff (Dr. Abbas) and NLH-team (Kathrin C. Hofmann, Ingrid Nyborg and Åge Nyborg) on 13th of May 1998. This map is a copy of the BDO's presentation of the high pastures of Basho and has no juridical rights. Made by Kathrin C. Hofmann.



Map of alpine pastures in the Basho Watershed

Based on participatory learning exercise with the BDO members of Basho (Basho Development Organisation), AKRSP- staff (Dr. Abbas) and NLH-team (Kathrin C. Hofmann, Ingrid Nyborg and Åge Nyborg) on 13th of May 1998. This map is a copy of the BDO's presentation of the high pastures of Basho and has no juridical rights. Made by Kathrin C. Hofmann.

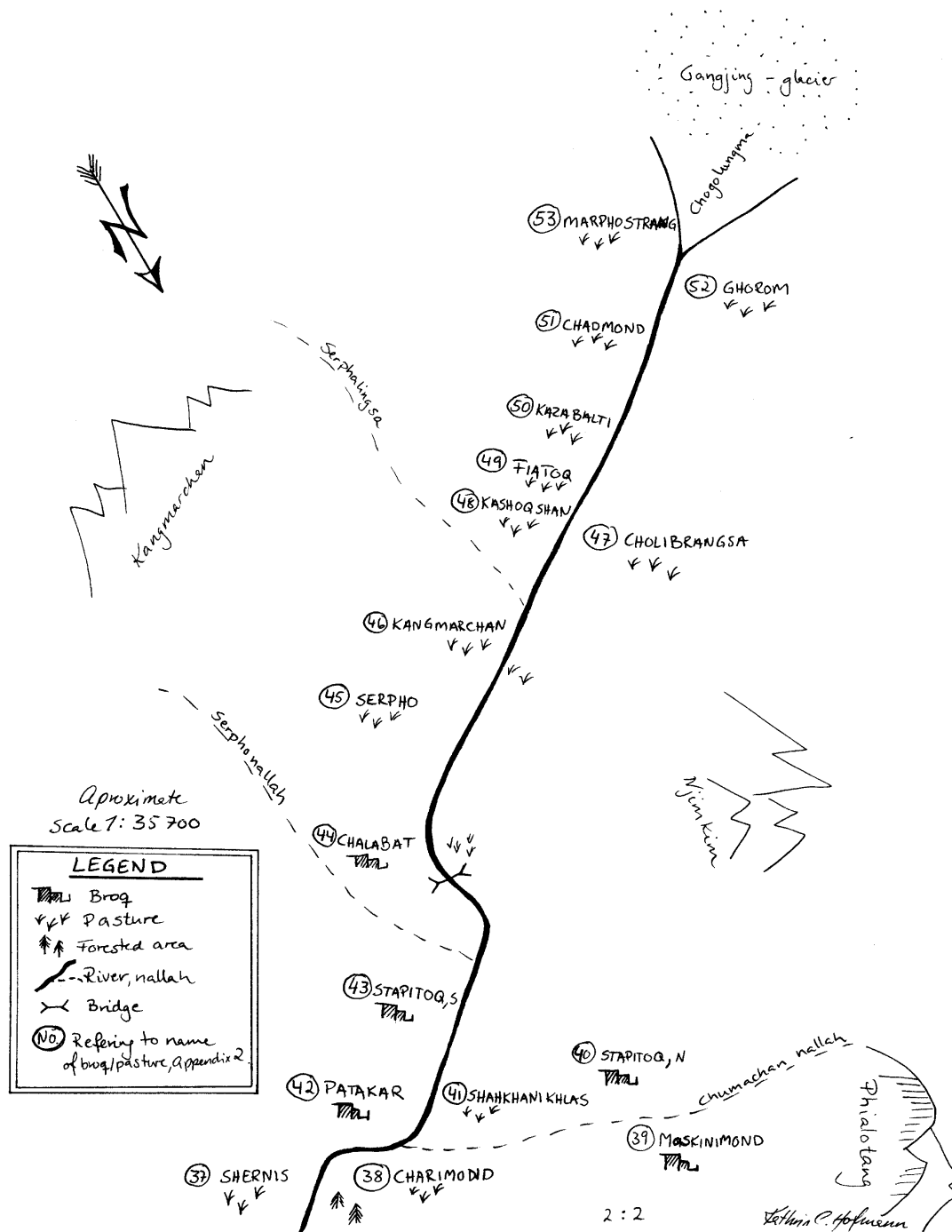


Table of Contents

PREFACE	I
ACKNOWLEDGEMENTS	II
EXECUTIVE SUMMARY	IV
MAP OF THE BASHO WATERSHED AND ITS LOCATION WITHIN PAKISTAN	V
MAP OF ALPINE PASTURES IN THE BASHO WATERSHED	VI
TABLE OF CONTENTS	VIII
1. INTRODUCTION	1
1.1 AKRSP - NLH COOPERATION	1
1.2 BACKGROUND	1
1.3 STUDY OBJECTIVE.....	2
1.4 FOCUS OF THIS REPORT.....	3
2. ANALYTICAL APPROACH	4
3. METHODOLOGY	5
3.1 STUDY AREA	5
3.1.1 <i>Selection of study area</i>	5
3.2 METHODS.....	5
4. THE SETTING	7
4.1 BRIEF DESCRIPTION OF LOCATION, CLIMATE, GEOLOGY AND PHYSICAL CHARACTERISTICS OF BASHO VALLEY	7
4.2 HISTORY AND SETTING OF SULTANABAD	8
4.3 NATURAL RESOURCES.....	8
4.4 GOVERNMENT SERVICES AND INFRASTRUCTURE	9
5. HUMAN, SOCIAL AND CULTURAL RESOURCES	10
5.1 HUMAN RESOURCES.....	10
5.2 CULTURAL ASPECTS.....	11
5.3 SOCIAL ASPECTS	12
5.3.1 <i>Social inclusion and exclusion</i>	13
6. GENDERED ASPECTS OF AGRICULTURE AND RESOURCE MANAGEMENT	14
7. GENDERED ASPECTS OF WORKLOAD AND HEALTH	ERROR! BOOKMARK NOT DEFINED.
8. LOCAL PERCEPTIONS OF POVERTY AND WELL BEING	15
9. CHANGES/TRENDS IN LIVELIHOOD SECURITY AND RESOURCE MANAGEMENT	16
9.1 CHANGES IN LIVELIHOODS	16
9.2 CHANGES IN FOOD SECURITY AND WELL BEING	18
10. CONCLUSIONS	21
11. REFERENCES	22
APPENDIX I BALTI TERMS USED IN THIS REPORT	23
APPENDIX II: : OVERVIEW OF PROJECT COMPONENTS AND COUNTERPARTS	24

1. INTRODUCTION

1.1 AKRSP - NLH cooperation

The context of this report is the agreement between AKRSP and NLH to cooperate on a combined programme of competence building and applied research on High Altitude Integrated Natural resource Management (Project document: NLH - AKRSP, 1997). It is stated here that:

The aim of the institutional cooperation programme is to gain further insights into pasture and forest resources and their role in farmers' livelihood systems. Participatory, applied research shall enhance the capacity of AKRSP to work with village organisations and partner institutions for sustainable management of pasture and forestry resources, through providing knowledge which may be used in developing management and conservation strategies, initially at project sites.

The specific objectives relating to AKRSP are:

- to expand the knowledge of the resource systems of Baltistan through a joint research project in order to enhance the capabilities of project staff to respond to the challenges of integrated resource management in high-altitude areas.
- to improve AKRSP documentation and extension systems with respect to forestry and pasture
- to improve AKRSP's links with national and international research institutions

The specific objectives relating to NLH are:

- to strengthen its knowledge-base for development-oriented research in the region and within fields where NLH are already working

- to gain the opportunity for carrying out applied, participatory research together with an implementing NGO and farmer-based organisations
- to provide an opportunity for staff, students and ex-students to gain field level working experience in Baltistan, Pakistan

The main **activities** in the programme will be:

- planning and conducting joint, participatory field research/documentation
- training and capacity building for AKRSP staff, primarily through joint research/documentation
- disseminating and sharing knowledge gained through workshops, training sessions, networking and publications
- exchanging information, references and literature through a library link for improved networking and information management
- technical advice for field-level application of the knowledge generated through research

1.2 Background

Experience from development initiatives in the Northern Areas and Chitral (NAC) of Pakistan¹ has shown great diversity in the roles women and men play in resource management and food or livelihood security. Knowledge of

¹The Northern Areas and Chitral (NAC) of Pakistan form the upper limits of the Indus Basin, at the intersection of the Hindu Kush, Karakoram and Himalayan mountain ranges. It covers an area of ca. 70 000 sq.km can be characterized as a mountain desert. The population is ca 1.2 million, most of which live between 1 200 and 3 000 m, and is comprised of equal numbers of Shia Ithnasheri, Shia Ismaili and Sunni Muslims.

these roles, however, is mainly static and descriptive; there has been little work in studying the dynamic, interactive nature of men's and women's strategies within livelihood security and resource management. Why is this the case, and what does this mean for women and men Baltistan? While initiatives are often gender-based, there is still a preoccupation with the household as the central unit when measuring the impact of change in the area. Is a focus on households as units, however, adequate when analyzing change? Is it more useful, perhaps, to examine how changes in the Northern Areas have affected gender relations, and to what extent are these changes the result of established gender representations? It is clear that the relationship between natural resource management systems and food security or livelihood systems is more complex than previously assumed, and not well enough understood in these rugged, remote areas. Issues of resource management and food security are often treated separately in planning development initiatives, and resource management policy is often formed without an understanding of what its impact will be on the food security situation of the rural population. While some consideration is given to the impact of these policies on men and women respectively, neither concept is seen as constructed with reference to gender. Moreover, without a better understanding of the linkages between the three concepts, policies and development initiatives concerning food security and natural resource management may be in serious conflict. One key to understanding this linkage may be found in a better understanding of changing social relations, both within and between households.

How social relations, and in particular gender, influence and are influenced by the management of resources and the strategies chosen to ensure food security is not well understood in this area. Are those who rely on certain resources for food security able to maintain or increase their influence over these resources over time and in the face of development interventions? There is no clear picture of how project activities affect gender relations, and, ultimately, their influence on resource management and food security. Also, how does gender intersect with class and culture? What role do local institutions and new organizations play in determining access to resources? How do men's and women's access to resources change over time, and why? Addressing these questions will contribute to the knowledge base for integrating concerns in natural resource management and social change.

1.3 Study Objective

The study objective presented here is a broad objective pertaining to the entire component of Gender, Environment and Livelihood Security. The more limited focus of this report is presented in the next section.

The objective of the broader study is to explore what effect changes in the gendered patterns of access to and control of resources has on food security and the environment in rural Northern Pakistan. It will explore the nature of these gendered social relations, and how they are changing in the face of the development of, for example, new local institutions and new economic opportunities in the area. It will

focus on these issues as they relate to agro-pastoral systems of production, where people are involved in both production on cultivated land and management of common property resources.

In light of the above, relevant research questions would include:

- How do men and women define household food security in agro-pastoral systems? How do they define poverty? Are there gender-specific perceptions of poverty, food security and responses (coping strategies) to food insecurity?
- Through what mechanisms do men and women gain access to and/or control over resources? How and through what channels does negotiation take place? How do they differ according to, for example, age, class, caste, status, type of resource? How do these mechanisms change over time, and what remains the same? How do changes in institutional norms affect men's and women's ability to lay claim over resources?
- Do changes in food security affect the mechanisms determining resource access and control (or system of redistribution)? In what ways? Are these changes gendered?
- Does changing resource quality affect men's and women's access to and control over resources? How and through what mechanisms? How do men and women view the quality of their resource base over

time? What factors do men and women feel lead to changes in the environment? How do men and women respond to changes in resource quality? Are decisions concerning changes in management practices gendered?

- Do changes in access and control over resources affect household food security? Through what processes? Do different patterns of redistribution emerge?

1.4 *Focus of this report*

The focus of this report is a description of some of the elements and issues necessary in order to address the broader objective of the previous section. This is mainly due to the fact that the first season of fieldwork has only just been completed, and a full analysis of the information has not yet been conducted. The section on findings is, thus, only a very preliminary presentation of some of the issues looked at this season, which will then be followed up in 1999.

With this in mind, the immediate objectives relevant to this report are:

- to describe the social, cultural, production and resource management systems of the village, and changes in these systems in recent history (past 50 years),
- to develop preliminary ideas on the dynamics of livelihoods and resource management in terms of their gendered social and cultural environment.

2. ANALYTICAL APPROACH

Due to the problem-oriented nature of the research question, the study is interdisciplinary in approach, combining concepts from discourses within the areas of gender, food security/livelihood security, and environment/resource management. This involves searching the literature on these topics from several disciplines in order to find concepts and tools which best can help to address the research questions. Gender aspects will be analyzed with a focus on process and power relations, as addressed, for example, in Moore (1994) as systems of redistribution. Moore's concentration on the mechanisms of redistribution, which involve bargaining and negotiating over the terms of redistribution of resources, opens for an analysis of changes in rights and needs, which will be a useful approach in looking at changes in individual rights as new institutional norms are evolving. This approach will also offer a way to break out of the conventional focus on 'household' and allow for a gendered analysis at both different levels and between levels of society.

Food security aspects are addressed through a framework which is based on people's access to food rather on merely the production of agricultural food crops. Davies (1996) has, for example, used a framework where food security is seen within the broader concept of livelihood security, and includes not only issues at the household level, but at the community and global level as well. Within this framework, we focus both on the individual and household levels, as well as on community level and the role of what has been

called the 'moral economy' (Swift 1989), or the networks within which people to different degrees are able to call on claims to cope with food insecurity. This will allow for analysis of the gendered power dimensions of food security and livelihood security issues. Particular emphasis is given to gender implications of changes in livelihood strategies over time.

Environment/resource management aspects will be addressed within an institutional framework, where institutions are defined as 'regular patterns of behavior between individuals, and groups in society' (Mearns 1994:103). An institutional focus, where institutions are permeable and can encompass concepts of marriage, networks, and other groupings, also allows for the analysis of gendered power relations, both within and between institutions. This approach is commensurable with Moore's (1994) approach, which allows for the study of flows of resources within networks.

These three approaches are not mutually exclusive, but inform each other such that they together will contribute to a more cohesive and enriched understanding of how changes in food security and environment are embedded in gendered social relations of power. They are relevant at different levels of analysis, and are themselves derived from a variety of disciplines².

² Moore's approach is rooted in an anthropological tradition, while both the food security and institutional frameworks are derived from a combination of anthropological, sociological, economic, political science views.

3. METHODOLOGY

3.1 Study area

3.1.1 Selection of study area

As a part of the NRM programme of AKRSP-Baltistan, the cooperation project focuses on Baltistan, the eastern-most region of the Northern Areas, covering the districts of Ghanche (District centre: Khaplu) and Skardu (District centre: Skardu Town). During the NLH-AKRSP Field Planning Workshop in Baltistan in September 1997, the Basho watershed was suggested by AKRSP as the site for a joint case study. After visiting both Hoshe (Ghanche District) and Basho (Skardu District), Basho was chosen as the main study area in 1998. Some of the criteria were:

- The presence and importance of alpine resources, including natural forest assumed to be among the largest patches left in Baltistan
- Local people's active interest in the alpine commons, partly expressed through the recent formation of a cluster organisation (the BDO)
- Accessibility (less than two hours driving distance from Skardu)

Basho was selected, therefore, as an interesting and illustrative case for both AKRSP and NLH, given the interest in the high alpine zone. Alpine natural resource management in Basho is probably similar to that of many other watersheds in Northern Areas or Baltistan, but in a strict scientific sense it was not selected to be representative of a certain larger area.

Within the study area chosen by the program,

this study chose one village, Sultanabad, in which to conduct a case study. People in Basho live in eight different villages distributed along the Khar *lungma*: (from top to bottom) Sultanabad, Nazimabad, Doros, Meito, Ghuntho, Khar, Bathang and Matillo (ref. map on page vii). The total number of households in Basho is estimated at 297 and approximate number of inhabitants at 2,400, based on an average household size of eight (Socio-economic survey by Aurang Zeb Zia, AKRSP, 1998). The majority of people are Balti speakers, while a minority are Shina speakers (immigrants from the Astore Valley or Gilgit). Shina-speakers are also termed Broqpa (mountain people, sometimes used derogatorily) and make up the majority of inhabitants in Sultanabad.

Sultanabad was chosen for this case study for several reasons. Being at the top of the valley, it is the closest village to the greatest area of natural forest in Basho, and to the higher pastures, both of which are the focus of the broader study. Also, being in a single-cropping area with limited agricultural potential and a high dependence on animals in the system, Sultanabad represents the system which AKRSP has had the least experience in working with, and thus a relatively greater need to explore, both in terms of production and social systems.

3.2 Methods

As background for the field study, a comprehensive literature review of existing studies of gender, household food security and resource management and social dynamics has

been conducted. This review included literature on theory, as well as case studies from both Africa and South Asia, and particularly the NAC of Pakistan

The fieldwork is being conducted using a case study approach³ in order to get a detailed understanding of networks and systems within the community. This does not mean, however, that the investigation excludes information of other villages. Emphasis is on Sultanabad's social, political and resource management links with other villages, rather than directly on the other villages in Basho. Primary data from Sultanabad has been collected.

Due to the emphasis the research gives to understanding gendered relations of power and local perceptions, beliefs, knowledge and attitudes concerning food security and resource management issues, qualitative methods have been used⁴. Participatory Rural Appraisal (PRA) has been chosen as the qualitative methodology.. PRA, as applied within a constructivist paradigm of inquiry, encourages a dialogic, iterative process of investigation. Quality of the data is controlled through a process of triangulation, both in terms of methods and sources of information (Robson 1993; Janesick 1994; Guba and Lincoln 1994; Pretty 1995). Within this methodology, emphasis is on the following methods:

- participant observation
- in-depth interviews with key informants

³ Field work was conducted over a 5 1/2 month period from 1.4.98 - 15.9.98.

⁴ Keeping in mind that qualitative methods can generate quantitative data as well.

- detailed semi-structured and open-ended group and individual interviews
- surveys using both unstructured and structured questionnaires
- transect walk

Within the framework of the above, the following participatory diagramming techniques have been used⁵:

- historical mapping and personal historical profiles for gathering information on trends over time
- wealth ranking for identifying the food secure and insecure
- social mapping for identifying intra-household networks
- resource mapping, flow/causal diagrams and livelihood analysis to understand possible seasonal variations in food security indicators.
- village mapping

Key informants have included village women and men, teachers, development workers and local government officials, village elders, members of the village organization, members of the Basho Development Organization, midwives, local religious leaders, as well as other resource persons identified by the village as having particular knowledge of the topics under investigation. All but one of the households was interviewed. Groups and individuals have been chosen to represent

⁵ The PRA literature offers a multitude of additional techniques which may be relevant for this study. Part of the process of PRA inquiry is, however, being flexible enough in the field to explore different techniques as one learns more about the community. More specific choices of techniques are thus being made in the field.

various stratification's in the community, e.g. men, women, young, old, well-off, poor, ethnic, food secure, food insecure (locally defined) as well as other categories as defined by the population.

The qualitative data from the fieldwork will be analyzed in several stages. First, the matrices, charts, graphs, diagrams and descriptions developed in the field to summarize and display the data will be analyzed in the field together with the local population (progressive, participatory analysis). The information from the field will be further analyzed at Noragric and AKRSP, where quantifiable data will be coded and analyzed using descriptive statistics and multivariate analysis if relevant. Non-quantifiable data will be coded and categorized using an appropriate data management program⁶. Results will be summarized in the form of matrices, flow charts, and diagrams, developed both in the field and afterwards (Robson 1993; Miles and Huberman 1994).

In addition to the collection of primary data, secondary data is and will continue to be consulted. There has also been a formal socio-economic survey conducted in Basho Valley by the program, which will be consulted as well. AKRSP has been working in the area since 1982, and has an extensive database on all aspects of their rural development activities. This includes both household surveys and project monitoring data.

4. THE SETTING

4.1 *Brief description of location, climate, geology and physical characteristics of Basho Valley*

The Basho watershed (75°15' E, 35°25' N) on the Khar Nullah is located approx. 45 km west of Skardu, and ascends from the southern side of river Indus at an altitude of approx. 2,150 m elevation. to the Banak La mountain at 5,520 m elevation. The uppermost village of Sultanabad is situated at approx. 3,200 m elevation. The total area of the watershed is approx. 120 km².

Situated in the western-most arm of the Himalayan range, Basho is found within a semi-arid and rugged mountain landscape "mountain desert". It falls within the "rain shadow" of the Himalayas, and average rainfall in the valley bottoms is estimated to be between 100 and 200 mm, but rising with elevation to create a moist environment at the extensive, high-altitude rangelands. Because of the altitude, the area has a marked seasonal climate comparable to that of the temperate zone. The mean maximum temperature during summer revolves between +30 - 35o C, while the mercury will drop to -15o C in winter. Basho is part of a living, dynamic and developing landscape. The mountains are geologically young. Features of the landscape are the giant erosion walls in the deep, light-grey loess deposits (50 meters or more) and deep gulches and huge glaci-fluvial gravel fans. Signs of frequent and severe avalanches, landslides, fallen rocks and soil erosion are common. Past and on-going channel

⁶ In this case, ATLASi.

construction and cultivation projects are changing the mountain sides and cultivated lands. Channels bringing snow melt from the glaciers to the fields are the blood veins of agriculture in Basha. Channels create a distinct line between the deserted grey colours above and the fresh greenness of afforestation sites (dominated by alfalfa and poplar) and cultivated fields beneath. For a more detailed description of vegetation and wildlife see Report No. 3, Pasture, livestock and biodiversity.

4.2 History and Setting of Sultanabad

Village Sultanabad is the last village in Basha valley. Its distance from Skardu is approximately 70 Km, and 30 Km from Gilgit-Skardu road. A narrow and bumpy road goes to Sultanabad, which was constructed by the government Forest Department. The road was not constructed to facilitate the people of the area but to bring timber wood from the natural forest existing in Sultanabad.

The old name of Sultanabad village was *Thourmik* meaning the "hole underneath". According to a few aged people of the village, this name had been changed when Sheikh Ghulam Mohammad (the famous religious leader of Baltistan) made a visit to the village. During his visit he suggested that the name should be changed because the old name was little bit silly. Therefore, the villagers gave the name Sultanabad; Sultan Ali was a famous person of the village who used to help all villagers.

Most of the people from this village came from different regions within the Northern Areas such as Astore, Chilas etc. The whole population in this village speaks Shina. However, due to extended interactions with the down valley people who are Balti speakers, now they also can speak Balti. They usually speak Shina at home, while outside the home they talk in Shina, Balti and Urdu.

According to the elders, the existing settlement area was a lake and the actual village was situated up on the mountain, Rashkin, which is now a cultivable pasture area (Youl Broq). When water in the lake drained, then the people started to settle in the existing village area; keeping in view the closeness to other neighboring villages. This increased their social interaction with other down valley villagers.

The village has three different sub-villages (mohallas); Chokot, Skillgrong, and Choghgrong. The village has a total of 29 households, Chokot has 15 households, Skillgrong has 9 households and Choghgrong has 5 households. There is one Imambargah and two mosques in the village.

4.3 Natural Resources

Sultanabad is rich in natural resources. Villagers have an average of 13 kanals cultivable and 10 kanals uncultivable (grass area) land, which is higher than the region's average land holding. The distribution, however, is varied, with the smallest land holding at 1 kanal and the largest at 82 kanals. Some of this cultivated land is located in the

village area, while some is located in the three lower pasture areas (*broqs*) used by the village: Rashkin, Sari and Bitei. The average number of animals per household is 12 (which includes sheep, goat, cow, dzo, dzomo etc.). Due to high altitude no fruit trees are found in the village.

The Basho Valley has one of the two largest natural forest areas of the region. In the recent past most of the people of Sultanabad used to earn their income from this forest by selling fuel and timber wood in the Skardu market. However, heavy extraction of resources by government and non-valley (as well as valley) contractors has reduced the forest resources considerably⁷.

One of the resources of the village is the large quantity of glacier water. This water is used for irrigation in village and hydro-electricity down the valley. The irrigation system is a centuries old system which leads snow melt through the lower, cultivated *broqs* down to the village level fields. There are also several springs in the valley, which provide water for drinking throughout the year, as well as for limited irrigation before and after the big snow-melt months of June and July.⁸

4.4 Government Services and Infrastructure

A steep, narrow and bumpy road connects this village to the Gilgit-Skardu road, however the

road stops about 300 meters short of the village. This road gives villagers relatively quick access to the market from where they purchase the necessities of life, as well as access to an expanded labor market. There is one privately-owned vehicle in each of the villages of Basho which makes daily trips to Skardu.

The education facilities in the village are minimal. Only one SAP primary school for boys is functioning in an Islamic Madrasa, built by the Marafi Foundation (private development organization from Kuwait). The school is shared with Nazimabad, but with only 12 students are from this village. The standard of education is very low; the teacher, who is from the village, has affiliations with political parties and therefore some households do not want to send their children to this school. Some of the households who have more land, keep their children in the house to do work in the field and graze animals. However, some of them are willing to educate their children up to high level classes. The ratio of educated to uneducated people is increasing but not encouragingly so. In the near past there was not a single person who could read or write except a few people who could read the Holy Quran. .At the moment there is one graduate, one intermediate, one middle and two primary pass men while none of the women in the village are educated.

Regarding health there is no facility at all in Sultanabad, either from the government or from any NGO. The closest facility is a government first aid station at Khar, a one hour walk from Sultanabad, and a doctor at Matillo,

⁷ For a discussion of the current status of the upper forest area of Basho, please refer to report No 5, *Natural forest inventory*

⁸ For a more detailed description of land use please refer to report no. 2 on *Institutions and Organisations in pasture and forestry management*

the village at the bottom of the valley and a two hour walk from Sultanabad. Although clean drinking water is available from springs in the valley, the water is not piped to the village. This is a heavy job for the village women and children, particularly in the winter months.

A mini hydroelectric power facility in Basho made electricity available in Sultanabad from 1992. Each household is connected to the net, with a government employee reading the meters once a month. The capacity of this net is limited however, with only the minimum available for household use (lighting and ironing, foreexample, but not for electirical heating). Nevertheless, the village has 24 hours electricity during summer, which is much more than is available in Skardu city.

5. HUMAN, SOCIAL AND CULTURAL RESOURCES

5.1 *Human Resources*

This resource includes family members, educational status, health standard, skills, indigenous capacity, confidence and emotional security, aspirations and imaginations. In most ways, one can say that human capital in Sultanabad is limited. As mentioned above, education levels are extremely low, particularly for girls and women, and health facilities are non-existent.

The village is also poor in terms of skilled persons. There is only one active skilled carpenter, three persons who know masonry work, one driver, two shopkeepers and two professional cooks. While AKRSP has

contributed to the training of the VO president and manager, and a livestock specialist, the livestock specialist is not active, and people usually treat their animals using indigenous knowledge. Most people are involved in subsistence farming.

While more formal measures of human resources appear to be poor, the family as a resource is something that needs closer examination. The household is one of the basic units of the community, and much of community life revolves around the household, such as inclusion in the Imambargah, access to common property, division of collective benefits of the village etc. Often one defines a household as a family who is using a common kitchen. In Sultanabad, however, the criteria for a household is a family that pays the social dues or collections at the Imambargah, or that attends collective works such as for the irrigation channels and loress/baress. It is the village elders which ultimately decide what is household and who is not. When a person or family is declared as a household they have to pay all social dues. In return this family or person gets all the benefits from the village such as new lands if they are dividing it among households or other collective benefits for the village.

Within the household there are male and female heads who deal with all household matters, make decisions within and out of the household. The heads are responsible for feeding the whole family living with him or her. The female head is usually the eldest woman of the household (either the mother or eldest daughter in law), however there are

exceptions. She has control over the household resources such as food, fruit and other expenses in the household, as well as decisions concerning production. Although elders command a lot of respect in Balti society and usually have the final say in household decisions, the cash earner also has a say in household matters. The cash earner influences the decisions made by the elders. The earner has respect in the household and his/her spouse and children get more attention compared to other the non-cash earner's family members.

The number of households in Sultanabad is 29, and the average number of family members per household is about 7, which is almost the average family size of the region. In the village the male population is slightly higher than female (124 male and 112 female). While the large size of families can be seen as a disadvantage in terms of resources needed to satisfy basic needs, it can also be seen as a resource. For example, a larger family has both more labor for agriculture, and more opportunity to send a family member for either labor work or employment outside the village. The benefits to the household, however, would depend upon both the age and the gender of the children. The family is also a source of support in that it represents a link to the wider network in the village and the valley of relatives – those with few family links might be at a disadvantage in terms of support in times of crisis. These issues will be examined more closely as the field data is more thoroughly analyzed.

There have been changes over the past 20 years in the form of households in Sultanabad..

While 20 years ago most of the families were joint families, the majority of the families today are nuclear. From one survey carried out in the village, out of 29 households only 8 are joint households. They expressed that in the past joint households were more beneficial than nuclear households because of the advantages of pooling resources and for the security of the family. But due to access to new income sources such as labor and services, and the army, the younger generation prefers to live in nuclear families.. In the past, people were dependent on only their natural resources to survive, and to avoid land fragmentation they lived together. Now land alone is not enough to feed most families – they have to earn off-farm income. Therefore, they prefer to live in small families which are easier to provide for.

5.2 Cultural Aspects

According to historical accounts, the original people of Sultanabad were probably settled at the top of Basho valley as a result of the military campaigns of Ali Sher Khan Anchan. In the early 1600s, this ruler brought to Baltistan Shina-speaking prisoners from Gilgit, Chilas and Astore and settled them at the top of all of the valleys with access to the Deosai plains, where attacks might be expected. The Shina-speakers were thus posted as watchmen to guard the valleys from their own relatives (Dani, 1991). Sultanabad is still a Shina-speaking village, but long interaction with down-valley Balti villages has led to a Balti dialect of Shina, and adoption of Balti traditions and religion. While they use Shina amongst themselves, nearly everyone in the

village can speak Balti fluently, and most of the men and some of the women can also speak Urdu.

Due to their different cultural background, the people of Sultanabad have been at a disadvantage in relation to the Balti population of the valley. They have been, and often still are, referred to as *Broqpa* (people of high places) by the Baltis, which is a derogatory term used for Shina speakers. The people of Sultanabad tell of a certain degree of discrimination when resources from, for example the government, have been distributed. This might be one reason behind the lack of services in the village, and the fact that the road stops several hundred meters short of the Sultanabad.

Like many other villages in Baltistan, Sultanabad is a single religious sect village. All villagers belong to the Shia Isnaashri sect of Islam. They celebrate all religious ceremonies such as *Moharam*, *Eid* festivals and *Norooz* etc. The participation in religious functions is equal among all villagers; however, some people are actively participating in terms of arrangement of the functions. There hold several collections for these functions that all the villagers have to pay except the very poor families who cannot afford to. In Sultanabad only two families are exempted from these social and religious dues. The local culture is absorbing the elements of outside culture such as consumption patterns, design of houses, clothing style etc.

Purdah, or the social separation of men and women, is only partly evident in Sultanabad.

Because of the small size of the village and the extent to which almost all of the village members are related somehow to each other, women and men from within Sultanabad can relatively freely interact. Most women are outspoken, and not overly shy when it comes to talking with strange men who accompany an 'insider'. There are no boundary walls between households, or areas which are reserved only for women. Women thus keep their heads covered at all times, within the house as well as outside. Women outsiders have no problem speaking with the men from Sultanabad, and often an interview conducted outside would attract spectators of both genders, making the public gathering a mixed gender affair. It was not possible, however, to organize a formal mixed gender affair.

5.3 *Social Aspects*

The people of Sultanabad belong to different family groups (clans) that migrated from different places of Northern Areas and Kashmir. In Sultanabad there are at least 11 clans, these are:

Name of Clan	Origin
Bundopa	Chilas Boner
Khoripa	local (down valley)
Serikpa	Kashmir
Sukarpa (Shailthangpa)	local
Bothopa	local (only one living woman left)
Chamiypa	local (no only left alive)
Astoripa	Astore
Malapa (Khachi)	Kachura, Kashmir
Gilgiti	Gilgit
Ali Bbiegpa	Bathang
Khorsingpa	local, down valley

The agnatic and afinal ties are strong in the village. Each household has lineal links with their respective clan. They try to maintain these links and consider it as their strength. During the natural disasters, disputes and other social events such as marriages, deaths etc. the family group helps each other. Usually people prefer to connect with their bigger clan when marrying. This is not strictly adhered to, however, and in reality there are many cross-marriages between clans. There are a number of formal and informal institutions and organizations both within and outside the village which work in conjunction with family networks. These institutions are still being explored, although examples include religious organizations i.e. Marafi Foundation and Lajnatul Ahlibait, the local Imambargah, the BDO, IUCN, and government departments such as the forestry department.

5.3.1 *Social inclusion and exclusion*

In mountainous societies the extent of social inclusion and exclusion is thought to be higher than other societies. This might be due to the importance of interdependency and the extreme physical features that do not allow living alone. However, "it is highly variable in meaning, notably because it is largely dependent on the different paradigms or modes of thinking about society. The three most pertinent paradigms in the analysis of social exclusion (and inclusion) would be 'solidarity', 'specialization' and 'monopoly'. These three paradigms are in reality theories of society, and exclusion (or inclusion) has different causes and meanings in each. Each paradigm attributes exclusion to a different cause, and is grounded in a different

political philosophy, republicanism, liberalism and social democracy. Each provides an explanation of multiple forms of social disadvantage - economic, social, political and cultural - and thus encompasses theories of poverty and long-term unemployment, racial-ethnic inequality and citizenship." (Gore and Figueiredo, 1996)

In Baltistan region there are different parameters in different villages, usually the social inclusion (first time in the society) is difficult compared to social exclusion. Many immigrant households have to wait for 50 -60 years to become a usual member of the community. This doesn't mean that they are kept separately - they are included in some social activities such as marriages and death ceremonies etc. Generally they are excluded from the natural resource rights and common properties, such as use of *broq* (pasture), irrigation water, common lands etc. This may be due to insufficient and limited resources in the area because they fear the influx of newcomers would threaten the natural resource endowments of the area.

There are two categories of socially excluded people; firstly, the immigrated (or outsider) status in the village, secondly, as a punishment due to conflict and disobedience to the community. The second type of exclusion mostly happens when a person does not agree with the decisions of elders (Sarmas) of the village. Social exclusion is an extreme punishment, and the last tool that is used to avoid people opposing the community's decisions. The social boycott and exclusion

are done by the community as a whole, not by individuals. Gore and Figueiredo describe that

...the focus of social exclusion in this sense is not persons, but rather the institutions, the rules, formal and informal, which enable and constrain human interaction. Social exclusion is presented as a structural property of a socioeconomic system when: (a) A society is divided segmentally and the various segments of society organize around different rules, processes and institutions that produce different systems of incentives and disincentives to which individuals respond, and, (b) the rules which enable and constrain access and entitlement to goods, services, activities and resources are unjust in the sense that certain categories of people are denied opportunities which are open to other persons who are comparable. (Gore, C & J B Figueiredo, 1996)

In Sultanabad the notion of social exclusion and inclusion is same as other villages of Baltistan. However, while some of the village population fall into the immigrant category (i.e. Astoripa), there is little evidence of social exclusion in terms of limited access to resources. There are at least two possible reasons for this. One is that some of the immigrants marry into the village and thus become a part of the existing population through their husbands or wives. Another reason may be that while the newer immigrants represent outsiders in terms of birthplace, they nonetheless are almost exclusively Shina speakers and are thus welcomed into the community as 'non-Baltis'.

At the moment there is nobody who is socially excluded in Sultanabad. However, in the past one family had been excluded from the village and this was due to unacceptable behavior in dealing with a conflict over land title. When

anybody is declared as socially excluded then the family can not take part in *loress/ baress* system (animal herding by turn taking) - the family has to herd their animals by themselves. This is very laborious work and prevents household members from taking part in labor for income or performing work on their fields. Also, the villagers do not accept Tabaruk (offers of foods after prayer or *majalis*) from the excluded family, and, at the occasion of ceremonies (except deaths) nobody gives them utensils, which one usually shares with each other. This type of exclusion results in a type of mental torture to the family members, and is difficult to endure. A family can be re-included in the community, however, if the elders set some type of condition or fine to be paid. In the case referred to above this entailed paying a fine in the form of a cow to the offended family.

6. GENDERED ASPECTS OF AGRICULTURE AND RESOURCE MANAGEMENT

In any community, women and men have specific roles in agriculture and resource management which are culturally determined, and thus constantly changing according to the changing social, political and economic environment. This is also the case for Sultanabad, where one can see examples of tasks which only women perform, tasks which only men perform, and tasks which both men and women perform. One must be careful, however, not to oversee the dynamics in a society and misinterpret the degree of constancy of these roles - when we observe them, we see how they are performed at this one point in time. It does not mean that that

they will always be performed in that way by that gender as circumstances change. What we thought was an exclusively female task, may sometimes be performed by men under certain circumstances, and visa versa. What is more difficult to capture, therefore, is not the roles of men and women, but the processes by which they are assigned, maintain and change their roles. Thus, as conditions change in agriculture and resource management, so might the gendered roles of men and women, and thus the impact of changes becomes intrinsically gendered.

Without going into a detailed description of land use and the farming systems in Sultanabad, we would like to give a brief overview of the gendered roles in food security and resource management. The processes mentioned above will be more closely examined after the data has been analyzed in more detail.

Taking agriculture as a starting point, both men and women are involved in agriculture at different times and to different degrees. The men carry the manure to the fields and the women spread it. The men plow, and both the men and the women sow. Women weed, but can get help from older men when needed. Women are in charge of watering, both deciding when and how much each family should water, both in the *broq* and in the valley. They can be assisted in this task by young boys. Both men and women cut grass, men carry the grass, although sometimes women do so if they cannot get help from a man. Both men and women do exchange labor, as well as labor for payment for both cash and

kind. Both men and women milk the animals and produce sour milk, cheese and butter. Women are the primary caretakers of animals in the winter stalls, and sick and weak animals all year round. Young boys and girls help both the men and the women in their tasks.

In more resource management activities, both women and men perform *baress*, mostly men perform *loress*, although women can also do so in the lower areas. Both women and men collect firewood, however, women have the major responsibility in the heavy collecting seasons. Men cut timber, and both women and men cut branches for fodder and house/shed construction.

7. LOCAL PERCEPTIONS OF POVERTY AND WELL BEING

In well being ranking exercises done separately by men and women of the village, there was little variation in which families they perceived as poor in the village. Criteria for the poor included limited land, no or low wage income, many small children (and thus limited labor), and physical infirmity. This category comprised 24% of the villagers. There was less agreement, however, on who comprised the well-off category, both within and between groups of men and women. Some villagers think that poverty means to be dependent on others for their livelihood survival - those that are dependent do not have enough resources to feed their family. Due to changes in the income portfolio in the village, however, the concept of poverty has been changing. In the past those were poor who did not have land and livestock, but now money has taken over.

Though land and animals are also important parameters to be rich, ultimately it is the money, which provides every thing from the market - it even gives respect and dignity. "Poverty also meant a loss of respect which was worse than hunger, without respect food won't go into the stomach". (Tony Beck, 1995). But notions of poverty and well-being are not always so straightforward. Other villagers stressed the importance of the will to improve one's situation. It was not enough to have land, animal or monetary resources, one had to be interested in managing the resources properly as well. This was one reason why the family with the largest amount of land was categorized by both the men and the women as poor – he lacked the will to improve. The well-off category comprised between 8-24 % of the households.

8. CHANGES/TRENDS IN LIVELIHOOD SECURITY AND RESOURCE MANAGEMENT

Communities are like a surface of water where a small piece of stone makes the surface uneven - sometimes a small event in the area makes a big change in the community, changing its character in both anticipated and unanticipated ways. This section looks at a few of the changes in the community over the past 50 years to try to identify how they affected the local community. The focus will be on changes in food security, quality of life, livelihood security and resource management.

When discussing change with the villagers, they identified two major events that made a significant change in their lives. One of these

changes was the abolishment of the Raja tax in 1973, the other the completion of the road down the valley. Exactly what the impact of these changes has been, however, is not always straight forward. Thus, instead of trying to develop a simple cause and effect model, we will simply present a bit about what changes have occurred in the village and try to put them in context with these two events, as well as others where relevant.

8.1 Changes in Livelihoods

Every village has its own portfolio, according to accessibility, natural resource endowments, migration patterns, religious sects, household composition, norms, values, rules, regulations, social services such as education and health etc. In Sultanabad, this portfolio has been changing.

According to our information, the villagers have become less dependent on land and forest resources, dependence on animal resources has been relatively stable, and income from labor and services has increased. Migration can also be seen as a livelihood security strategy. Migration can be seen in several ways. 13 people can be said to have migrated from Sultanabad in one way or another; one person settled in Skardu with his family, 3 in Karachi, 5 in Gilgit, one in Rawalpindi, 3 are in Shangrila Skardu, and 8 people are in Army, posted at different places in Northern Areas. If one considers the entire village population (236), migration may not appear significant. However, if one considers that there are a total of 29 households, then almost half have a family member which has moved and is sending money home. All the migrated

persons' families are relatively well off, due to receiving remittances, especially those families who have members in the army.

The village as whole can be said to be improving. Within the village, however, there is differentiation among households. As livelihoods shift so do social relations in the village. For example, the people who were traditionally rich are losing their status due to changes in income sources, such as moving from farming to off farm activities etc. Changing trends in livelihood security can be captured by dividing the households into three categories. One is those who are improving and getting more status, both socially and materially. Second are those who are coping and maintaining their livelihood. The third category is the most miserable and deserving of help - they are losing their status in the community because of declining income levels.

In Sultanabad, many of the households are improving, some are coping and a few households are relatively declining. According to the villagers those who are improving plan for their future and daily life. They do labor work, business and services while the households in the other two categories are static, stuck with the old traditions, not taking risk, and only engaged in farming and not in off-farm jobs. One might also view the strategies as being either economic-based (income oriented), resource-based (land/animal oriented) or social-based (family, religious, institutional oriented). While most households have elements of all of these strategies, their weighting would be different depending on

their human and natural endowments and capabilities.

(I) Improving

There is a saying that "human beings can never be satisfied" they always try to be better and want a more conformable life. The village as a whole is improving, partially due to it being linked-up with the market through the Basha road and opening-up of the area due to the construction of the KKH and Gilgit-Skardu roads. These roads have brought a lot of opportunities to get cash income in the area through wage labor, access to market (selling their products) and exposure (travelling to other areas). One of the important things which has helped to improve the economy is mobility, which creates links with other villagers and has developed their social capital.

Most of the people who are improving their living standards in Sultanabad s are involved in off-farm activities such as labor in construction sector, services in government and private departments, and businesses. They generally have enough labor power to engage in both on and off-farm activities, they work hard and easily adopt new ideas and things such as doing off-farm work, using new techniques in farm activities, starting new business and taking risks. Most of the people said that in the past they used to pay state taxes such as Maliya, Kharzan and Reas,. but now they are free from all these taxes. Many people improved their living standard when the village linked-up with Skardu market and started selling wood from the natural forest - they were involved in this wood marketing directly or indirectly working as laborers and transporters.

In Sultanabad, mostly the larger clans are improving. The two largest clans are Bondopa and Astori. Bondopa has 10 households and Astoris are 8 households in the village. In the Bondopa family out of 10, six are improving, 3 are coping and one family is declining. In the Astori clan out of eight families, 5 are improving and only 3 are coping while none of the family is on a declining stage.

(II) Coping

Most of the people of the village fall in this category. However, there are some contradictory statements from the villagers regarding overall improvement. They argue that their income level has increased as compared to the past but due to high expenses for household consumption and inflation in the market, they hardly meet their household expenses.

This category includes large families, with minimal land and partially doing labor work. They keep some animals for their own use and as well as for sale during the disaster times. Basically they are doing more work now for the survival of their family and therefore can not save.

(III) Declining

As mentioned earlier, the inflation and changes in income sources has caused the decline of many well-off families. 40 years ago the land and animals were the main sources of income, but now only these sources are not sufficient for survival of the families. The trend of individualization also pushes people who are dependent on land, towards decline. They are not getting support in farming such as sharing

labor, as the labor group prefers to do work as daily labor for cash income.

8.2 *Changes in Food Security and Well Being*

Change in the local community was discussed in many fora, and due to its complexity it is difficult to fully comprehend it causes and implications at such an early point in the research. We do, however, feel it is useful to try to present some of the aspects of change which we are currently examining.

One of the approaches to the question of change has been to ask the villagers what events over the last 20-50 years have made the most impact on their way of life. Two events stand out as significant - one is the construction of the road in the valley (forest road /local road), and the other is the abolishment of the Raja tax. The impacts of these changes, however, are not straight forward - they act together, as well as in conjunction with other processes of change within and outside the village. We are interested in looking particularly at the social and environmental consequences of change - how does change affect different members of the community i.e. women, men, young, old, rich and poor? How does change affect resource management?

We can begin by looking at the changes which the villagers associated with the abolishment of the Raja tax in 1973. Until this time, the village community was organized such that a few families had large holdings of land and animals, while the majority had limited land and animals. The few families of power would

collect produce from the poorer families, sell it in the market for cash, and then pay the Raja in money rather than kind⁹. This left little for own consumption, both in terms of food and clothing. Since the abolishment of the tax, however, farmers could both keep more of their production for themselves, or sell it for a better price in the market (although selling was, and is, not so usual). Overall the food consumption pattern has changed. Now most villagers are getting sufficient and more varied food. In the past they used to eat dried apricots, chari (dried turnip), tsonma (turnip greens), barley, milk products and a few vegetables. Today they are in addition using wheat, rice, a lot of tea, sugar, and cooking oil - much of which is purchased from the market. They have more clothing, as well as consumer goods i.e. cassette players, watches and rubber shoes.

The effects of change, however, have not been the same for all members of the community. While the majority of families became better-off, the richer families seem to have lost their position in relation to the Raja, resulting in less severe socio-economic differentiation with the village. There are still, however, families which can be classified as poor in the village (see discussion above on well-being ranking). Nevertheless, it was contended that the poor today are not as poor as the poor in the past - they are in fact richer than those who were

⁹ This system was a bit different than lower down in the valley, where farmers would pay their taxes in local produce. It was said that this was the result of an agreement between the villagers and the Raja. Due to the poor quality of produce from Sultanabad,

previously well-off in that they have more consumer goods. This viewpoint, however, was given by a fairly well-off individual, and it is not certain that the poorer families would agree with his perspective and thus this point needs to be further investigated.

Next we consider the impact of the building of the road (s) in Sultanabad. The roads were built in at least two stages - the forestry road on the east side of the valley in 1968, and the upper road on the west side of the valley in the late 1970s - 90s. The building of the road(s) have several sides. One side was the opening-up of easier access to markets via Skardu and Gilgit. In the past the villagers had limited access to the market. They produced almost everything from their own resources - however, they did exchange animals and wood (both firewood and timber) to down valley for some food items such as apricot. Nowadays they purchase almost everything from the market like flour (after they use their own produce), sugar, oil, rice, clothes and other household items. The villagers supply animals to the Skardu market; many wholesalers purchase animals from Basho and especially from this village. In a discussion like this, however, it is important not to overestimate the impact of the road in opening up the village to trade. Baltistan, and particularly Skardu, had markets and trade for centuries before the opening of the Karakoram highway and the jeep road between Gilgit and Skardu. Sultanabad, for example, has overland (and trans-glacial) routes both to Astore and Deosai plains. More investigation of how trade has changed in

the Raja preferred to get cash.

character in more modern times is necessary to avoid falling into the trap assuming no trade occurred before the road.

Another impact of the road was the increased access to labor income. In building the road, contractors used local villagers as labor, giving them access to cash income at the same time as they had access to consumer items in the market. It also opened up the labor market of Skardu and beyond, and family members could leave the valley for certain periods of time for employment and send back their earnings to the village.

In terms of resource management, the opening of the forestry road has had what appears to be a devastating effect on the natural forest of Basho. Fuel wood and timber, previously limited to in-valley use, was for a 30 year period removed from the valley in large amounts by the government, army, and local contractors for heating and building purposes. The villagers from Sultanabad both profited and lost from this experience. In the short run, those who were employed by the forest contractors gained in term of cash income. In the long-run, however, the restrictions enforced by the government limited their legal rights to the timber and fire wood, particularly their rights to sell wood in the lower valley and Skardu. The depleted forest also meant that the women of Sultanabad had to shift from wood collection above Ranga to wood collection farther away, i.e. Sheri Mon. Since it is primarily the women who collect firewood, this had a significant impact on the use of their time.

Finally, another aspect of the road is the way it facilitated more frequent visits to the city, primarily Skardu, by the men of the village. During these visits, either to the market or to do wage labor, the men were exposed to cultural differences. One example of this is the cultural norms associated with the movement of women within and outside the home. Villagers from Sultanabad were confronted with a culture which was more restrictive in women's movements outside the home, and this was said to have had consequences for women's movements in Sultanabad. For example, it has been said that it was the women who in the past were responsible for herding the sheep in the high pasture, and bringing them down to the khlas for the night. This practice was changed, however, after seeing the norms of women's movements in Skardu, and young men and boys were sent up with the sheep instead. Whether this was the only reason for the change in resource management practice is unlikely, however it is likely that increased contact with the more culturally conservative Skardu did influence local culture. Again, referring to the discussion of trade above, Sultanabad was not necessarily in cultural isolation before the road. What might be more significant in this case was whether changes in attitudes towards gender roles coincided with the road-building at all. If so, did the building of the road coincide with the return of conservative religious leaders to the region, making the effect of the road only one factor in the process?

There are many other changes in the community which we thus far have not pieced

together. For example, farmers say that the benefits from land are decreasing and the land is not producing as much as it used to in the past. This is due to loosing fertility of the soil and lack of interest in farming (because of involvement in off-farm activities). In the past the farmers used to get 40 kg grain for 1 kg seed, but now they get only 20 kg for a kilo of seed. The size of land holding is also decreasing due to separation of families, which is cause of land fragmentation. While the number of animals per household is decreasing, it is not clear at this point whether the total number of animals has changed over time.

What is perhaps just as interesting when dealing with changes, is dealing with what does not change in the community. Why do some things change and some remain the same? Which gendered roles do not change, and which institutions continue to function despite other changes in the community? One example of something which has not changed over time is, for example, the *loress/baress* systems of turn-taking herding. This system has been around for hundreds of years and with the increasing demand for wage labor it seems to be a system which will continue, since only the fewest have the labor capacity to herd their own animals on a full-time basis. The dominant role of women in agriculture persists, as does their role in fuel wood collection, while their role in sheep/goat grazing has changed. The role of the valley elders in resolving conflict has persisted, despite the more cosmetic change in their name (BDO).

What might change in the future? Will women still have control over water management when

the new channel is put into use in 1999? Will wage labor and other employment opportunities decrease people's dependence on animals? Forest? There are plenty of issues to address over the next few years of the study, many of which will be followed up in next year's fieldwork.

9. CONCLUSIONS

Many people of Sultanabad are not satisfied with their existing livelihood system. In the past, they were dependent on the local economy, growing their own food through agriculture and livestock. Now their livelihood survival pattern has been changed due to market influence and as well as availability of labor work in the area. Although several events in the 70s and 80s led to an increase in their living standard, they are now more dependent on resources obtained outside the village. Therefore, they fear that if they lose the outside interaction due to any socioeconomic changes in the area, then they would not be able to feed their families. Easy availability of labor work in the area due to infrastructure projects from the government and AKRSP has meant the cash flow in village is higher then ever. This will put them in trouble once the projects will be completed. Another fear among the villagers is the existence of foreigners in the village. There are many rumors about the researchers coming in the village (many researchers from Norway are working in the village). Some of the villagers fear that these researchers will buy the forest area and high pastures from government and then the villagers would be kicked out from the village.

This report has only been able to present a brief overview of some of the issues of gender, resource management and livelihood security which are and will be considered as this research continues. We hope that as the work proceeds we will be able to continue to enjoy fruitful discussions with the people of Sultanabad, the AKRSP staff and NLH researchers directly involved in the research, as well as with other AKRSP and NLH staff interested in learning about the challenges of a high altitude mountain system.

10. REFERENCES

1. Beck, T. (1995). Survival Strategies and Power Amongst the Poorest in a West Bengal Village.
2. Davies, S. (1996). Adaptable Livelihoods: Coping with Food Insecurity in the Malian Sahel. Basingstoke, Hampshire: Macmillan Press Ltd.
3. Gore, C., & Figueirido, J. B. (1996). Research Project on the Patterns and Causes of Social Exclusion and the Design of Policies to Promote Integration: A synthesis of findings (mimeo ed.) International Institute for Labor Studies.
4. Guba, E. G., & Lincoln, Y. S. (1994). Competing Paradigms in Qualitative Research. in N. K. Denzin, & Y. S. Lincoln (eds), Handbook of Qualitative Research (pp. 105-117). London: Sage Publications.
5. Janesick, V. J. (1994). The Dance of Qualitative Research Design. Metaphor, Methodology, and Meaning. In N. K. Denzin, & Y. S. Lincoln (eds.), Handbook of Qualitative Research (pp. 209-219). Thousand Oaks: Sage.
6. Miles, M. B., & Huberman, A. M. (1994). Qualitative Data Analysis. Thousand Oaks: Sage.
7. Moore, H. (1994). Social identities and the politics of reproduction. Chapter 5 in: A Passion for Difference. London: Polity Press.
8. Pretty, J. (1995). Participatory Learning for Sustainable Agriculture. World Development, 23(8), 1247-1263.
9. Robson, C. (1993). Real World Research. A Resource for Social Scientists and Practitioner Researchers. Oxford: Blackwell.
10. Swift, J. (1989). Why are rural people vulnerable to famine? IDS Bulletin, 20(2), 8-16.

APPENDIX I BALTI TERMS USED IN THIS REPORT

Balti	English
baress	turn system for herding large livestock
broq	summer farm/grazing area with khlas
Broqpa	Mountain people
dzo	male offspring of yak/cow cross
dzomo	female offspring of yak/cow cross
khlas	summer farm/grazing shed
loress	turn system for herding sheep and goats
mohalla	sub-village

APPENDIX II: : OVERVIEW OF PROJECT COMPONENTS AND COUNTERPARTS

High Altitude Integrated Natural Resource Management

Project	NLH	AKRSP
Institutions and organisations in pasture and forestry management (property rights and other formal and informal institutions interpreted as the rules for behaviour; organisations/actors within the institutional framework)	Hans Sevattal, Håvard Steinsholt, Poul Wisborg	M. Akbar Raza, Dr Abbas; Wazir Ghulam Haider
Pasture, livestock and biodiversity (the dynamics of high pasture management, fodder demand and fodder production, quality assessment for land use planning and conservation of soil and vegetation)	Øystein Holand, Per Wegge, Kathrin C. Hofmann, Åge Nyborg, Veronika Seim, Thor Sigurd Thorsen	Iqbal Hussain, Dr Abbas, Jawad Ali, Ulrik Motzfeldt
Farm forestry and natural forest assessment (forest and tree resources assessment, regeneration evaluation, and analysis of the supply and demand of forest products and linkages between farm-forestry practices and natural forest)	Knut Velle	Jawad Ali,
Gender in natural resource management (dynamics of changes in women's and men's use, access to and control over resources, and the effects of changes on household food security)	Ingrid Nyborg	Nazir Ahmed, Gulcheen Aquil
Information and documentation (creating a common information resource base relevant to all project sub-themes, facilitating exchange of information between project counterparts in Baltistan and Norway and supporting AKRSP Baltistan's efforts in networking for information access)	Liv Ellingsen	M. Masood Khan/Nazir Ahmed
Coordination	Poul Wisborg	Khaleel Tetlay