

**Gendered livelihood assets and workloads
in Pakistan's North-West Frontier Province (NWFP)**
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1. INTRODUCTION

Worldwide, more work is done by women than by men in order to sustain their households' livelihoods. However, in many cases women's access to basic assets like proper food, education and awareness of the outside world, as well as cash money for their needs is restricted. Social and gender norms are commonly used to legitimate this unequal access and a gendered division of work.

Little evidence of these gender equality issues is available for Pakistan's North-West Frontier Province (NWFP) despite the rigid seclusion of the sexes under the system of 'purdah'. This paper provides an exploratory analysis of gendered access to livelihood assets and the resulting workload for women and men in NWFP. The analysis is based on the framework of the sustainable livelihoods approach.

More specifically, this paper assesses the gender differences in access to human, environmental, and financial assets as three pillars of sustainable livelihoods in rural communities of developing countries. Gender differences in such access have consequences for the workload of women and men.

According to Chambers and Conway (1992) "a livelihood comprises the capabilities, assets and activities required for a mean of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in future, while not undermining the natural resource base".

In its simplest form, the sustainable livelihood framework depicts stakeholders as operating in a context of vulnerability, within which they have access to certain assets. These gain their meaning and value through the prevailing social, institutional, and organizational environment. This context decisively influences the livelihood strategies that are open to people in pursuit of their self-defined beneficial livelihood outcomes (Kollmair and Gamper, 2002).

The sustainable livelihoods approach does not explicitly conceptualise the gendered nature of the social world. However, it provides a conceptual framework sufficiently flexible to integrate the influence of gender norms in stratifying livelihoods strategies. Gender norms thus receive special attention in the social environment. This paper makes use of this flexibility to explore gendered access to livelihood assets and the associated workload for women and men.

Figure 1 outlines how gender norms as part of the social environment of livelihood strategies influence both women and men's access to livelihood assets and their direct and indirect impact on gendered workload seen as their strategies to achieve a sustainable livelihood.

[Here: Figure 1: Gendered access to livelihood assets and associated workload](#)

The paper's objectives can thus be stated as follows:

1. To explore the access of the female and male population of rural NWFP to human, environmental, and financial assets.
2. To analyse gender differences in their workload, and
3. To relate both to prevailing social and gender norms of that area.

The structure of the paper follows the conceptual framework sketched above. After the next section briefly outlines the background to the survey and the study area, section 3 explores indicators for gender norms and their application to the female and male population. They are given a central mediating role for access to livelihood assets and the associated gendered workload. Restrictions to female mobility as a means to protect the family honour are emphasised here. Gender differences in access to human, environmental and financial livelihood assets as apparent in the survey data are presented in section 4. Section 5 gives an overview about gender differences in workload by the population in the study area. The discussion in the sixth section connects the previous explorations in a causal model. It suggests that access to livelihood assets is significantly influenced by gender norms rather than externally given.

2. BACKGROUND

This exploratory analysis is based on the Sustainable Livelihoods Survey that took place in Pakistan's NWFP in the period of May-August, 2004¹. The survey was part of a research cooperation between the National Centre for Competence in Research (NCCR) in Switzerland and the Sustainable Development Policy Institute (SDPI), Islamabad. Quantitative and qualitative data on livelihood assets and strategies have been gathered from 114 female and 122 male adult respondents by a team of female and male enumerators in three selected villages of NWFP. A rapid household listing in the first stage of the research was used as the sampling frame for random sampling of female and male respondents. This sampling strategy ensured representativeness regarding the villages' female and male population, but not on the household level.

The stratifying criteria for the selection of the villages were difference in location with one of the villages representing a relatively inaccessible highland region (Kanshian, 36 female and 45 male respondents), the second a valley location (Gali Badral, 46 female and 33 male respondents), and the third a lowland location (Chamtta, 32 female and 44

¹ If no other sources are provided, the data discussed in this paper are taken from the Sustainable Livelihoods Survey 2004.

male respondents). Whereas Kanshian and Gali Badral are located in the Hazara region, Chamttar is a Pathan village².

Kanshian is a mountain village located at 2000 meters asl surrounded by dense forest. It is situated in the district Mansehra and tehsil Balakot. Its total population is 2889 inhabitants. The villagers themselves own all land and there is no concept of tenancy. The village's main crops are maize (*kharif*), and wheat, which is used as fodder. Agriculture is rain-fed. Although three different irrigation schemes have been constructed in the 1960s, most irrigation channels are in a bad condition. Other infrastructure is deficient either, first and foremost the road to Kanshian. The rough and steep six kilometres trip from Balakot takes about one hour by jeep. There is no natural gas available but most of the households are electrified. A primary school for boys and girls is found in the village and there are three primaries, and one high school in the village. The villagers have access to drinking water through indoor tap water and natural springs. Their main sources of cash income are remittances, and, secondly, non-farm labour. Other income generating activities are farming, agricultural labour, dairy farming and trading.

Gali Badral is located at 1500 asl in the district Mansehra and tehsil Oghi. The village's total population is 1569. The majority of the village's population belongs to the Badral caste giving the village its name Gali Badral, i.e. Street of Badral. Similar to Kanshian, the main rain-fed crops of the area are maize (*kharif*), and wheat (*rabi*). Pears and apples are also cultivated. There is thin forest cover above the main hamlet of the village. People use drinking water from springs and indoor taps. Pipe gas is not available however most of the households have electricity supply. Gali Badral is linked to Oghi through a metalled road, one way is about 35 minutes. There is one primary school for girls and one primary and a high school for boys. Apart from these, a private English medium school with co-education is located in the village. Also in Gali Badral, the inhabitants' main sources of cash income are remittances and non-farm labour. Other remunerated activities include dairy farming, salaried jobs, and trading.

The village of Chamttar is a small village in the district and tehsil Mardan. It is located at 300 meters above sea level (asl) in the Peshawar valley. Chamttar's total population of is 2067 inhabitants. The village population's main sources of income generation are farming, non-farm labour, remittances, agricultural labour, dairy farming, and trading. Typical crops cultivated in the village are sugar-cane, maize (*kharif* season, i.e. from April to October), and wheat (*rabi* season, from November to March). There are no forests around Chamttar. Infrastructure is comparatively well developed. Chamttar is accessible by road from Mardan, located about 4 km or half an hour walking distance from the village. There is an irrigation scheme for agricultural purposes. The people of Chamttar have access to drinking water through dug wells and hand pumps however tap water indoor is not accessible. Although natural gas is also not available as in the other villages, most of the households have electricity supply. One primary school for boys and girls is found in the village. With more than 200 children per class, it is overburdened. Whereas a

² The information on the study area is based on Steimann (2004).

high school for boys is situated in the village, a high school facility for girls is lacking in Chamttar.

3. GENDER NORMS IN THE NWFP

In Pakistan in general and in the NWFP in particular, gender norms link space to women and men, respectively, and their activities. The home is defined as women's ideological and physical space whereas the world outside the home is perceived as being related to men (ADB, 2000). As women's confinement within this spatial boundary as well as their sexual behaviour is linked to the male's honour, women's movements are restricted and controlled in order to protect the family's honour.

These norms are reflected in the data this paper is based on. Both women and men in the study area report women's mobility to be most restricted when it comes to shopping at local shops and markets outside the village. Two thirds of all women in the research area and more than three fourths of all men state that for them or for male respondents' female household members it would be impossible to go to the local shop. Going to bazaars outside the village is also relatively restricted but less than shopping locally. If responses from the three different villages are analysed separately, it becomes apparent that women's movement regarding the local shops is most restricted in case of the only Pathan village in the sample, Chamttar, reflecting the more conservative gender norms applied here as compared to the Hazara region (Akram-Lodhi, 1996).

Visits to relatives and to hospitals, both outside the village, are handled more liberally. Women report to be able to visit relatives sometimes (45%) or anytime (42%) in the majority of cases. Men's answers are more restrictive but the overall picture remains the same. Visits to the hospital are considered possible anytime by both women and men in about 75% of all cases. In the majority of cases, both women and men report that they or their female household members nonetheless have to ask for permission if they want to go to any of the mentioned places.

These results may be interpreted in the following way. The population of rural areas of the NWFP might see a greater need to protect the family honour from non-family members who nonetheless exert social control, such as neighbours and other villagers. These are likely to be able to observe a visit of female household members to the local shop. Visits to relatives as well as the necessary trips to the hospital are perceived as being less threatening in this respect.

4. GENDERED LIVELIHOOD ASSETS

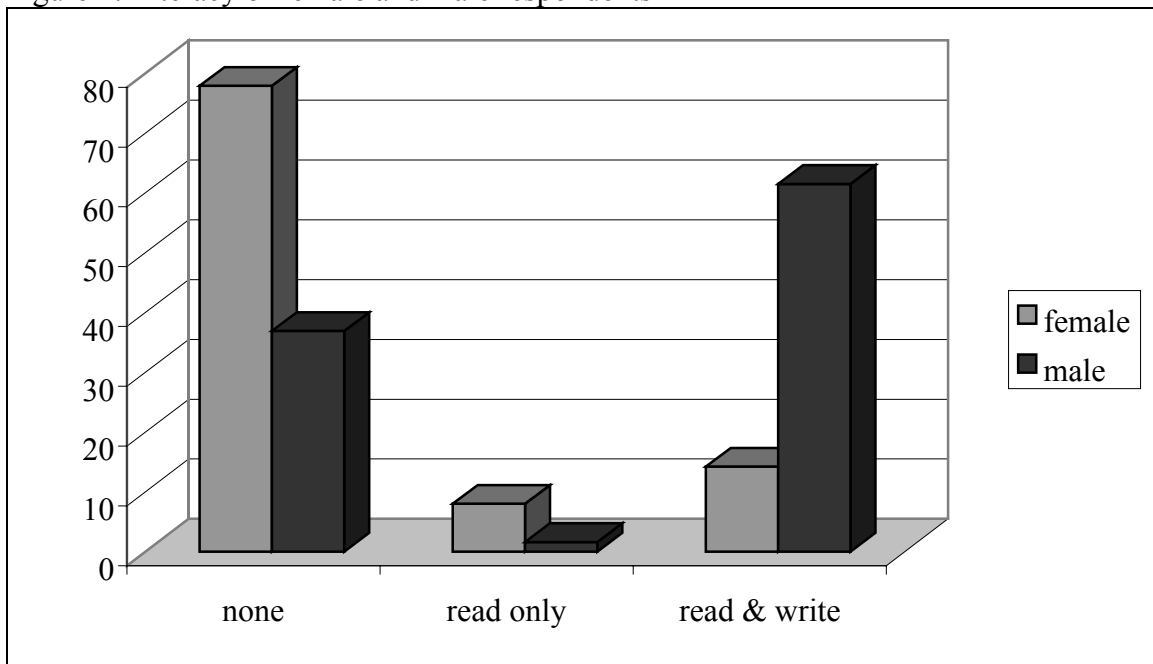
As mentioned above, the three types of livelihood assets studied here are human, environmental, and financial assets. These were chosen as they are closely linked with both the workload of women and men and differences in their ability to achieve sustainable livelihoods.

4.1 HUMAN ASSETS

Human assets are more than means to achieve sustainable livelihoods but ends in themselves. In the context of this paper they are operationalised as access to education and good health.

Education first of all refers to the literacy of the respondent. It is commonly defined as the ability to read and write. Figure 2 shows that a larger portion of women, a majority of 78% as compared to 37% of all male respondents, is illiterate, as they can neither read nor write. The bulk of men (62% of all male respondents) have the ability to both read and write. The lack of schools for girls in the study area is not sufficient to explain this gender difference, as schools for both girls and boys are available in all three villages.

Figure 2: Literacy of female and male respondents



Apart from being a development goal in itself, good health is crucial for an active and productive life. No data are available about the respondents' health status in the survey data. However, information is provided about the health status of household members, disaggregated by their sex. Both women and men mention illnesses or accidents most often as crises experienced by their households during the past year by. They observe both a long-term increase in the incidence of illness and the availability of health facilities at the same time. The diseases reported most frequently by interviewees are chronic diseases. Thereafter, infections, diarrhoea, and respiratory diseases are mentioned most often. Interestingly, male respondents systematically report a lower incidence of illnesses from their household members than females.

Female household members appear to be more exposed to both chronic diseases and infections, as reported by both female and male interviewees. However, looking at Table

1, it appears that male household members are at least more prone to diarrhoea, the main water-borne disease in Pakistan.

Table 1: Number of household members with diarrhoea

Sex of respondent	No. of HH members	% adult females	% adult males	% girls	% boys
female	0	97.4	96.5	93	89.5
	1	0.9	1.8	7	7.9
	2	0.9	1.8		1.8
	3	0.9			0.9
male	0	98.4	97.5	97.5	94.3
	1	1.6	2.5	0.8	4.9
	2	0	0	0.8	0.8
	3	0	0	0	0
	4	0	0	0.8	0

It is more often reported for one or several male household members by both female and male interviewees than for females sharing one roof. The significant difference in diarrhoea cases reported for girls by female and male interviewees suggests that adult male household member are not informed about such illness experienced by minor household members.

In summary, the human assets, women and men in the NWF are endowed with differ significantly between women and men. In education, a pronounced gender gap is apparent, depriving women and girls of access to schooling. Although the individual health status cannot be gauged from the data analysed, it appears that women and men are affected in a dissimilar manner by different types of illnesses.

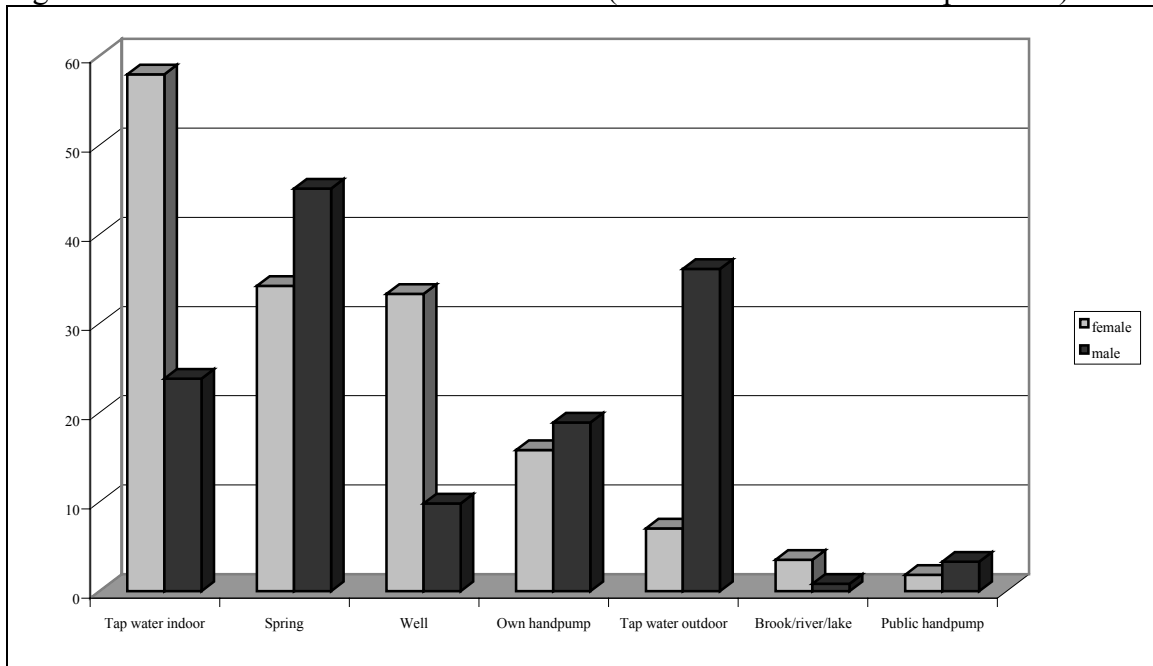
4.2 ENVIRONMENTAL ASSETS

Particularly in rural areas of a developing country as Pakistan, access to environmental assets is crucial in a setting where public provision of water and energy as well as opportunities for paid employment are scarce. This also holds true for the study area as indicated above. In the context of this paper environmental assets are operationalised as access to water and energy sources. Information on both is not available on the individual level but only for households.

The majority of both women and men report one or two water sources their household accesses. According to about 47% (62%) of the female (male) respondents, they use water from one water source and 52% (38%) female (male) reported two water sources. Obviously, tap water and springs are the most important sources of water (Figure 3). 58% (34%) of all female and 24% (45%) of all male respondents report tap (spring) water to be available to their household. Given the fact that one of them is an indoor and the other is an outdoor source, access to tap and spring water has dissimilar implications for the amount of time and work involved to fetch it. This issue will be explored in section 3. Overall, female and male perceptions - particularly regarding access to water through tap

water outdoor and wells - differ considerably (Figure 4).

Figure 4: Household's access to water sources (% of female and male respondents)



Indicators for access to energy are energy sources people can access in their natural environment.

Both female and male respondents state to access a number of three energy sources on average. However, there is considerable variation ranging up to six different sources. The reason for this might be the combined use of different energy sources, e.g. wood used in combination with kerosene oil for cooking, different purposes of the sources, e.g. kerosene oil used for lightning and wood for cooking. And last but not least, costs involved in using the different sources differ. Kerosene oil is expensive as compared to wood, which is cheap or free in case of mountainous areas.

Table 2: Household's use of natural energy sources (% female and male respondents)

	Fuelwood	Dungcakes	Leaf litter
female	99.1	26.3	29.8
male	100	33.6	36.9

Three energy sources collected directly or indirectly from the natural environment are fuelwood, dungcakes, and leaf litter. It is apparent from Table 2 that fuelwood has the greatest importance for households. Whereas fuelwood is used for cooking, lighting, and heating, the much less common energy sources of dungcakes and leaf litter are predominantly used for cooking.

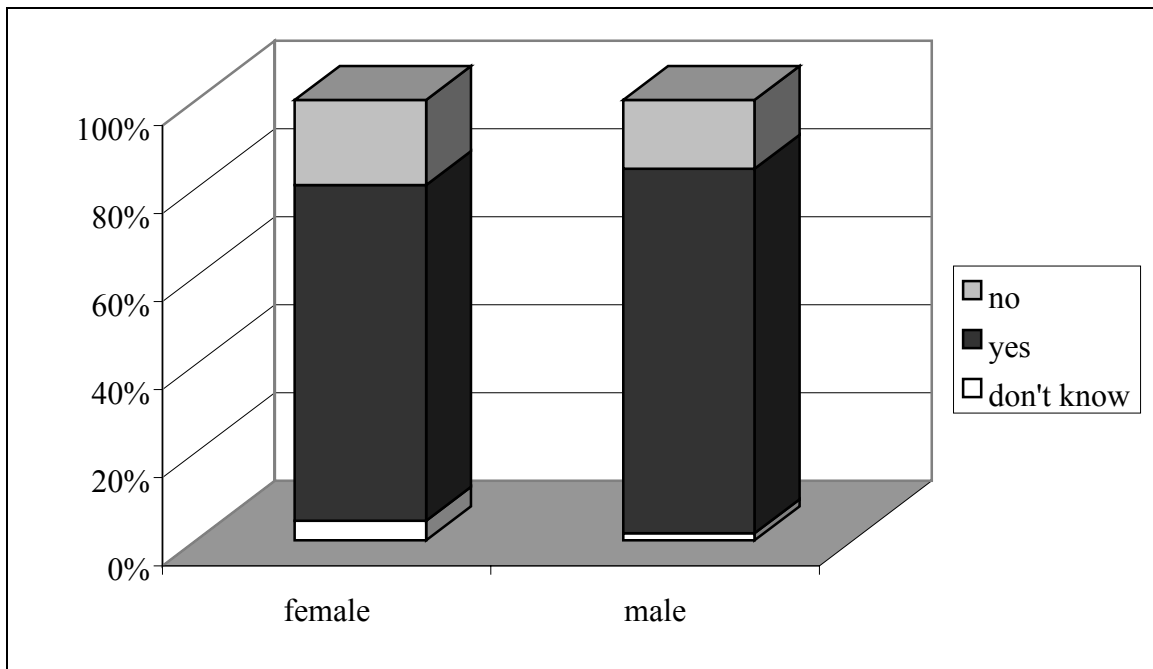
Overall, striking gender differences in knowledge about access to water sources and very similar perceptions about women and men's access to energy sources are apparent in the livelihood survey.

4.3 FINANCIAL ASSETS

Financial assets are not only important sources of livelihoods but have a particular importance for the intra-household bargaining strength of women and men (Sen, 1990). However, access to financial assets – particularly for women – does not necessarily imply control over them (Elson, 1999). Here, female and male access to loans and savings are highlighted. Availability of pocket money to the respondent and the gender division of responsibilities in managing the household budget proxies control over financial assets.

Overall, a majority of the respondents reports loans to be available to their households (Figure 5). Female and male perceptions do not differ significantly in this respect (76% of all female as compared to 83% of all male respondents). More female than male respondents are unaware of their household’s access to loans.

Figure 5: Household’s access to loans (% of female and male respondents)



Most female and male interviewees report access to one loan during the past half-year (34% and 41%, respectively). However, the information given by women shows more variation as can be gauged from the higher standard deviation this variable displays (1.1 for females as compared to 0.96 for males).

Table 3: Source to household’s loans (% of female and male respondents)

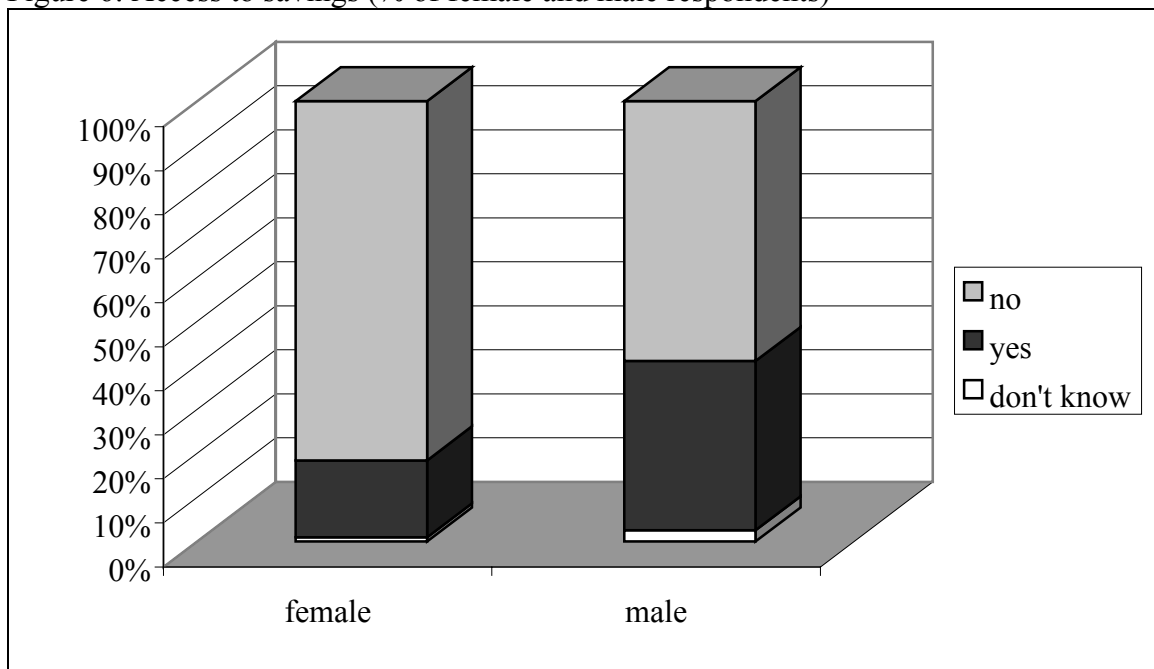
No. of loans	Shopkeeper		Relatives		Neighbours	
	female	male	female	male	female	male
0	54.4	43.4	47.4	59.8	84.2	76.2
1	43.0	55.7	46.5	39.3	13.2	23.0
2	2.6	0.8	6.1	0.8	1.8	0.8

3	0.0	0.0	0.0	0.0	0.9	0.0
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Neighbours, relatives, and shopkeepers, i.e. informal sources, are the most important providers of loans, whereas banks, NGO's, money lenders, and landlords are of negligible importance (Table 3). Generally, female and male perceptions are similar for loan sources. Just in case of relatives as a source of loans there is a statistically significant difference in the perception of female and male respondents.

In case of savings, most female and male respondents state not to have access to savings, pointing either at the extent of poverty in the area or at the sensitive nature of the topic – or both (Figure 6).

Figure 6: Access to savings (% of female and male respondents)

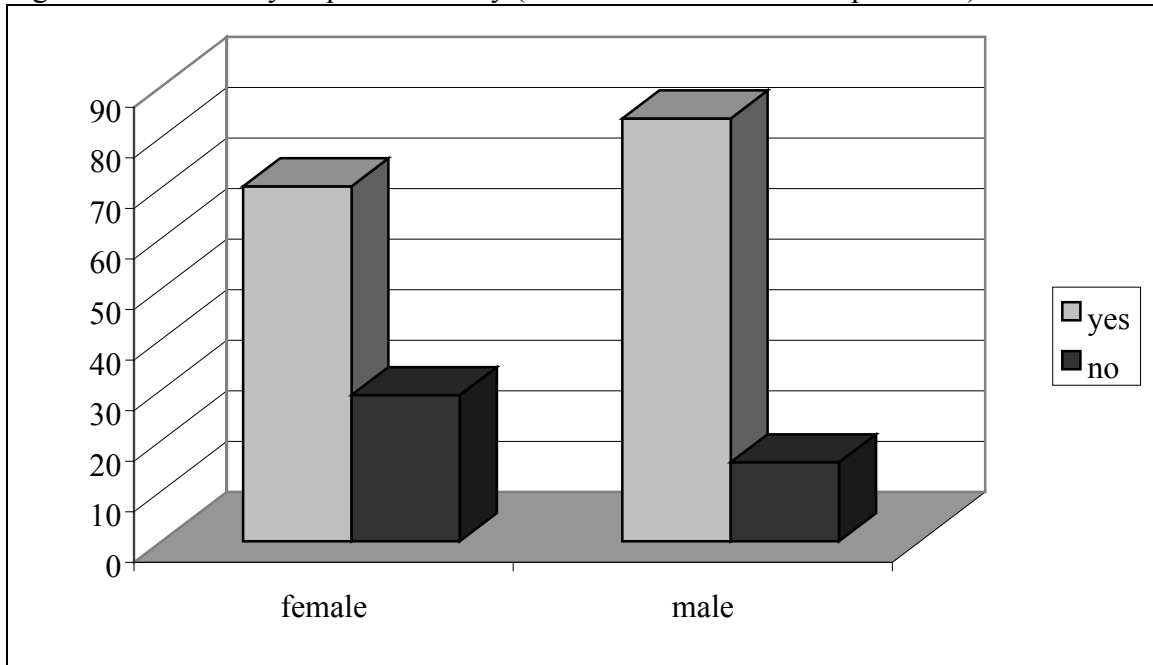


However, considerably more women than men report not to have any savings. The impression of weaker female access to savings is corroborated by the gendered information about use of, i.e. control over savings. Of those who have saved, only 23% of females as compared to 49% of male respondents state having used them during the past six months.

In addition to the use of savings, pocket money available to the respondents may approximate their direct control over financial assets.

Figure 7 reflects access to cash income in the form of pocket money to the interviewees. A majority of both female and male respondents have access to pocket money, although their share is higher in case of male respondents. As the findings above, this indicates that women lack control over cash income.

Figure 7: Availability of pocket money (% of female and male respondents)



Apart from this, from Table 4 it is clear that pocket money available to female is significantly lower than men. The respective means (medians) show that the amount available to female respondents is PKR 277 (60) on average whereas the male average is PKR 515 (300), i.e. on average half the money available to men.

Table 4: Amount of pocket money available to female and male respondents

	Female	Male
N	79	103
Missing	35	19
Mean	276.65	515.42
Median	60	300

Finally, control over financial assets can be proxied by the gender division of responsibilities regarding management of their household's budget. Women report that in 34% of all cases, the budget is managed jointly by two or more household members (Table 5). The male perception differs. They state that in only 7% of all cases, budget management is a joint responsibility. For those who report a single budget manager in their household, there are large discrepancies in the perception between women and men in the research area. Whereas women state that in 57% of all cases an adult male rather than an adult female household member manages the budget, it is 95% in case of male interviewees. Whereas men would stress the involvement of the household head (80% of all cases with a single budget manager) and his son (11%), women would also emphasise the role of the household head's wife as sole managers of the household budget (28% as compared to 5% in the perception of male interviewees).

Table 5: Sex of household's single budget manager (% female and male respondents)

	female	male
adult male	57.3	94.7
adult female	42.7	5.3

Summarising, the data presented and discussed lend support to the assumption of poorer access to financial assets for women than for men in an environment where it is already difficult for the population to access loans and to save. This difference become more pronounced when it comes to control over financial assets, e.g. in the form of pocket money.

5. GENDERED WORKLOAD

The gendered nature of livelihood assets is related to the activities performed by women and men in the NWFP. Access to water sources is an example. The household members typically involved in hauling water reflect the sharp differences in gendered perceptions about access to water sources quoted above.

Table 6: Household members involved in water hauling (% of respondents)

No.of household members	Adult women	Adult men	Girls	Boys
0	21.9	70.9	66.9	80.1
1	37.7	19.9	21.9	6
2	22.5	6.6	8.6	10.6
3	7.3	2	1.3	2
4	6	0.7	1.3	1.3
5	4	0	0	0
6	0.7	0	0	0
N	151	151	151	151
Mean	1.52	0.42	0.48	0.38
Median	1	0	0	0
Mode	1	0	0	0

Note: Only those cases are included where walking distance to the next water source is greater than 0.

Table 6 shows that in the majority of cases where walking distance to the next water source is greater than zero, it is one or more adult female household members who are in charge of water hauling. Boys are least involved, whereas in about a third of all cases, girls and - to a lesser degree – adult men carry water as well. The average (median) distance to the next water source reported by women is 27 (20) minutes as compared to a

male average of 21 (15) minutes³. This difference in information may be related to the distinct gender division of work with women being the main persons in charge for water supply. They may thus be considered more knowledgeable about the actual time input for water hauling.

Similarly, in the case of other environmental assets, a clear gender division of responsibilities becomes apparent. As shown above, fuelwood is an essential energy source for both cooking, heating, and lighting for a large majority of the respondents' households.

Table 7: Household members involved in supply of fuelwood (% of female and male respondents)

No. of household members	Adult women		Adult men		Girls		Boys	
	Female	Male	Female	Male	Female	Male	Female	Male
0	69.9	90.2	38.1	7.4	90.3	93.4	92.9	91
1	19.5	9.8	38.9	63.1	8.8	4.9	1.8	2.5
2	5.3	0	19.5	17.2	0.9	1.6	3.5	3.3
3	1.8	0	1.8	7.4	0	0	1.8	3.3
4	0.9	0	0	4.1	0	0	0	0
5	2.7	0	0.9	0	0	0	0	0
6	0	0	0.9	0.8	0	0	0	0
N	113	122	113	122	113	122	113	122
Mean	0.52	0.10	0.93	1.41	0.11	0.08	0.14	0.19
Median	0	0	1	1	0	0	0	0
Mode	0	0	1	1	0	0	0	0

Note: Only those cases are included where fuelwood is used in the respondent's household.

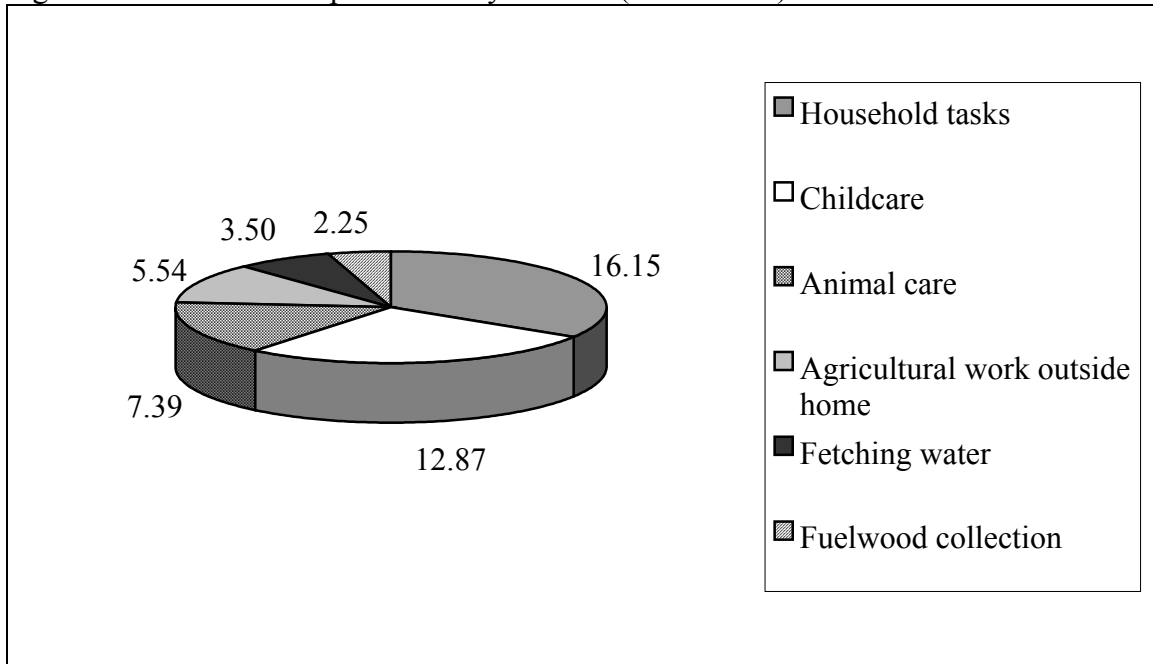
Table 7 reflects that both female and male respondents perceive adult male household members as the ones primarily in charge for the supply of fuelwood. Girls and boys are hardly involved. However, distinct gender differences in the role of adult women and men in fuelwood supply also are apparent from the data. Whereas male respondents see hardly any role for female household members in fuelwood collection, stating that in 90% of all cases no females are involved in this task, female respondents see it as an important responsibility for female household members, mentioning that in 30% of all cases, they are actually involved.

A look at the overall time-budget of the respondents shows that, on average, the most time consuming activities performed by the interviewees are childcare, salaried

³ Only those cases are included where walking distance to the next water source is greater than 0.

employment, household work, and non-farm employment. However, if female and male respondents are analysed separately, pronounced differences in their overall working time⁴ and the activities they perform become apparent. Women in the research area work about 50 hours weekly as compared to their male household members who work about 16 hours on average⁵.

Figure 8: Main activities performed by females (hours/week)



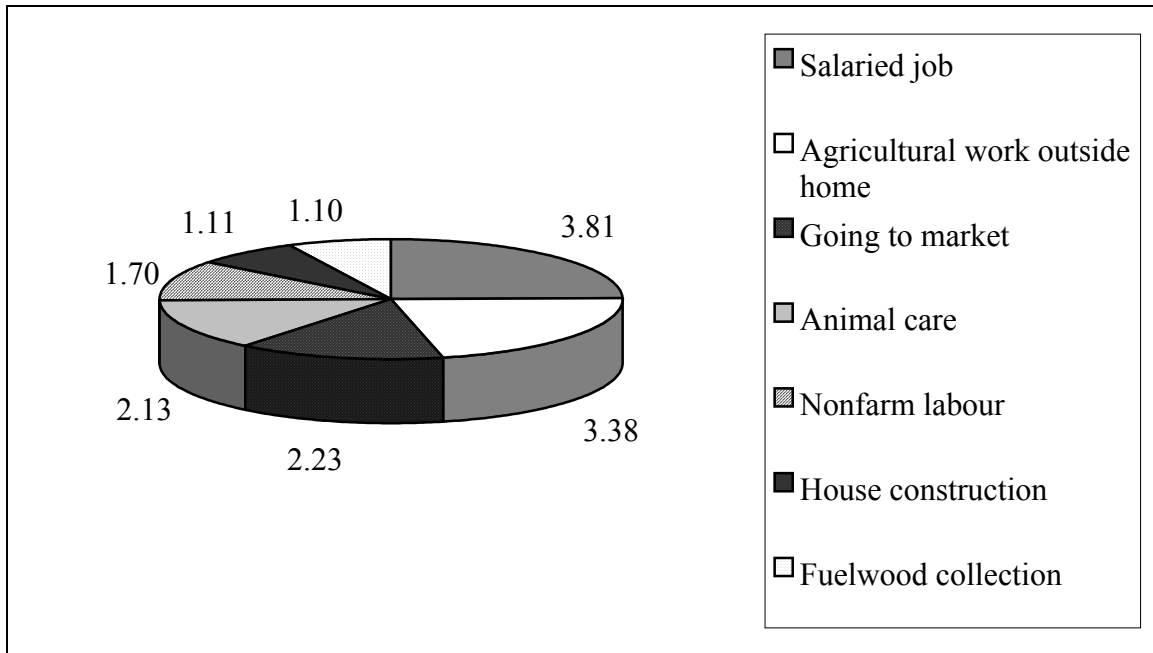
Note: Only such activities are considered that take on average more than an hour in the weekly time-budget.

The bulk of work performed by women is located at the homestead (Figure 8). It includes domestic work such as cooking and cleaning, childcare, as well as animal care. However, work that involves movement away from the house is also performed. It includes water and fire-wood collection as discussed previously as well as agricultural work. The data on the gendered time-budget for fuelwood collection actually lend more support to the female perception reported above, that this is a responsibility of both female and male household members. Similarly, the fact that also in the data on time-use it is women rather than men who are responsible for water supply make women's information on the household's water sources more reliable.

Figure 9: Main activities performed by males (hours/week)

⁴ Working time includes the respondents' activities excluding leisure, playing cricket, prayer, seeking job, and social occasions.

⁵ It has to be noted, however, that no cap on the time budget was applied during the survey. This means that multitasking, i.e. the performance of several tasks at a time, is allowed for.



Note: Only such activities are considered that on average take more than an hour in the weekly time-budget.

Men in the study area, on the contrary perform most of their work outside the home, distributing it comparatively equally across salaried jobs, agricultural and non-agricultural work, shopping and other tasks (Figure 9).

From Figures 8 and 9, it is clear that women have no access to cash income as both their involvement in agricultural and non-farm wage labour, as well as salaried employment is less than 1% of all respondents⁶. About 30% of all men have access to paid employment and thus cash income. As mentioned above regular salaried employment, non-farm labour, and agricultural wage labour are important main sources of income for the people of NWFP. However, there is a distinct gender dimension in access to such financial assets with women being left out.

In summary, women have a significantly longer working week than their male household members. Apart from this, a gender division of labour becomes apparent with women working at home rather than outside. It reflects gender norms quoted above. This implies amongst other things that access to gainful work is severely restricted for women in rural areas of the NWFP.

6. DISCUSSION AND CONCLUSION

The survey results presented in the previous sections mirror gender inequalities in access to livelihood assets reported from other developing countries. Women in Pakistan's NWFP are poorer educated than men and have little access to financial assets in the form

⁶ It is unclear, in how far women have access to money generated through dairy farming. Both women and men are involved in the related animal care.

of loans, savings, pocket money, or even cash income. They do access environmental sources along with men, and this access, e.g. to water and energy sources, is characterised by a distinct gender division of work.

Even this brief exploration emphasises the mediating role of gender norms for access to livelihood assets. It is highly probable that it is the restriction to female mobility rather than the lack of educational infrastructure (alone) that is a main cause for the gender gap in schooling reported above: If girls are not allowed to move freely, accessing a school outside the village becomes a problem. This again has implications for the access to financial assets. If women do not acquire basic reading and writing skills, their chances for remunerated employment are poor. However, there is a more direct effect of the social environment placing restrictions on women's movement. Commonly, free movement outside the homestead - even more than education - is a prerequisite of gainful employment. The distinction between a female space close to the home and a wider radius for men runs through this exploration. Water hauling as a typically female task is an anomaly in this respect.

One could therefore say that gender norms as an invisible but very powerful part of the social environment in which people develop livelihood strategies first influence women and men's activities and, resultantly, their gendered access to livelihood assets. This access thus becomes dependent on people's physical and social cruising radius and is not something externally given.

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