LINKING RELIEF, REHABILITATION AND DEVELOPMENT PROGRAMME (LRRD) IN AFGHANISTAN

RETHINKING WOMEN'S AND FARMERS' PROGRAMMES TO IMPROVE HOUSEHOLD ECONOMY IN RURAL AFGHANISTAN

Case study in Baharak valley
(Badakhshan Province)

2005-2006
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ABSTRACT

Using an agrarian systems analysis, Groupe URD requested that we carry out research on farming families’ livelihoods in Baharak, a valley surrounded by high mountains in northeastern Afghanistan.

A historical study helped us understand how the valley had adjusted to the population increase in this hostile environment (harsh winters, farming on steep mountain sides). Smallholders have intensified their farming systems, switching from animal husbandry to cultivating poppy, a practice that Muslim leaders have failed to discourage despite the importance of Islam in Baharak society. Given the intensification of poppy cultivation, ‘wheat programmes’ have become increasingly irrelevant.

In order to develop a more comprehensive view of household economies, a typology was drawn up underlining the diversity and temporal dynamics of farming systems. Very few farms have the necessary means to be wheat self-sufficient. Most farmers have to carry out work elsewhere or develop survival strategies such as farming intensification (vegetables, poppy cultivation) and women working in the fields.

Indeed, the gender issue is highly significant in the reconstruction period in Afghanistan. Many development programmes are in favour of a ‘gender approach’ and promoting women’s empowerment, but are these programmes always relevant and appropriate? Significant numbers of ‘women’s programmes’ fail to meet their objectives because they are not adapted to women’s real needs. They often consider women as a coherent group instead of taking into account the diversity of the female population.

Moreover, in this post-conflict context, current ‘food security’ programmes focus primarily on the quantity of food consumed rather than on diet quality. But in the long run, nutrition quality gets more important. In that case, a response that focuses on supporting ‘nutrition security’ as opposed to focusing solely on ‘food security’ could be a means of improving the link between relief and development strategies. To meet this goal, women should be targeted as they are responsible for much of the farming and non-farming production and for providing food for the household. Therefore, the majority of women’s tasks are food related and food preparation is the most important part of a woman’s activities. It is important to establish the most appropriate way of addressing nutrition issues and improving nutrition security through women’s programmes.

Finally, the main objective of development programmes is to decrease household vulnerability. As a consequence, women’s programmes need to develop a response that benefits both women and men. Similarly, agricultural programmes need to focus on cash crops and provide support for the whole of the crop chain, including sales technique.

KEY WORDS: Afghanistan, Farming system, Household economy, Poppy, Wheat, Vegetables, Women, Nutrition
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# Acronyms

<table>
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<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AAD</td>
<td>Afghanaid</td>
</tr>
<tr>
<td>ACCT</td>
<td>Agence de Coopération Culturelle et Technique</td>
</tr>
<tr>
<td>Afghs</td>
<td>Afghanis (50 afghs = US$1)</td>
</tr>
<tr>
<td>AKDN</td>
<td>Agha Khan Development Network</td>
</tr>
<tr>
<td>AREU</td>
<td>Afghanistan Research and Evaluation Unit</td>
</tr>
<tr>
<td>CF</td>
<td>Capital Foncier</td>
</tr>
<tr>
<td>EA</td>
<td>Exploitation Agricole</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organisation of The United Nations</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Produce</td>
</tr>
<tr>
<td>HH</td>
<td>Household</td>
</tr>
<tr>
<td>Hj</td>
<td>Homme-Jour</td>
</tr>
<tr>
<td>ISAF</td>
<td>International Security Assistance Force</td>
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<tr>
<td>Jb</td>
<td>Jerib</td>
</tr>
<tr>
<td>Kg</td>
<td>Kilogramme</td>
</tr>
<tr>
<td>Km</td>
<td>Kilomètre</td>
</tr>
<tr>
<td>m</td>
<td>Mètre</td>
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<tr>
<td>MSF</td>
<td>Médecins Sans Frontière</td>
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<tr>
<td>NGO</td>
<td>Non governmental organisation</td>
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<tr>
<td>NSP</td>
<td>National Solidarity Programme</td>
</tr>
<tr>
<td>ONG</td>
<td>Organisation Non Gouvernementale</td>
</tr>
<tr>
<td>ONU</td>
<td>Organisation des Nations Unis</td>
</tr>
<tr>
<td>S</td>
<td>Sourate</td>
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<tr>
<td>SC</td>
<td>Système de Culture</td>
</tr>
<tr>
<td>SE</td>
<td>Système d’Elevage</td>
</tr>
<tr>
<td>SP</td>
<td>Système de production</td>
</tr>
<tr>
<td>Sd</td>
<td>Sans Date</td>
</tr>
<tr>
<td>UC</td>
<td>Unité de Consommation</td>
</tr>
<tr>
<td>URD</td>
<td>Urgence, Réhabilitation, Développement</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>UPM</td>
<td>Unité de Production Masculine</td>
</tr>
<tr>
<td>URSS</td>
<td>Union des Républiques Soviétiques et Socialistes</td>
</tr>
<tr>
<td>SMU</td>
<td>Strategic Monitoring Report</td>
</tr>
<tr>
<td>V</td>
<td>Verset</td>
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<tr>
<td>VAB</td>
<td>Valeur Ajoutée Brute</td>
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<td>WB</td>
<td>World Bank</td>
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INTRODUCTION

Afghanistan has now entered into a period of reconstruction after more than twenty years of war. Given this post-conflict situation and the events of 11 September 2001, humanitarian organisations increased their commitment to the region with the media watching closely over developments. Indeed, humanitarian presence in Afghanistan is currently one of the largest in the world.

Women’s issues are a priority for the new government and international institutions. Indeed, Afghan women still suffer from the extremism that remains prominent in certain areas, and social pressure effectively relegates them to a fairly secluded lifestyle. Moreover women are the first victims of limited access to health and education. Many women’s programmes are being implemented but it is often unclear just how appropriate they are. We shall consider how can these programmes can be adapted to women’s real needs and thus improve their relevance.

Furthermore, agriculture is one of Afghanistan’s key economic sectors as most of the country is rural. Nevertheless, agricultural production is limited due to the harsh climate and poor soil. Long-term conflict has caused Afghan markets to contract and the country has become impoverished. As a consequence, Afghanistan’s comparative advantages appear very weak. The issue of developing new agricultural products is regularly raised in the debate on Afghan economic development. These products were indeed commercialised in the past both in Afghanistan and neighbouring countries. It remains to be decided what type of product will be developed and how profitable production chains can be established. Moreover, wheat production has always been central tenet of NGO programmes, both in emergency relief strategies (wheat distributions) and development (research, inputs distribution, training). Indeed, in the present reconstruction phase, farmers are faced with new needs and new constraints. It remains to be seen to what extent wheat programmes are still the most relevant response and how agricultural programmes can be adapted to household diversity.

Finally, the health situation is catastrophic for many Afghans, with malnutrition representing one of the main causes of infant mortality. In the emergency phase, most programmes responded to food security objectives by carrying out food distributions, a solution based on quantity rather than quality. Existing nutrition needs are primarily the result of micronutrient deficiency and an unbalanced diet. It is therefore fundamental to understand the new stakes of dietary habits in Afghanistan, especially in rural areas, and ensure that food programmes adopt a ‘nutrition security’ approach.

These questions call for an understanding of social, agro-economic and nutrition issues and a comprehensive view of the household economy with research targeting both women and men. Groupe URD, in partnership with Afghanaid (AAD), a non governmental organisations (NGO) working in Badakhshan, commissioned a six-month survey in a high valley for a team of student researchers. This research study should also put forward recommendations on how to improve women’s and agricultural programmes with the objective of enhancing household incomes and improve food quality.

The first chapter details the issues covered by the research study and the methodology used. The second chapter resumes Baharak valley’s social and historical background in order to underlie the diversity of farming strategies in this area. A third chapter looks at women’s roles in agriculture and in rural economies. A fourth chapter provides information on the issues at stake for food programmes in Afghanistan and the diversity of food consumption in a suburban area like Baharak. Finally, the fifth chapter provides recommendations for women’s programmes and agricultural programmes on the basis of an evaluation of AAD programmes.
1 GENDER ISSUE IS CENTRAL TO RECONSTRUCTION IN AFGHANISTAN

1.1 THE NATIONAL CONTEXT: A POST-CONFLICT SITUATION

1.1.1 A tumultuous history

Afghanistan, one of the poorest countries in the world, situated in Central Asia, often makes international news headlines.

In 19th century, Afghanistan symbolised a pawn in the game between two influential nations: the English and the Russians. The Afghan monarchy effectively formed a buffer zone between the two empires. With the fall of the British Empire and the emergence of the U.S.S.R, Afghan communists pulled off a coup d'État in 1978 with the support of Moscow.

The new regime had to cope with the population’s rising discontent, kindled by the mullahs. In 1979, the U.R.S.S. invaded Afghanistan under the guise of supporting a Communist regime in difficulty. This forgotten country made a dramatic comeback to the front pages of international newspapers. Over the following decade, the country suffered many violent struggles, although the Russians never quite succeeded in controlling the whole country, notably the mountainous regions. These natural fortresses protected the mujaheddin who received the support of western countries and Arab countries in the Persian Gulf.

The fall of the Soviet empire led in turn to the collapse of the Soviet Red Army, and thus to the fall of the regime in Afghanistan. A civil war broke out in the country with former allies pitching fierce battles against each other. In 1996-97, a political party close to Saudi Wahabism succeeded in establishing peace throughout most of the country. The extremist religious party, composed of theology students (the Taliban), continued to fight rival factions (the Northern alliance) that contested the new regime.

The 11 September 2001 terrorist attacks plunged Afghanistan into a new war. The Taliban were accused of complicity with those responsible for the attacks and were removed from government by the United States. A temporary government was installed prior to the elections in November 2004 which brought Hamid Karzai to the presidency.

However, the task facing the new president was by no means simple. One of the main objectives of the new government was to control Taliban factions in the south and east. The nation’s infrastructure, ravaged by twenty years of war, needed to be rebuilt and the role of state institutions reinforced, in a country where local warlords still have considerable power. Strategies to stem poppy cultivation, which is condemned by the international community, were put in place. Finally, President Karzai not only had to win the confidence of the Pashtun ethnic group from which he originates, but also of all the ethnic groups populating this mountainous country.

1.1.2 A harsh landscape

Afghanistan is a landlocked country between 28°40 and 38°40 north latitude, and 60°31 and 75°00 east longitude. It has a total of 647,500 km² of land area with 1% of water bodies. It shares borders with China, Iran, Pakistan, Tajikistan, Turkmenistan and Uzbekistan.

The Hindu Kush mountain range crosses Afghanistan from east to west. The higher peaks are in the Wakhan corridor in the east at 5,500-7,000m altitude. In the west, the mountain culminate in the Safed Koh Range at 1,100m, north of Herat and close to the north-western border.
Weather conditions are characterised by extremes temperatures and arid to semi-arid climate, hot summers and cold winters (32 to -7°C in Kabul). Annual rainfall ranges from 100 mm to 400 mm from January to May.

1.1.3 Administration under reconstruction

Afghanistan has 30 administrative provinces: Badakhshan, Badghis, Baghlan, Balkh, Bamian, Farah, Faryab, Ghazni, Ghowr, Helmand, Herat, Jowzjan, Kabul, Kandahar, Kapisa, Konar, Kondoz, Laghman, Lowgar, Nangarhar, Nimruz, Oruzgan, Paktia, Paktika, Parvan, Samangan, Sar-e Pol, Takhar, Wardak, Zabol. In the future, two new provinces of Nuristan (Nuristan) and Khowst may be introduced.

Within each province, there are subsidiary Districts where most rural families live in villages which are organised in local groups, guided by the shurah (village council).

Central government is organised around Ministries for each important domain. This includes the Ministry Agriculture; Rural Development; Public Health; Women’s Affairs; Higher Education; Water and Power; Commerce; Education; Mines and Industries; Pilgrimage (Haj); Light Industries; Interior Affairs; Defense; Civil Aviation and Tourism; Information and Culture; Reconstruction; Urban Development; Transport; Public Works; Justice; Martyrs and Disabled; Telecommunications; Foreign Affairs; Border Affairs; Refugees; Planning; Finance; and finally Irrigation.

1.1.4 A melting pot

The total population in Afghanistan is 26,813,057 (est. July 2001) composed approximately of: 0-14 years (42.2%); 15-64 years (55.01%); 65 years and over (2.79%).

The population growth rate is high, at 3.48% (est. 2001), reflecting the continuous return of refugees. The average lifespan is reported to be 40 years. Children under 5 have a mortality rate of 25.7 and illiteracy of 64%. The fertility rate, which varies according to family size, was estimated to be 5.79 children born/woman (est. 2001).

Ethnical groups include Pashtun (38%), Tajik (25%), Hazara (19%), and other minor ethnic groups including Aimaks, Turkmen, Baloch, etc. (12%), and Uzbek (6%). These ethnic groups are divided in tribes, themselves divided in clans.

Religions in Afghanistan include Sunni Muslim (84%), Shi’a Muslim (15%) and other (1%).

The languages spoken are Pashtu (35%), Afghan Persian - Dari (50%), Turkic languages - primarily Uzbek and Turkmen (11%) and 30 minor languages, primarily Balochi and Pashai (4%).

An estimated 80% of the population lives in rural areas, with only 20% living in larger urban settlements. The major cities are Kabul, Kandahar, Mazar-i-Sharif, Herat and Kunduz.
The World Bank described Afghanistan as a country "which has always been at or near the bottom of most poverty and social indicator rankings, must now be considered the poorest, most miserable state in the world."

As a result of intense poverty in rural areas and long periods of conflict, the population has become relatively mobile, showing a strong tendency to migrate to the cities, waves of internal displacement and return of refugees, etc. This has reportedly upset the extended family situation which in the past guarantied support for many people.

The mountainous landscape makes transport difficult and recent hostilities have destroyed a number of roads and bridges. Public transport generally consists of buses or trucks, with large numbers of people in the vehicle or on the roof. Most Afghans in rural areas travel by foot, donkey or horse.

Before 1979, energy consumption levels (electricity, gas, etc.) were among the world’s lowest. In 1993, UNDP estimated that 60% of the electric transmission lines were inoperative.

Numerous years of war has left Afghanistan with one of the worst health situations in the world. Malnutrition is one of the biggest problems for children and adults, particularly women. Moreover the majority of educational infrastructure has been demolished and a large proportion of the Afghan population has not attended school for years. As a consequence, the quality of education for boys is poor and most of the women are illiterate and excluded from the educational system.
Years of war have separated and impoverished extended families that traditionally took care of widows and fatherless children, many of whom must now fend for themselves.

1.1.5 An economy based on agriculture

In 1978, before the arrival of the Soviet army, Afghanistan was largely self-sufficient in food and was a significant exporter of agricultural products. Agriculture was largely concentrated in narrow river valleys and plains where irrigation water from snowmelt was available. Manufacturing industry was largely undeveloped, with only a few factories functioning (in textiles, medicines, cement, etc.). Social and other services (such as education and health) were limited to the relatively small urban sector.

In 1990, contributions to Gross Domestic Product (GDP) were estimated as follows: Agriculture (53%); Industry (28.5%); Services (18.5%). An estimated 70% of the workforce was employed in agriculture.

Agricultural production conditions vary significantly depending on local geography and topography. Agriculture (including livestock) is highly vulnerable to natural conditions as proved by recent droughts which have resulted in famine in some areas. The main agricultural produce includes wheat, fruits, vegetables, cotton and small ruminants (sheep and goat for fur, leather and meat).

“Inflation remains a serious problem throughout the country (currency is printed by the Northern Alliance without any monetary control). International aid can only deal with a fraction of humanitarian problems, let alone promote economical development. In 1999-2000, internal civil strife continued, hampering both domestic economical policies and international aid efforts. Numerical data are likely to be either unavailable or unreliable. Afghanistan was by far the largest producer of opium poppies in 2000, and narcotics' trafficking is a major source of revenue.” (CIA Afghanistan website, 2002).

Millions of Afghans became refugees in neighbouring Pakistan and Iran, and elsewhere, albeit to a lesser extent. The refugee population played an important role in supporting Afghanistan's economy through remittances. Finally, land and infrastructure were widely and indiscriminately sown with landmines, causing enormous human and economic losses. The introduction of a certain degree of stability in large parts of the country also facilitated the growth of various kinds of unofficial economic activities, most notably long-distance trade (particularly re-exports to Pakistan) and opium poppy cultivation.

One other important economic sector is the mining of coal, lapis lazuli, rubies and gold.

1.2 MAIN STAKES OF RURAL DEVELOPMENT IN AFGHANISTAN

1.2.1 Linking relief and development

In order to support the Afghan people after twenty years of war and three years of drought (1999-2001), the international community provides huge amounts of money for the implementation of emergency programmes, such as food distributions, reconstruction of roads and bridges, etc. In the new post-conflict context, these programmes are now in the process of making the transition over to development programmes with a long-term outlook. This transition is by no means smooth in a country where institutions remain fairly inflexible. Also, even though most of the internal conflict has ceased in Afghanistan, the situation remains highly unstable. Although the general focus is on sustainable development, there is still a need for short-term, emergency relief in some areas and technical sectors.

For instance, women’s programmes are significantly less visible compared with emergency programmes. Championing causes such as women’s empowerment is new to Afghanistan
and in order to broach these issues many NGOs are required to change their approach in order to become ‘less visible’ but more socially oriented. It is common for NGOs to include women in their programmes at the donor’s request rather than to respond to women’s specific needs. The Gender Approach concept has today been taken on board by all development organisations whereas few of them understand the true consequences of this approach in rural development.

“The concept of gender refers to women’s and men’s roles and relationships which are shaped by social, economic, political and cultural factors rather than by biology. Gender, moreover, is a dynamic concept which examines the nature of these roles and relationships between women and men in the context of the perspectives and beliefs of society. These socially constructed roles and relationships have a direct bearing on the health and well being of both sexes. A gender perspective helps identify the inequalities between women and men which in the field of health can lead for both to increased illness or death from preventable causes.”

Moreover, many relief programmes were based on wheat distribution. During difficult years, many households were obliged to sell their assets, such as breeding animals, mills, land, etc. To help communities avoid asset depletion, aid organisations delivered food aid, especially wheat distribution. Today, many programmes are trying to improve wheat yields with new varieties, fertilizers, advice, etc. Wheat is the most important crop for Afghan farmers and consumers and the majority of humanitarian projects in Afghanistan (in terms of investment, number of staff and number of organisations) are focusing on wheat improvement. But even if NGOs though built expertise in this domain over the years, this type of programme is not necessarily adapted for the majority of beneficiaries because rural diversity is not taken into account.

1.2.2 Taking diversity into account

Today Baharak valley has all the advantages and constraints of both urban and rural areas. This ambiguous situation has had an impact on the rising inequality and the complexity of women’s issues. Within both male and female groups, there is a wide range of diversity.

The diversity within the female population is actually linked to their role in decision-making processes both inside and outside the household. This role depends on different factors which affect women’s involvement in household activities, compared to men. These factors, which are discussed in an Afghanistan Research and Evaluation Unit (AREU) report on gender roles in agriculture include social, geographical and economic indicators.

One of the social indicators is the child-bearing role of women which evolves over her lifetime and has a strong impact on the type of activities she may be involved in. For example, from puberty until their wedding, girls generally have less room for manoeuvre and less freedom than their mothers. Within the compound, the eldest woman is responsible for the distribution of household tasks to the younger women and she participates more easily in discussions and sometimes decision making. Widows enjoy a greater freedom than other women and often play a leadership role within women’s groups.

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2 Jo Grace, Who Owns The Farm?, February 2005
Moreover, the relationship between women within the village depends on the history of the village (old or new village) and its composition (whether the same families have been present for many generations or whether new families have arrived from other villages or districts). Although some internal systems of solidarity amongst women generally exist, whether relations are harmonious or not differs from one village to another. As a result, women’s groups that are set up by NGOs often fail because they do not take into account the different power relations that exist between women within each village.

Household composition and wealth also influence women’s role in decision making. All these factors have to be taken into account when implementing women’s programmes. As such, organisations need to invest more time understanding the diversity that exists within communities and propose more flexible programmes.

1.2.3 Improving coordination between development agencies

Finally, women’s programmes are confronted with global strategy problems. After years of widespread free food programmes, one of the difficulties that the development approach has to overcome is making people aware of their responsibilities. For example, free food distributions in schools and literacy courses generated a degree of passivity amongst beneficiaries. Also, girls involved in the Afghanaid’s Women’s Resource Center (WRC) in Baharak retorted to Afghanaid staff: “Why you do not give us a free sewing machine after the six months training? Our friends received one from another NGO.” and: “This neighbour earns every month 50$ to teach a literacy course, for two hours a day whereas I earn just 20$ for the same work but with another NGO, it isn’t fair!” Not only is there a risk of creating jealousy between women, but communities may finally loose confidence in NGOs and international organisations.

Moreover, knowing that in Afghanistan there are plenty of NGOs, if there is no real coordination between programmes and operational strategies, true development is an unrealistic goal. For example, it is common to visit one village in Baharak valley which benefits from three different programmes, for example health education and embroidery courses, while a neighbouring village does not get any kind of assistance. These inconsistencies are often indicative of sense of competitiveness between different organisations.

1.2.4 Building a new democracy

In order to maintain peace and establish its authority over the whole territory, the new Afghan government needs to extend its control in the provinces. It was hoped that the elections of September 2005 would improve relations between central government in Kabul and the provinces, and increase state unity.

Badakhshan has thirteen districts which are composed of villages, where communities are brought together by the village organisation, namely the shura. In the past, the role of the shura was to settle disputes between villagers living around a common Mosque. Male villagers elected a chief, an arbob, among the eldest and the richest members of the community. During the Mudjahidin war, these chiefs were required to organise supplies for soldiers. Henceforth, these chiefs were known namahindas and, today, are in charge of managing relations between local government and villagers. In return, they receive wheat or money from members of the shura.

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3 “These distributions refer to the World Food Programme operations, such as food-for-education which includes school feeding (where food rations are used to encourage attendance, notably of young girls) and food-for-training programmes where women receive food rations to attend literacy classes and training on income generation skills.” Dufour, C., Nutrition Update, LRRD, Groupe URD, June 2005
Since 2004, a new programme financed by the World Bank (WB), in partnership with NGOs, aims at improving community resource management. To do so, new groups have been set up called NSP (National Solidarity Program). The objective of these NSP groups is to allow villagers to carry out public works, such as building canals, bridges, hospitals, schools, with a budget per household and a participative approach. NGOs are in charge of setting up NSP groups for women and men in villages. The NSP programme has received much criticism lately, but remains at present the only way for the Afghan government to help remote communities and stimulate a common interest in rebuilding public works. Moreover, this programme focuses on women’s groups, targeting female beneficiaries and encouraging NGOs to hire female staff as social organisers.

1.2.5 Improving control of traditional powers in rural areas

There are many power games at play in Afghanistan, especially in rural areas. The rebuilding of Afghanistan depends on government’s capacity to hold these traditional powers in check. At present, they tend to have too much power and influence and this is weakening the role of the state.

Firstly, the Mullahs (religious leaders) are very powerful in Badakhshan and every villager must contribute to their upkeep and pay the Mosque an *Osher* as a private tax. Mullahs have considerable influence, especially where women and education issues are concerned. For instance, some Mullahs encourage parents to keep their children at home instead of sending them to school. Moreover, most of them do not agree with more contemporary lifestyles, such as watching television, using the Internet or allowing women to work outside the home. Despite the fact that local communities often criticise their points of view, the majority of people continue to acknowledge them as legitimate leaders and accept their influence.

Secondly, old warlords still wield considerable power in rural areas, and particularly in Baharak valley where they are often landlords and owners of the biggest herds. Some of
them are also responsible for overseeing the poppy chain from cultivation to processing. Their wealth allows them to have several wives and there are still cases where girls from poorer families are sold to these warlords. Unfortunately, the trade in young women is still common in Afghanistan.

1.3 **What difficulties do women’s programmes have to overcome in rural Afghanistan?**

1.3.1 Women are ‘hiding behind walls’

In Afghanistan, women have to contend with considerable social pressure, especially in rural areas, and this places constraints on their activities and movement. The interpretation of the Muslim religion in Badakhshan, where people are relatively conservative, has an impact on women’s access to agricultural activities, markets and decision making within the household.

Moreover, as a result of 25 years of war, women have become accustomed to hiding. In the valley, women tend to wear the *burka* and they only work in fields with protecting walls. It is more difficult for women to carry out commercial and income generation activities compared to men.

Nevertheless, over the past five years, the situation has been changing gradually. For example, half of the teachers in Baharak’s school are women and all the NGOs operating in the area employ female staff. Returnees from Pakistan or from Kabul became accustomed to a different lifestyle and have a more liberal perception of women’s role. However, few men agree with this change and most NGOs have to deal with this constraint. If men decide that they do not want women to benefit from a programme in their village, then the project cannot be put into practice.

1.3.2 Women’s activities do not generate ‘visible’ incomes

Most women in rural areas are involved in some agricultural activities and are responsible for livestock inside their compound. Men generally undervalue women’s work as it does not generate large amounts of concrete products nor cash revenues. Yet, for some time now (over 50 years), lots of women work in kitchen gardens and are responsible for irrigation, weeding, harvest, processing and cooking vegetables. When it comes to crops, such as wheat, fodder and potatoes, women are involved in cleaning and drying seeds at home, storing grain and baking bread. Women have also to clean the litter in summer, making and drying cakes of dung (*tchapack*) and are responsible for breeding, milking and processing the milk. Women sell dairy products (*yogurt, qrut*[^5]) to local traders and villagers but most transactions are carried out on an exchange basis rather than for cash.

The household work and handicraft’s activities rarely generate income because women do not have enough time and material to produce surplus. Moreover, men do not allow women to exchange high value products. Nevertheless, the goods that are produced by women in the home reduce household expenditure on imported goods, such as food and carpets.


[^5]: *Qrut:* dried cheese made in Afghanistan with sheep, goats and cows milk.
1.3.3 Relevance and sustainability

If women do not really feel a sense of ownership for the programme, there is a high risk that these activities will not be sustainable in the long term. Most of the programmes are based on a limited understanding of women’s activities and expectations as the assessment phase is often too superficial. As a result, a large number of women’s programmes are abandoned after few months because they fail to take into account the whole spectrum of women’s issue. NGOs often work with women as individuals without taking into account their role as an economic worker within the household. Women generally dedicate all their in kind and cash incomes to improving the living conditions of their household.

For instance, literacy courses are relevant for women’s education but not for improving women’s income generation capacity in the short term. Yet, many households are too vulnerable to have a long-term outlook. As a result, many women are not motivated to attend these courses and teachers are confronted with high levels of absenteeism. One of the teachers responsible for a literacy programme in Baharak valley said: “If women do not receive any oil, wheat or other goods during the courses, they are not motivated to come. Women would rather stay at home in order to take care of the children and do the housework.”

Furthermore, the sustainability of women’s income generation programmes is questionable because these programmes do not always take the whole of the production chain into consideration.

Taking handicraft activities as an example, six years ago in Baharak, a group of women was trained in carpet weaving over a six-month period. However, today nobody produces carpets in the valley because people do not have looms at home and nor do they have sheep to produce wool. Moreover, weaving these carpets takes a lot of time and they must be of a high quality (hard-wearing wool, fashionable or original designs) to be sold. The interviewed trainees also said: “There is no market here for these products, nowadays everyone buys Iranian or Pakistani carpets because they are cheaper and modern.” In this way, it would be appropriate to support handicraft activities in areas where women are highly skilled and have access to the necessary materials, such as wool.

1.4 TWO NGO PARTNERS FOR THIS STUDY

1.4.1 Groupe URD

Groupe URD (Emergency Rehabilitation Development) was founded in 1993 with the aim of improving our understanding of the complexity of emergency contexts and developing new operational procedures. Its activities are based on a ‘learning cycle’: field learning through research and evaluation, capitalising lessons learned, development of tools and methods, dissemination of these lessons and tools through training, publications and conferences.

Groupe URD conducts a number of different thematic research programmes, in areas such as health, education, agriculture and water resources. It has permanent office in Kabul and employs experts and students specialised in these sectors to carry out field research throughout the country. Moreover, Groupe URD also carries out evaluations for NGOs, such as for Afghanaid (AAD), who requested an evaluation of two of its agricultural projects in Badakhshan Province.

1.4.2 Afghanaid (AAD), a British NGO in Badakhshan

In the district of Baharak, where this research project was conducted, AAD works exclusively with Afghan staff and no longer employs any expatriate staff in the area.
One of AAD’s projects is “kitchen garden programmes” (KG programmes) whose objective is to improve the household’s diet and provide women with the opportunity of developing an economic activity. Growing vegetables and fruit enables women to diversify the ingredients used in their cooking and should also help women to get more involved in the local economy, as they can sell any surplus products which have good added value.

1.5 RESEARCH PROJECT CENTRED ON TWO ISSUES

1.5.1 Women’s issues

Groupe URD submitted a request for a research study on 1) agricultural systems with a focus on women’s role in local agriculture, and 2) the impact of AAD’s KG programmes. This assessment should look at nutritional, social and economic impacts and assess this programme’s limitations and risks. The objective is to highlight the project’s main constraints and successes and put forward recommendations for improving and conceptualising these methods. Groupe URD hopes to implement this type of research programme in other regions of Afghanistan.

1.5.2 Farmers’ issues

Within the framework of this study, an analysis of farming systems and decision-making processes adopted by different types of farmers should also be carried out in order to understand the relevance of Afghanaid’s programme. This programme was developed in Badakhshan province (northeastern Afghanistan) and more precisely in the district of Baharak. It is based on the introduction of improved wheat varieties to increase yields and to improve food security (and, maybe, to reduce poppy production).

Thanks to the analysis of cropping and livestock farming systems, a typology of farming systems was first drawn up with a list of factors affecting decision-making processes. Then, these decision-making processes were studied in greater detail, especially decisions over traditional wheat, improved wheat and poppy with a view to understanding farmers’ overall strategies.

These two issues can be summarised in the following three main research issues:

- Study of farming systems in the district of Baharak and their evolution over the past decades with a focus on women’s role in the local rural economy.
- Analysis of eating habits in Baharak and main challenges of nutrition programmes in rural Afghanistan.
- Analysis of limits and successes of AAD project with women and farmers with the objective of reinforcing and diffusing lessons learnt to other areas of Afghanistan.

1.6 METHODOLOGY

1.6.1 Issues at stake

This study will focus on the following central theme:

Within a context of reconstruction, to what extent is it necessary to have a good understanding of farming systems and women’s activities and household coping strategies in order to reduce vulnerability and improve the quality of diet?

How can NGOs improve their programmes for women and farmers, especially wheat programmes, to ensure relevant development-oriented results?
1.6.2 Working hypotheses

Our working hypotheses are linked to this central theme and our study is structured around five main questions. These questions are based on a desk review of relevant documents and discussions with numerous organisations engaged in supporting development efforts in Afghanistan.

**Question 1:** What existing mechanisms in rural areas have contributed towards the improvement (or stabilisation) of household economies?
Before implementing a development programme, it is essential to understand how communities live and their survival strategies.

**Hypotheses:**
1. **Intensification of land is the ‘natural’ evolution of local agriculture in Baharak.**
2. **Besides the illegal aspect of poppy cultivation, poppy contributes higher revenues to the household economy.**
3. **The only advantage of ‘improved’ wheat is its yield.** It is important to compare different varieties of wheat (improved and traditional) in order to understand the relevance of Afghanistan’s action plan.

**Question 2:** In a conservative society where women are hidden, what role do women play in the household economy?

**Hypotheses:**
1. **Women are not financially independent.** The Afghan context shows that women and men lead separate roles in public life, especially in rural areas. Women’s activities are limited to domestic work and do not generate visible incomes. Moreover they are not allowed to sell nor buy products themselves in bazaars. In such a context, does it make sense to promote women’s independence in rural households?
2. **Historically, women have played an essential role as economic agents in most households.** Throughout the different crises in rural Afghanistan (war, drought), Afghan society has required all its workers (women and men) to pull together in order to survive such periods. Moreover, women are responsible for many activities in poppy cultivation.

**Question 3:** How can NGOs take into account the diversity of female populations and farmers in their programmes?

**Hypothesis:**
1. **The diversity of female populations and farmers is determined by geographical location.** Between Kabul and rural areas such as Baharak, there are many significant differences, such as the tendency of women to wear the *burka*. Moreover, between certain provinces such as Hazaradjat and Badakhshan, households vary considerably. Within a valley such as Baharak, there is less visible diversity but NGOs should not forget to take into account the differences between women and farmers who do not have the same needs nor the same constraints.

**Question 4:** How can food programmes take on more of a ‘nutrition security’ approach?

**Hypothesis:**
1. **Food programmes do not take into account the quality of food** nor the role played by women in food production. The challenge in this post-emergency context is to improve the diet of the Afghan people in terms of quality rather than quantity and to develop programmes focused on women which are based on a thorough knowledge of production and consumption units.
Question 5: How can we improve household economies with programmes for women and farmers?

Hypotheses:
1. **Diversifying activities is the only alternative to poppy cultivation because 1) it is not repressive and 2) it is a feasible way of developing agriculture in remote areas.**
   Studying different activities (agricultural or otherwise) may reveal the various options available to smallholders in the area.

2. **Supporting collective dynamics is essential in order to develop income-creating activities for women.** Illiteracy amongst the female population limits their capacity to participate in decision-making processes at political and economic levels. In order to cope with all these constraints, women’s programmes should also focus on education, social empowerment and new activities, such as AAD’s programmes for local communities.

3. **AAD’s programmes do not target the most vulnerable.** Indeed, in order to develop a new ‘intensive’ agriculture (vegetable farms, wheat production with high yields), farmers need irrigated land and expensive fertilisers. They also require technical skills and materials to sell and store their production. In this way, it is not possible for the poorest households to benefit from kitchen garden programmes and improved wheat programmes.

1.6.3 Methodology

This study was conducted over a year with a six-month field study in Afghanistan, from June to December 2005. This field internship was completed by pre-mission preparation and a post-mission period in France for analysing the data and writing the report.

Our field mission was broken down into five periods: three short periods in Kabul (based in Groupe URD’s office) and two periods of three and 1.5 months in Badakhshan (based in AAD’s office).

During this study, different methodology tools were used for gathering and processing information. These research tools are detailed in this following table. (The field periods are coloured in grey).

**Table 1: Methodology and work plan (2006)**

<table>
<thead>
<tr>
<th>Period</th>
<th>Objectives</th>
<th>Concepts</th>
<th>Tools for gathering information</th>
<th>Tools for analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb.-June</td>
<td>Preparatory phase to analyse the research objective and collect general information on Afghanistan.</td>
<td>- Bibliographic research on the existing literature and documentation. - Preparation of questionnaires for households. - Meetings with teachers and Groupe URD.</td>
<td>- Previous calendar of study - Writing of study issues and working hypotheses.</td>
<td></td>
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</tbody>
</table>
### June-July (1 month)

**Historical study of agriculture in the district of Baharak**  
Understanding of farmers’ strategies with a focus on women’s role in the local rural economy.  
Answers to questions 1), 2) and 3).

**Systemic approach for an agrarian assessment**  
(cf. annexe 3)

- Socio-economic and ‘mixed’ (with women and men) study of HHs.
- Choice of around ten villages in the valley and two more ‘remote’ villages in the lower part of slopes\(^6\).
- Random sampling of 50 HHs (4 HHs per village).
- Individual meetings with both men and women.
- HH questionnaire (cf. annexe 10)

**Systemic approach for an agrarian assessment (cf. annexe 3)**  
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- Individual meetings with both men and women.
- HH questionnaire (cf. annexe 10)

**Zoning**  
- Schematic historical presentation of the valley (cf. annexe 11)
- Typology of HHs\(^7\) on the basis of farm and off-farm activities.

### July-August (3 weeks)

**Eating habits in Baharak and main challenges of nutrition programs in rural Afghanistan.**  
Answer to question 4.

**Understanding of local food dynamics\(^8\):**  
- Functions of food consumption
- Cultural eating habits
- Evolution of the concept of ‘food security’
- Diversity factors of consumers
- The “quality” of food concept

**Sampling of 22 women chosen according to HH type in ‘focus’ villages.**  
- C. Dufour’s guidelines (cf. annexe 9)
- ‘Food game’ for women
- EBC\(^9\)
- Frequency of food consumption
- Basic foods mentioned in NRVA\(^10\)
- Methodology of the ‘day before’ (meals within the last 24 hours.)

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**Anthropological tools of ‘knowledge techniques’**  
- Typology of consumers according to access to good quality food.
- Graphs: quantities and frequencies of food consumption
- Table of food availability according to the season and to HH diversity
- Tables of food composition from FAO\(^11\)

### August (2 weeks)

**Evaluation of AAD’s programmes with farmers and women (especially wheat and kitchen garden programs).**  
Beginning to answer question 5.

**Anthropology of participative projects.**  
- Individual and group meetings with men and women involved in programmes (AAD staff and beneficiaries) in the valley and other districts of Bdk
- Introduction to the participative approach during meetings with women’s groups and shuras.

**List of main constraints and assets of AAD’s programmes**  
- Introduction to an evaluation guide, Groupe URD’s Quality COMPAS\(^12\)

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\(^6\) Cf. next section on the limits of this study.

\(^7\) Households were chosen as our study unit because they represent the consumption unit where all members participate to a same income and eat together. The household is also the smallest comparable economical unit. Indeed, the main objective of this typology was to highlight the most vulnerable HHs in order to improve the relevance of development programmes.

\(^8\) Local food dynamics are mentioned in Bricas, N., 1998, *Le cadre conceptuel et méthodologique*.

\(^9\) Enquêtes Budget Dépense (Bricas, N., 1998).

\(^10\) *National Risk and Vulnerability Assessment* (cf. Methodology for the National Surveillance System for Afghanistan, WFP, 2003)

\(^11\) FAAH (Food, Agriculture, Animal Husbandry and Information Management and Policy Unit), 2004

\(^12\) Thanks to a short workshop on the Quality COMPAS with P. Pascal of Groupe URD (cf. www.compas.qualite.org).
### 1.7 LIMITATIONS

#### 1.7.1 Limitations linked to the field context.

Despite our learning a basic grounding in *Dari*, this study would not have been possible without translators (Dari-English) although translation often resulted in misunderstandings. Firstly, it was difficult to explain our methodology and technical vocabulary to our translators. Secondly, they were unable to translate all the local sayings used by the interlocutors. As a consequence, our understanding of the local context is not totally exhaustive.

The fact one of the researchers, Cécile Duchet, was a Western woman had several advantages and disadvantages, especially in terms of access to information from male interlocutors. Additionally, Ms Duchet’s translator was a young girl who was not allowed to speak to men and could not ask questions in the bazaar or study the fruit and vegetable market. Ms Duchet could speak with shopkeepers via Mr Duchier’s translator but this was not a good context for holding meetings.

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13 These networks mean social networks but also family, matrimonial, economic and village networks.

14 *Eid* is an Islamic holiday that marks the end of Ramadan, the month of fasting. Women prepare special dishes for this event (see chapter on food).
Moreover, it was difficult to organise individual meetings with either a woman or a man. Mr Duchier had to meet men outside their houses (because of women) and thus spoke with several men in mosques or in other public places. As a consequence, it was sometimes difficult to receive information from one HH because there was no guarantee that what had been said was true. As far as women were concerned, many of them were interested in taking part in meetings and answering the questions. It was not always easy to have a comprehensive view of the HH economy.

A final limitation related to the context was the restriction of movement due to insecurity. Under the responsibility of AAD, we could not carry out our agrarian assessment in remote villages and in ailoqs (high pasture lands), such as Shewas in Baharak district. In this way, only the Baharak valley and two villages on the slopes were included in the study, which limited the diversity of case studies.

1.7.2 Limitations linked to the methodology

The methodology described in this chapter is by no means exhaustive. Many of the concepts and approaches which were used were new for us and we did not master them very well. For instance, the anthropological approach used for studying villager networks was complex because they are not ‘visible’. This analysis requires a much longer study focusing on social relations within villages. This study presents information on these networks as a means of understanding the general context but does not describe their analysis.

Furthermore, a number of limitations affected the gathering of information and analysis of nutrition data. During the eating habits survey, Ms Duchier tried to use a ‘food game’ to help women answer her questions but this pedagogic tool was inappropriate. Women older than twenty years old tend to be illiterate and this explains why they were not used to playing with pictures and tables. They were also too shy to use pulses to indicate the quantity of food they eat. As a result many of the answers provided were influenced by the translator and were not spontaneous.

The duration of this study was too short to use Groupe URD’s Quality COMPAS.

The objective of the evaluation aspect within this study was to initiate discussions on how to improve AAD’s programmes but it would have been more interesting to evaluate these programmes in greater detail.

1.7.3 Limitations linked to numbers

The bulk of quantitative data presented in this report was gathered during our surveys with the Afghan population. In order to analyse their significance, we used them to establish estimates (cf. annexe 16). These figures need to be interpreted as indicators for a qualitative viewpoint but are meaningless for statistical analysis.

Gathering quantitative data during interviews was a difficult task especially with women who were unable to give estimates for the amount of food and domestic materials they consume. Nevertheless, women were able to indicate the frequency of consumption. Thanks to the example of AAD’s eating habits in Baharak, it was possible to estimate the quantity of meat, vegetables and fruit consumed in average by an adult per meal. These estimates were used to draw up graphs and for a better understanding of food dynamics.

Moreover, we used WFP food tables on Afghanistan to obtain the caloric value of foods but this data was often incomplete and needs to be checked. The study on eating habits in Baharak is of interest for understanding the main issues at stake for nutrition programmes in this type of rural areas.
The following chapter presents our ‘mixed’ assessment of the valley using a systemic approach. It describes the rural context which is essential for a thorough understanding of farmers’ strategies and women’s place in this society.
2 CONTEXT OF BAHARAK VALLEY

2.1 HISTORY OF FARMING INTENSIFICATION

The history of agrarian practices in Baharak can be divided in five phases:
Phase 1: Agropastoral system (before 1930)
Phase 2: Development and Pashtunisation
Phase 3: Cereals instead of animal farming (from the 1950’s to 1979)
Phase 4: War (1979-2001) and drought (1999-2001)
Phase 5: Cash crop system (from 2001)

Phase 1, 3 and 5 are separated by two interludes, representing periods of fundamental change which partly explains the agrarian evolution. Phase 2 which can be entitled “Development and Pashtunisation” commenced with Zaer Cha in 1933, and phase 3 was when the country was at war (1979-2001) and suffered severe drought (1999-2001).

2.1.1 Phase 1: Agropastoral system (before 1930)

“Before, animals grazed in the valley”. In the past, agriculture was really very different with fallow land, grazing land and crops being grown in the valley which was not overexploited. The following paragraphs explain what type of agriculture there was in the valley a century ago.

“Before, there were less people.” This sentence was often heard when interlocutors were asked to give some historical information on the valley. According to Baharak elders, there were significantly fewer villages and they were less populated: "In Deta, during my father’s time, there were only three or four houses; today, there are more than forty families.”.

The oldest villages were built at the bottom of the mountain because of the type of soil (see section 2.3.1.3). These villages have the best soil and possess the rare quatans.

During this period, living conditions were harsh which explains the limited growth in population. Apart from a few midwives (dayas), there was no doctor in the valley. An old man explained: “When my father was a child, disease killed a lot of people, now, we have medicine and doctors”. The low population density meant that there was little pressure on the natural habitat.

“When I was a child, there was no road to go to Faizâbâd.” Baharak valley was a remote area even if hawkers or explorers, such as Marco Polo (Larousse, 2003a), passed through Badakhshan. This isolation meant that farmers had to grow several crops and breed animals in order to be self-sufficient. Animals were bred and exchanged for arms, clothes, tea and salt.

This relative geographical remoteness also resulted in political isolation. An interviewee explained: “During my grandfather’s time, there was no governor who came from Kabul, people of Baharak appointed their leader: the arbob.” The arbob is a leader elected by a committee (shura) composed of male members of the community only. Shuras are presided over by the White Beards (muy-e-safed), i.e. the elders of the community.

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15 Quatan: Land where animals are kept from November to April (winter).
Crops and animals
During this period of low population density and relative isolation, farmers combined crops growing and animal husbandry. This mixed agriculture was possible thanks to the relatively large surface per inhabitant.

Manure and fallow are the two elements which allow farmers to recover soil fertility, and in the past, cropping systems always included a fallow period. Grazing land and grass land represented the second cropping system, which allowed farmers to accumulate stocks of grass for feeding their animals over winter. During the summer, farmers moved their livestock up to the neighbouring grazing grounds (ailoqs), namely Shewa. At this time, the price of meat confirms that there were more animals per inhabitants than today. One man explained: “Goat was very cheap, rich people usually ate meat, my parents more than once a week. Today, it is over, it is too expensive”. According to interviewees, in the past, 4kg of wheat was equivalent to 1kg of meat. Today, people need to sell 15kg of wheat to buy only 1kg of meat.

After the transhumance (from April/May to October), some of the breeders left Baharak to sell their animals in Kunduz or Kabul. Animals were fattened up before the trip. Breeders traded their animals for products they could not produce, such as arms, clothes and tea. Cash exchange was rare, even with hawkers.

Seventy years ago, the bulk of agriculture and food in Baharak was composed of wheat, barley, maize, sesame, rice, vegetables (potatoes, onions, etc.) and fruit (apple, apricot, cherry, nut, etc.).

2.1.2 Phase 2: Development and Pashtunisation (1930-50)
In 1933, Zaer Sha became King of Afghanistan. This young king engaged upon a global development plan for his country. Social (education), technological (agriculture, health) and administrative sectors were particularly developed (Barry, 2002). Governors were appointed from Kabul and were no longer elected by local shuras. Several people benefited from this new political deal becoming increasingly influential in Baharak society.

“They built the school and several doctors arrived.” The focus was placed on developing health and education. Child mortality rates dropped in the forties thanks to the arrival of the first doctors in Baharak, and population numbers began to rise.

“They built the road.” For the elders, two important events confirmed the success of development efforts in Baharak: the construction of a road between Baharak and Faizâbâd in the forties and an increase in motorised transport. Henceforth, Baharak district was connected with the rest of Afghanistan and new goods became available in the bazaar.

“A lot of people came to the valley.” With its development, the valley attracted people from neighbouring districts. Since neighbouring valleys did not benefit from the same level of development and people did not have access to new goods, doctors and schools, large numbers of people immigrated towards Baharak. Moreover, war broke in Tajikistan with the expansion of Russia (Carrere d’Encausse, 2005). An old shopkeeper told us that “During the war in Tajikistan, a lot of people came here and stayed.”

“And, the Pashtuns arrived.” The King and his government supported their ethnic group, the Pashtun people. In order to control all Afghanistan, a wave of “Pashtunisation” took place. Pashtun people migrated from their province (in the south of Afghanistan) to provinces where Tajik people were the majority. With official documents, they came to Baharak. This migration was pacific thanks to the low population density. These newcomers built their own
irrigation system in order to transform their rain-fed fields (lalmi) into irrigated fields (abi). These new villages, such as Doagbi, are located in areas with sandy soil.

2.1.3 Phase 3: Cereals replaced grazing land (1950-80)

With the drop in mortality rates and waves of migration, the population increased quickly. Farmers had to adapt their farming systems in order to produce enough food for everyone.

"Before, farmers had more land." Due to the rise in population, farming families found it increasingly hard to recover their productivity after transmission where land is divided between each heir. Farmers had to produce more with less land, marking the beginnings of the intensification process. Wheat is the first food consumed in Afghanistan. Farmers began to sow more wheat on the fallow land and grazing land.

A few families had large amounts of despite land transmission and the division of land. New civil servants, appointed by Kabul, could benefit from their social situation. An old man explained: "This man has a lot of land because his father's uncle worked with the governor".

"My father had more animals." The reduction in grazing land, pasture, grassland and quatans gave a new deal from the first break. Farmers had to produce more with less land, hence the start of the intensification process. Wheat became the most important crop just before phase 4, thanks to technological advances whereby new varieties of wheat began to infiltrate farming communities. The amount of land set aside for cultivating wheat increased and other crops such as maize decreased. Maize was still harvested with a manual threshing as opposed to the wheat harvest which was carried out with new thresher machines. Barley was still grown thanks to donkeys and horses which are bred in Baharak.

The increase in cereal cultivation stretched over 50 years. Grazing land, grasslands, quatans were replaced by cereals, in order to produce enough food for everybody. The introduction of chemical fertilizers also had an impact on the reduction in fallow land: farmers succeed in improving soil fertility thanks to these new chemicals which were used for the first time in the 1960’s. The diminishing amount of grazing land, grasslands and quantans lead to a reduction in the number of animals per household.

2.1.4 Phase 4: War and its consequences (1979-2001)

"We had to sell our animals." In 1979, the Soviet army invaded Afghanistan. Several farmers testified: "Russian soldiers came and butchered everybody in Orim," in the Shohada district, "Before the war, the bazaar was in Bewikan, everything was bombed." After the war against Russian troops, peace alluded Afghanistan as civil war broke out and continued for ten years, until 2001 when Taliban regime was brought down.

Farmers took part in the war. They had to get involved in the mujaheddins’ fight by sending men to war or by giving supplies to soldiers. Each village had a commander who was in charge of the local aid control. In order to survive in the valley and help the mujadeedins, smallholders had to sell their assets: land, breeding animals and fruit trees. After the war, farmers had to try to survive with limited assets and could not hope for any government support.

Between 1999 and 2001, the drought cast a new shadow over the region. Badakhshan province was not really in danger thanks to the high mountains and large amounts of snow, but there were indirect consequences. Baharak communities imported fodder to feed their animals during the winter but because of the drought, fodder was scarce and thus expensive. Several farmers had to sell their animals to reduce costs.
“So many trees were cut.” The elders remember that before the war, the valley was filled with fruit trees. Local people, Afghan or Russian soldiers cut many of the trees down for cooking, heating and construction purposes.

“Paralysis without any political control.” Large numbers of refugees returned at the end of the war and recuperated their land back without any problem, in contrast with what can be read on the subject (Wily, 2003). Along with these returnees, other people who had taken refuge in Badakhshan in order to escape the Taliban regime also returned (Badakhshan was never under Taliban control). After the war, some of these refugees decided to stay in the province and are still living there. Finally, after the war, people continued to migrate for economic and political reasons\(^{16}\). In search of work or shelter, this influx contributed to the rise in population density and saturation of living space in the valley.

The war was responsible for political, economic and social collapse in Afghanistan that the Bonn agreement subsequently attempted to address. When the Taliban controlled the majority of Afghanistan, the former president Rabbani was leader of Badakhshan but he never succeeded in establishing peace in the region. Some farmers said that: “Rabbani is corrupt and he never worked for his province”. Many others confirm his unpopularity. Moreover, there were many other prominent local leaders who earned their position during the war: the commanders. These leaders knew how to impose their rules. They seized farmers’ land and decided unilaterally on a new location for the bazaar.

2.1.5 Cash farming systems

“Fewer and fewer animals.” New arrivals and natural population growth are responsible for urban development. The *quatans* (land where animals are kept over winter) have gradually decreased. Today, only a few big landowners still have *quatans*, which allows them to breed the largest flocks. Most households only have a few small ruminants (goats, sheep) in order to produce milk if they cannot breed one or two cows. Moreover, the lack of living space is not the only constraint, as the lack of fodder is increasingly problematic. Crops are now being cultivated where grassland used to be, so breeders have to cut grass further afield in order to store enough essential grass for the winter.

**Two crops a year**

According to SMU (SMU Area Report, 2001), in 1990 roughly 50,000 inhabitants lived in the valley, in a surface area of 80km\(^2\), i.e. 5 inhabitants per hectare. Most farmers have barely enough land to produce food for their family. Some of them have begun to grow two crops a year in the same plot. Clover can be found in wheat and maize crops, or water melon can be found growing just after the barley harvest. These new agricultural practices are used in order to increase land productivity, i.e. land intensification.

**Poppy, a quickly adopted crop**

The strategy of growing two crops a year is not the only alternative in order to cope with population growth. Indeed, the majority of farmers have begun to grow poppy. Local commanders introduced this crop in order to cover the cost of war and today, in Baharak, this crop is widespread. Rising from 1,700ha in 1994 to over 15,000ha in 2004 (Afghanistan, Opium Survey 2004, 2004), poppy now represents one of the main crops. By selling poppy latex, this crops does not only allow farmers to cover their food needs but also build up their assets again, such as breeding animals or access to new consumption goods. Communities in Baharak no longer live on food crop agriculture but within an economic market. Farmers are no longer interested in exchanging nuts against clothes, but they want to grow cash crops in order to buy radios and TVs.

\(^{16}\) The civil war produced both winners and losers. Some people on the losing side had to leave their villages for economic reasons and migrate towards cities. Baharak is the first market town on the road, so many of them settled there, while others went on to Faezabad, Kunduz and Kabul.
However, farmers are not the main beneficiaries. Other more influential people, such as local commanders, have taken control over the poppy crop production. Today the Afghan government has to take into account the influence that commanders have on local agriculture.

Poppy requires a lot of work and this crop is responsible for an increase in labour costs. Only the poppy growers can bear these costs. With more work and more cash, the Baharak economy has developed quickly. A shopkeeper explained: “With poppy, there is money, people work and buy”.

With these new dynamics in the local economy, poppy is not the only major crop, as potatoes and onions are taking an increasingly important place. Moreover, trees are being planted again but poplars have taken the place of fruit trees. Today, agriculture systems are reaching a new stage in their development with the introduction of cash crops, especially with poppy.

2.1.6 Historical summary

The historical analysis has revealed a general trend: land intensification. The reduction in land availability per household has forced farming communities to maximise land productivity, i.e. households have to produce more with less land. Figure 3 illustrates the different phases over the past 100 years, with the arrow indicating land intensification.
Figure 3: Historical summary of Baharak

1st period: Agropstoral system

2nd period: Cereals replace grazing land

3rd period: Cash crop

1st break: Development and « Puchtunisation »

2nd break: War and drought

Land intensification
2.2 WOMEN’S POSITION IN BAHARAK

2.2.1 A tradition of agricultural production

It is also interesting to see how agrarian dynamics have changed over time by studying women’s role in processing the household’s agricultural produce, thereby playing a major role in generating added value.

For over a century now, Baharak valley has been building its reputation in the production of dried fruit and processing of animal products. Thanks to its irrigated gardens and numerous passers-by (caravans of travellers and traders on horseback or donkeys), trade in walnuts, dried apricots and almonds was one of main sources of wealth in the valley. Similarly, Baharak inhabitants bartered tanned animals hides and processed dairy products such as krout\(^{17}\) in exchange for fabric, tea, oil, etc. These products were also exported to Tadjikistan, Pakistan, the rest of Afghanistan and Russia. During the 1950’s, a small family business processed apricot kernels into sweets (kernels were dried, roasted and then covered in sugar) which were sold locally and abroad.

Trade started to decline when the conflict broke out and then completely dried up until the early 2000’s when markets opened up again to foreign trade. Today the trade of dried fruits is beginning to recover although it is struggling to overcome the loss of many fruit trees which were cut down for wood during the war, as well as competition from more appealing manufactured goods which can be found in local bazaars. The general decline of livestock farming in the country, and particularly in Baharak, is another factor that has affected the profits that can be made from animal products.

Political stabilisation in the region and the development of infrastructure should nevertheless help promote trade and develop new processing techniques to improve agriculture.

2.2.2 Present communities: a mosaic of populations

In describing the social context of the region under study, this chapter aims to shed light on the rules that govern communities in the valley and women’s position in society. This information can be used to design development programmes that are well adapted to women’s way of living in this kind of society.

History shows that Baharak valley has always attracted different groups of people. In the last five years, migrants have been coming in from neighbouring districts, high-altitude regions affected by drought or insecurity\(^{18}\), as well as from Pakistan and Iran (former refugees), Kabul and foreign countries (NGO staff).

These people form various social groups who share specific identities, rules and ways of life. Describing this heterogeneous social organisation help us to understand how difficult it is to define the concept of a household unit and how dangerous it is to over-generalise certain social observations.

In their own way, women also form a specific community. However as they are present in all other social groups, it is more relevant to describe their social position in each one of these groups, where they are subject to particular rules and identity but which share common Persian origins.

\(^{17}\) Krout is made from whey, a waste product in butter processing. It is boiled, salted and drained and dried in the form of a very hard small ball. It is similar to cheese.

\(^{18}\) Over three consecutive years (2000-02), a severe drought affected large parts of Afghanistan, especially in already arid high-altitude regions (SMU report, 2001, p.18).
Just over a century ago, Badakhshan was a separate kingdom (I. Bashiri, 2003) but has since been incorporated into Afghanistan as a province. It has however succeeded in preserving specific customs and a strong ‘regionalist’ identity. Moreover, Badakshan never fell under the Taliban influence. Most inhabitants prefer call themselves *badakshis* to distinguish themselves from Afghans from other provinces.

This regional identity becomes particularly apparent during disputes over the right to pasture cattle between nomadic breeders from the valley or from the high plateaux and semi-nomadic breeders from Kundunz, west of Badakhshan. The latter have a very poor reputation amongst local breeders who accuse them of ‘stealing’ their pasture and contributing to the decline of livestock farming in Baharak.

Despite this common attachment to their region, people living in Baharak usually try to highlight differences in identity, such as belonging to a specific ethnic group.

Officially the Tajik ethnic group is the oldest in the region and today is the most widespread, followed by the Uzbeks and the Pashtuns, who arrived last century. These three main ethnic groups in the region were traditionally agro-pastoral farmers, although the Uzbeks were typically more specialised in livestock farming. Each group also claims his own identity through his language (Pashtu and Uzbek), particular food habits and also physical features, such as almond-shaped eyes.

But little by little and since the massive arrival of new populations in the Baharak valley, Pashtuns, Tajiks and Uzbeks have begun to mix. This led to interesting developments: for instance, children whose father is Pashtu and mother is Tajik but who do not speak the Pashtu language do not consider themselves Pashtuns but Tajiks. Similarly, a woman born of Uzbek parents who marries a Pashtu man has her forehead tattooed and calls herself a Pashtun. Certain factors such as craft industries, clothing and housing layout are also evidence of this intermingling as they have become fairly similar from one ethnic group to another in this valley (contrary to the Ismaelian population of *Shewas* who can easily be distinguished on the basis of these criteria).

### 2.2.2.1 A society of descendants organised in networks

In the Pashtun villages created about fifty years ago, villagers claim they belong to one or two lines of descendants originating from the heads of family who were the first ones to settle in the village. The first type of network, the one of descent, is therefore absolute and organised in space (*qaum*\(^{19}\)).

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\(^{19}\) This word can refer to a family or a neighbourhood network and therefore can be compared to a clan, a pattern which is widespread in many regions of Afghanistan.
Nevertheless in Baharak, many inhabitants say they do not belong to any particular qaum. Women do not have a word to refer to their belonging to a group apart from ethnic denomination, as they are ‘given’ to a line of descendants when they marry.

Upheavals and population displacement caused by the war in the valley notably account for the difficulty to clarify the networks in the area. People from the same village still find it difficult to really feel ‘settled’ in the same territory as they are just emerging from a long period of uncertainty. The war also contributed to the degree of female reclusion and encouraged women only to associate with the nearest circle of relatives, namely household members. For these reasons, it is extremely difficult for women to identify with a social group beyond the private sphere of the household.

2.2.2.2 Basic social organisation: the family

The family is the oldest and most basic entity of social organisation in a rural society such as Baharak.

However a woman’s position within the family is ambiguous. Indeed when a girl marries she leaves her parents’ home to join her future husband’s home. The woman then considers that she is leaving ‘her’ family to be adopted by another one. For this reason, most marriages are endogamous, taking place between members of a single line of descendants. Marriage between close relatives is common (cousins, uncle and niece, aunt and nephew, etc.).

Women react differently to this sense of belonging to both a family and a line of descendants. Some women see their marriage like an unfair separation and claim they have no family. Others never break the link with their parents and if they need to ask another woman for help, they turn to a member of ‘their family’, i.e. a blood relative.

The notion of family includes different levels of organisation, from the household to the line of descendants. Indeed it describes a wide network whose members are bound together by trust and mutual support.

2.2.2.3 Minimum social organisation: the household

Housing in Baharak valley is remarkable in the way it fixes boundaries. The high walls that surround houses are an indication of the importance of privacy in this society. Within the privacy of these fortress-like homes, discovering the life and excitement which reigns within is an amazing experience. Indeed women, who are discrete in public places, are lively, talkative and light-hearted! The main living place is often composed of a yard and a covered terrace where the kitchen tools and the bread oven can be found. Women are thus at the very centre of the spatial organisation of the house and the household.

In terms of decision making within the household, it is the oldest man, the head of the family, who decides what each member of the household can purchase until he hands this role over to someone else. If he chooses to do so, he can hand this power over to his brother or his eldest son. If several brothers live together, the youngest ones, just like their wives, must ask their elder brother for permission before purchasing anything.

As polygamy is allowed within the Islam religion, it is possible to find almost ten married women and girls living under the same roof. This implies a strict organisation amongst the different women for the various household tasks. The mother-in-law, the oldest woman within the household, often oversees each woman’s tasks and allocates the hardest work, such as cooking and washing, to the latest arrivals.

There are many different types of organisation between women living within the same household. Indeed, in the villages close to the new town, many families do not to live with the husband’s parents, out of choice or otherwise, and the number of women living under the
same roof is reduced to one or two. Therefore they are not subject to this hierarchy and are ‘freer’ in their daily activities and schedules.

Moreover, many women20 have been widowed due to the war and limited access to medical care. Their household is thus often predominantly composed of children, who may be old enough to work, but without a man present.

In addition, some husbands, who have several wives, choose to live with one of them and to accommodate the remaining wife/wives in a separate flat. These households of both married and separated (but not divorced) women are often dependent on the husband’s household, who must provide for his wife/wives and child(ren). All these households, composed of women and children, must overcome the problem of insufficient male workforce if their sons are too young to work.

In a society where women cannot be paid for their work, this type of household is often in a precarious situation, if not extreme poverty, although some women manage to take advantage of this situation. Indeed, the box below reminds us that marriage in Afghanistan is often experienced as some form of ‘subservience’ to men by women.

> “Parents are rarely happy with the birth of a girl, as she is born to make another family richer whereas a married son will stay with his father, thereby strengthening the inheritance he will have to protect”21.

A man from Baharak also states with some kind of irony “This is my daughter, her name is Dollar...”. Alluding to women as a financial resource is a reference to marriage because the future groom’s family must pay a dowry (kaling) in order to get a wife.

Unlike in the capital and in large towns, the badakhshi tradition has continued in Baharak. For instance, a marriage lasts three days (see annexe 14 on the traditional development of a wedding) and the opulence of the event gives an indication of how wealthy the family is and thereby its social status. Dowries have reached record-high levels in Badakhshan22. They include a sum of money or a piece of land for the family of the bride as well as a list of material goods.

The men from both families (usually the father of the future groom) negotiate and decide on a list, including the food necessary for the celebrations, the cost of the reception, crockery and also the household linen necessary for setting a new household. Marriage can therefore imply severe financial hardship for the father of several sons but, on the contrary, an opportunity for the father of numerous daughters. Some poor families have no choice but to ‘exchange’ a son for a daughter in order to secure a marriage contract ‘for free’.

At first sight, marriage is a transaction in which the woman’s opinion is not taken into account, just as the sale of cattle is also a ‘man’s business’ and women are not consulted. Even widows, who are perfectly aware of the sum of money that should be exchanged, have no power to negotiate. Indeed, when the head of the household dies, the widow must appeal to a brother-in-law or a brother for the ‘commercial’ side of this event. Nevertheless, women obviously also play an active part in preparing the marriage festivities. Indeed, it is the mother of the future groom who will first visit the bride’s family to ensure that they have ‘good

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20 The number of widows interviewed correponds to 20% of this survey (see statistics in annexe 12). This data can only be taken as an indication of women’s situation after the conflict.
21 Delloye I., Femmes d’Afghanistan, Phébus, 2002
22 Over the last two or three years, dowries have been fetching between 1-4,000,000 afghanis ($20-80,000) in the region. This is one of the highest levels in the country, probably due to the economic boom in relation to poppy cultivation.
manners’. This first step is essential for a mother who is to welcome a new daughter-in-law and who will spend, in most cases, the rest of her life with her. If she is not satisfied with the visit, she can prevent her son from marrying the woman. On the contrary, if she agrees, the man in charge of negotiating the dowry will meet the father of the bride to discuss the marriage contract.

2.2.3 Promotion of female segregation

In rural society, the submission of women does not call into question the Islam religion itself but its interpretation, as illustrated by a Pashtun woman’s comments taken from the book by Isabelle Delloye on Afghan women.

The Mullahs play a central role here: indeed, they use their power to advocate the respect of the Purda, and prevent the women from going to the bazaar, speaking to a man in public, attending mixed meetings, sending their daughters to school although they are old enough to get married, etc. television programmes, which are relatively new to the region, are also severely criticised by religious leaders. They strongly recommend that the Afghan people reject Western culture, which they see as a symbol of women’s ‘depravity’.

As a consequence, NGOs such as AAD, who work in the valley with women (both salaried employees and beneficiaries) are constantly watched by local religious authorities and sometimes find that their activities are restricted.

Yet women remember their grandmothers saying that they did not wear the burka thirty years ago. At this time, rural society did not see the burka as being that useful as women did not often leave the village. However with the arrival of large numbers of newcomers, including women from wealthier families accustomed to the city way of life, wearing the burka gradually became more widespread in the valley.

The development of the new town since the war only intensified this phenomenon. Today, no woman would dare to leave the household perimeter without being veiled from head to foot for fear of slander.

Nevertheless when placed in its context, the importance attached by the media to the burka issue appears to be excessive. Indeed, the fact that wearing the burka is something relatively new in the region shows that customs within a given society are constantly evolving but this factor alone does not allow us to draw any conclusions on the position of women in society.

“The Koran inspired a real revolution in Arab society in the 7th century, notably with regard to women at this time. All too often we forget that the very first believer in our religion was a woman (…). The prophet Mohammed’s favourite daughter has always spoken out on behalf of women to improve their lot and protect them by giving them a social status. It is according to this chapter in Arab history that one must comprehend a woman’s status in the Holy Koran to fully understand the meaning of respect and tolerance (…). Elsewhere it is written that girls and boys are God’s gift (XLII, 49) (…). The Koran ordered men to take charge of women as human beings and we tend to forget this condition, even though the texts explicitly mention that men and women must be treated fairly (IV, 3)”.}

23 Delloye I., Femmes d’Afghanistan, Phébus, 2002
24 The strict observance of the rules of the Purda is one of the characteristics of religious extremists who intend to keep women away from the world of men. These texts were particularly adhered to during the Taliban regime in Afghanistan but are also valid for some Hindu communities in India.
Of course, people living in the valley are not used to letting women work outside the house. Working in the fields is usually the responsibility of men and children. Nevertheless some women can sometimes be seen crouched in a field close to their house or a long way from the main roads. This is the case when the household does not have enough male workforce or the financial means to pay farm workers. Households that do not own land but rent plots of market gardens also have a tendency to allow women to work in the fields. One or several women live in tents over the three months of vegetable harvest, hidden behind small hedges to protect their privacy.

Some households (the poorest) are therefore obliged to bend the rules on women’s movements out of financial necessity and are marginalised by the rest of the community as a result. The possibility for women to work in the fields is still highly influenced by ‘other people’s point of view’ and the economic context.

2.2.4 Celebrations indicate women’s attachment to tradition

During an Afghan woman’s life, there are a number of events which are opportunities for her to break isolation in the household and above all to revive social links in the different lines of descendants to which she belongs: religious celebrations such as Eid, weddings, births and funerals regulate society and especially the lives of women.

For instance, the birth of a child is celebrated (Grahwara bandaan) when he/she is more than three days old and close female relatives (mother, mother-in-law, daughters, sisters-in-law) are in charge of welcoming the various visitors. It is also the time to cook the alloua25 and other special meals, give presents and talk. It is one of the rare moments too when mother and daughter meet up in the husband’s family and when the mother-in-law remains in the background to allow the mother give her daughter valuable advice.

These celebrations are a means of bringing to the fore women’s networks, be they in the family, neighbourhood or among friends. Analysing these networks should enable development programmes to better meet the beneficiaries’ expectations on the one hand, and adapt their activities to the different social groups within these networks in particular.

2.2.5 Women’s access to salaried activities

Despite the religious conservatism in the Baharak valley, there are visible signs that female emancipation is taking place, particularly in the vicinity of the new town. Half of the teachers in the three schools of the Baharak valley are now women (that is to say about fifty women), often young girls who have just left school between the 10th and 12th grade26 and who now earn their own salaries. The arrival of NGOs has also boosted women’s employment in the health sector, craft industry and organisation of activities. Among the fifteen or so female NGO staff, some were already qualified and had attended lessons before the war broke out, but others have been trained by the NGOs. At the September 2005 parliamentary elections, two local women employed by the NGO AKDN (AghaKhan Development Network) stood as candidates.

Even so only a minority of women in the valley have access to salaried activities, as a result of pressure from the family on the one hand and to political control on the other.

25 Alloua is a sweet, white nougat made of flour and oil and which is kneaded by women for a long time so as to make it frothy.
26 The 12th grade corresponds to the French ‘terminale’. On completing this school year, students sit a university entrance exam. Students start school in 1st grade at the age of 6 and teachers are thus often aged between 16 and 20 years old.
2.2.6 Via the new bazaar, the model of modern society

Three years ago, the governor of Baharak declared that women should be allowed to go to the central bazaar of the new town. They cannot sell goods themselves and few of them buy fresh food but many go to stalls selling fabrics, clothes and women’s accessories. Incidentally, the number of such stalls is considerable compared with the small size of the valley but it shows the growing demand for such products destined for women above all.

Moreover, displaying these new products contributes to spreading the model of a more ‘modern’ society. The western-like consumer society is seen as an ideal to which many women aspire. Whether it is an ideal or a real expectation, it is essential to take this fact into account when proposing projects if we want to avoid too wide discrepancies in our reading of the situation.

Finally, around the new town of Baharak, a lot of young women are today tempted by this way of life which they deem ‘liberating’. On the contrary, in the more remote villages at a distance from the bazaar, remaining within a community and close family circle remains an important point of reference for most women and one that they are not ready to give up.

We have seen in this chapter that this society is constantly changing and is today beginning to open up to the outside world (via the media, new products on the market, NGOs, etc.), despite its religious fundamentalism. In this context of deep contrasts, people living in the valley remain deeply attached to their cultural and religious points of reference, particularly those that exert a control on women’s position in society.

Faced with this evolution, women do not form a homogenous social group. In the valley, women living close to the new town (see Figure 38 on geographical zoning) have easy access to new consumer goods, education and paid activities, as a result of this proximity. But the people living in this area often have different origins and strong social networks are often non existent in the neighbourhood or even in the family. The fact that women lead very different ways of life makes it difficult to set up women’s groups in development programmes.

In the rest of the area, it is the women themselves who say that their village is koshlak to show that they are far from the new town and to justify the fact that they feel ‘less modern’. Indeed it is more difficult for them to reach the market. And yet it is in these villages that community dynamics are strongest and it seems more relevant to work with women.

2.3 Social organisation to natural constraints

2.3.1 Environment

2.3.1.1 A continental climate

There is no precise meteorological data available for Badakhshan. However, according to interviews and our observations, Baharak’s climate shares the characteristics of a mountain and a continental climate.

Baharak (1,500m) is surrounded by peaks of over 5,000m and this affects the climate in the valley. These high mountains cause clouds to gather and rain to precipitate. At 5,000m, the snow thaws during spring and summer (from May to September), and this water flows in the rivers of Baharak.
Baharak has four seasons. Winter which is bitterly cold with snow lasts from November to April. Summer which is hot and dry lasts from June to September. From April to June, during spring, there is heavy rainfall. From October to November, during autumn, temperature falls quickly and there is less rain.

The yearly average rainfall in Badakhshan is between 400-600mm (Abdul, Ghulam, Mahbuba).

Between winter and summer, the temperature varies from under 0°C to over 35°C (Abdul, Ghulam, Mahbuba). There is the risk of frost at the end of winter in April.

2.3.1.2 Inhospitable mountains

A study of Baharak topography reveals two distinct areas: the valley and the mountains. Human activities are particularly developed in the valley where it is easy to irrigate land. In the mountains, without irrigation, natural vegetation is limited because of the dry season. Slopes are so steep that it is too difficult to build terraces in order to irrigate only during the summer (during the winter, it is not possible to carry out agricultural activities). On the slopes, there are only rain-fed fields.

In addition to these two main areas, there are also the highland pastures (ailoqs). For the breeders of Baharak, the highland pastures are known as Shewa. It takes two hours by car to reach Shewa from the valley. With an altitude between 2,700-3,000m, vegetation starts growing in Shewa just after the thaw in April/May. Only a few people live in Shewa all year long: the Shewachis; Badakhshis (breeders from Badakhshan) and Kuchis (breeders from other provinces, mostly Pashtuns) move to the area during the transhumance.

These three areas are complementary. Highland pastures supply feed during the summer. Manure from Shewa helps fertility in the valley. Baharak can supply basic necessities to Shewachis (food, wood, tools).

Unfortunately, because of security reasons, it was impossible for us to adequately study villages situated in the mountains and the Shewa.

2.3.1.3 Yellow and black land

In this valley, the soil originates from alluviums from rivers and colluviums from slopes. Near the rivers, the soil is sandy; the clay rate is under 12%. These soils are drained and the leaching of the organic matter gives it a yellow colour. Farmers refer to this soil as rok e zard (yellow soil) and explain that its agronomic quality is poor. Near the slopes, the clay rate is higher (15 to 30%), drainage is less important and the organic matter rate is high. Farmers refer to this soil as rok e sya (black soil) and confirm that it has good agronomic qualities. Of course, there are many shades of soil but according to farmers, it is either black or yellow soil. Soil in Hazardjat has been described in the same way (Robin, 2004).

Finally, the exposition of the land is another important factor for farmers. As one farmer said: “That plot is too weak because of the shadow”. According to farmers, the soil needs rays of sunshine in order to limit soil impoverishment. Figure 5 below illustrates the soil composition in the area.
2.3.1.4 Many rivers

Three main rivers supply water to Baharak. These three rivers join up to form the Kotcha River which runs towards Faezabad (cf. Figure 6).
The first two rivers, the Shohada river and the Warduj river, run from the east. Jurm river runs from the south. Water flow in the rivers varies in accordance with the season. Rivers can be large from the end of spring to the middle of the summer, and river swelling in spring can cause serious problems.

Alongside this main river system, there are numerous irrigation canals and some natural springs.

### 2.3.1.5 Impact of the environment on agriculture

The temperature in winter is too cold for agricultural activities. Chart 1 illustrates which months are best suited for agriculture.

#### Chart 1: Temperature, precipitation and plant growth

Source: Author
This graph illustrates that the only months that are really appropriate for agriculture are from April to October. During the summer, the drought means that farmers must irrigate their crops in the valley: the slopes are too steep and erosion is too important. Moreover, altitude has to be taken into account. In Shewa, the highland pastures, it is not possible to grow winter wheat and low temperatures reduce vegetable yields.

During springtime (May/June), torrential rains can be dangerous. Moreover, too much rain can be detrimental for agriculture, especially at specific stages in the plant cycle. For example, this year, rains were responsible for a bad filling of wheat grains and for the development of rust (cryptogenetic disease).

At the beginning of spring (April), frost and hail can have catastrophic consequences on fruit and vegetable production. This year, apples were the only fruit that was saved from these consequences, thanks to its late flowering.

This region is often affected by different climatic extremes and the summer drought can only be controlled by irrigation.

Finally, the soil texture has to be taken into account. Some plots are ‘yellow’, their agronomic potential is weak and the organic matter rate is too low.

2.3.2 Environmental exploitation

2.3.2.1 Large villages are near roads and black soils

The best soil can be found at the foot of the mountains, where the oldest and largest villages are situated. The first inhabitants to this area chose to build their houses here.

The main road running from Faezabad to Baharak runs through the most important villages. Along this route, it is possible to travel to Faezabad in two hours (40km) and a variety of consumables can thus be sold in Baharak. Bridges are weak and in the case of flooding, road traffic may be interrupted. This year, the main bridge was washed away which consequently had an impact on local prices.

As seen in section 2.1, many newcomers have come to Baharak. New villages were built near the poor quality land, the yellow soil. Some villages cannot even be reached by car.

Villages with a strong political influence (large numbers of inhabitants) are situated near the road and have the best soil. Moreover, smallholders from new villages work on yellow soil. The most recent village to be built, Naobad, does not have any land.

2.3.2.2 Travelling by foot or donkey, rarely by car

Most people travel by foot or donkey along tracks when they have to transport something. The high costs involved prohibit most people from owning horses, motorbikes or cars. People sometimes rent cars or minibuses which can transport roughly fifteen people in order to travel neighbouring districts. For sociological reasons, these constraints limit women’s capacity to travel.

2.3.2.3 Walls as a sign of importance of private property

Between plots of land, there are many low walls (tchod e wali). These walls stop animals from grazing and mark the limits of private properties. The closer the plot of land is to the river, the more visible these walls are. A lot of stones are brought down by the rivers which farmers then use to build their walls.

The importance of private properties is very striking here and most houses are surrounded by a high wall.
Figure 7 illustrates a classic exterior design, where the wall is particularly visible.

**Figure 7: A house surrounded with a wall, October 2005**

2.3.2.4 The irrigation system

A large majority of land is irrigated in Baharak. Along the three rivers, several water points can be seen, sometimes set in walls, sometimes in concrete. These water points supply the main canals, which then branch into secondary canals, etc. There is no drainage canal and surplus water accumulates in the plots nearest to the rivers. With this irrigation system, farmers can grow cereals, fodder, vegetables and fruit, including during the dry season.

2.3.2.5 The bazaar

“Shar e Nau” bazaar is the most important commercial, political and social point within the district, in contrast to kochlaks, villages situated far away from the bazaar\(^{27}\). One interlocutor commented: “Here, we are living in kochlack, we are different from people of the bazaar.” There is a social differentiation according to the distance between village and the bazaar.

The bazaar is a major meeting point for men in Baharak. From the day it was built, it has increased in size and today, there are about 100 shops which offer various supplies from imported products to local farming goods. Shops are not open every day and every hour. Normally, activities start at 7.00am and finish at 7.00pm, except during the Ramadan when shops close at sunset. Even during holidays, such as Fridays, many shops are still open. Shops tend to be grouped together per trade: blacksmiths, grocers, agricultural products, etc. Traders come from different regions, including Panchir and Mazar e Sharif. Traders buy products in their province and sell it in Baharak during dry season (from May to October). Most shopkeepers rent their store from the government. Shopkeepers accept cash and poppy as means of payment. The bazaar attracts people from neighbouring districts. Since women are allowed to go to the bazaar, different cosmetic products and women’s clothing are sold.

In villages situated near the main road, there are shops selling biscuits, oil, tea and sometimes fruit but prices are often higher than in the bazaar. The shops are often run by old men or children and they accept cash, poppy, oil, wheat and fodder as means of payment, i.e. a barter economy.

\(^{27}\) Twenty minutes by foot between a village and the bazaar is enough for a village to be considered kochlak.
Alongside these shops, there are hawkers who travel backwards and forwards throughout the remote areas. They tend not to be from the district and sell primarily clothes and cooking utensils.

2.3.2.6 Mosques, the village centre

Mosques are important meeting points for men. As soon as people decide to create a new village, the mosque is one of the first buildings has to be built. If the village is large, there may be more than one mosque.

Villages are important in the Afghan culture. When people introduce themselves, they mention the name of their village. However a village is only considered to be a village if it has a mosque.

2.3.2.7 NGOs and public institutions

The only school which has classes from first grade to twelfth grade (last grade before university), i.e. from six to eighteen years old, is in Diha village, near Shar e nau. Some villages have a school but only up to fifth grade. There is no university in Baharak district although it does have the only agricultural school in the whole province. The Agricultural School teaches specialised subjects from tenth to twelfth grade. Public schools are closed during winter (from December to March).

In contrast to public schools, Koranic schools are private and are completely detached from government jurisdictions. Koranic schools are open during winter from November to March. In this quieter season, children and men have more time to study the Koran.

The governor and public offices are based in Shar e Nau. Unfortunately, due to insufficient resources, the public administration is fairly inefficient: “We do not have any money, we do not have any programmes” insists the agricultural government officer.

There is one health clinic in Baharak with few doctors and nurses. It receives funding from Medair, an international humanitarian aid organisation, and it is very crowded.

Two NGOs currently have offices in the district: Afghanaid and Mission East. There are other NGOs working in Baharak but they do not have offices in the region. The offices of AKDN and FOCUS were destroyed during the May 2005 riots.

2.3.3 Rural and Muslim society

2.3.3.1 Confused political control

A governor is appointed to run administrative affairs in each district. Each village has a village chief, the Namainda, who is elected during a shura meeting. At present, the governor has little control over villages farther afield than Shar e Nau, such as Warkshir or Dashtok.

Local political leaders, for example the mujahiddins, have important social influence, and tend to be wealthy and powerful individuals. Some of them make money from drug trafficking and they must be taken into account in order to understand the situation in Baharak.

As for the ISAF (International Security Afghanistan Forces), they have enough soldiers to command respect and keep peace.

Today, with so many leaders (individuals or organisations), local political power dynamics are still confused.

Apart from electricity taxes, shopkeepers only have to pay the tax on trade. The governor only intervenes in contentions with usurers on the strength of a denunciation. The income
generated by local taxes is insufficient and most of the programmes are cancelled because of a lack of funding.

Moreover, there is a range of informal taxes, including taxes on poppy production imposed by local commanders and mullahs collect money from their congregation.

2.3.3.2 Islam: some important consequences

- **Spread of religious dogma**

In order to understand the impact of Islam on Afghan society, it is important to analyse the different ways in which religious dogma is diffused.

The most important Muslim rules are:
- Profession of faith
- Five daily prayers
- Ramadan
- Mecca Pilgrimage
- Charity

The first and the fifth rules do not have a great impact on how people lead their lives in Afghanistan. However, the one month of Ramadan is a period of strict fasting (no food, no drink) from sunrise to sunset and this can have a considerable impact on people during the long summer days.

The Pilgrimage takes place during the second Aïd, two months after the end of Ramadan. There are some strict conditions determining who must carry out a pilgrimage to the Mecca: pilgrims must be house owners and they must not borrow money for the trip. These conditions mean that many people are exempt from carrying out the pilgrimage. People who have carried out the pilgrimage are called *hadji*, and they automatically obtain a higher social status.

Mosque goers are required to frequent the mosque regularly because of the five prayers. Most of the time, Muslims pray at home but once a week (minimum), they go to the mosque, particularly on Friday (*Djoma*).

Mullahs do not reach a consensus on all topics. People often say: “*This mullah says we can grow poppy but another says we cannot*”. Often different mullahs will give different recommendations and advice. “*Mullahs know the truth*”. This affirmation shows that Muslim leaders have a considerable impact on Afghan society.

- **What are the impacts?**
  
  **Division of assets**

One of the most important impacts of Islam on Afghani society is the question of inheritance. When a family leader wants to, he can divide up his assets amongst his heirs according to Muslim rules (The Koran, sura (S.) 4, verse (V.) 12). To summarise the complex rules determining division of assets: sons receive two parts and daughters receive one part. These rules even apply to the division of land and have had a considerable impact on agrarian systems in Afghanistan as farms have become smaller and smaller.

**Forbidden food**

In the Koran, it is written that humans must not consume several animals, including pigs (The Koran, S.5, V.4). The consumption of drugs, such as alcohol and opium, is also clearly prohibited but not the production process. Muslims are permitted to grow grapes in Afghanistan but not partake in the fermentation process. In the case of poppy cultivation, opium is directly extracted from the poppy plants, which strictly means that Muslims are not allowed to grow it. However, according to many farmers, some mullahs authorise poppy
cultivation in order to have help farmers improve their lifestyles or to pose a thorn in the side of the West. If poppy is grown for pharmaceutical purposes, this is allowed.

**Dowry**
When a man wants to get married, he has to pay a dowry for his future wife. The dowry is a kind of insurance in case of repudiation (The Koran S.3, V.24). In Baharak, it is usually the family of the future wife who receives the dowry. The dowry can be considered as compensation since the wife goes to live in the husband's house. Today in Baharak, the dowry stands at between US$2-10,000. This exorbitant price can be explained because people earn a lot of money with poppy and can easily overbid.

**Sharecropping**
In contrast to certain affirmations (Coke, 2004) and the Koran, the price of sharecropping currently stands at 50% of the production. Both Coke and the Koran, ascertain that agricultural production is divided in five parts: one for the landowner, one for the water owner, one for the seed owner, one for the oxen owner and one for the labourer. This implies that a sharecropper without any oxen earns only 20% of the harvest. However, in Baharak, sharecroppers earn 50% of the harvest and the landowner takes the remaining 50%, irrespective of who has oxen, seed or owns water rights.

**Mullahs' incomes**
The *Osher* is a gift from believers to mullahs. Each man who attends the mosque has to pay (food and/or cash) according to his means.

**Credit**
The *karlzassana* is the Muslim credit. It is an interest-free loan (The Koran, S.2, V.276), that people give to family, close friends or neighbours. Credit is a fundamental element of social relations. Despite its prohibition in the Islam faith, other types of credit with interest exist.

### 2.3.3.3 Credit with interest
Along with the *karlzassana*, there are three other types of credits in Baharak:

1. The *sut*, or credit with interest
2. The *mozabarat*, or credit with sharing out of profit or deficit
3. The *guerao*, or land mortgage

1. **The sut**
The *sut* is a credit with a minimum interest. Islam forbids interest but a lot of shopkeepers use the *sut* with poor customers. This credit appears to be widespread but it was difficult to obtain information because of the social stigmas attached.

Islam expresses disapproval of forced repayment and instead the creditor should wait for his debtor. However, a debtor who is unable to repay his credit risks increasing the burden of debt. Often debtors will honour their debts even if this means taking out credits elsewhere or by selling their assets. Despite its prohibition in Koran (S.2, V.280), creditors with little scruples demand that debts be repaid and debtors may then be obliged to work for free for their creditor.

2. **The mozabarat**
There is no bank in Baharak which explains why the *mozabarat* is necessary. The creditor gives capital to a debtor who has an income-making project. In addition to repaying the debt, the creditor takes 50% of the project’s profits. However, the creditor accepts to lose 50% in case of deficit.
3. The *guerao*
A family who needs to raise an important sum of money can mortgage their land. When land is mortgaged, the landowner no longer has the right to work on it. When he pays his creditor back, he gets his lands back. The creditor has sole rights on the mortgaged land but he cannot sell it unilaterally. Repayment is equivalent to debt without interest. However, since the creditor can use the mortgaged lands as he wishes over the duration of the debt, he earns money (he can work the land himself or sharecrop the land). Sometimes, creditors can rent the land to the landowner who works on his land for only 50% of the harvest.

### 2.3.3.4 Land tenure

Most land is privately owned. The government owns roads, a bit of land and several public buildings, such as schools, clinics and administrative offices.

*Lalmis* unlike *abis* are a special case: in Baharak, they are never sold, rented or mortgaged because of zero demand.

- **Private land**
The price of land varies according to its distance from the bazaar. The price of one *jerib*\(^{28}\) (jb) is between US$2,000 if the land is roughly one hour by foot from the bazaar, and US$100,000 is the land is adjacent to the bazaar. Land that is adjacent to the bazaar is no longer exchanged for agricultural purposes as it would be too difficult to make sufficient profits, and instead is sold uniquely for housing. There is no existing land policy protecting agricultural land from encroaching urbanism.

- **Sharecropping**
Sharecropping is widespread in Baharak. The landowner and the sharecropper divide the harvest into two equal parts. According to their agreement, the landowner can supply seeds and/or fertilizers and/or oxen, whereas the sharecropper always provides the labour. If the landowner provides all the production factors (except the labour), he can decide which crop will be planted. If the sharecropper provides the seeds, he can decide on the variety. Today, the availability of land exceeds the demand. In fact, it has become increasingly less profitable to sharecrop because of the rise in production costs (salary, fertilizers, seeds) and the cost of sharecropping is still the same.

- **Mortgages**
Mortgages represent the third type of land tenure as discussed in section 2.3.3.3. In summary, if the landowner re-mortgages his land, he loses all his rights until the debt is repaid.

- **Pasture land, the *Shewas***
Each village has a territory in the *Shewas*, the high pasture lands, with a document outlining the necessary credentials. These documents were distributed 70 years ago. Today, if a family has rights to *Shewa* land, people from the same village can also use it. These lands are managed by the *namaïnda* or village leader.

### 2.3.3.5 Different types of work

People are occupied in two types of work: agricultural and non agricultural.

- **Agricultural work**
Farming work can be broken down into two types: household workers and non-household workers.

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\(^{28}\) The *jerib* is an Afghan surface unity. It is equivalent to the surface we need to sow 4 *sers* (28 kg) of wheat. We consider that 1 *jerib* is equivalent to 0.2 ha.
Household workers cover the male labour force. Most children go to school in the morning and they can thus work with their father in the farm in the afternoon. Children under two and old men are considered as half active.

Young girls who have not yet reached puberty can work in fields looking after animals and selling products in bazaar. Once they have reached puberty, they have to wear a burka and can no longer work outside the house.

Most children have to collect animal dung in order to make tchapaks, manure disks, which are used as fuel for cooking and/or heating.

**Figure 8: Tchapaks drying (June 2005)**

Non household workers are mainly composed of daily workers. These workers are paid on a daily basis and farmers hire them for time consuming work, such as weeding and harvest (spring and summer).

- **Non agricultural work**
  There are four types of non agricultural workers: daily workers, permanent employees, free workers and temporary migrants.

  **Daily workers**
  Daily work is any work that is not steady employment. The two main sectors employing daily workers are agriculture (as seen earlier) and the construction industry. Economic development in Baharak has seen a rise in widespread new private or public buildings. From March to August, the agricultural sector offers the most important work opportunities. After the July harvest, the construction industry is the sector which hires the largest number of workers. During winter, few daily workers find a job because of weather conditions. The salary for daily workers is between 70 and 300 afghs a day but this can reach 600 afgh on lafmis. The salary varies depending on supply and demand, i.e. during the peak periods, salaries are high.

  This type of work allows men to carry out two activities. A man can work on his own farm and carry out another activity in his free time (such as farm labourer or mason).

  **Permanent employees**
  Baharak has a wide range of public institutions (schools, police, etc.) and a number of NGOs who also require a relatively large workforce (technicians, guards, cooks, drivers, etc.). This type of job is permanent work and does not allow people to carry out a secondary activity.
Free workers
Baharak district is an important economic centre, and Baharar itself has numerous shops. Most shopkeepers have another job and do not keep any particular schedule at the shop, opening and closing when they choose. This type of employment is known as free workers.

Along with shopkeepers, there are engineers and doctors although this type of free worker is rare in Baharak. Most people go to bigger cities or try to work in other countries.

Migrants
Some men migrate to big cities or to other countries leaving their family behind. During the war, most refugees were able to build networks they still use today to find work. Iran seems to be the best country for Tajik people to migrate to because they speak the same language. Most Pashtun people choose to go to Pakistan where people of Afghan nationality do not need a visa and thus migrants do not have to rely on traffickers to enter the country. Most migrants stay one or two years abroad, trying to save money for their family but the majority are not successful.

2.3.3.6 From ethnic group to family
There are different ethnic groups in Baharak.

• Ethnic groups
There are three main ethnic groups in Baharak valley: Tajik, Uzbek and Pashtun people. Many people confuse nationality and ethnic groups. One hundred years ago, Afghan people respected ethnic divisions and different ethnic groups rarely mixed. Today, the situation has changed and marriages between two different ethnic groups are increasingly common, particularly in urban areas.

• Gender
Gender is a fundamental aspect of the Afghan culture. They are three social groups: children (until puberty), men and women. Each group has a specific role and occupation, and it is rare for the different groups to mix socially.

Women remain in the home and cannot participate in outside economic activities. A woman can exchange goods only with women of her family or with neighbouring women. Men are able to talk with anybody, except women.

• Shura
The shura is a village council who comes together to discuss social, economic, political and legal matters. These traditional meetings are made up of men only.

• Neighbourhood
Neighbourhood is really important in Baharak society, especially for women’s mutual support. Most neighbours often share a common ancestor and have the same lineage.

• Rechawan and Quom
The rechawan, or lineage segment, concerns the close family, in geographic terms. If two people share a common ancestor, they belong to the same rechawan. If people live far apart but share a common ancestor, they belong to the same quom. For Pashtun people, the quom is as important as the rechawan. Indeed, quom is a matter of honour. For Tajik and Uzbek people, rechawan seems to be the most important.
• **Households**

In Baharak, the family structure is large\(^{29}\). Children get married and have children themselves before leaving the parental house. Often more than two generations live in the same house. Children leave the parental house if they have enough money to buy land, build their own house and feed their family independently. Children get married before leaving the parental house for financial reasons. In Baharak culture, it is more important to be married than to be financially independent.

• **Foreigners**

Any person who is not from the neighbourhood or from the family is considered to be a foreigner. People that are met for professional or administrative reasons only (shopkeepers, NGOs, etc.) are considered to be foreigners. Foreign people are treated with reserve and wariness, and exchange is limited to the bare minimum.

2.3.3.7 **Impact of large families on agriculture**

A farm is established when the farmer sets it up and ceases to exist when the farmer stops his activity. For each stage in its life cycle, the family “*is a really different labour machine*” (Tchayanov, 1990). Moreover, “*they [the correlation coefficient] are enough in order to consider as true the existence of a real link between the family dimension and its economic activity and more specifically its farming activity*” (Tchayanov, 1990). Taking into account the different stages of the life cycle is essential in order to understand the farming practices (Brossier, Chia, Marshall, Petit, 1997). It would be relevant to study how farms evolve according to their different stages of life cycle taking into account variations in the workforce, in this case the **Male Production Unit (MPU)**. As seen before, only men can work outside of the home and can earn money. Given this reality, the production unit will take into account men only. The advantages of this choice will be studied in the household strategies chapter. For example, if there is a workforce deficit, the farmer can use women outside, and this will then be considered as a strategy.

The ratio between the **Consumption Unit (CU)**, i.e. people of the household who consume, and the Male Production Unit (MPU), CU/MPU, influences farming strategies. The closer this ratio is to 1 (minimum ratio), the lower the number of consumers per worker is. It would then be possible for the production unit to produce surplus supplies which could be used by the consumption unit. This surplus can then be saved or invested.

The more this ratio increases, the higher the number of consumers per worker becomes and it is then difficult for the production unit to produce a surplus. Depending on where this ratio stands, households adopt different strategies and approach crisis management in different ways.

Figure 9 shows how the CU/MPU ratio varies during a farm’s life cycle in the studied area, indicating the different levels of vulnerability.

\(^{29}\) Large family: a family which is composed of more than two generations living in a common residence (Piriou, 1996).
2.4 TYPOLOGY: SIX TYPES OF HOUSEHOLD

The objective of this study is to examine the relevance of wheat programmes. The previous chapters covered historical, ecological and sociological aspects and in this section we shall be looking at the way of life in Baharak and the different strategies adopted by different types of household. Each household is different and this is why a typology of households has been drawn up, categorising different household types according to relevant factors.

2.4.1 Three factors: land, labour and location

2.4.1.1 Which factor?
Different factors which influence the strategies adopted by the household have been taken into account.

- The zoning exercise (cf. annexe 29) shows the importance of location. Household strategies vary according to where people live, i.e. there are significant differences
between households living near the bazaar and people who live in the mountains. Depending on the location, the climate may vary and this influences people’s coping strategies. Indeed, location is the most important factor of the typology. Unfortunately, due to security constraints, it was not possible to visit villages in the mountains and only villages in the valley were accessible.

- The historical study shows that land pressure is increasing in Baharak valley whilst production factors are decreasing, as illustrated by price increases. Indeed, 30 years ago, one *jerib* was equivalent to 150 days of work and is now equivalent to 5,000 days of work (US$4 a day). In order to understand how smallholders are coping with this land pressure, land capital (private land) is considered as a factor in this typology. However, the *lalmis* (rainfed land) were not taken into account because there are not enough of them to have a significant impact on people’s strategies.

- As well as land capital, the consumption unit also has to be taken into account. If we take an example of two families, one composed of 25 members with ten *jeribs* and another composed of four members with eight *jeribs*: which one is wealthy? In this case of our typology, a ratio which includes land capital, people (or the consumers) and the family (consumption unit) can be used: Land Capital (LC)/Consumption Unit (CU).

- The workforce factor may have different consequences. This factor varies according to the family and according to the farm’s life cycle and the following ratio can be used: Consumption Unit (CU)/Male Production Unit (MPU).

2.4.1.2 The labour ratio

To use this typology, a limit ratio has to be identified. We shall establish a CU/MPU ratio which distinguishes between households with or without labour difficulties. In this case, we also need to define what we understand by households with labour difficulties. The most precarious employment is that of daily workers and we need to establish how many people a daily worker can support. A daily worker can earn from 150 to 600 afghs a day but he cannot work every day (unemployment, illness, etc.). We shall assume that the average daily salary is about 150 afghs.

Secondly, we need to assess the daily needs for one adult (over 12 years old). According to our interviews, one adult requires about 25 to 30 afghs of food per day (although this varies with the season, cf. annexe 16). Indispensable fuel consumption (cooking, heat) can be considered as fixed costs and this varies from 50 to 90 afghs per day, irrespective of the number of people in the household.

Three people need from 125 to 180 afghs everyday to live in Baharak. A daily worker earns about 150 afghs a day, implying that he can support three people, himself included. Three people will be used as a limit for the typology. Above this limit, the household’s existence becomes precarious.

2.4.1.3 Land ratio

National agricultural policy is centred on wheat production. Moreover, the objective of the majority of NGO programmes in the agricultural sector is to improve wheat yields and farmers focus their strategies on this cereal. (The surface unit *ser* is defined as a surface where 7kg of wheat can be sowed: 0.04 ha). The typology needs to take this norm into account in order to be relevant.

We need to calculate the minimum land surface required by a farm in order to feed all its members in wheat. According to interviews, one adult eats about 240kg of wheat each year in Baharak. The average yield is about 3,500kg per hectare. We have to subtract 20% (threshing, mill) and 875kg per hectare as fixed costs (seed, fertilizers). Moreover, wheat is
cultivated every two years. One hectare gives on average \((3,500 - 20\% - 875) / 2\), i.e. 975kg of wheat per year. One adult needs \((240/975) 0.25\) ha, i.e. 1.25 jerib. Therefore 1.25 jb/per adult is the minimum amount of land that each household requires to meet its needs. Above this limit, households can produce surplus wheat; below it, households are wheat self-sufficient.

This method does not take into account sharecropping (50% of the harvest) and this is why we consider the land capital and not the land used. Moreover, sharecropping is a strategy adopted by several types of households and this is why it is not taken into account in a typology that is only based on structural factors (sharecropping is not a structural factor).

2.4.1.4 A final ratio: the minimum land surface that a man can use

It is also clear that one man is unable to work more than 3.75 jerib of wheat alone, especially at harvest time which is the busiest period for this crop. The typology shall include a limit above which, the production unit is not sufficient to grow wheat in its entire land capital. With a CU/MPU ratio of 1, the land capital limit is 3.75 jeribs, above which the production unit is not sufficient to grow wheat.

Table 2: Minimum surface where a farmer can grow wheat alone

<table>
<thead>
<tr>
<th>Consumption Unit/Male Production Unit ratio</th>
<th>LIMIT above which the production unit is not sufficient to grow wheat on its entire land capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.75</td>
</tr>
<tr>
<td>2</td>
<td>1.875</td>
</tr>
<tr>
<td>3</td>
<td>1.25</td>
</tr>
<tr>
<td>4</td>
<td>0.9375</td>
</tr>
<tr>
<td>5</td>
<td>0.75</td>
</tr>
</tbody>
</table>

2.4.2 The typology

2.4.2.1 Description

Figure 10 illustrates the typology. The y axis is the land ratio with two limits separating households: 1.25 jb/adult and 0. The highest group represents farms which are wheat self-sufficient; the medium group represents households which have land but not enough to be wheat self-sufficient, and the last group represents landless people.

The x axis is the labour ratio with a limit of 3. Above this limit, households have enough male domestic workers and they can save money and/or invest. Below this limit, households do not have enough male domestic workers and are unable to invest or save money if workers are only daily labourers.

The curve represents the limit above which the production unit cannot grow wheat alone on its entire land capital. The farm manager has to increase his production unit by employing daily workers, women and children.
2.4.2.2 Six types of households

- **Type 1: Households without any land and labour constraints**
  These households have enough land to be wheat self-sufficient. They can produce surplus amounts thanks to their land capital and thanks to their male domestic workforce. They can save money and/or invest it easily.

- **Type 2: Households without any land constraint but with labour constraints**
  These households differ from type 1 in that they have enough land to be wheat self-sufficient but the number of male domestic workers is a problem. Part of the surplus produce that they are able to generate thanks to their large land capital will be used to compensate for their male worker deficit.

- **Type 1 and 2**
  Given the prestigious social or political status of their ancestors, these families took advantage of the new political deal during the 1940s and invested in land.

  Today, these families still have a large land capital. However, their land ratio is getting closer to the limit (1.25 jb/adult), and the next division will bring most of these farms below the limit.
Other households took advantage of the war period. Commanders took over un-irrigated land during the conflict, sometimes forcibly, and irrigated it with the agreement of the government.

- **Type 3: Households with land constraints but without any labour constraints**
  These households do not have any labour constraints. They have enough male domestic workers to support every family member and can produce extra. However, they have insufficient land capital. These families cannot be wheat self-sufficient and have to purchase some of the wheat for their consumption.

- **Type 4: Households with land and labour constraints**
  These households have to cope with insufficient land and a lack of male domestic workers. These farms need to adapt specific strategies in order to overcome these two problems. We notice that households of type 4b have such a large male domestic workers deficit that they cannot grow wheat on their entire land capital.

- **Type 3 and 4**
  The main reason for land deficiency is because of the population growth within a limited space. Land surfaces per farm have gradually decreased over the past 50 years.

- **Type 5: Landless without any labour constraints**
  These families do not have any land. Their poverty is mainly due to migration and the selling off of assets, such as land. Fortunately, these families can rely on their high male domestic workers ratio, which indeed, is their only asset.

- **Type 6: Households with land and labour constraints**
  These households are landless and have a workforce deficit (not enough male domestic workers) compared with the consumption unit. Among these households, widowers are the most vulnerable.

- **Type 5 and 6**
  Landless people represent the final phase of impoverishment due to increasing land pressure. With the successive divisions of household plots, some families have less than one *jerib* to feed each family member.

Today, because of urbanisation and poppy cultivation, the value of land has reached exorbitant levels. Many small landowners decided to sell the little land they had in order to raise cash and today find themselves without any production factors.

Other families have recently arrived in Baharak (migration for political or financial reasons). The sale of their previous house and land raised just enough money to buy a small piece of land and build their new house but they are unable to buy more land for agricultural activities. Newcomers tend to live together in new villages, such as Naubad.

2.4.2.3 Distribution

Although Figure 11 is based on more than 80 interviews, it is not fully representative of the population because too few inhabitants were interviewed in relation to the total population (over 50,000). However, it gives a general idea of the diversity of Baharak households.
This illustrates that most interviewed households (80%) have an insufficient male production unit compared with the consumption unit. This can be explained by two factors: 1) only men have been taken into account for the production unit and 2) high birth rates. For these households, daily labour is not sufficient.

According to interviews, 30% of households are landless. The SMU study carried out in 2001 confirms this, putting the figure nearer 40% (SMU, 2001). For households that own land, only a few (less than 20%) can be wheat self-sufficient. The remaining 54% are considered to be small landowners.

20% of interviewed households do not have a large enough male domestic production unit to grow wheat on their entire land capital.
2.4.3 Typology

Figure 12: Typology dynamics

With this typology, it is possible to study the different strategies adopted by households and the existing dynamics within the system in order to adapt potential programmes in time. For example, the relevance of emancipation programmes for professional women depends partly upon of the labour ratio, in other words at what stage the farm is in its life cycle. A farm will resort to using a female workforce if the labour ratio is above 3, implying that these farms will be more receptive to this type of programme. Nevertheless, these programmes are likely to have less of an impact if the labour ratio is below 3 because it is less socially acceptable for women to participate in NGO programmes. Figure 12 illustrates that dynamic.

Most programmes lack flexibility because they fail to take into account the natural evolution of a farm. However, building a typology based on these dynamics is highly relevant.

2.4.3.1 Variations in land ratio

There are two reasons that explain why households fall below the 1.25 ha/adult limit. Firstly, land may be divided up for inheritance purposes (land capital decreases) or birth of children (consumption unit increases). The second reason is the sale of land, which is generally prompted by serious financial problems or a change in activity. In either case, repurchasing land is made really difficult by land pressure.
2.4.3.2 Variations in labour ratio

By studying the farm life cycle, it is possible to understand changes in the labour ratio. A family is likely to go through different stages. The ratio increases with the birth of children or the arrival of daughters-in-law. On the other hand, the ratio decreases when boys grow up. They can work in fields even if they go school (because they only have school in the morning).
3 HOUSEHOLD ACTIVITY SYSTEMS

In this chapter, we shall look at the different strategies adopted by households, including farming and non farming strategies.

3.1 WHEAT, FEW VEGETABLES, FEW ANIMALS AND POPPY

This section provides details on the different farming systems in Baharak, including cropping systems, livestock farming systems and finally processing systems.

3.1.1 Cropping systems

3.1.1.1 Different crops grown in Baharak

Baharak farmers grow three types of crops: autumn crops, spring crops and summer crops.

Table 3: Baharak crop list

<table>
<thead>
<tr>
<th>Autumn crops</th>
<th>Winter wheat, poppy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring crops</td>
<td>Vegetables, barley, patic (pulses), clover, alfalfa, poppy, spring wheat, maize, mustard.</td>
</tr>
<tr>
<td>Summer crops</td>
<td>Clover, water melon, maize</td>
</tr>
</tbody>
</table>

In Badakhshan, people’s diet is based on wheat which is used to make bread, the nan. Indeed, the word nan in Afghan can also be translated as ‘meal’, and this double meaning highlights the importance of bread in the Afghan diet. Bread is eaten at all of the three daily meals.

Most crop rotations are based on wheat. According to soil quality and prices, wheat can be followed next year by:
- Vegetables
- Poppy
- Fodder (patic\(^{30}\), clover, alfalfa)
- Barley
- Mustard
- Maize (rare)
- Fallow (very rare)

There are many different types of crop rotations. On irrigated land, fallow can be included in each crop rotation. Moreover, in the same year, barley can be followed by a second crop such as maize or water melon (summer crop). Furthermore, clover can be sown directly in wheat and harvested the same year. Few farmers sow alfalfa on their fields for six years.

Farmers may replace any crop with poppy for many reasons. There are two other crop rotations: poppy/summer crop and poppy/spring or autumn crop.

On rain-fed fields (lalm), it is possible to grow wheat, barley and poppy. Each crop is followed by a fallow period.

Annexe 31 gives details of each crop, its characteristics, management sequences, yields and uses.

\(^{30}\) Patic is a leguminous plant used for animal fodder. Baharak communities very rarely eat peas.
3.1.1.2 Cropping systems

The main cropping systems (CS) are:

- **On lalmi**
  - CS1 Wheat/fallow
  - CS2 Barley/fallow
  - CS3 Poppy/fallow

- **On abi**
  - CS1 Wheat/alfalfa (6 years)
  - CS2 Wheat/Spring crop/fallow
  - CS3 Wheat/spring crop (without vegetables)
  - CS4 Wheat/spring crop
  - CS5 Wheat/spring crop/wheat/barley/summer crop
  - CS6 Spring crop

Apart from *lalmi*, there are six types of cropping systems on *abi*. If the household has sufficient land capital, CS1 and 2 are more common. On small farms, CS2 and 3 are more common. On very small farms, CS4, 5 and 6 predominate. The smaller the land surface, the more farmers want to increase land productivity.

The main spring crops are:
- Vegetables, clover and *patic*
- Barley
- Mustard

Poppy cannot be included because cultivation varies considerably. In 2004, poppy was the most widespread crop, but in 2005, there was less poppy cultivation than mustard. Poppy sowed in autumn can be followed by clover or watermelon just after harvest in June.

Table 4: The cropping systems in Baharak

<table>
<thead>
<tr>
<th>Cropping system</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS1 Wheat/alfalfa (6 years) (<em>abi</em>)</td>
<td>Rare, the plots is useless during 6 years without any wheat production</td>
</tr>
<tr>
<td>CS2 Wheat/spring crop // fallow (<em>abi</em>)</td>
<td>Conventional but less and less uses.</td>
</tr>
<tr>
<td>CS3 Wheat/spring crop (without vegetables) (<em>abi</em>)</td>
<td>An intermediate CS.</td>
</tr>
<tr>
<td>CS4 Wheat/spring crop (<em>abi</em>)</td>
<td>The most used CS</td>
</tr>
<tr>
<td>CS5 Wheat/barley/summer crop/wheat/spring crop (<em>abi</em>)</td>
<td>Recent CS, it seems more and more used by farmers in Baharak.</td>
</tr>
<tr>
<td>CS6 Potatoes/onions (<em>abi</em>)</td>
<td>Rare in fields</td>
</tr>
<tr>
<td>CS7 Wheat/poppies (<em>abi</em>)</td>
<td>Depends on the year</td>
</tr>
<tr>
<td>CS8 Autumn poppy/clover (<em>abi</em>)</td>
<td>Depends on the year</td>
</tr>
<tr>
<td>CS9 Poppy/fallow (<em>lalmi</em>)</td>
<td>Depends on the year</td>
</tr>
<tr>
<td>CS10 Wheat/fallow (<em>lalmi</em>)</td>
<td>Rare for the valley’s villages</td>
</tr>
<tr>
<td>CS11 Barley/fallow (<em>lalmi</em>)</td>
<td>Depends on the year</td>
</tr>
</tbody>
</table>

When cropping systems have a spring crop (except poppy), it changes every time a new crop rotation starts. For example, CS4 would be: wheat / vegetable / wheat / barley / wheat / clover / wheat / *patic*. CS1 is spread over eight years, whereas CS2 is spread over twelve years and CS3 over six years.
3.1.1.3 Economic assessment

Before studying the technical analysis, this section provides details on the economic characteristics, taking into account gross added values (GAD). The following graphs give the GAD, the amount of working days\(^\text{31}\), the GAD per *jerib* and the GAD per Wd for each crop.

\(^{31}\) The working day is the unit of one working day per man.
Chart 2: GAV/Jb for the main crops

<table>
<thead>
<tr>
<th>Crop</th>
<th>Good Year</th>
<th>Bad Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>⬆️</td>
<td>⬇️</td>
</tr>
<tr>
<td>Corn</td>
<td>⬆️</td>
<td>⬇️</td>
</tr>
<tr>
<td>Poppy</td>
<td>⬆️</td>
<td>⬇️</td>
</tr>
<tr>
<td>Potatoes</td>
<td>⬆️</td>
<td>⬇️</td>
</tr>
<tr>
<td>Onions</td>
<td>⬆️</td>
<td>⬇️</td>
</tr>
<tr>
<td>Watermelon</td>
<td>⬆️</td>
<td>⬇️</td>
</tr>
<tr>
<td>Clover</td>
<td>⬆️</td>
<td>⬇️</td>
</tr>
<tr>
<td>Alfalfa</td>
<td>⬆️</td>
<td>⬇️</td>
</tr>
<tr>
<td>Pasture</td>
<td>⬆️</td>
<td>⬇️</td>
</tr>
<tr>
<td>Barley</td>
<td>⬆️</td>
<td>⬇️</td>
</tr>
<tr>
<td>Barley on abo</td>
<td>⬆️</td>
<td>⬇️</td>
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<tr>
<td>Barley on lam</td>
<td>⬆️</td>
<td>⬇️</td>
</tr>
</tbody>
</table>
Chart 3: GAV/Jb for the main crops

<table>
<thead>
<tr>
<th>Crop</th>
<th>Good Year</th>
<th>Bad Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barley</td>
<td></td>
<td></td>
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<tr>
<td>Potatoes</td>
<td></td>
<td></td>
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<tr>
<td>Onions</td>
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<tr>
<td>Melon</td>
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<tr>
<td>Alfalfa</td>
<td></td>
<td></td>
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<tr>
<td>Clover</td>
<td></td>
<td></td>
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<tr>
<td>Water</td>
<td></td>
<td></td>
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<tr>
<td>Barley</td>
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<td></td>
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<tr>
<td>Potatoes</td>
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<tr>
<td>Onions</td>
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<tr>
<td>Melon</td>
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<td>Alfalfa</td>
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<tr>
<td>Clover</td>
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<tr>
<td>Water</td>
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<tr>
<td>Barley</td>
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<td>Potatoes</td>
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<td>Onions</td>
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<td>Melon</td>
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<td>Alfalfa</td>
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<tr>
<td>Clover</td>
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<tr>
<td>Water</td>
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<td></td>
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<tr>
<td>Barley</td>
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<td>Potatoes</td>
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<td>Onions</td>
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<td>Melon</td>
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<tr>
<td>Alfalfa</td>
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<tr>
<td>Clover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GAV/Jb (Afghs)
Chart 4: GAD/working day (wd) for the main crops

<table>
<thead>
<tr>
<th>Crop</th>
<th>Bad year</th>
<th>Good year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat on abi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat on lalmi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poppy on abi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poppy on lalmi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potatoes</td>
<td></td>
<td></td>
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<tr>
<td>Onions</td>
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<td></td>
</tr>
<tr>
<td>Watermelon</td>
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<td></td>
</tr>
<tr>
<td>Clover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alfalfa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barley on abi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barley on lalmi</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chart 5: Necessary working days for one jerib for the main crops

- Barley on Ailim
- Barley on Asti
- Palla
- Alfalfa
- Olive
- Water melons
- Onions
- Peaches
- Poppy on Ailim
- Poppy on Asti
- Wheat on Ailim
- Wheat on Asti

Wd/Jb (on average)
• **Production per jerib**

The first economic statistics to look at is the production value of one *jerib* for each cropping system.

**Chart 6: GAV/jb for each cropping system**

CS1, 2 and 3 produce about 5,000 afghs/jb. These CS need few working days and production costs are low. If there is a bad year for wheat, CS1, which is based on alfalfa, provides an attractive minimum income compared to the other CS.

CS4 and 5 with vegetables and summer crop without any fallow have higher productivity. However, production costs and working days are higher. CS6 (vegetables) produces the highest legal land productivity in Baharak.

CS7, 8 and 9 are based on poppy. These CS are illegal but they give the best financial return for *abi* (CS7 and 8) and for *lalmi* (CS9). There is a high variation between good and bad years because of the price and yield elasticity.

CS9, 10 and 11 are only on *lalmis* and low yields limit land productivity.

**Chart 7: The GAV/wd for each CS**

---

32 Poppy selling price varies from US$100-200/kg. In 2005, it was roughly US$100/kg.
Production per working day (wd)
This gives an outline of the best land productivity but if we compare GAV with working days, a different picture emerges.

There is less variation between the GAD/wd for each CS than between the GAD/jb. CS8 is different from the others given that it has two cropping systems per season.

CS1, 3, 4, 5, 7 and 8 generate about 450 afghs per working day. There are composed of alfalfa, wheat and spring crops (CS3, 4 and 5) and of poppy (CS8).

CS 1 and 8 generate the same GAV/wd but CS 8 requires more than 120 working days whereas CS 1 only 15. CS 8 is widespread in Baharak where the minimum salary is roughly 200 afghs/day.

3.1.1.4 Technical assessment
Improving fertility
Farmers use different techniques to improve soil fertility. The first option is spreading manure spreading but unfortunately, given the population growth and the increase in cereal crops at the expense of fodder, the number of animals per household has decreased and so has the quantity of manure. The drop in available manure was further aggravated by the use of manure for domestic fuel. Goat and sheep manure are better for the production of tchapaks, manure disks which are dried and used as fuel. Nowadays, farmers no longer buy manure to use as fertilizer although the trade continues for domestic fuel. The cost of manure is 110 afgh for 50kg which is consumed in two to three days, and this represents a significant part of the HH budget. Children are often engaged in collecting animal dung for the family. Farmers no longer use enough manure on fields. For one jerib of wheat, two tones of manure are required, i.e. 4000 afghs, which implies that cost of manure is equal to the earnings generated by the harvest of wheat.

In order to resolve this problem, farmers use nitrogen-fixing pulse plants with Rhizobium bacteria. In Baharak, the most common are clover, alfalfa and patic.

Fallow is a good solution for restoring soil fertility. Unfortunately, given the high pressure on land availability, farmers do not usually leave land fallow for more than a year. It would be worthwhile verifying the relevance of leaving land fallow for one year only.

Today, in Baharak, the most relevant solution as far as improving soil fertility is concerned is the use of chemical fertilizers (urea and DAP). For spring crops, manure is spread (with little urea for clover, alfalfa, poppy and vegetables). Chemical fertilizers are used for autumn crops. However, the fertility reproduction is insufficient. Even if domestic ashes are taken into account, the amount of trace elements is insufficient. Moreover, the structure of soil with little organic matter is often poor. CS without pulse plants (CS6, 7 and 8) are the most sensitive to this problem. Using these CS intensively may result in infertile soil if no alternative is found.
Labour

Chart 8: Working days for each CS (Wd/jerib)

CS6, 7, 8 and 9 require a lot of work and as a result are the most productive. Households with little land are often attracted by these CS and have to work for many days. These households need to be able to depend on sufficient labour force. Unfortunately, as explained earlier, 20% of interviewed households do not have sufficient domestic labour for wheat production (and this problem is magnified for more labour intensive crops). Many households need to employ daily labourers or women participate in farming work.

The increase of these CS leads to higher labour demands, i.e. a rise in salaries. The most vulnerable households find it hard to cope with this rise in salaries and prefer to let women work in the fields even if it is not socially acceptable.

3.1.2 Animal husbandry: milk, meat, manure and labour force

There are eight types of animals in Baharak: Bovini for milk and meat, Bovini for farm work, goats, sheep, donkeys, horses, poultry and bees. We shall examine two common factors: transhumance and feeding.

3.1.2.1 Space, the first limiting factor

There are two distinct periods in the animal husbandry calendar: transhumance, from April to October, and wintering from October to May.

Essential transhumance

Small ruminants (sheep and goats), cattle and horses migrate during the six/seven hottest months when the snow has melted in the highland pastures (Shewas). Not all animals are taken to the Shewas. Some donkeys, a few goats, cows and oxen stay in the valley for milk production and work work.

Figure 13: Ailoqs in Shewas (high pasture lands) July 2005

Use of highland pastures: indispensable and conflictual

Stockbreeders use these ailoqs showed in the above picture. Each village in the valley has rights to a specific territory. They have to live with Shewachis, the permanent inhabitants, and Kuchis, semi-nomadic Pashtun people.
During these months, the three populations have to live together, under the jurisdiction of the governor. Baharak farmers explain that this cohabitation is not always simple, particularly with Kuchis. Unfortunately, because of security constraints, we were unable to visit the ailoqs. The Patterson report (2004) explains the relations between people in the Shewas and confirms that conflicts do arise.

Farmers of Baharak confirm Patterson’s observations. During the first half of the last century, these pastures became private land with official documents, and these documents were distributed to villagers. Every village has one, two or three ancestors who were holders of this official document. Nowadays, every inhabitant of every village can claim to have blood ties with these pastors and can use the official document. New villages, such as Naubad, do not have any documents and its inhabitants cannot use the Shewas.

Without access to the Shewas, it is really difficult for farmers to feed animals during the dry season in the valley because fodder is scarce. It appears that feeding animals during the dry season is becoming increasingly difficult in Baharak. Farmers who are unable to go to the Shewas have few animals (one cow or two goats).

High cost of transhumance
Farmers have two solutions for keeping animals during transhumance. Firstly, one can send a family member or employ a shepherd to accompany the livestock. The salary is about 300 or 500 afghs per cow or horse or two small ruminants. The shepherd keeps the milk and dung he can collect.

• **During the winter, taking animals to paddocks is difficult**
When farmers are asked why there are fewer animals than before, they almost always respond: “There are no more places”. Finding an area to keep animals during the winter has become a real issue.

During the winter, breeders have to keep and feed their livestock. Most of the valley is covered by abi and about 50% of land is sowed during autumn (wheat or poppy). There is no community management and the divisions are too small for keeping animals. Indeed, they might destroy the sowed plots. Moreover, there are fewer quatans, which are specific places to keep animals during the winter, because of urbanisation. Most of the larger livestock breeders do not have more than 20 small ruminants and seven or eight cows. These breeders have a big stable in their house whereas the majority of breeders do not have a house big enough to keep many animals (six small ruminants and one or two cows, sometimes two oxen).

There are only two or three breeders in the valley who have more than 100 animals and they still have quatans.

3.1.2.2 **Winter feeding, the second limiting factor**
Clover, alfalfa, patic, straw and grass cups are the main fodder consumed during winter. However, clover, alfalfa, and patic are not sown as much as crops for human consumption (vegetable and wheat) or for sale (poppy). Breeders are using more straw than before but it is less appetising for the animals because the threshing machines crush straw. Breeders have to gather more grass from the mountains but because of the population growth in the valley, natural fodder resources are diminishing.

The richest breeders can import fodder from other provinces but small breeders are excluded from this strategy because of the high transport costs. There is no breeders’ association in order to limit those costs. Big landowners can produce enough fodder for winter and have large flocks but these farms are becoming increasingly rare.
3.1.2.3 The animal production system (APS), interests and problems

- Many animal production systems

  ‘Small’ animal production systems
  - APS oxen (2 or 3)
  - APS cows (from 1 to 8 cows)
  - APS sheep (less than 20 sheep)
  - APS goats (less than 20 goats)
  - APS donkeys (from 1 to 3 donkeys)
  - APS horse (only one)
  - APS poultry

  ‘Big’ animal production systems
  - APS cows (more than 8 cows)
  - APS sheep (more than 20 sheep)
  - APS goats (more than 20 goats)
  - APS horses (more than one horse, very rare in Baharak)

- Livestock interests in Baharak

  Meat
  Livestock gives meat and provides an important supply of protein in Islamic societies. During the Aïd al-Adha, all Muslims have to sacrifice an animal, mostly a sheep.

  Milk and processed products
  Processed milk products are very important for the basic diet in Baharak. *Krut*, a cheese, is also a way to keeping any surplus milk. Processed products, such as *moss* or *tchaka* (yogurt), can be sold.

  Transport
  Animals are very important for transport in Baharak. Horses and donkeys are indispensable for many families in order to transport harvest, seeds, fertilizers and wood. Moreover, they allow women and old men to travel more easily.

  Ploughing
  Ploughing is indispensable and according to Baharak farmers can only be done with oxen. Even if a few old soviet tractors are visible, most ploughing is done by traditional non-motorised methods. Most plots of land are small, making the use of tractors impractical.

  Manure
  Animals provide a highly effective organic fertilizer for crops. Some of the dung is used to make manure in order to try to improve soil fertility of irrigated plots.

  Fuel
  Animal dung is also used as fuel. Baharak district can supply enough wood for every household: the prohibition of woodcutting is evidence of this environmental weakness. People use dung as fuel for cooking and heating during winter.

  Skin and wool
  Animal skins do not generate as much income as sheep’s wool.
**Income generation**
Animal production systems generate cash incomes which is becoming increasingly important in Baharak society. The arrival of attractive new consumer goods is encouraging people to carry cash with them. By selling animal by-products (meat, milk, cattle, animals, honey, etc.), livestock represents a good way of making money. However, few breeders have enough animals to be able to produce extra meat and sell it.

**Capitalisation**
Most of the time, animals are the only way for farmers to capitalize and save money. Farmers buy livestock when their budget allows them and sell them when they need money.

**Animal production systems’ problems**

**Problems related to oxen**
Many oxen were killed or sold during the war and the drought. Today, some farmers no longer have any animals to carry out essential farm work and they have to rent oxen. This increases the demand for oxen and rental prices now stand at roughly 500 afghs per working day. At this price, some farmers prefer to rent out their land and find another job.

**Soil fertility problems**
Some of the animal dung is used as domestic fuel and most farmers are unable to obtain enough manure for their land (Wily, 2003). Although at present, the problem of soil fertility has not yet taken on huge proportions in Afghanistan, it is likely to be a major problem in the future. There is not enough livestock in Baharak to ensure recovery of soil fertility.

**Diseases (water, farm buildings)**
Disease is responsible for up to 25% of animal mortality. Vaccination programs are carried out by NGOs such as Afghanaid but this treatment does not solve the origin of the disease which is bad water and poor hygiene in farm buildings.

**Problem of space**
Space, as studied earlier, is one of the most important disadvantages of livestock breeding. Farmers often do not have the space to keep animals over the winter.

**Feeding during winter**
It has been said earlier that feeding animals during the winter is one of the main problems in Baharak. Crops are more and more intended for human consumption. Most of the farmers have to content themselves with modest livestock.
### 3.1.3 Processing systems

<table>
<thead>
<tr>
<th>Products</th>
<th>Who is responsible</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td>Women and children</td>
<td></td>
</tr>
<tr>
<td>Moss (yogurt), tchaka (yogurt)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>maska (better), krou (cheese)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin and wool</td>
<td>Women and children</td>
<td></td>
</tr>
<tr>
<td>The skin can be used as churn.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wool can be used for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>making carpets.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>Men for flour</td>
<td>Wheat is processed into flour only in the water or electric mill, never at home.</td>
</tr>
<tr>
<td>Flour and bread</td>
<td>Women for bread</td>
<td></td>
</tr>
<tr>
<td>Oil (mustard, poppy)</td>
<td>Men for oil</td>
<td>Grain is processed in oil and oilcake only in the electric mill, never at home.</td>
</tr>
<tr>
<td></td>
<td>oilcake, women for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>soap</td>
<td></td>
</tr>
<tr>
<td>Vegetables</td>
<td>Women and children</td>
<td>Only tomatoes are processed into powder.</td>
</tr>
<tr>
<td>Tomato powder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruits</td>
<td>Women and children</td>
<td></td>
</tr>
<tr>
<td>Dry apricots, nuts, almonds</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author

Table 5 illustrates the main processing systems of Baharak. Most products are consumed at home. Only milk products, tomato powder and dry apricots are sold.

### 3.1.4 Farming systems

A farming system is the combination of cropping, animal production and processing systems. We are going to study the main farming systems (FS) of Baharak.

#### 3.1.4.1 Farming systems

There are numerous FS in the Baharak valley but they can be classified into four main categories. People who are considered to be “big” landowners are those with more than 1.25 jb/adult and ‘small’ landowners have less than 1.25 jb/adult.

<table>
<thead>
<tr>
<th>Farming system</th>
<th>Characteristics</th>
<th>Comparison with household typology</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS1 Big landowners (rare)</td>
<td>CS require few working days (CS1, 3 and 4). Large numbers of livestock thanks to high fodder production.</td>
<td>Household type 1 and 2</td>
</tr>
<tr>
<td>FS2 Small landowners who live from a licit agriculture: FS maximises land productivity (with high production cost) (average number of households)</td>
<td>CS requires many working days (CS4, 5 and 6). Limited livestock because of the low fodder production.</td>
<td>Household type 3, 4a and 5 (4b and 6 with the women as labour force)</td>
</tr>
<tr>
<td>FS3 Small landowners who want to maximize land productivity thanks to poppy. (the number varies a lot)</td>
<td>CS requires many working days (CS 7 and 8). Limited livestock because of the low fodder production.</td>
<td>Household type 3, 4, 5 and 6 (1 and 2)</td>
</tr>
<tr>
<td>FS4 Small owners who want have enough free time for a second activity. The FS requires few working days (many households)</td>
<td>CS requires few working days (CS3 and 4) Medium or small livestock</td>
<td>Household type 3, 4 and 5</td>
</tr>
</tbody>
</table>

Source: Author
In contrast to FS1 which concerns big landowners, the three other FS concern farms which do not have enough land to be self-sufficient in wheat. Finally, there is there sharecropping strategy.

**FS1: ‘big’ landowners**
FS1 represents farms with large amounts of land. Taking the typology into account, most households of type 1 and 2 are included in FS1 because they have more than 1.25 jb/adult and can produce a surplus. Given the large amounts of land, they can grow crops which do not require many working days. The limiting factor is labour and farmers try to maximise the labour productivity. They choose activities which produce good incomes per unit of time (the working day). CS1, 3 and 4 are the most appropriate in this respect because they are based on wheat and do not include any labour intensive crops (such as vegetables).

Big landowners base their farming systems on wheat in order to maximise labour productivity and try to ensure that all their land is being used. The CS they adopt have other advantages. Firstly they produce enough fodder for large numbers of animals during the winter. Secondly, these farms benefit from government and NGO programmes which are based on developing wheat yields.

**FS 2: ‘small’ landowners growing legal intensive crops**
Some farmers with small amounts of land decide to increase land productivity by replacing wheat with other crops. These farmers want to grow legal crops and refuse to cultivate poppy. CS4, 5 and 6 have high land productivity but are labour intensive, particularly CS6. Farmers need to employ daily workers but this strategy is compounded by salary increases due to a rise in the demand for labour for poppy cultivation.

FS2 concerns households of type 3, 4, 5 and 6 but given labour requirements, it is most appropriate for households with a lot of male domestic workers, i.e. households of type 3 and 5. In order to compensate for an insufficient labour force, women can be included but this practice is frowned upon.

FS2 does not generate much fodder which prevents farmers from having large numbers of livestock.

**FS 3: ‘small’ landowners growing poppy**
FS3 is based on the illegal poppy crop. In this confused political situation, many farmers have opted to grow poppy through financial constraints. The fact that poppy is labour intensive is of no consequence because the revenues are so high that production costs are covered.

FS3 is highly attractive for households with few male domestic workers (types 4b and 6).

FS3 does not generate much fodder, so these farms do not have many animals.

**FS4: ‘small’ landowners with a second activity**
Rather than maximising land productivity, these farmers would rather have a second activity. They adopt CS which require few working days, mainly CS3 and 4, in order to have enough time for another occupation.

These CS, as seen earlier, do not generate enough wheat for the household and farmers rely on their second activity to cover these needs. This FS concerns household types 3, 4, 5 and 6. The different types of activities are discussed in a subsequent section.

As for FS2 and 3, FS4 does not generate much fodder and farmers are unable to keep many animals.
Sharecropping, an insufficient help
Household types 1, 3, 4a and 5 often try to rent land because it is difficult to ensure that all their male domestic workers are fully occupied if there is a predominance of FS based on wheat. Moreover, it is possible for household types 3, 4a and 5 to rent more than 1.25 jb of land per adult. Unfortunately, the cost of sharecropping is so high that farmers adopt this strategy in order to ensure that all their male domestic workers are occupied. Farms of types 4b and 6 can rent land but they have to rely on female domestic labour force.

Figure 14: CS, APS and FS for different types of households

Source: Author

Type 6 households are landless and they have few male domestic workers compared with the consumption unit. They have no option but to engage in sharecropping because renting land is too expensive. These households have to employ daily workers to compensate for their lack of domestic workers. Given that production costs are high, FS2 and 4 would not be profitable for this type of household. However, FS3 is a viable alternative.

3.1.4.2 The importance of land and labour management

Land management
The rise in population density has caused land prices to soar. Land rebuilding is nearly impossible. During this study, none of the interlocutors had recently bought land for farming purposes and land is sold purely for property development. Today, there is insufficient policy for protecting agricultural land from overdevelopment.

Land management can only be preventive. Farmers need to plan the division of their land for their children in advance. Some farmers encourage their children to go to university in the
hope that they will find work in other sectors. In this way, only one heir need inherit the land because any other brothers will be qualified to do other jobs. The brother who inherits the land will have to pay an allowance to his brothers but this allowance is often a nominal amount.

However, most farmers are unable to cover the costs of their children’s studies and in this case, the household’s land will continue to be divided up until the plots are too small for agricultural activity of any consequence. These small farmers have the following choices:

- Maximise land productivity (FS2 and 3)
- Find a secondary occupation (FS4)
- Become sharecroppers if there are enough male domestic workers in the household
- Rent their land and find another job
- Sell their land and find another job

**Labour management**

A farmer who has limited male domestic workers has the following alternatives:

- Adopt a FS which requires few working days (FS1 or 4 with another job).
- Employ daily workers if the ratio of male workers to land area is too low or if the FS is labour intensive (FS2 and 3).
- Allow women to work in the fields if the ratio of male workers to land area is too low or if the FS is labour intensive (FS2 and 3), even though this option is not really socially acceptable.
- Engage children to work in the fields if the ratio of male workers to land area is too low or if the FS is labour intensive (FS2 and 3).
- Rent part of the land to reduce land area and thus working days.
- Rent all of the land and find another job.

### 3.1.4.3 Main constraints

**Technical constraints**

**Lack of motorised farming machinery for FS1**

As far as FS1 is concerned, the main technical constraint is the lack of motorised farm machinery. Motorisation would save time because this type of farm usually has a lot of farm land. Today, only threshing is motorised, and occasionally ploughing and harvesting. However, the cost of motorised machinery is so high that it represents too high an investment for landowners. One of the solutions would be to create a farming cooperative.

Small farms do not have enough land to merit motorisation. The cost outweighs the benefits.

**Insufficient skills have a negative impact on FS2 and 3**

Farmers concerned by FS2 do not have much land and want to maximise land productivity by growing vegetables (FS2). FS2 is not really common in Badakhshan because farmers do not have the necessary skills for this type of cultivation, for example, farmers encounter serious problems in controlling pests. Furthermore, agricultural advisers (from NGOs) also have limited skills in this domain. Not all of them are capable of recognising diseases, insects, fungi, mineral deficiencies, etc. nor can they recommend the appropriate treatment (for pest and for the area possibilities). Some of the vegetables are put up for sale and the price they fetch is determined by the quality. Parasites tend to affect the quality and reduce the selling price.

The same applies for FS3 which is based on poppy. Farmers do not have the necessary skills because it is a crop that has been introduced only relatively recently.
Limited livestock for FS2, 3 and 4
Given that CS1, 2, 3 are increasingly being replaced by CS6, 7 and 8, there is less fodder being produced than in the past. It is lack of fodder that prevents households from breeding livestock.

Restoring soil fertility
The lack of manure poses a serious problem for future farmers in Baharak. The drop in the number of livestock per household and the use of manure as fuel is responsible for impoverished soils.

Figure 15: Decreasing fertility in the valley of Baharak

- Social constraints
Women cannot work outside of the homestead
It is not socially acceptable for women to work in the field and this is a serious constraint for agriculture. It means that many households are unable to support the family members. This constraint is especially problematic for household types 4 and 6.

Religion favours FS1
Poppy is frowned upon because of the consequences of the opium drug, rather than because it is illegal. Islam officially bans the crop but, in reality, each mullah may pronounce his own opinion on the matter. Each Muslim is required to give a gift to the mullah and the richer the believer, the larger the gift is supposed to be. This may be an incentive for mullahs.
to encourage farmers to grow poppy. Other mullahs encourage poppy cultivation because they see it as a means of attacking Western culture, or because they see it as a way of resolving farmers’ financial problems. Other mullahs continue to ban poppy cultivation but their influence appears to be limited.

- **Economic constraints**
  Household types 3 and 5 have reasonably large production capacity (in terms of male domestic workers). This labour force can be employed for FS2 and 3 which require a large number of working days but it is often not totally sufficient, and daily workers must be hired. There is a real economic problem regarding high salaries. This places pressure on the workforce available for FS2 (vegetables) compared with the FS3 (poppy) which generates higher incomes. High salaries are a considerable constraint for truck farmers because they are tempted to adopt FS3 or 4.

Moreover, this constraint also limits the possibility for households with few male domestic workers (household types 4 and 6) to engage in sharecropping, or any type of agricultural activity.

- **Climatic constraints**
  The climate can pose serious complications for farmers interested in growing vegetables. Firstly, the long, severe winters (from November to March) mean that vegetable production starts late. Secondly, during spring, frost and hail storms can destroy fruits and particularly sensitive vegetables.

### 3.2 NON FARMING ACTIVITIES

In Afghanistan, many people wonder why the drought of 2002-03 was not so deadly after 25 years of war. Given that agriculture is particularly sensitive to drought, the reason appears to be that households are flexible enough to diversify their activities. Indeed, in Baharak, people carry out a number of different activities other than agriculture. Moreover, household types 5 and 6 are landless and sharecropping is not financially viable option for many of them because of the high costs. Many landless people would rather carry out other activities.

#### 3.2.1 Four reasons for non farming activities

- Smallholders who have lost their land and who do not sharecrop are obliged to work outside the farm.
- Farmers who work their land (or who sharecrop) can undertake a second activity if they have enough free time, such as FS4.
- If the household has a large number of male domestic workers, one person can work outside the farm.
- Some landowners rent out their land and engage in another activity. As they do not have much land, smallholders have no choice but to sharecrop, although some are discouraged by the costs involved. They would rather rent out their land and devote their free time to another activity.

#### 3.2.2 What type of activities?

##### 3.2.2.1 Free workers

- **Shopkeepers**
  If the household has the possibility to invest, most families decide to set up a small business with one family member as shopkeeper. This requires a house near a crowded road or renting small business premises in the bazaar (from 2,000 to 5,000 afghs per month). In either case, the family needs to be able to invest in order to buy goods.
In the bazaar, all shopkeepers are men. They work full time unless they have a secondary activity (e.g. the landless). If shopkeepers are also carrying out farming activities, they will divide their time between the shop and agricultural work. If the shop is located in another village or beside a road, rather than in the bazaar, children or elderly men can also run the shop.

Household types 1, 2, 3 and 5 have enough land or male domestic worker in order to place one of their workers as a full-time shopkeeper. This is especially true for household types 3 and 5 because households types 1 and 2 tend to opt for more prestigious options.

It is important to point out that the household typology is dynamic. Households may fluctuate from types 3 and 5 to types 4 and 6. On opening a shop, shopkeepers tend to be from household type 3 or 5 but later, their household may become type 4 or 6.

- **Executives and artisans**
  People who had the opportunity to study at university become executives (doctors, pharmacists, etc.). They come from families who have enough money to pay for the studies (household types 1 or 2). Occasionally, other households, such as types 3 and 5, will sacrifice modern facilities in order to pay for their children’s studies.

  Alternatively, some families encourage their children to learn a manual trade (blacksmiths, tailors, jewellers, etc.) which implies fewer years of studying. This strategy requires less investment and gives a quick financial return.

  Executives and artisans do not tend to have a second activity. They hand over their land to their brothers and sisters or they rent it out.

  Household types 4 or 6 find it very hard to save money and cannot spare any of the family members for university studies or other vocational training. Consequently, children from these households do not usually study.

3.2.2.2 **Permanent employees**

With NGOs and public administration departments in charge of developing local infrastructure (hospitals, roads, bridges, schools, government office, etc.), the demand for labour increased. These organisations employ a qualified labour force (engineers, technicians, advisors, teachers, secretaries, etc.) and unskilled workers (guards, drivers, cooks, etc.). Most NGOs employ large numbers of local staff. These workers are unable to carry out a second activity, for example they cannot be farmers (if they have land, they tend to sell it or rent it out), and the family has to have enough male domestic workers to fulfil the household’s agricultural activities. All household types are concerned by this strategy but household types 1 and 2 will be attracted by the best positions because it means that their children will be able to study or the family is powerful enough to influence recruiting practices. Since households of types 4 or 6 do not have any relationship with these organisations, it is naturally difficult for them to obtain work with them.

3.2.2.3 **Daily workers**

Jobs such as farm labourers, stone masons, transporters, etc., are seasonal. The high season comprises three main periods. The first period, from April to June, is taken up by weeding activities. The second period, from July to August, concerns harvests, and the final period, from September to November, concerns masonry. During the winter, from December to March, there is no agricultural work and weather conditions determine whether it is feasible to carry out building activities.

During the high season, salaries vary according to labour demand. For example, spring showers can cause weeds to spread throughout the entire valley. Crops, which are very
sensitive to competition from weeds, such as poppy, require a lot of weeding. This means that there will be a high labour demand and salaries may even double, reaching 350 to 400 afghs per day. In the high season, the average salary is about 200 afghs a day with one meal included. In winter, when work is available, the average salary is about 150 afghs a day.

Landless families from types 5 and 6 who do not want to sharecrop apply for these daily jobs. Household type 4 (limited labour force) are interested in agricultural activities which do not require many working days in order to carry out a second activity.

3.2.2.4 Migrants

With the development of new means of communication, working in other countries is becoming increasingly common. More than 95% of migrants move to Iran and Pakistan. For language reasons, Tajik people tend to go to Iran and Pashtun people prefer Pakistan.

International borders are not strictly controlled and the use of false papers is widespread. People who want to go to Iran need a visa, and therefore rely on people traffickers, whereas for Pakistan, a visa is not required.

During the war, most refugees built up a network of contacts which they still use today to find work. Many Afghan people still have family in Pakistan (Peshawar) because the standard of living and salaries are higher. However, the cost of the journey, the high standard of living and traffickers’ fees means that it is an investment to migrate and once in the country it is not easy to save money. Moreover, it is difficult to live abroad because of the precariousness of their situation and the distance from relatives. The majority of migrations on average last one to two years.

Families who are most concerned by migration are those with little land (household types 3, 4, 5 and 6). However, household types 4 and 6 do not have enough male domestic workers and would rather keep family members at home. Indeed, migrants do not earn much money, which is why migration is predominantly a strategy for reducing the family’s running costs.

3.2.3 Summary

Table 7: Non farming activities

<table>
<thead>
<tr>
<th>Type of job</th>
<th>Investment</th>
<th>With a second activity</th>
<th>Cost</th>
<th>Which type(s) of households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopkeeper</td>
<td>Yes</td>
<td>Yes</td>
<td>Low</td>
<td>3, 5, 4</td>
</tr>
<tr>
<td>Executive</td>
<td>Yes</td>
<td>No</td>
<td>Low</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>Artisan</td>
<td>Yes</td>
<td>No</td>
<td>Medium</td>
<td>3, 5, 4, 6</td>
</tr>
<tr>
<td>Permanent employees</td>
<td>Yes</td>
<td>No</td>
<td>Low</td>
<td>1, 2, 3, 4, 5, 6</td>
</tr>
<tr>
<td>Daily workers</td>
<td>No</td>
<td>Yes</td>
<td>Medium</td>
<td>4, 5, 6</td>
</tr>
<tr>
<td>Migrants</td>
<td>No</td>
<td>No</td>
<td>High</td>
<td>3, 4, 5, 6</td>
</tr>
</tbody>
</table>

People who do not carry out a secondary activity tend to be from households that 1) have a sufficient number of male domestic workers and 2) have access to studies, i.e. household types 1, 2, 3 and 5.
3.3 CREDIT AND SELLING OFF ASSETS: THE LAST RESORT

If the household is unable to cover its costs or it wants to invest in a small business, there are two strategies: debt and selling off assets.

3.3.1 Debt

In Baharak, giving or obtaining credit is common and four types of credit can be identified:
- Sut
- Karlzassana
- Mozabarat
- Guerao

3.3.1.1 Indebtedness in order to live

The sut is a credit facility with a low level of interest and the karlzassana, an interest-free loan, is not banned by Islam.

These first two credit systems are mostly used during winter and spring (from December to June) when households are living off their stocks from the last harvest or from non-farming activities. These stocks are used to tide families over between two harvests or two daily worker seasons. Free workers and permanent employees are the only workers who are likely to have a regular income all year round. Some households use up all their stocks before the new season begins and they have to buy food on credit. The most vulnerable households (types 4 and 6, with little land or landless and few male domestic workers) are the first households to buy on credit.

First, families try to take out karlzassana credit with family, friends, neighbours. When this is not enough, households then have to ask people with whom they have no particular relationship, in which case, the sut applies.

Credit can be dangerous for the most vulnerable families. The slightest incident can cause a family to spiral in extreme indebtedness, further weakening their capacity to cope.

3.3.1.2 Taking out credit for investment

The mozabarat is a credit that is taken out for investment purposes. Anyone can use it if the investment is attractive and it is particularly practical to start up a small business. Unfortunately, there is a high level of risk attached to this type of credit for lenders, which is why it is rarely practised in Baharak.

3.3.1.3 Credit for large investments

Another type of credit is the guerao or mortgage which is used for large investments, such as marriage, disease, purchasing land. The sut is not applicable in this case because of high costs. Mortgages for purchasing land are accepted because of land in Baharak has reached such high levels. This type of credit poses serious problems and households often start to sell of assets in order to meet repayments.

3.3.2 Selling off assets

3.3.2.1 Which assets are sold off?

Animals

The first type of asset which is sold off are animals. A distinction must be made between animals which are sold for meat and breeding stock which is used for farming activities. In this case, only breeding animals will be considered as assets.
Wood
Wood can be sold. Many households have planted trees (poplars) and most of this wood is destined for building houses for the children. Unfortunately, households occasionally have to sell their wood in order to raise cash.

Land
Land can also be sold. There is no policy protecting agriculture against urbanisation. Land prices are very high and households can earn a lot of money in a short time but they also lose an important asset which is really hard to recover.

Moreover, with the guerao, so long as families are unable to reimburse, they are unable to use their land which is nonetheless one of the most important assets.

Women?
Women can be considered as a means of earning money. Several fathers introduced their daughter to us with the nickname “dollars”. Even if this was a joke, women often represent a means of raising money at the time of their marriage thanks to the dowry. Many families do not hesitate to marry their daughters at a very young age. Even though it is preposterous to consider women as an asset, it is nonetheless important to take into account this important social problem.

3.3.2.2 Why do people sell off their assets?
No more trust, no more solvency
Many households need credit in order to ride out a temporary money problem. Credit is based on trust: the moneylender judges a man solvent if he has land, if he grows poppy (because of the profits can be generated), etc. If a household breaks this trust, they no longer have access to credit. Trust is broken when households are no longer solvent or if they have not yet paid back the previous credit. Households that need money have to start selling their goods and assets.

The immediate consequences of severe shocks
Severe upheavals or shocks, such as death, disease, drought, war, epidemics, etc., may affect one or many households. This type of upheaval tends to reduce the number of moneylenders and raise the number of borrowers. The latter find it harder to obtain money and have to sell off their assets.

During the war, smallholders had to support the mujahidins and their own family and farmers were often required to sell their goods in order to do so. Moreover, many men were engaged in the war efforts, which meant that there was not available workforce and agricultural production dropped as a result. These factors had an impact on people’s tendency to sell off their assets.

From 1999 to 2001, another natural disaster seriously affected farmers: the drought. For three years, wheat and fodder prices were high and low yields forced farmers to buy more. Many farmers chose to sell their animals rather than buy very expensive fodder to feed them.

At a household level, accident and disease may reduce the available domestic workforce and production capacity. In order to overcome this problem, most households have to sell their goods and assets. In case of a son’s marriage, the family may take out credit or sell goods in order to pay the dowry.

Impact of population on production factors
Besides unexpected shocks, population growth generates difficulties for smallholders. The amount of land per inhabitant decreases as the population grows, and in theory, production capacity per inhabitant also decreases. Most households have to borrow money in order to
bridge the gap. These levels of debt are tolerable until it becomes clear that the household is no longer solvent. Indeed, in general, the population is becoming increasingly less solvent because of pressure on land availability.

In order to overcome solvency problems, smallholders are required to intensify their farming systems and poppy is the most attractive alternative.

### 3.3.3 Loan or selling of assets: two closely-linked phenomena

Figure 16 shows the link between households who borrow and households who sell their assets.
The normal cycle of indebtedness is not dangerous for most of the households. Only households with insufficient land capital or male domestic workforce (type 4 and 6) are vulnerable and can be plunged a cycle of selling off assets. Additionally, these households are very sensitive to severe shocks.
Households who are concerned by indebtedness but have not yet begun to sell off their assets (type 1, 2, 3, 5) may resort to this option if they are affected by upheaval that lasts for a long time.

Figure 16 also illustrates the final phase when households have sold everything. In this case, the only option open to them is to resort to begging or moving to a larger city in search of work.

### 3.4 TYPOLOGY AND ACTIVITY SYSTEM

Table 8 presents the typical activities carried out by each type of household. It is not include the types of activities that may be carried out in the case of shocks.

<table>
<thead>
<tr>
<th>Household type</th>
<th>Farming systems</th>
<th>Non farming systems</th>
<th>Main needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>1 (wheat)</td>
<td>Executives, doctors, etc.</td>
<td>Better wheat varieties</td>
</tr>
<tr>
<td>Type 2</td>
<td>1 (wheat)</td>
<td>Executives, doctors, etc.</td>
<td>Better wheat varieties</td>
</tr>
<tr>
<td>Type 3</td>
<td>2 (vegetables), 3 (poppy), 4 (wheat)</td>
<td>Shopkeepers, artisans, permanent employees, migrants.</td>
<td>Poppy legalization. Better return on non farming activities. Improved vegetable chain (advice, marketing...).</td>
</tr>
<tr>
<td>Type 4a</td>
<td>2 (vegetables), 3 (poppy), 4 (wheat)</td>
<td>Shopkeepers, artisans, daily workers, migrants.</td>
<td>Poppy legalization. Better return on non farming activities. Improved vegetable chain (advice, marketing...).</td>
</tr>
<tr>
<td>Type 4b</td>
<td>3 (poppy), 4 (wheat)</td>
<td>Shopkeepers, artisans, daily workers, migrants.</td>
<td>Poppy legalization. Better return on non farming activities. Improved vegetable chain (advice, marketing...).</td>
</tr>
<tr>
<td>Type 5</td>
<td>2 (vegetables), 3 (poppy), 4 (wheat)</td>
<td>Shopkeepers, artisans, permanent employees, daily workers, migrants.</td>
<td>Poppy legalization. Better return on non farming activities. Improved vegetable chain (advice, marketing...).</td>
</tr>
<tr>
<td>Type 6</td>
<td>2 (vegetable), 3 (poppy)</td>
<td>Artisans, permanent employees, daily workers, migrants.</td>
<td>Poppy legalization. Better return on non farming activities. Improved vegetable chain (advice, marketing...).</td>
</tr>
</tbody>
</table>

The above table shows the main difference between household types 1 and 2 and the other household type. Household types 1 and 2 benefit from NGO programmes whose objective is to improve wheat yields, while the other household types do not expect to benefit from this type of activity.
4 WOMEN’S ROLE IN AGRICULTURE AND IN THE HOUSEHOLD ECONOMY

The aim of this chapter is to present the position of women in the Afghan rural society, based on the initial indications following an analysis of agrarian systems in Chapter 3.

4.1 FEMALE ACTIVITIES IN BAHARAK VALLEY

In rural areas, women are in charge of both farm activities and non-farm activities inside their home.

In terms of agricultural products, women are mainly in charge of storing (grain, animal feed, vegetables) and processing (drying, cooking). Women are responsible for feeding livestock, checking their health in the stable, cleaning the litter, milking and taking care of poultry and young animals.

In terms of non-farming activities, women are responsible for domestic chores (cleaning the house, taking care of children, cooking). They also carry out handicraft activities, such as embroidery, sewing or weaving for the household’s needs.

Nevertheless, women’s roles may vary considerably between two villages and also between individual women. What are the factors behind this diversity?

4.2 FACTORS INFLUENCING DIVERSITY OF WOMEN’S ROLES

Women’s roles inside and outside of the household depend on different factors which affect women’s involvement in household activities in comparison with men. These factors, which are partially discussed in an AREU\(^33\) (Afghanistan Research and Evaluation Unit) report on gender roles in agriculture include:

- Household composition
- Household wealth
- Women’s marital status and whether they have children (bride, mother in law, widow and young girl)
- Relationship between women in their village
- Agricultural skills (kitchen garden cultivation, vaccination of livestock)
- Women’s involvement in NGO programmes.

4.2.1 Demographic and economic factors

Factors such as HH composition and wealth of HH were already mentioned in the analysis of agrarian systems. As previously mentioned, in circumstances where there are several family units living as a community, domestic activities are divided up between women according to strict rules. The eldest woman is responsible for delegating household activities and the youngest married women are responsible for the most difficult chores. In other HH, where there are fewer family members (only one generation of parents and children), the woman manages domestic activities herself. Moreover, in relation to HH wealth, the poorest households tend to rely on women carrying out agricultural activities (gardening, vegetable growing and fruit harvests).

4.2.2 Marital status and age

As soon as children reach 6-7 years old, girls and boys are raised differently. Mothers teach girls how to manage the main domestic activities so that the young girls can begin to help

\(^{33}\) J. Grace, *Who Owns The Farm?*, AREU Report, February 2005
them in this work and in order to prepare them for their future role as a wife. “It is better that my daughter learns early to work hard because that way she is ready for her future life”. The work carried out by girls at this age is not limited to chores inside the home: they can also help their father and brothers in the fields or with other outdoor activities.

At the age of puberty (11-15 years old), the father often has to impose his authority and inform the daughter of her new working environment. From this point, she can only carry out activities at home because young girls are not allowed to be seen speaking or meeting with men, except from their fathers, brothers or older men. If a woman does not comply with these conditions, the local community is likely to find her behaviour unacceptable and her parents will find it hard to get a suitable dowry for her marriage.

Married women must obey both their husbands (and other men in her HH) and her mother-in-law. As a result, a widow or a woman without a mother-in-law has more freedom within her own home to carry out her activities as she wishes but she still has to comply with social obligations in her ‘public life’.

Figure 17 gives details of the different activities carried out by women and their limitations according to their age and marital status.
Figure 17: Women’s roles according to age and marital status

- Bride (18-30)
  - Going outside home alone.
  - Working in fields.
  - Being a shopkeeper in remote villages.
  - Speaking with men.

- Young girl (13-18)
  - Not allowed to go alone outside home.
  - Wearing burka.
  - Not working in fields.
  - Not selling in bazaar.
  - Handicraft activities and domestic work.
  - Not speaking with young men.
  - School for a minority.

- Girl (7-13)
  - School
  - Shepherd of HH’s animals.
  - Selling of not-heavy agricultural products in bazaar.
  - Transportation of meals in fields.
  - Searching fuels (roads, mountains).
  - Searching clean water.
  - Helping for cooking and domestic work.

- Mother-in-law (> 30)
  - Not allowed to go alone outside home.
  - Wearing burka.
  - Not working in fields.
  - Not selling in bazaar.
  - Handicraft activities and domestic work.
  - Not speaking with young men.
  - School for a minority.

- Old woman (> 40 years old)
  - Responsible for agricultural work and livestock inside home.
  - Processing of agricultural products.
  - Cooking and baking bread.
  - Taking care of babies and breath-feeding.
  - Organization and participation to festivals.
  - Domestic work.

- Widow
  - Not allowed to go alone outside home.
  - Wearing burka.
  - Not working in fields.
  - Not selling in bazaar.
  - Handicraft activities and domestic work.
  - Not speaking with young men.
  - School for a minority.

- Children (girls and boys < 7)
  - Mixed activities.
  - Games inside and outside home.
  - Doing not to school.
  - Doing not Ramazan.

Source: Author
Only widows and older women are allowed to breach these social rules that are imposed on younger women.

Furthermore, young girls very rarely work in kitchen gardens. However, young brides would be interested in this type of activity because they are interested in improving their children’s diet and generating new incomes.

4.2.3 Relationship between women in their village

In this context, some women admit that: “Neighbourhood is better than family” but others say that they do not even know their neighbours. In fact, the relationship between women in a village depends on the age of the village (old or new village), on its composition (HHs from the same lineage or HHs from different areas) but also on the wealth of HHs. However, one may assume that this relationship would be better in older villages with inhabitants from the same lineage. Surprisingly, we observed that in new villages of migrants, women built up strong solidarity links and had good group dynamics. For instance, in one of these new villages women are used to sharing skills and organising a ‘community tandur’ to cope with fuel deficits. This is especially true for young and poor brides.

Furthermore, in older villages, women have to deal with problems of jealousy and they are rarely accustomed to working together. As a result, they are not willing to work in groups and to exchange their skills.

It is essential that these relationships are taken into account before implementing women’s programmes or organising women’s groups in villages where they are not motivated by group initiatives.

The last two factors determining diversity within the female community will be described in this chapter by analysing women’s roles in agriculture and in chapter 6 with the evaluation of AAD’s programmes.

4.3 Women’s roles in agriculture

“It is demonstrated that women play an important role in all dimensions of agricultural production – in certain regions women’s time input equals men’s, while in other regions traditions restrict their work to the household where they are involved in crop processing and are in charge of household maintenance and reproductive activities. In most cases women’s labour is non-monetized, but they make large labour contributions to a range of marketed products such as dried fruits, opium, fuel wood, dairy products and handicrafts.” (BM, 2005)

4.3.1 Female activities are limited in space

There is a visible division between agricultural activities carried out by men and women in Baharak valley.

Although men are in charge of cereal and animal fodder, women often say that they are in charge of kitchen garden and growing vegetables. Except for potatoes (which are always cultivated in fields), women are responsible for growing vegetables from sewing to harvesting. Indeed, these activities are seen as being ‘degrading’ for men who prefer being in charge of ploughing and other more ‘noble’ activities.

Table 9 gives details of different agricultural activities carried out by women in Baharak valley.

---

34 Tandur: traditional Afghan oven built in soil.
Table 9: Agricultural activities of women in Baharak Valley

<table>
<thead>
<tr>
<th>Sectors of actions</th>
<th>Female activities</th>
<th>Activities non accessible for women.</th>
</tr>
</thead>
</table>
| **Livestock**      | o Animals care in stables and poultries  
|                    | o Animal weaning  
|                    | o Animal feeding in stables and poultries | o Animals sale  
|                    | | o Shepherding outside home |
| **Animal products**| o Milking (caw, sheep and goat)  
|                    | o Milk processing (yogurt, cream, butter and cheese)  
|                    | o Manure drying and thapack\(^{35}\)  
|                    | o Wool cleaning, carding, spinning and weaving  
|                    | o Cleaning of animals skins  
|                    | o Eggs storing | o Cutting up animals  
|                    | | o Tanning skins  
|                    | | o Selling processed products in bazaar (> 7kg) |
| **Vegetables**     | o Kitchen gardens irrigation  
|                    | o Sewing  
|                    | o Doing nurseries.  
|                    | o Transplantation  
|                    | o Fertilizing (with manure and chemical products)  
|                    | o Weeding  
|                    | o Harvesting  
|                    | o Cleaning vegetables  
|                    | o Storing: in halls for potatoes and carrots, in a dry room for onions  
|                    | o Drying vegetables  
|                    | o Bottling vegetables (otchor\(^{36}\))  
|                    | o Tomato paste | o Ploughing  
|                    | | o Digging and taking care of irrigation canals.  
|                    | | o Selling vegetables in bazaar |
| **Fruit trees**    | o Guarding orchards  
|                    | o Harvest with men  
|                    | o Storing  
|                    | o Drying fruits  
|                    | o Cooking jam (rare) | o Pruning  
|                    | | o Chemical treatment and fertilizing orchards  
|                    | | o Irrigation  
|                    | | o Selling fruit in bazaar |
| **Cereals**        | o Grain cleaning  
|                    | o Flour sifting.  
|                    | o Building lofts for grain and flour in soil  
|                    | o Storing oil  
|                    | o Building the tandur in soil.  
|                    | o Bread baking | o Working in fields for cereals  
|                    | | o Transportation of grains and straw  
|                    | | o Processing in mills (for oil and flour) |
| **Forages**        | o Sifting and selling of pulls for feeding animals and humans | o Working in fields for forages.  
|                    | | o Transportation of forages outside home. |
| **Poppy**          | o Weeding  
|                    | o Harvesting with men and children  
|                    | o Storing grains for oil  
|                    | o Storing straw for fuel  
|                    | o Using residues of oil for feeding animals during winter | o Ploughing and irrigation  
|                    | | o Fertilizing, treatments  
|                    | | o Selling of latex  
|                    | | o Processing in mills for oil |  

4.3.2 Activities according to seasons

Women are busy in rural areas from the beginning of spring (April-May) during the lambing/calving season until autumn harvests end (October-November) and they have to dry the last fruits. Women are particularly busy in the summer (July-September) during the wheat harvest because they have to prepare food for large numbers of workers in the fields and

\(^{35}\) *Tchapack*: dried dung which is used as fuel.

\(^{36}\) *Otchor*: vegetables cut and preserved in vinegar in bottles.
they are also in charge of harvesting, storing and processing fruit and vegetables. At the end of this period, the majority of animals that were grazing in high pasture lands (*ailoqs*) are brought back to the stables and women take over responsibility for them. Finally, they have to dry *tchapacks* before autumn rains and winter snow.

Summer is thus the busiest season for women in terms of agricultural activities.

Poppy cultivation is hard work especially during the harvest (April-June) and women on average work in the poppy fields eight hours per day for several weeks. Women from the most vulnerable households (type 4 and 6) are required to work in fields, particularly for poppy because there are not enough male workers. As a result, these women have no spare time to invest in new activities, such as kitchen gardens or participation in women’s groups.

Women’s programmes need to take into account these seasonal activities and adapt their projects to when women are available. During the summer, programmes need to offer women who live in rural areas activities that are not too time consuming. During the winter, NGOs can organise regular meetings and introduce more demanding activities when women are not busy (December-March).

4.3.3 Processed products are mainly consumed in the home

Processing techniques are used for storing agricultural products for consumption in winter and spring when fresh products are rare and expensive, and also to sell any surplus in the bazaars. Indeed, between January and April, transport is problematic (bad weather conditions) and the price of imported products increases in the valley. Moreover, HHs need to have a means of making ends meet during this period because men are jobless and the granaries are empty.

Nevertheless, few HHs in the valley are capable of generating surplus produce from their farming activities and the majority of Baharak inhabitants consume all their production in the home.

4.3.3.1 Drying fruit and vegetables

Local drying techniques are not very good quality because households rarely intend to sell this produce in the market. Women dry fruit and vegetables on the roof of their house and sometimes directly on the ground. As a consequence dried fruit and vegetables are often mixed with dust and gravel. After drying vegetables, women grind them (tomatoes, pepper, onion, garlic) and store them in bottles or in plastic containers. The powder is then used in cooking as condiments. Dried fruit is preserved in dry and dark places.

Despite its poor marketing quality, this technique has the advantage of processing large quantities of fruit and vegetables and requires few materials and little time. Where home consumption is concerned, women are not interested in changing these traditional practices.

4.3.3.2 Processing milk products

Women have a good grasp of traditional techniques for processing dairy products and thanks to these skills, they can generate a small income which in turn enhances the value of their work from the community’s point of view.

Nowadays, only HHs who own more than two cows or five sheep and goats can produce enough milk to process it into butter and *krout*. These HHs are mostly located in *ailoqs* (the *Shewas*) and in Uzbek villages which have the largest amount of pasture land within this area. Most women directly use their boiled milk to feed their children and to make yogurt.

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37 A table of fruit and vegetable prices is presented in annexe 19.
(moss). Indeed, curdled milk is the most abundant dairy product in Baharak at the height of the milking period (May to September).

Figure 18: Milk processing with different dairy products

![Diagram of milk processing]

Each woman chooses to process milk according to milk availability (both in terms of quantity and quality). Indeed, ewe’s milk has a higher fat content than other milks and produces more butter, whereas, goat’s milk is lighter but contains more proteins (according to nutritionists) and produces a better tasting krout. Women make different types of dairy products depending on the type of milk they have available.

In terms of HH economy, krout is the least interesting product in terms of added-value. Selling fresh milk or yogurt generates the highest profits because these products contain few dried matter compared to their sold weight (less than 5%)[^38]. Furthermore, milk and yogurt are easily sold in bazaars by children or exchanged in villages between neighbours.

[^38]: Indeed, 1kg of cheese is sold in Baharak between 60 and 100 afghanis whereas 1L of fresh milk is sold 20 to 40 afghanis and women need 2L of fresh milk on average to process 1kg of krout.
It is fairly complicated to assess the amount of milk that is required to make all the different dairy products and the examples provided in this report are only approximates. In order to promote processing of one or another of these dairy products, development agents need to take many factors into consideration, such as milk volume, season, fat content, local milk consumption, eating habits, etc. For instance, this milk chain can be illustrated by the following example of a woman from Baharak.

**Example of an Uzbek woman, in charge of milking 4 cows twice a day during 4 months of last summer in ailoqs.** These cows produced a total of 32-48L per day according to their lactation phase\(^{39}\). This woman made between 750g to 1kg of butter every 2/3 days. She kept this butter for her home-consumption, for cooking and for guests. Butter does not sell well because it cannot be stored for a long time in salt. Moreover, it is rare that there is a surplus of butter. Butter is used in cooking like vegetable oil in the valley. This woman sold *Tchakah* to nomads or offered it to her guests. She prepared 14-17kg of *krout* every 40 days. When she came back from the *ailoqs*, she sold 1ser (7kg) of *krout* for 400 Afghanis to shopkeepers of Baharak (thanks to her son). She kept the rest of her production for her HH and as gifts for her neighbours and relatives. She admits that *krout* generates higher incomes than in the past because fewer women are producing this cheese.

4.3.3.3 **Wool and skin processing**

In many remote areas of Afghanistan, where livestock is the first source of income for HHs, such as in Hazaradjat, women weave balls of wool and sell them to shopkeepers. Although in Mazar-e-Sharif, carpet weaving is widespread and these carpets can fetch very high prices in Kabul, this handicraft is not developed in Baharak valley. There are two reasons for this: firstly, there is very little wool available in the valley because there are fewer sheep herds than before; and secondly, HHs have access to many new imported products, such as Iranian carpets in Baharak bazaar and synthetic leather which is less expensive and more fashionable. As a consequence, women have given up practising wool and skin handicraft activities.

Yet, some women continue to weave local clothes, such as *gelams* (Cf photo 3) with goat hair or wool bought in bazaars. This type of weaving is mainly used to make big bags for transporting grain and animal fodder. Few *gelams* are sold but they are often exchanged between women at weddings.

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\(^{39}\) During the two months following delivery, a cow of Baharak which receives enough food and is healthy, can produce 12L of milk per day. The two following months, it produces 8L.
4.3.4 Vegetable and fruit tree cultivation

4.3.4.1 Tradition of kitchen gardens in the valley

“My mother and my grandmother were already in charge of kitchen gardening”, said a woman from a valley near Baharak. Indeed, women of the valley agree that kitchen gardening has been a female activity for a long time. Some of them explain that during the war against URSS, women had no other choice but to work in the fields while men were fighting. The absence of large numbers of male workers was one of the main reasons that women were involved in growing vegetables and fruit trees.

Women explained that they processed more fruit before the war. Many fruit trees were cut down during the conflict for fuel or for generating income. Moreover, as the population increased in the valley, proportionally the number of trees decreased per inhabitant.

4.3.4.2 Vegetable and fruit production increased with the arrival of refugees and NGOs

Migrants came to Baharak with new cultivation and processing techniques. Women who came from the South (Kabul, Tarar) introduced more developed and diversified agricultural skills, and new varieties of vegetables.

Moreover, NGOs in Baharak such as AAD, distributed new varieties of seeds and technical packages with advice and fertilizers for farmers and women. These programmes resulted in an increase of vegetable and fruit diversity and improved access to inputs for farmers.

Nowadays, most women know how to grow vegetables and fruit. Indeed, women who do not have these skills tend to be refugees from high altitude villages (from Shewas or other neighbour districts of Baharak) where they did not have access to Kitchen Garden training programmes. Moreover, some poor women do not have access to land or water canals in order to start a kitchen garden.

4.3.4.3 Vegetable production generates small incomes for women

The arrival of new inhabitants and the expansion of Baharak bazaar have contributed to the increase of young handsellers (children) who sell fresh vegetables and fruit in public places (central bazaar, school, public footpaths). They also sell milk, honey and yogurt which are often processed by women. These children earn money and can generate small profits for themselves and their family. This type of commerce is new in Baharak. It began three years ago in Faizabad where development programmes such as those implemented by AAD encouraged women to set up small business activities. This type of activity does not exist in other districts that are less suburban than Baharak valley.

Children are very useful for women’s empowerment in business activities with regard to local social pressure. With these sales, women are able to participate more in the HH economy.

Nevertheless, not many women are able to generate enough surplus food for selling purposes and, as a result, few women generate visible incomes in rural areas. The following section aims to explain why women’s participation in the HH budget is so low and how women currently participate in the decision making process relative to the HH economy.

4.4 ARE WOMEN REALLY ABSENT FROM HH FINANCIAL MANAGEMENT?

4.4.1 Tradition prevents women from participating in financial decisions

4.4.1.1 Land negotiation is carried out by men

In rural areas, land is the most important asset. When a landowner dies, women are not allowed to participate in negotiations (which are managed by Mullahs according to
regulations laid down in the Koran). Despite being a widow, a woman is informed by men of her inheritance and she does not have any power to negotiate.

Moreover, a woman is not allowed to claim her right to land if she does not have the approval of a man. This means that sons can inherit land from their father when he dies without their mother’s agreement. Women are omitted from land transactions and have no right to become landowners.

4.4.1.2 Women cannot negotiate large amounts of money
Women are not allowed to carry out money transactions when amounts are ‘high’ (> 10$). For instance, only men can negotiate the amount of a dowry for a wedding. As far as animal sales are concerned, it is impossible for a woman to negotiate directly without men.

For all questions relating to food, men are in charge for purchasing expensive goods such as wheat, flour and wood. Although women are responsible for preparing the meals, men or children select the food for cooking. Moreover, in the most remote villages, all women ask their husbands or their fathers (or fathers-in-law) for permission to purchase clothes, jewellery, and goods for their children and for their house.

In terms of handicraft or dairy products, women cannot sell their own produce. For instance, if a woman wants to sell krout or a gelam, she cannot negotiate a price higher than 500 Afghanis (US$10) because she is not considered to be a good seller (“a woman does not know how to count”).

4.4.2 Domestic activities take women away from financial management of HH budget

4.4.2.1 Day-by-day management without budget forecast
In local communities, domestic activities are not seen from a long-term outlook. This work is repetitive and does not require expensive expenditure.

High levels of illiteracy amongst women make it difficult for them to work outside the home. Moreover, they often do not have any notions of how to budget. This means that most women are unable to participate in making decisions relative to the HH economy.

4.4.2.2 Women are too busy for new business activities
For eight months of the year, housework and agricultural activities mean that many women do not have any free time. At home, women are in charge of maintaining the house, looking after the children and preparing food. The following timetable is an example of a woman’s summer day in Baharak valley.
Table 10: A woman’s summer day in Baharak valley, 2005

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
<th>Comments</th>
</tr>
</thead>
</table>
| 5h       | Wakes up and prays  
Looks after children                                                               | All HH members often sleep in the same room, which is also the guests’ room. There is little room for privacy.                                                                                                                                                                                                                                                                                                                                                           |
| 5h30-6h  | Prepares breakfast (tea, salted milk and bread)                             | Fire needs lots of fuel which is very expensive in the valley for the poorest HHs (cf. annexe 17).                                                                                                                                                                                                                                                                                                                                                                           |
| 6h-7h    | Milks animals  
Boils milk and keeps the *kaimoch*.                                     | This is often the oldest women’s work. In summer few animals stay in the stable because they are moved up to summer grazing grounds.                                                                                                                                                                                                                                                                                                                                        |
| 7h-9h    | Cleans the house  
Washes clothes (with cold water)  
Looks after animals in the stable  
and feeds them (also poultry).                     | When the homestead is not irrigated by canals, women and children have to find water everyday for the housework. For clean water, men and children go to water points with donkeys and water tanks.                                                                                                                                                                                                                                                                               |
| 9h-11h   | Cleans the litter and makes *tchapacks*  
Looks after babies and the youngest children  
Kitchen garden, fruit garden  
Sewing, darning                                                      | This activity (*tchapack*) is very dirty and it is time-consuming, hard work. Women who have a lot of manure dry these cakes of dung with neighbours.                                                                                                                                                                                                                                                                                                                                       |
| 11h-12h  | Prepares lunch                                                              | Two women are often required to light the fire and prepare food.                                                                                                                                                                                                                                                                                                                                                                                                               |
| 12h30-14h| Eats and serves lunch, washes the dishes and prays                          | During harvest time, men eat in fields and children bring them lunch.                                                                                                                                                                                                                                                                                                                                                                                                               |
| 14h-15h30| Makes dough for bread, lights a fire in the *tandur*                          | Bushes and fire are used to build the fire for baking bread, but this produces lots of smoke which makes their eyes smart.                                                                                                                                                                                                                                                                                                                                                        |
| 15h30-17h30| Kitchen garden  
Dries vegetables and fruits  
Welcomes guests  
Looks after children                                         | In summer, there are many guests for women of Baharak because relatives often come to the valley for weddings or births. Or because they go to the hospital, purchase goods in the big bazaar.                                                                                                                                                                                                                                                                                   |
| 17h30-18h30| Milk and yogurt process  
Feeds animals in stable                                          |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 18h30-20h| Prepares diner  
Washes children/women  
Prays                                                                 | Few HHs have electricity (generator), they just have oil lamps.                                                                                                                                                                                                                                                                                                                                                                                                               |
| 20h-21h  | Washes the dishes, tidies the house  
Children’s bedtime routine  
Looks after animals in the stable                                       |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 21h-22h  | Sewing, embroidery, bed time.                                                | The richest HHs can watch TV.                                                                                                                                                                                                                                                                                                                                                                                                                                                |

*Source: Author*

Some periods, such as Ramadan, are especially demanding for women because they have to prepare a lot of food for the evening, having not eaten anything for the whole day (no food and no drink during the day). Women usually say: “*During Ramadan we have no time to*”

40 *Tandur:* Afghan baker’s oven.
pray” and also: “How do you want us to develop a new activity and participate to a woman’s group?”

The lack of time is the most quoted reason for high levels of absenteeism in literacy courses, handicraft centres or micro finance groups.

Despite this constraint, if women are sufficiently motivated to participate in women’s programmes, it is possible to help women organise their timetable. For instance, in winter and in HHs where several women live together, women are able to find enough free time to develop new business activities.

4.4.3 Some women participate in managing HH expenditure

<table>
<thead>
<tr>
<th>Example of Ghorshona, a young woman from the valley who is in charge of purchasing food and goods while her husband and her son work in the fields or in Faizabad.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thanks to her eldest daughter, she buys goods (sugar, tea, oil, fuel, and clothes, but not wheat) for winter stocks when prices are cheaper and transport is easy. She says that she does not always talk with her husband about these expenses except for medicine (expensive) because he trusts her. He is in complete agreement with the way she manages the HH budget because he is often absent and he would rather she took care of it. She does not have her own business activity and she is illiterate but she fully understands how much she can purchase and the amount she needs for stocks.</td>
</tr>
</tbody>
</table>

There are other examples where women partly manage their HH expenditure.

Women living near the bazaar who earn a small income are often in charge of purchasing clothes and domestic goods (for children, kitchen utensils). If their husband earns enough money to cover the HH’s basic needs (wheat, tea, rice, oil, fuel), women keep their salary to buy jewellery, gifts or a TV.

Furthermore, there is an increasing number of young girls who are becoming teachers, tailors, embroiderers or who are generating incomes in Baharak Valley. Their parents encourage them to be financially independent and to purchase their clothes and pay for their own entertainment. In this way, these girls can buy a sewing machine, furniture for their future house or participate in micro finance groups. Thanks to these income generation activities, the “added-value” of these girls increases. Indeed some fathers encourage their girls to develop such activities in order to negotiate a higher dowry for their wedding.

Although a widow often suffers from impoverishment, she is also freer than other women. Rulgôl, who has been a widow for a decade says: “Last year I sold 10,000 Afghanis ($200) of poppy and I bought a small shop in my village”. Another widow, a refugee from Pakistan, purchased a cow with funds that were provided to refugees. Although they are particularly vulnerable, there is less social pressure on these two women and they were courageous enough to cross over social constraints. Moreover, some widows become hand sellers of herbs, music tools or jewellery in the villages.

Finally, in HHs where husbands and sons cannot work or where there is insufficient workforce, women try to find work in other houses. They often work in the new city where HHs are rich and women earn their own salaries. These housework employees can earn goods such as rice, tea and manure.
4.4.4 Women participate to useful exchanges for HH economy

4.4.4.1 Exchange with shopkeepers

Women participate in this type of exchange when they have urgent needs (arrival of guests for dinner, illness of their husband). They exchange with shopkeepers in villages if he is close to the family (relative, neighbour). They send their children with wheat, animal fodder or fruit in exchange for other goods. This type of exchange is not possible in the new city where shopkeepers are often foreigners and only sell goods in exchange for cash (or poppy). This type of exchange is limited to solidarity networks.

Women fully understand the value of the different goods that they exchange and how their value fluctuates over the year (wheat price doubles in spring and before harvest time). Women wait for winter and spring when prices are higher before exchanging their agricultural produce (krout, dried vegetables). Yet, in remote villages where women can only exchange goods with hand sellers, they do not always have the possibility of waiting until winter before negotiating and, as a result, they do not know the precise value of their products. We observe that krout can fetch a high price in the cities and yet women in villages are often obliged to sell it for less than its real market value.

4.4.4.2 Reciprocity with neighbours

In villages organised around a good social network, women are used to exchanging food between neighbours. This type of exchange cannot be considered as swapping because they do not exchange different goods. For instance, if a woman gives her neighbour 1kg of rice, she will reimburse the same quantity of rice the following week. Thus, it functions more like a sort of solidarity network.

Sometimes, women use this exchange as credit for goods or money\footnote{ Cf face 17 on credit in rural Afghanistan (Klijn F. Credit and Debt in Rural Afghanistan, Concept Note and Literature Review, AREU, Kabul, September 2005).}. For example, a woman who borrows 500 Afghanis or 50kg of flour from her neighbour can pay back her debt next year, whereas if she borrowed the same amount from a shopkeeper she would have to pay off her debt two or three days later (with or without interest).

4.4.4.3 Gifts linked with social pressure

A poor woman who lives alone (with or without children) is often invited by her neighbours to cook her bread in their houses or is given fresh food, such as milk and eggs. This type of solidarity is indeed often linked to milk products. For instance, in Pashtun villages, local social mores prevent women from selling her milk. Moreover, women who do not have animals can receive small quantities of milk from other villagers (who see this type of assistance as an obligation). Yet, a woman would never ask her neighbours for milk. A Pashtun woman would rather buy imported milk in the bazaar or not drink milk at all rather than asking for milk from her neighbours. In this way, we can conclude that milk is exempt from traditional exchanges networks.

In conclusion, we understand that milk is a valuable product. In order to promote income generation activities for HHs, agricultural programmes should encourage the development of milk chains, for milk and other dairy products.

Finally, women are often not accustomed to sharing their skills, advice or recipes their knowledge with other women. They consider these skills as their only asset and part of their own identity. For instance, a woman who learns a new technique for her kitchen garden will not necessarily share it with others because she feels she would be loosing something. Indeed, given traditional social dynamics between men and women, most women do not have any material resources and rely a lot on their skills or gifts they have been given...
(animals they received for their wedding). For example, even if the dayâs do not earn an income from assisting women in childbirth (although they sometimes receive food or small gifts), they are proud of this qualification because it gives them a certain status in rural society.

4.4.5 Women prepare festivals

HHs consider festivals as an important financial event and, indeed, often a significant amount of cash is required for the preparation. Several months before a festival, HHs save money and women are required to contribute to this sum of money. For example, they make clothes and embroidery that they can easily exchange or sell to their relatives. They also save the money earned with the sale of dairy products or other processed goods.

Moreover, in rural society the richer a family is, the more they want to show off their wealth to their guests. Thus, women must pay a lot of attention to preparing for their guests with delicious meals, gifts and nice clothes. For this purpose, women’s organisations have to be extremely efficient and manage carefully the budget negotiated by men.

For a wedding, men make a list of all the different requirements for the reception and women try to ensure that their preparations cover everything on the list. They organise different activity groups according to their skills. The mother-in-law is not always the leader. For a birth, a death or a religious festival, such as the Eid, women work together to cook, clean the house and sew, etc. All these social events are of particular interest because they represent an opportunity for women to exchange their knowledge and carry out group activities.

Example of the party of Samenack: “We organise a big garden party for women”

This festival is quite old and is celebrated at the New Year, 21 March. It is a neighbourhood party. One or two women set the date and organise a meeting with other women from their villages. Then, women decide on the financial participation for this garden party (between 10 and 50 Afghanis per woman) and on the location. They agree on a food list and utensils. Children are often the ones who purchase goods for their mother. The evening before, women cook the samenack together and sing a famous song for this event. On New Year’s Day they eat together in a garden without men. The samenack is both a special dish for a special event and an opportunity to build links between women and neighbours. Wheat is essential for this festival which symbolises prosperity.

4.4.6 Working towards financial independence?

“It is true that the burqa symbolises oppression but women have other urgent needs such as health, education and economical independence”: Minister of Women’s Affairs, Habiba Sorabi.

As discussed earlier, it is difficult for most women in Baharak valley to visit the bazaar and they cannot sell or purchase goods. As a result, many of them are afraid of keeping even a small amount of money. Nevertheless, other women are accustomed to negotiating small business transactions, with their children’s help, partly to cover HH expenditure. It may be

42 Dayâs are traditional midwives, although today many have received training from NGOs (MSF, AAD) pregnant women and children.

43 Eid is a Muslim religious festival. There are two Eid each year, one after the Ramadan and one two and half months later. Each festival lasts three days and three nights.

44 Samenack: germinated grains of wheat boiled and cooked. According to UNICEF nutritionists, it is rich in protein and vitamins.

possible to encourage these women to acquire a degree of financial independence but do they express a desire to do so and is it a priority for them to improve their female condition?

A young widow, who was a refugee in Pakistan for three years with her brother’s family said: “I was happier in Pakistan because it was my brother who managed the money. I am now alone and am financially responsible for renting my house, employing sharecroppers, bringing up my sons. It is very hard”.

It is important to assess whether women really want to be financially independent. For a Western woman, this is a symbol of independence but Afghan women do not have the same vision of independence. They are not necessarily interested in managing the household budget or being financially independent. The main concern of most Afghan women is to improve the household’s living standards and not their own condition. As a conclusion, women programmes must be adapted to Afghan women’s true priorities and to fully assess the importance of financial independence for women in rural contexts.

This chapter presented women of Baharak valley as essential economic agents, as well as domestic workers. They contribute to the HH’s income with their skills and their activities. They are essential actors in the HH’s social and economic production processes.

In the most vulnerable HH, women are required to adopt emergency strategies in response to a prolonged crisis phase: “Thanks to the sale of milk, I made stocks of foods for the winter”: said a young woman from the valley. She is alone at home with her children because her husband works in another province. Indeed, with the help of their children, more poor women are generating small incomes and, in this way, can purchase basic goods for their HH.

Finally, we observed that women alone are responsible for their children’s health and are very motivated to improve the family’s health, especially as health problems are often linked to food. Women also have a thorough knowledge of production and consumption units. The following chapter analyses the role played by women in food production in order to put forward some recommendations on how to improve nutrition programmes with the help of women.
5 WOMEN WITHIN FOOD CONSUMPTION DYNAMICS

This chapter examines the link between different female activities and the main objectives of development programmes in rural Afghanistan. Indeed, these programmes aim to improve food security because the majority of Afghans in rural areas are still suffering from malnutrition. In order to improve food programmes we shall study the nutrition issues that are at stake at a national level and then we shall analyse food consumption dynamics in Baharak valley.

5.1 MAIN CHALLENGES OF NUTRITION IN AFGHANISTAN

“The population of Afghanistan suffers from one of the poorest health and nutrition situation in the world. Levels of chronic malnutrition, also referred to as stunting and characterized by a low height for a given age, are extremely high: between 45 and 59% of children under 5 (<-2 Z-score height-for-age). Micronutrient deficiency diseases are very widespread.” (MOH, 2004).

The Afghan Ministry of Health (MOH) underlines the appalling health conditions affecting the majority of the Afghan population. Chronic malnutrition is the result of war and of the most recent drought. Today, some areas still suffer from food insecurity and most people still suffer from malnutrition, especially in remote areas such as Badakhshan which are the worst hit. In this context, women have to cope with poor health and limited food availability which in turn has a disastrous effect on their children’s health. According to UNICEF and the MOH, the poor health of many mothers has severe repercussions on children’s health, i.e. an “intergenerational cycle of malnutrition” (cf figure 7). That is why women should be the first targeted by nutrition programmes.

“Poor maternal nutritional status will contribute to poor intrauterine growth, low birth weight, poor complementary feeding practices and micronutrient deficiencies coupled with high incidence of diarrhoea, and subsequent undiversified and limited food intake of the child leading to another generation of mothers who are malnourished and who will replicate this cycle.” (MOH-UNICEF, 2003)

Figure 7: Intergenerational cycle of malnutrition

In order to understand the evolution of different food programmes in Afghanistan, annexe 23 presents an historical view of international programmes (Dufour, 2005).
One of the Afghan government’s current preoccupations is to fight this malnutrition problem which is directly linked to economic and social issues. In order to improve the food situation, the government would like to:

- Improve coordination between NGOs, UN and Ministries (and within Ministries).
- Enhance public help in the nutrition sector.
- Move from emergency programmes to a long term view by integrating different nutrition aspects (agricultural production, involvement of women, access to health centres, nutrition education).

5.1.1 Enhance the “agri-nutrition” link

According to Dufour, FAO nutritionist in Afghanistan: “Good household food security and nutrition is both an objective of agricultural development and a requirement for agricultural development”.

Figure 21: The cycle of “Agriculture-Nutrition”

5.1.2 Involve women in food programmes

Women have a thorough knowledge of both production and consumption units. As seen in the previous chapter, women are responsible for several processes from vegetable cultivation to cooking meals. Moreover, they alone are responsible for their children’s health. As a result, women are particularly motivated to improve the quality of food in their HH.

Figure 22 highlights the diversity of factors that affect food improvement (Dufour, 2005). It shows that women are essential agents according to their activities (processing, storing, education).

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46 Dufour C., Supporting the Improvement of Household Food Security, Nutrition and Livelihoods in Afghanistan, FAO project supported by the Government of the Federal Republic of Germany, 2005

Besides, if you ask a woman in the valley “What for you is good quality food?” the majority of women would answer: “rice, meat, yogurt and potatoes.” Indeed, these types of food are judged as “healthy” because they are nourishing. Few women spontaneously mention green vegetables. When they talk about this type of food, women may say: “with green vegetables, rice is tastier”. Although they do not seem to be very interested in a varied diet with a lot of fruit and vegetables, women are always interested in having advice on nutrition.

**Figure 23: Women baking cookies for the Eid of Ramadan (October, 2005)**
5.1.3 Adapt national programmes to local contexts

The example of nutrition programmes in Badakhshan can illustrate some of the effects that national policy can have on the provinces.

5.1.3.1 Food distribution

During and immediately after the intense conflict period, food policy aimed at improving food security in terms of quantity. For instance, the FAO Food for Education programme distributed oil and lentils to schoolchildren in Baharak. These distributions encouraged parents to send their children to school, especially girls. However, people became accustomed to receiving free food aid and the syndrome of food aid dependency emerged.

In 2005, the FAO programme was brought to a close in the valley because the area was no longer classified as “food insecure”. As a result, many beneficiaries do not understand the transition over to programmes that stipulate that they must participate in programme implementation and they refuse to accept this change. These programmes are facing real difficulties because they are less “visible” and require significant motivation from local population.

5.1.3.2 Education for pregnant women and breast-feeding mothers

The French NGO, Médecins Sans Frontières (MSF) successfully provided health education programmes for pregnant women and breast-feeding mothers. For instance, women who became dayâs thanks to these programmes have a real positive impact on health education. Women in the valley now know that they have to breastfeed their babies as soon as possible in order to protect them from disease and to reinforce their immunity. They are also aware that animal milk is dangerous if it is not boiled. Today, other NGOs continue to provide health education to women, such as the dayâs.

Besides, statistics gathered by MSF in Baharak showed that 30% to 50% of pregnancies were too “risky”. They also observed that 70% of women coming to the hospital suffered of goitre and 15% from anaemia (SMU, 2001). In fact, pregnant women eat the same food as other members of the HH which are often micronutrient deficient. Moreover the lack of qualified staff in the hospital and bad transport conditions continue to hamper efforts to improve women’s health.

5.1.3.3 Nutrition education at school

Teachers at Baharak school educate their students in nutrition (from grades 8 to 12) according to the Ministry of Education’s national programmes. They improve student awareness of the link between agriculture and health, eating more vegetables and fruit, cooking and recognising the main component of foods. Although many children do not have access to education in rural areas, it does mean that those who do have a chance to follow this programme show promise of a better future.

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48 Badakhshan has one of the best attendance records for schoolchildren in Afghanistan but still suffers from high levels of illiteracy. According to AAD’s data, in three districts, just 28% of children went to school in 2000. (AAD, 2000 in SMU report, 2001).
49 MSF worked in Baharak between 2001 and 2004 where they built the hospital. MSF left Afghanistan in 2004.
50 For AAD, these programmes are called Health and Child Education.
5.1.3.4 Flour fortification pilot project in Badakhshan

A research study, conducted in 2004\textsuperscript{51} by the United Nations, analysed the impact of a flour fortification pilot project on iron deficiency in women and children. Field surveys took place in Faizabad ("pilot" city for the project) and in Baharak ("control" city) in order to compare results. According to blood tests from 2,000 women and children, this study showed that in Baharak there were 10% more anaemia cases (high iron deficiency) than in Faizabad.

One of the main findings of this study was that the majority of children tested were iron deficient despite the fortification project. Nutritionists explained that one of the reasons for this failure was that inhabitants of Faizabad were not used to purchasing their flour in mills and the pilot project had to adapt to this constraint. This implies that the fortification of flour should target remote areas where HHs are more accustomed to buying their flour from mills. In conclusion, one of the risks of programmes designed at a national level is that they do not correspond with local reality.

It is important to bear three main ideas in mind for improving food programmes in rural areas such as Baharak valley:

- Encouraging agricultural development in order to improve food access and food availability and contribute to improving health within HH.
- Involving women in food programmes because they are responsible for the HH economy and health.
- Ensuring that beneficiaries’ needs and eating habits (on the basis of field research) are taken into account in food programmes and that projects are well adapted to nutrition needs in rural areas.

The following section analyses eating habits in Baharak valley and puts forward recommendations for food programmes related to agricultural and women’s issues.

5.2 Dynamics of food consumption in Baharak valley

Eating habits are influenced by a number of different factors including: "food availability, capacity of access to food, ways of life, social and cultural models". (Bricas, 1998). In Baharak, as the valley has become increasingly sub-urban, so too have eating habits become more modern\textsuperscript{52}. Nevertheless, local food consumption still retains many of the rural characteristics that are found in other remote areas: little food variety, home-consumption of HH production and high dependence on seasons.

5.2.1 Bread, a common basic food

The majority of HHs mainly eat wheat bread with tea from once to three times a day. This consumption is based on local cereal production and cultural eating habits: every member within a consumption unit eats the same food (despite different ages) and bread baked at home represents the staple ingredient for women, men and children. Bread pancakes are also used as a plate and are always offered to guests as a welcoming gesture.

Besides, bread is a basic food for many villagers because it has the advantage of consuming less fuel than other food (fuel is used for baking once a day)\textsuperscript{53}. Thanks to this low fuel consumption, women also have more time for other domestic activities when there is enough sunlight. In the evening, when they usually bake bread, they can use the tandur’s warmth

\textsuperscript{51} Branca F., Mistura L., Ferrari M., \textit{Small Scale flour Fortification Pilot Project In Badakhshan, Baseline Survey}, National Institute for Research Food and Nutrition, Rome Italy and WFP Afghanistan, September 2004

\textsuperscript{52} Bricas N., \textit{Degré et la nature de l’urbanité}, 1998

\textsuperscript{53} Wood and manure are very rare in the valley and lack of fuel poses a big problem for many HHs (cf. annexe 17 about fuel).
(hot embers) to cook other food. Dinner is often the only warm meal of the day (rice, potatoes soup, *kroutâb*<sup>54</sup>).

Chart 9<sup>55</sup> indicates that most households in the valley eat, in terms of quantity (and energy), mainly bread which represents more than half of their daily diet (61% of daily energy supplies).

**Chart 9: Quantity of bread consumed per adult in Baharak valley compared with daily energy supplies**

<table>
<thead>
<tr>
<th>Daily energy supplies (Kcal) of the basic foods for one adult (&lt; 12 years old) in Baharak.</th>
</tr>
</thead>
<tbody>
<tr>
<td>bread (w heat)</td>
</tr>
<tr>
<td>oil</td>
</tr>
<tr>
<td>vegetables</td>
</tr>
<tr>
<td>milk</td>
</tr>
<tr>
<td>sugar</td>
</tr>
<tr>
<td>meat</td>
</tr>
<tr>
<td>rice</td>
</tr>
<tr>
<td>walnuts</td>
</tr>
<tr>
<td>walnuts</td>
</tr>
<tr>
<td>rice</td>
</tr>
<tr>
<td>potatoes</td>
</tr>
</tbody>
</table>

*Source: Author*

From these results, one can conclude that adults in the valley do not suffer from food insecurity in terms of energy requirements because they consume more than 2,500 Kcal per day<sup>56</sup>. In comparison with other areas at a higher altitude such as the Shewas (pasture lands in Baharak district) and other areas in Afghanistan where food insecurity remains high, the population of Baharak valley is less affected by food insecurity<sup>57</sup>. Besides, people’s daily intake of vegetables is very low (1%). Malnutrition is caused primarily by poor “quality” food rather than inadequate “quantity”.

### 5.2.2 Food availability depends on seasons

Although HHs cannot satisfy their food requirements by home production alone, Baharak valley remains a remote area which is strongly dependant on its agricultural production for food. Moreover, the lack of storage facilities prevents inhabitants from stabilising their produce throughout the year and providing food for the market in the low season. Finally national government is at present too weak in Baharak to establish local regulation of the

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<sup>54</sup> Oily soup with *krout* and bread.

<sup>55</sup> This chart is based on the results of twenty HH field surveys in Baharak valley which were asked about the quantities of different basic foods consumed (cf. annexe 16). Energy values were taken from FAO data (cf. annexe 24).

<sup>56</sup> WFP food distribution programmes in Afghanistan provide portions of 2,100 Kcal/day per adult.

<sup>57</sup> This conclusion is based on average figures gathered during HH interviews but would require more in-depth research to be confirmed.
food market. As a result, HHs of the valley consume food according to agricultural seasons (see Table 11) and the quality of food varies considerably.

Table 11: Food availability in agricultural products among seasons in Baharak valley

<table>
<thead>
<tr>
<th>Seasons</th>
<th>Available agricultural products commonly consumed.</th>
<th>Rare products and few consumed.</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Spring (March - April) | - Pulses and red beans  
|                   | - Onions and dried tomatoes  
|                   | - Dried herbs (oregano, mint, etc.)  
|                   | - Milk, yogurt  
|                   | - Meat  
|                   | - Fruits and vegetables (fresh)  
|                   | - Eggs  
|                   | - Potatoes  
|                   | - Butter  
|                   | - Red meat  
|                   | - Potatoes  
|                   | - Butter  
|                   | More difficult season: HHs have to bridge the gap, prices are high, HHs cannot purchase food in bazaar, lofts are empty. |
| Summer (May - October) | - Diversified fruits and vegetables  
|                   | - Milk, yogurt, *tchakah*  
|                   | - White meat (poultry)  
|                   | - Eggs  
|                   | - Milk  
|                   | - Yogurt  
|                   | - Red meat  
|                   | - Potatoes  
|                   | - Butter  
|                   | Time of work in fields, wheat harvest. High energy requirements.                                                          |
| Autumn (October - November) | - Autumn fruits (apples, pears, nuts, almonds)  
|                   | - Vegetables (pumpkins, carrots, cauliflowers, etc.)  
|                   | - *Krou*  
|                   | - Meat  
|                   | - Potatoes  
|                   | - Eggs  
|                   | - Milk  
|                   | - Yogurt  
|                   | “Abundant” season. Animals come back from *ailoqs* with dairy products, lofts are full, prices are low and there are many vegetables and fruit available. |
| Winter (December - March) | - Dried vegetables and fruits  
|                   | - Potatoes  
|                   | - Dried vegetables  
|                   | - *Krou*  
|                   | - Milk, yogurt  
|                   | - Eggs  
|                   | - Meat  
|                   | Little work in fields and in the bazaar, energy requirements are low, difficult access to market because of weather conditions (snow). |

As Chart 10 shows, consumption of basic foods varies according to the season\(^{58}\). Indeed, food prices and also energy requirements influence food consumption. Indeed, the colder it is, the higher energy requirements are and people eat nutritious food (high in carbohydrates and lipids).

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\(^{58}\) See annexe 16, interviewee consumption (in Kg/adult/month) according to seasons.
According to interviewees, Afghans classify their foods in two types: “cold” food and “warm” food\(^{59}\). As a result they are used to eating “warm” food in winter when energy supplies are higher (for hard physical work). Besides, “warm” food is usually consumed with guests and festivals because they symbolise wealth. “Cold” food is especially eaten in the summer but also as a garnish, served with other food.

- “Cold” foods: yogurt, cheese, boiled eggs, fresh fruit, honey, fresh vegetables, root vegetables, cow and goat meat, local vegetable oils (poppy oil, mustard oil), sugar (sugar can also be “warm” when it is consumed with tea or during work in the fields for energy supply).
- “Warm” foods: sheep meat, rice, soup, potatoes, milk (with tea), aubergine, cooked vegetables, garlic, bread, fish, eggs cooked in oil, butter, animal fat (such as *domba\(^{60}\)*), walnuts, dried fruits and jam.

This seasonal variability and cultural specificities seems to confirm that nutritional health is highly dependent on agricultural practices in this type of rural area. To improve food quality, it would be relevant to promote agricultural production especially with the development of new technologies which could limit the seasonal drop in food availability. Moreover, the improvement of infrastructure (roads, storage, trucks) would increase access to market goods during the low season.

\(^{59}\) This classification is also mentioned in Delloye I., *Afghan Women*, 2001

\(^{60}\) *Domba*: sheep’s fat located in the back of animals, especially in the *Turki* species.
5.2.3 New eating habits

5.2.3.1 Purchasing white bread in bakeries

Since the conflict ceased, the bread produced in the valley has changed because of the introduction of new varieties and some of the older varieties cereal such as barley, corn and sesame, are no longer grown for human consumption. Besides, some HHs no longer bake their bread at home but would rather purchase it in bakeries. These changes are the result of an increasing urbanisation in Baharak valley and a new way of life.

Today, most women agree to say that: “bread is better now”. They believe that the flour used for baking is better quality (“bread does not fall from the tandur”) and because bread is more easily digested. Indeed, barley or corn bread has a harder consistency than wheat bread. Moreover, the white colour of new wheat breads (compared to the brown colour of former wholemeal flour) is more appreciated and is a symbol of sophistication. However, in terms of taste, women do not see eye to eye. Before the war, the richest HHs already cultivated wheat with “local” seeds on rain-fed land, the lalmis, and could keep their bread for two/three days. Today, bread from improved seeds on irrigated fields, the abis, can only be kept for one/two days even if it becomes dry. These HHs say that bread was tastier in the past. Finally, another source of satisfaction comes from the improvement of wheat yields with new varieties that produce more flour for the same area.

Bakeries were first set up in the valley at the same time as hostels for shopkeepers appeared and hand sellers in the bazaar (1950-1980). In 2005, there were five bakeries in the new city and a new one in a village near the main road. Bakers use white flour imported from foreign countries or from Kunduz, a neighbourhood province which produces larger quantities of wheat than Badakhshan.

Figure 24: Baker of Baharak (October 2005)

Nowadays, HHs who are used to purchasing their bread in bakeries mostly live in the new city but their number is increasing compared to the rest of the valley. Indeed, baking bread at home appears to be less profitable due the cost of fuel and wheat and lower bread consumption in “new” HHs (parents and children of one generation) and also there is greater demand for white bread from migrants who became accustomed eating white bread in foreign countries and in the cities (refugees, NGO staff, etc.).

Despite traditional viewpoints that favour home baking (“a young girl must bake bread at home if she wants to get married”), many women do not have time for this time-consuming domestic work and they are motivated to buy bread (some women send their flour to a baker who bakes the bread and keeps part of the flour in exchange). These swift changes indicate that development programmes, and wheat programmes in particular, need to pay greater attention to the different “qualities” of bread (taste, preservation, digestibility and tendency to fall into the oven or not).

61 For instance, a HH composed of five adults requires between 82 to 154 Afghanis per day for wheat and fuel (according to the season) for home-baked bread instead of 73 to 108 Afghanis for bread purchased in bakery (cf. annexe 17 about fuel).
5.2.3.2 Fewer animal products

Interlocutors claim that they ate more meat before the war. There appear to be two main reasons for this fact: many animals were killed during the conflict, during the last drought or when the population began to increase in the valley. The fact that smoked sheep’s fat (known as landi by the Pashtuns) is no longer available in bazaars illustrates this change. Today, only the wealthiest HHs still own enough land to feed their herds and produce this fat.

Over the past five years, thanks to the development of the local market, new products (rice, vegetables, biscuits, vegetable oil) have replaced butter and meat, which remain symbols of a more rustic lifestyle. HHs often prefer to consume imported products which are seen as being more healthy than local animal products. Nevertheless, butter, cream and meat are still offered to guests because they have a high social value despite being qualified as heavy food compared to new imported products.

However, dairy products such as milk, yogurt and krout continue to be consumed in the valley throughout the year. As a consequence, more and more HHs purchase packaged milk in the bazaar to compensate for their lack of home produce.

5.2.3.3 New fruit and vegetables

Urbanisation within the valley has increased the diversity of fruit and vegetables throughout the year. Indeed, since 2001 shopkeepers are selling fresh vegetables in winter (cabbage, cauliflower, broccoli) and imported fruit (bananas, oranges) in the central bazaar. Nevertheless, less than 25% of interlocutors purchase these products on a regular basis (more than twice a month) because they are too expensive and HHs are not convinced of their nutritional value.

5.2.3.4 Fascination for packaged products

Today, the central bazaar of Baharak offers a wide range of products, especially imported products from Iran, China and Pakistan which attract both young and old people alike, the richest and the poorest. Biscuits and fizzy drinks are of particular interest given that they are cheap and they symbolise “modernity”. As a result, many villagers would rather buy a bottle of sweet fizzy drink for their guests rather than local fresh fruit.

HHs are beginning to introduce other imported products, such as tomato paste, vegetable oil and noodles into local food instead of local dried tomatoes or animal fat. For example, tomato paste has the advantage of giving rice a good colour does not contain any gravel. Besides, people prefer to use imported oils for cooking cakes and cookies because they prevent the cookies from browning and cakes can be preserved for longer.

However, some products such as jam are rarely consumed in the valley. Apart from NGO staff who purchase jam more regularly, people rarely eat jam except during Ramadan.

In conclusion, these new products attract people thanks to their packaging and because they symbolise the opening up of their country after many years of exclusion and war. However these new products may pose problems if eat-by dates are not controlled.

5.2.3.5 New culinary skills

The recent arrival of migrants has also contributed to diversifying food variety with the introduction of new culinary skills. For example, mantus or palau originating from Kabul and elsewhere in Asia are now cooked by women in Baharak and sold in bazaars. Moreover, refugees who are used to cooking with gas encourage HHs in the valley to do the same.

62 Poppy and mustard oils alone are produced in the valley but are often considered to be “bad” for one’s health.

63 Mantus: steamed ravioli from Uzbekistan or Tajikistan, with spiced meat and onion filling.

64 Palau: fried rice garnished with raisins, vegetables, spices, and sometimes served with boiled meat.
5.2.4 Typology of consumers based on different eating habits

According to this presentation of eating habits in Baharak, two main tendencies emerge: on the one hand, inhabitants of the valley are changing their habits towards more “urban” eating habits; on the other hand, people living at higher altitudes (villages on slopes, shewas) are still eating more rustic food, which is not very varied and is based on agricultural production. Furthermore, eating habits in the valley vary considerably.

Chart 11 illustrates the diversity in eating habits of twenty HHs (numbered from HH30 to HH50) according to their consumption of “basic” foods. For example, HH40 and HH47 do not consume the same quantity nor type of basic foods (HH50 consumes neither sugar nor vegetables).

To understand this diversity, it is important to build a typology of consumers. If food programmes are better adapted to all the different types of eating habits, they are likely to be more effective. In order to build this typology, these twenty HH surveys highlight two highly relevant points.

First, we can conclude that there is no link between the type of HH described in Section 2.4 (type 1 to 6) and their food consumption. Indeed, Chart 11 highlights that the food consumed by household types 1 and 2 (represented by red circles) is not any “healthier” (fruit, vegetables, meat) than the food consumed by other household types. Moreover, HHs belonging to types 5 and 6 (represented by blue circles) do not necessarily have the “worst” quality food (unbalanced diet, no fruit and vegetables). For instance, HH45 (type 6) and HH38 (type 2) consume the same amount of vegetables even though they have different access to land and there is not the same availability of domestic workers. As a result, we can conclude that it is not necessarily the more vulnerable HHs (according to chapter 2) who have the most unbalanced diet. Finally the relevant factors mentioned in Chapter 3 (systems analysis typology) are not adapted to consumers of the valley.

Chart 11: Comparison of basic food consumption between HHs (2005)

<table>
<thead>
<tr>
<th>N° of Surveys</th>
<th>Meat</th>
<th>Vegetables</th>
<th>Sugar</th>
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Source: Author

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65 Bricas N., 1998
66 The data for this graph is presented in annexe 16.
67 These numbers refer to the surveys presentation table in annexe 12.
Two relevant factors to distinguish HHs in this second typology would be:

- **Purchased food/Home-produced food ratio**: This corresponds to the percentage of food purchased in relation to total food costs for a HH\(^{68}\). On average, a HH spends 515 Afghanis per month and per adult on basic food and produces food at home valued at 363 Afghanis. In this case, on average, the ratio would be 60% for a HH’s purchased foods compared to total food costs.

- **Cost of food per adult per day**: This corresponds to a HH’s food costs divided by the number of members relative to one day. A limit for this ratio has been fixed at 30 Afghanis which is the average cost of basic food for one adult in the valley\(^{69}\).

The following typology (Figure 25) distinguishes six types of HH according to their eating habits (ratios are estimated in annexe 27):

**Figure 25: Typology of consumers in Baharak valley**

- **Type a**: (40) Food > 30 afs/day/adult and expenditures = to costs of home-produced foods.
- **Type b**: (36, 38, 48) Food > 30 afs/day/adult but few expenditures, majority of foods are home-produced.
- **Type c**: (n° of surveys: 39, 42, 43, 44) Food > 30 afs/day/adult but few expenditures, majority of foods are home-produced.
- **Type d**: (32, 34, 41, 47) Food < 30 afs/day/adult and expenditures = to cost of home-produced foods.
- **Type e**: (30, 33, 35, 45, 46, 49, 50) Food < 30 afs/day/adult and expenditures = to cost of home-produced foods.
- **Type f**: (31) Food < 30 afs/day/adult and majority of foods are home-produced.

\(^{68}\) These ratios are provided in annexe 27.

\(^{69}\) This limit is based on the labour ratio (first typology): 100 Afghanis are required on average to provide basic food and fuel every day for three adults.
This typology is based on a small cross section of HHs and it is not possible to extrapolate this information for the whole of the valley. Nevertheless it does give an indication for understanding local food dynamics. Indeed, there is only one HH of type a and f which implies that these ‘extremes’ are a minority in the valley. Furthermore, the majority of HHs can be categorised as types that purchase more than they produce at home (i.e. types a, b, d and e). This confirms the idea that the valley is moving towards a more urban way of life.

The limit of 30 Afghanis per day per adult, which can be used to distinguish between ‘food insecure’ HHs and ‘food sufficient’ HHs, can give an indication on how to improve food programmes. For instance, HHs of types d, e and f do not have sufficient income to cover their minimum expenditure for basic food and programmes should look at developing incomes-generating activities for this type of household. Indeed, small business programmes should focus mainly on these consumers. On the other hand, programmes providing education on nutrition and fruit and vegetable cultivation are less relevant because they are unable to purchase agricultural inputs and expensive food, such as vegetables, fruit and meat.

Indeed, this type of agricultural programme would be more applicable to type c households. They already produce the majority of their food at home and are motivated to increase this production and to diversify it. Kitchen garden programmes and fruit tree development are especially relevant for these HHs and can significantly contribute to improving the household diet. These households would also be interested in livestock development programmes (animal health, dairy products).

Type a and b households who purchase the majority of their food would be mainly targeted for nutrition education. These programmes could help reduce the number of micronutrient deficiencies and promote the consumption of fresh food that is grown and processed in the valley.

For NGOs that are interested in using this typology, it is possible to determine where these different households are likely to live in the valley. Firstly, ‘city dwellers’ (type a and d) are mainly located in the new city, near the central bazaar and in the new villages of migrants where a majority of landless people live. ‘Rural people’ (types c and f) are more present in high-altitude villages, on the slopes and at a distance from the bazaar. The ‘sub-urban inhabitants’ (types b and e) are more difficult to group because they live both in koshlacks and in the new city. To distinguish the ‘food-insecure’ HHs, it could be easier to interview HHs about their daily expenditure on basic food and compare the figure with the limit determined for this typology.

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70 This limit is likely to vary in relation to bazaar prices and changes in local eating habits.
This study on food habits and nutrition issues highlights the relevance of nutrition research programmes in Afghanistan, especially in remote areas such as Baharak valley.

Despite an increasing urbanisation and the diversification of local and imported food products, many HHs suffer from an unbalanced diet whose main component is bread. Moreover, access to the food market varies according to the season and hygiene aspects require attention (no control of products in bazaar). In this context, the issue of Food Safety needs to replace the issue of Food Security.

Besides, to improve food programmes, NGOs need to take into account the different eating habits. Agricultural programmes such as kitchen garden and fruit tree programmes are relevant for farmers who are able to invest in this type of production. On the other hand, for landless people, programmes focusing on nutrition education are more appropriate. Finally, for HHs who are unable to invest in agriculture and who do not have access to the food market, income-generating programmes are more relevant.

In all these cases, except for landless people where men alone are responsible for expenditure, programmes should target women.

The aim of the following chapter is to present an evaluation of AAD’s programmes (wheat and women’s programmes) and put forward recommendations for new activities aimed at reducing HH vulnerability and improving their diet.
6  IMPACT OF AFGHANAID’S PROGRAMMES

6.1 PROGRAMMES FOR VILLAGE ORGANISATIONS

Village communities are always consulted by AAD male staff before implementing projects for women and men. AAD’s policy is to base its actions on community priorities which are discussed during shura meetings. In terms of women’s programmes, men’s shura have the final decision as to whether the project can go ahead, such as the setting up of a Women’s Resource Center in the village. If the male villagers refuse the project, it is not implemented in the village.

AAD female staff visit villages, once the men have accepted the project, in order to meet the most motivated women. Often it is necessary to limit the number of beneficiaries and thus select specific women or girls. Indeed, AAD female staff in Baharak have grown up in the valley and tend to know a woman in every village. As a result, the members of AAD groups, especially the group agents (chiefs) are often relatives of these employees. Despite this relationship, strict rules are implemented in each group to prevent favouritism. For example, one woman per HH is accepted in micro finance groups. Besides, AAD staff usually selects the poorest women for dayâas training, or widows and older women with a good ‘life experience’.

In order for the future project to progress satisfactorily, it is essential that relationships within the group are smooth. Although AAD makes it perfectly clear that its programmes should be based on community requirements, it faces some failures in terms of how these groups have been set up. Indeed, the most vulnerable HHs are rarely included in AAD groups. One of the reasons for this is that female staff often choose agents from the richer villagers. Secondly, the poorest women are often too shy to enter an agent’s house when AAD staff is visiting the programme. Moreover, they claim that they are too busy to start a new activity and they have to look after their children at home. As a consequence, it is hard for AAD programmes to succeed in reducing HH vulnerability, especially where the poorest HHs are concerned.

6.2 KITCHEN GARDEN PROGRAMMES

Despite these problems, AAD promotes income-generating activities for women, agricultural diversification and improvement of diet thanks to a Kitchen Garden programme, which began in 2002 in Baharak.

“Wheat is not good in Baharak, it is better to grow vegetables to sell them and purchase imported wheat”. According to this point of view and conclusions on the impact of wheat programmes, it would be more profitable for farmers in the valley to develop vegetable farms instead of cereal crops. Vegetables have the twofold advantage of increasing HH incomes and also improving the quality of local food. Yet, there is one main problem that needs to be overcome: “men do not want to grow lots of vegetables because it needs too much work”, claimed a woman from the valley. This is why Kitchen Gardens for women are an interesting alternative because they target women, who demonstrate the most motivation for this type of programme.

AAD and Groupe URD have already carried out evaluations of this programme71 which highlighted the main positive aspects of Kitchen Garden (KG) programmes. For instance, this programme contributed to the diffusion of new technical skills and in the introduction of new

71 Groupe URD carried out an evaluation of AAD’s programmes in Badakhshan, December 2004.
vegetable varieties\textsuperscript{72}. Furthermore, three female staff in charge of KG programmes in Badakshan presented the project in Kabul last year during a conference held in the Ministry of Health (February, 2005).

Figure 26: Organisation chart of KG programme in the district of Baharak\textsuperscript{73} (2005)

Source: Author

The above organisation chart illustrates all the different actors involved in this project and their role in the different activities and follow-up. Although the beneficiaries of the programme are women, men are highly involved (male staff and husbands of beneficiaries) in decision making processes. Indeed, if men were not encouraged to participate, especially in a social context such as Baharak, it would be impossible to implement such a programme.

\textsuperscript{72} According to AAD, fourteen new varieties of vegetables have been introduced by their programmes in Badakshan (AAD, 2005).

\textsuperscript{73} This organisation chart was established thanks to semi directive interviews with AAD staff in charge of KG programmes (Akila, Maleha and Massouda).
The following table highlights how this programme has evolved in the valley, especially in terms of numbers of beneficiaries.

Table 12: KG tracing of programmes’ history in Baharak

<table>
<thead>
<tr>
<th>Year Range</th>
<th>Description</th>
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<tbody>
<tr>
<td>2002-2003</td>
<td>Beginning of KG programmes in Baharak: First training for ten women from the valley, already known by AAD staff because they had participated in a carpet weaving training programme with AAD. This two-week training programme taught skills on different types of food processing, such as jam, tomato paste, fruit dried with sulphur and on racks but also on cultivation techniques such as plastic tunnel, nursery and use of fertilizers. They also received seeds and chemical fertilizers from AAD. All the seeds distributed by AAD are tested beforehand in Demonstration Plots in Baharak.</td>
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<tr>
<td>2004-2005</td>
<td>Training programmes in villages with Akila (head of KG programme in Badakhshan) and female staff (Social Organizers) are conducted three times a year (2-3 days per period): in spring (March-April) for nurseries, in July for processing techniques and follow-up of KGs (often in Women’s Resource Center, group training) and in September for harvest. For the past two years, Akila has visited six villages in the valley, twelve women agents were individually trained and fifty women attended group training sessions (average of 25 per year).</td>
</tr>
</tbody>
</table>

Source: Author

The evaluation of the nutritional, social, technical and economic impact of this programme is based on our observations during training sessions and discussions with staff and beneficiaries.

Firstly, the lack of diffusion of information between women within groups is one of the main limitations affecting this KG programme. Indeed, agents who beneficiated from technical advices are not used to explaining these new skills to other women. This ‘passive’ behaviour means that information is not successfully conveyed to other people. As a result, only a few women in the valley have access to these new techniques.

Furthermore, the processing techniques taught during AAD training sessions do not appear to be fully appropriate for the local context. Our understanding of local eating habits (see chapter 4) indicates that inhabitants are not used to consuming jam, except during Ramadan. Moreover, for this festival, women from Baharak prepare apple or carrot jam but most people say they prefer imported jam despite being more expensive because they are sweeter and ‘nicer’ for guests (with pretty packaging, red fruit, etc.). Jam processing does not correspond to local requirements. Moreover, using racks to dry fruit is not adapted to local constraints (women do not have much time and big volumes). Indeed, on the racks women can only dry a small amount of fruit (just 1-2kg) and they have to buy the racks, yet, they are used to drying between 10-20kg of fruit on the roof without paying anything. Besides, the drying technique promoted by KG programmes implies cutting fruit into small portions which is time consuming. As a consequence, women who are busy harvesting tend not to use these new techniques. Finally, AAD uses sulphur for drying fruit but it is not possible to purchase sulphur in the bazaars (neither in Baharak nor Faizabad).

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74 Women had to pay AAD for the plastic after the training programme.
75 For example, women learned to mix sand and manure to improve the way that fertilizer is absorbed into soil.
76 Imported jam is sold at between 120 and 200 Afs/kg whereas the price of local jam is between 50 and 100 Afs/kg.
In conclusion, all these techniques which originate from Pakistan are more relevant for small businesses rather than for HHs. Women in Baharak do not see the value of using them because their production is mostly for home consumption.

A third limitation concerns the head of the programme, Akila, who does not live in the valley and cannot regularly visit each district. As a consequence, many women are not aware when her training programme is taking place and she cannot answer the questions of each woman when there are more than twenty participants in each training session. Consequently, KG programmes have not really had a major impact on changing local KG techniques.

Nevertheless, for the lucky beneficiaries, this programme has had many positive effects. Thanks to seed distribution, HHs have improved their diet with a greater variety of vegetables and a more long-term view (each year HHs keep seeds for next year’s crop). Moreover, these HHs often distribute seeds to their relatives. Training for women gave them an extra sense of independence in carrying out KG activities because they no longer need their husband’s help. Some of them improved their vegetable yields and sold extra vegetables in the bazaar. Finally, some women living in the new city are highly motivated to make and bottle jam because they can access the bazaar more easily and can set up small businesses during festivals with these products.

### 6.3 Women’s Resource Center Programme

This programme began in 2000 in Baharak valley, targeting young women and girls for handicraft activities, health education and literacy courses. The advantage of this programme is that it offers an alternative to women outside their compound that is accepted by men. These centres have a good reputation because they are well managed.

In 2005, only one centre per district opened. In Baharak, a centre spends six months in the same village and then it moves to another village. Handicraft activities include embroidery and sewing courses with forty students mostly between sixteen and twenty years old. Once a week, literacy and health courses are organised by AAD female staff. Men accept this programme because it is very useful for their girls to attend this type of training for their domestic work.

After three years, when women have acquired these new skills, AAD set up a credit scheme allowing them to purchase a sewing or embroidery machine. In this way, they can generate small income from these activities. To benefit from this micro credit (less than 1000 afs or US$20) they have to be member of a women’s group and pay back AAD within the year after their training. This is an interest-free loan which is based on trust between AAD and beneficiaries but also on social pressure because if a woman does not pay her credit back, it would not be possible for her group to access any more credit. Thanks to this credit programme, women are motivated to be member of a women’s group which helps ensure its sustainability. Thus, these centres have a great potential for women’s empowerment and can really improve business activities for women in Baharak district.

Despite these advantages, Women’s Resource Centres face a major limitation in terms of the type of beneficiaries. Indeed, married women do not have access to this centre because they are busy with their children, their eyesight is no longer good enough for this type of activity or their husbands do not allow them to participate. Nevertheless, these women claim that they would be interested in attending training programmes which could help them improve the HH economy. Besides, in comparison to the total number of women per village, the number of beneficiaries is relatively low and the most vulnerable women are rarely involved in this programme.
6.4 FROM WOMEN’S GROUPS TO SELF HELP GROUPS

Women’s Groups (WG) began in Baharak in 2002 with the idea of setting up female village groups as dynamic as men’s shuras. In these groups, women can talk about their problems to female social workers. AAD female staff give advice on health education, child education, recipes and to provide micro credits to women, who are motivated by income generation activities such as beekeeping, embroidery machine and goats for milk. These credits are based on the same rules (interest free, social pressure) but they are limited to 5,000 afs (US$100).

Since 2005, more than ten WG (with fifteen members on average) have been set up in the valley. One or two agents are elected by members for each WG and one female staff of AAD manages 5/6 groups. Thanks to micro credits, women from these groups were able to make small incomes (selling milk, clothes, honey, and fruit) and contributed to the HH economy. As a result, more husbands are in favour of such programmes and local society is slowly moving towards a new vision of women’s role.

Figure 27: Women of Baharak valley participating in a Self Help Group (October, 2005)

In this suburban context, credit seems to be a relevant response to the increasing need for more cash in many HHs. Furthermore, credit improves women’s empowerment thanks to the generation of new incomes.

Last year, AAD trained its male and female employees in India in the Self Help Groups system (SHG). Self Help Groups are inspired by the Grameen Bank\(^77\) and will replace the WGs in Baharak in the long term. The objective of SHG is to educate women in financial management and promote business activities for women. Besides, SHG are a good opportunity for AAD to give advice to women on various matters, as for the WG.

Each member has to bring 10, 20 or 30 Afghanis to the weekly SHG meeting. The money collected is given to a woman, chosen by the SHG members. This woman is supposed to use this money for an income-generating activity. The woman who received the money has to reimburse the amount borrowed plus half of her profit. Members decide on the rules that will apply and must elect two agents and one secretary. For example, if a woman is late for SHG meetings two or three times, she has to pay a small sum of money to the group.

Since June 2005, this new programme has been successfully implemented in Baharak and many villages are interested in setting up a SHG. Women are motivated to participate in this type of financial activity which they see as an opportunity to increase their local financial potential.

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\(^{77}\) The Grameen Bank was set up in Bangladesh in 1996 by Muhammad Yunus and provides credit to the poor. The Grameen Bank visits villages and carefully selects candidates with microcredit projects. The entrepreneurs are organised in groups of five members and have to abide by a series of 16 rules.
If this programme is a success and if men support this initiative, it may contribute to improving women’s role in Baharak society:

“When I have 20 Afghanis, I give it to my son so he can buy sweets or biscuits but if I was member of a SGH, I would save this money.” SHG help women to save money instead of spending it.

“It is like school but in SHG we do not come for nothing.” SHG act as educational centres for women. Members learn to write their name, to count, to write dates and to be more rigorous in various aspects of their lives.

According to the ideology behind this type of group, SHG members must not be ‘passive’. As a result, women who participate are the most motivated and quickly become independent. Some SHG attend meetings even when AAD female staff have not planned to attend.

Nevertheless, there are limits that must be taken into account:

1. Firstly, some men do not accept these groups and do not understand their value because most of the time, it is men who provide women with money so that they can be part of SHG. They claim that SHG are a waste of time.
2. It is hard for each woman to find money every week. In remote villages, where women do not have access to markets and money, it would not be relevant to set up this type of group.
3. Moreover, women are not very interested in organising group activities even though this would generate higher profits. Thus, they tend not to cook biscuits and food together in order to sell them and say that they are very busy with their domestic work.
4. Furthermore, groups are often mixed and jealousy is a problem in many SHG where rich and poor women are members of the same group.

As a result, AAD staff need to pay attention to these limitations in order to improve SHG.

Finally, the fact that men are involved in the programme and often provide the money for its activities is both an advantage and a constraint. Indeed, in this way men still have the power to stop a SHG. Besides, it shows that programmes that try to focus solely on women are meaningless because in order to reduce HH vulnerability, both men and women have to be taken into account.

6.5 THE DEMONSTRATION PLOT

6.5.1 Description

Afghanaid has demonstration plots in each district. The objective is to test different wheat, vegetables and tree varieties. Afghanaid also provides grafting courses for farmers.

After interviewing Afghanaid staff, it should be noted that wheat tests are the most important activity of these demonstration plots. There are four trials:

– The first trial concerns the test of twenty wheat varieties. Each variety is tested four times in the same conditions.

The other trials are conducted on the variety that was selected in the previous year’s trials. These new trials are carried out in order to shed light on:

– The best sowing day
– The best sowing density
– The best fertilizer supplies

Other tests are carried out on vegetables: tomatoes, potatoes, aubergines, peppers, okra, onions, etc. Most of these tests are carried out on one variety only in order to determinate whether these vegetables can be grown in Baharak.
Demonstration plots are also used as a tree nursery for fruit trees (apple, apricot, walnut) and non-fruit trees (poplar).

### 6.5.2 Impacts

This programme has a direct influence on the wheat varieties that are used by farmers. The only indicator is the grain yield but as Figure 28 illustrates, other parameters could also be taken into account.

**Figure 28: Parameters in choice of wheat variety**

In the demonstration plots, tests are made in optimal conditions without taking into account farmers’ constraints: little time for weeding and not enough fertilizer. Yields which are obtained in demonstration plots are two to three times higher than the yields obtained in farms. Farmers are attracted by these new varieties which, in theory, can multiply yields.
6.6 CONTRACT GROWERS

6.6.1 Description
When Afghanaid selects the best variety for year y, they test it during year y+1 and multiply it during year y+2 with several farmers called contract growers with a crop management sequence stemmed from the test of year y+1. Contract growers are selected according to their capacity to reproduce the crop management sequence (enough labourers for weeding activities, enough money to buy fertilizer, etc.).

6.6.2 Impact
The objective of this programme is to multiply the best selected varieties and to produce harvested grain that is adapted to the field. Moreover, it promotes the development of a wheat chain and the private sector even though the wheat chain is not yet self sustainable and still requires Afghanaid’s support.

6.7 WHEAT DISTRIBUTION

6.7.1 Description
Contract growers sell their wheat harvest to Afghanaid. Afghanaid distributes varieties during year y+3 to farmers taking part in the programmes. With 50kg of improved seed, Afghanaid supplies fertilizer and gives advice on the crop management sequence. Seeds and fertilizer are sold in a package and farmers have to reimburse this sum just after the harvest (during year y+4). Afghanaid’s prices are lower than market prices.

6.7.2 Impact
This programme encourages farmers to grow wheat in their fields. Farmers have a financial advantage using Afghanaid’s package because it is cheaper than market prices. If farmers refuse this offer they are effectively loosing money. Farmers are capable of working out the difference between Afghanaid’s price and market prices but it is more difficult to estimate the value of the package in comparison with other crops, such as vegetables for example. This programme promotes wheat growing because it effectively discourages farmers from adopting other strategies that do not have the same advantages.

6.8 FRUIT AND VEGETABLES

6.8.1 Description
Thanks to the tests carried out in demonstration plots, Afghanaid distributes about fifteen types of vegetable in Baharak. Seeds are sold for a nominal amount. Farmers and women (in specific programmes) receive advice (although this is less thorough than for wheat).

6.8.2 Impact
This programme is more concerned with kitchen garden activities than field activities. The first objective is to improve households’ diet before improving household economies. Most families have a kitchen garden and accept Afghanaid seeds. Unfortunately, these seeds are not always adapted to the local climate. For instance, the distribution of onion seeds by the FAO is a good illustration of the inappropriateness of some choices. Indeed, they were readily adopted by farmers the first year but were unfortunately rejected the second year because of their poor storage capacity. Farmers preferred local varieties which give an equivalent yield than the FAO onions.
The impact on the households' diet is not clear. Baharak people have grown a variety of vegetables for many years. However, potato yields have increased (thanks to Bamiyan varieties), tomatoes have a shorter cycle and produce fruit before local varieties, and the yield of the new variety is higher.

6.9 TECHNICAL ADVICE

6.9.1 Description
In each Afghanaid team, there is an extension worker whose role is to give technical advice and answer farmers' questions. This advisor meets farmers in the field. Unfortunately, there appears to be little discussion with farmers and the transfer of information is unilateral, from the advisor to farmers.

6.9.2 Impact
This programme can help improve farming practices, even though most farmers do their job very well and are always open to new ideas. However, there is no forum for debate which means that farmers have little opportunity to explain their preoccupations and problems.

The following chapter puts forward recommendations for AAD programmes according to the Baharak local context but which can be extended to other areas in Afghanistan.
7 RECOMMENDATIONS FOR WOMEN’S AND FARMERS’ PROGRAMMES

This chapter aims to put forward ideas on how to improve development programmes in order to improve the integration of women and farmers and to meet the real needs of people living in rural and suburban areas such as Baharak. Two main objectives of these development programmes can be summarised as follows:

- Enhancing HH incomes, especially focusing on the most vulnerable HHs (landless, lack of male domestic workers).
- Improving health by taking into account the risks of urbanisation, drop in farming incomes and introduction of new ways of life, especially in terms of food consumption.

7.1 RESPONSES TO THE WORKING HYPOTHESES

The following responses can now be provided to the questions raised in chapter 2.

**Question 1: What existing mechanisms in rural areas have contributed towards the improvement (or stabilisation) of household economies?**

1. Over the past 100 years, agriculture is undergoing a process of land intensification. The historical overview carried out in this study has highlighted the fact that many farmers have changed their practices in response to certain constraints, such as demographic pressure. As a result, farming production has undergone a process of intensification, moving from an agro pastoral system to a cash crop system.

2. Poppy generates higher profits than all other cash crops. The analysis of the different cropping systems highlights the fact that poppy cultivation generates the highest profits per land capital. Nevertheless, poppy prices are extremely variable. Besides, poppy is also fairly labour intensive compared with wheat and fodder for example.

3. It is not possible to compare ‘improved’ wheat and ‘traditional’ wheat. Today, the majority of plots in the valley consist of irrigated land cultivated with ‘improved’ wheat varieties (95% of farming area). Indeed, farmers no longer grow ‘local’ varieties of wheat. Two reasons explain the disappearance of traditional wheat varieties: yields are doubled with improved wheat and NGO programmes work with improved wheat without working on other varieties.

**Question 2: In a conservative society where women are hidden, what role do women play in the household economy? Hypothesis 4 and 5**

In addition to harsh living conditions, Afghan women are essential economic agents in rural HH economies. Although their movement is often restricted to their compound, women are capable of producing resources and generating an income for their HH.

The example of Baharak valley shows that women’s work in the production unit is a necessary element for reducing HH vulnerability.

Besides, even if lots of women do not have access to economic transactions and financial decisions, some of them participate in the decision-making process relative to the HH budget, by exchanging wares and generating small incomes. Even if promoting financial independence for Afghan women is not realistic, HH incomes can be improved by means of women’s programmes. However, this is only possible if women have the prior agreement of men. For instance, access to micro credit is relevant in suburban areas.
Question 3: How can NGOs take into account the diversity of female populations and farmers in their programmes? Hypothesis 6

There are many different factors which explain the diversity in women’s roles and their position in society, including economic, social and geographical factors. This last factor in particular has a visible impact on women’s roles when one compares women living in high pasture lands such as the Shewas and those living in suburban areas such as Baharak valley. Although it was not possible to study the Shewas in detail, differences between villages in the valley are still apparent. As a consequence, women’s roles tend to depend on village networks. NGOs have to take into account these social and geographical factors and each woman’s situation to ensure that their programmes are well adapted to reality.

Question 4: How can food programmes move on to nutrition security programs?

In rural areas most people still suffer from malnutrition even if they are not ‘food insecure’ in terms of energy requirements. Rather than a lack of food in terms of quantity, these problems are generated because of lack of food diversity. In remote areas, people do not have a balanced diet during all seasons and many HHs do not generate sufficient income to purchase highly nutritious food, such as fruit and vegetables. Moreover, many HHs have not received any education on relevant nutrition issues.

Organisations for agricultural development must therefore take into account how local eating habits are evolving and propose, on a scale of Bahark valley, activities which bring together the improvement of fruit and market garden production, food education and health. It would be misleading to only pay attention to the improvement of the local farm production, in a context which is changing rapidly and farmers are naturally draw to poppy production. However integrating women into the thinking behind these programmes and the activities proposed seems all the more relevant as they are recognised as being the intermediary between production units and consumers, and as they are also experiencing significant changes in their lives (schooling, urbanisation, etc.).

Question 5: How to revive the local economy while further developing women’s activities?

The main issue at stake is to improve people’s living conditions in order to limit migration or discourage farmers from growing poppy. The standard of life depends on people’s health within the household, and therefore mainly on their food habits and access to goods which are synonymous of modernisation, openness to the world or an ‘ideal’ lifestyle. While development programmes need to be realistic about such obvious trends, development programmes must first try to increase sources of income for households. Some activities carried out by women indeed have some economic potential. For instance, the bulk of market garden production and fruit and vegetables processing, which are tasks carried out by women, already allow a small number of households to earn significant incomes and they deserve further development.

Projects targeting women could therefore contribute to developing this type of agricultural production by providing technical training in market gardening for women and also by supervising processing units which are a source of job creation and bolstering economic dynamics in the valley.

AAD’s programme, which focuses on kitchen gardens, and the new forms of microcredit already partly fall within this scope but still need to be encouraged so that more households can benefit.
Nevertheless, several constraints must also be taken into account:

- Women do not always have the capacity nor the desire to form groups of common interest which NGOs can then support. We know that this trend towards the individualisation of activities and skills in this society is based on cultural factors which in part determine each woman’s position and identity within in these family and village networks. However the difficulties encountered in fostering collective work also stem from an obvious lack of motivation and trust amongst women. Creating women’s groups without taking into account either their reluctance or the constraints linked to their family and household set up would inevitably result in discrepancies, ineffectiveness and absenteeism. Development organisations would therefore be well advised to ensure that programme objectives are well understood and that the programme itself is more flexible in terms of organisation. Programmes should focus on groups or individuals who already have the capacity (age, free time, economic means, etc.) to be leaders and the driving force behind local development dynamics (diffusion of knowledge, individual initiatives, etc.).

- The fact that it is not possible to promote new activities without first obtaining men’s approval via the shuras. This unavoidable step in the process means that there is no guarantee that promotion and development in a village will be accepted and this also affects the type and extent that women will support these projects. In the same way it also has an impact on the speed at which new activities (such as microcredit granted to women with a guarantor) can be introduced.

### 7.2 Propositions for Kitchen Garden Programmes

The figure below (Figure 29) reminds us of the major limitations of these programmes, but what can be done to overcome these difficulties?

**Figure 29: Challenges facing Kitchen Garden programmes (2005)**

- Processing methods (jam, drying using sulphur) are not adapted to the local market.
- Participants are reluctant to share their newly acquired knowledge with women who have not attended the training sessions.
- Not many women are able to go to the market to sell their products.
- Some women do not have the space to set up a kitchen garden (either on their own land or rented property).
- Participants have encountered difficulties in growing vegetables of enhanced varieties and do not know enough about how to prevent disease.
- People do not know enough about nutrition.
- There is no woman responsible for agricultural matters in the district, follow-up on female participants is weak.
- Not enough manure for kitchen gardens and orchards (shortage of fuel).
- Seeds and chemical fertilizers are expensive.
7.2.1 New cultivation techniques

The impact of AAD’s kitchen gardens shows that women are motivated to learn new techniques. In order to better harmonise the amount and types of food available throughout the valley, stakeholders should consider teaching women how to build small greenhouses and verandas, such as those proposed by GERES offers in other parts of Afghanistan. Women would then be able to increase their vegetable production when their availability begins to decline in the market (winter and spring). Moreover, training sessions on how to fight fruit tree and vegetable diseases using ‘home-made remedies’ could be a means of improving people’s understanding on this issue and on the use of chemical pesticides and insecticides.

In order to make this type of training sessions more effective, NGO staff should encourage women to become involved through practical exercises and take the time to check that they have fully understood these new techniques. Each participant would be asked to do a practical exercise in front of the group and could thereby be ‘assessed’ by the rest of the group.

Nevertheless, only a small number of motivated women, who have the means to invest in new techniques, could benefit from this type of practical exercise. Women from vulnerable households are likely to be left out.

7.2.2 Groups to share the know-how

In order to reach a higher number of people, the creation of groups to share out the know-how would be an opportunity to encourage the women to pass their technical knowledge on to the others in turn. The ones in charge of these small groups would have to make sure that both the women who are listening and the ones who are speaking are making the most of this sharing out. The medium-term objective (after six months at least) would be to have the women become aware that they would be well advised to take part in these groups and to take stock of what they have learnt. A trial period could be established within the valley’s SHGs, which gather women who are particularly motivated by these sharings.

But such sharings cannot be implemented in the villages where there are no networks of women and where their relationships lack harmony. Another way to share out technical information would be to open a garden for women exclusively (which is already the case in Faizábād) where they would be offered training courses on a one-to-one basis or in small groups based on affinities. The first women to be selected would be widows or poor cleaning women, two categories of women who are already used to working outside their homes.

7.3 Upgrading processing activities

7.3.1 A small unit of fruit and vegetable processing

Today the production of fruit and vegetables in the valley is gradually picking up again but transport and storage issues are a constraint for the development of ‘fresh’ products on the market. In this way, processing seems to be an ideal solution. Moreover, women have been involved in processing fruit and vegetables for years already: drying, storing and preserving techniques, in jars, whole or in puréed form, all these techniques are commonly used in the local cuisine.

Despite this potential and people’s desire to increase the household revenues, only a small minority of households are currently able to generate an income from these processed products as they rarely produce surpluses.
In this context, developing a fruit and vegetable processing microbusiness in Baharak has the advantage of on the one hand improving the nutritional content and aesthetics of the finished products and ensuring the supply of raw materials from the few local producers who are in a position to sell their produce. In order to support this network on a local scale, it should be possible to increase the range of processed products in order to compete with imported goods which are often more expensive (fruit juice, jam, tomato paste, etc.). Such a project would thus have the advantage of both boosting local production and employing women from the most vulnerable categories (landless women, widows, etc.) in the processing. Finally, men would also be involved in the project at various stages: in agricultural production (arboricultural techniques, working the land, etc.), transport of raw materials and finished products, as well as marketing.

Nevertheless, setting up such a microbusiness project requires significant financial and human resources and detailed market research on the area. Moreover, before embarking on such a business, the programme should ensure that women are trained in using semi-traditional techniques (press, grinder, etc.), maintenance of the machinery, health and safety conditions at work, marketing (packaging, labelling, marketing, etc.) and accounting. Premises for processing and selling the goods would also be required, yet rent is currently very high in Baharak. However an increasing number of NGOs and international institutions are working to this end and the Afghan government is now ready to launch a series of initiatives of this type.

7.3.2 Products from livestock farming

A region like Baharak also offers opportunities to develop products derived from livestock breeding which can also be processed by women. Given the decline of the number of animals in proportion to the number of inhabitants, some products are now highly sought after by consumers (milk, yoghurt, honey and eggs). These products can provide good added value and women are easily capable of participating in this type of production.

Thanks to microcredit programmes, which support bee keeping and poultry farming, it is envisageable to develop this type of small-scale domestic enterprise. Therefore, it would be interesting to ensure that women get more involved in these programmes as they are often in charge of these activities within the household and to teach them how to build chicken coops and how to produce honey.

Figure 30: AAD’s hives prepared for a beekeeper from Baharak (July 2005)

On the contrary, it is difficult to contemplate increasing the livestock in the valley as cattle fodder is becoming scarce in the area. However it is possible to look at ways of reducing the livestock mortality rate. For instance, programmes that aim to raise women’s awareness on
how to improve animal shelters (duckboard technique) and animal health (vaccination) would significantly contribute to a reduction in cattle mortality.

7.4 SUPPORTING EXISTING COMMUNITY DYNAMICS

The study on the impact of AAD programmes shows that women’s groups, managed by NGOs, have a limited scope of action. These limitations are summarised in the figure below (Figure 31).

Figure 31: The main challenges of women's groups set up by AAD (2005)

A lot of women do not manage the money borrowed from the SHG but give it to their husbands or sons to invest.

The villages the most distant from the new town are not visited by AAD’s staff.

Women with small children cannot leave their homes to take part in groups or training sessions.

Patients living at the edge of the new town do not have access to medical services.

Men do not always let their wives participate in groups.

Access to information about group training sessions is difficult for women whose husbands do not belong to the men’s shura.

Women are not used to working in groups to generate small incomes.

Jealousy between women within the same group or village, risk of favouritism from AAD officials.

The women who do not have access to monetary goods cannot join a SHG.

Old-style crafts (embroidery, carpets) have little financial potential in terms of sales in Baharak.

7.4.1 Communal ovens

Despite the lack of fuel, many households continue to make their own bread at home as they do not have the money to buy bread at the baker’s or because they live too far away from the bazaar. The example of community ovens (in a new village composed of migrants where women’s networks are dynamic, seems to be an interesting alternative and development programmes would do well to support this initiative in other villages.

Firstly, these ovens consume less fuel and may even allow households to increase the amount of manure for fertilising kitchen gardens, which is often insufficient, without using expensive chemical fertilizers. They thus represent a practical means of encouraging the poorest women to offer this service at home and make a profit from it. SHGs may be the vehicle for suggesting setting up one or two communal ovens in the village. The basic principle is based on clients bringing their dough to the woman in charge of cooking in exchange for a piece of bread, fuel or money, depending on each group.

7.4.2 Women’s leaders

In order to make women’s groups last, it is essential that women are united around shared interests and women’s leaders, who can take over from NGO officials who are rarely available.

These group agents can be identified among the young women who were previously refugees in Pakistan and who are often more open-minded and are more motivated to improve their living conditions. For instance, they can encourage some women to cook with gas (which is sold in the bazaar but which still frightens many women) and teach them new...
preserving techniques which they became accustomed to using abroad. Widows are also good leaders as they are often highly motivated to obtain loans from a SHG to start income-generating activities.

7.4.3 New activities for Women’s Resources Centers

The main purpose of these centres is to enable women to meet in a ‘public’ place without upsetting local mores. It would also be beneficial to introduce new activities, in the style of the ‘Garden of women’ in Kabul: a day nursery for married women wishing to take craft courses, microfinance or cooking groups, an opportunity for women to cook together and sell their meals (with the help of their children), or to be involved in the shop selling agriculture produce which they have processed (dried fruit, honey, jars of vegetables, etc.), and also handmade crafts (clothes, jewels, decorative arts, etc.).

7.5 Improving Nutrition Programmes

In another report written for the LRRD programme, Charlotte Dufour mentions: “Food diversification strategies aimed at vulnerable households are a key strategy in the fight against micronutrient deficiencies. An increasing number of agencies are supporting such activities, through community-based food security programmes, but also through income generation programmes targeted at women, where women learn how to produce and preserve certain foods so as to sell them, for example. Nutrition education on the use of diverse foods and food preparation methods are also being integrated in other projects, such as through women’s Community Development Councils set up as part of the National Solidarity Programme. But these projects are still implemented on a small-scale, and their impact and sustainability remains to be assessed.”

In agreement with C. Dufour’s study and the analysis of food dynamics in Baharak, improving food programmes via women’s activities means focusing on the integration of nutrition into other development sectors (microfinance, education, agriculture, health).

Providing nutrition education to women’s groups, such as SHGs, is an example of an integrated nutrition project. Indeed, these groups allow women living in the valley to share information. Women who join these groups are initially motivated by financial opportunities but they can also learn new things on a variety of different subjects, including balanced diet (for children and adults), basic food products depending on age and physical condition (pregnant women, teenagers, etc.).

7.6 Coordinating Local Development Actors

The obvious lack of coordination between the various development actors in Afghanistan is by no means a new observation. Awareness about this issue has already resulted in the creation of a number of forums where NGOs and Ministries can communicate. But at the local level, these good intentions have not yet materialised. In order to put them into effect, it would be relevant to increase awareness amongst NGO staff of the need to meet regularly in the field, including meetings between NGOs and with local authorities.

For example, the authors of this study tried to organise a meeting with teachers from Baharak’s School of Agriculture (the only school of agriculture in the whole province) in order to present the objectives and findings of this study, and to discuss the outcome with students and teachers. However, it became apparent that AAD’s agriculture managers and School of Agriculture management had never met, even though they both acknowledge that it would be beneficial for them to work together. Since a partnership between AAD and the School of Agriculture has been set up where AAD members provide theoretical (classes) and practical advice (using a practice field in the school’s garden) related to agriculture and where the school makes students available to help AAD in its farm tests.
This last point can be applied to all the development programmes but still remains difficult to implement thoroughly in a fragile context, such as in Afghanistan at present.

Figure 32: The beginnings of a partnership between Baharak’s school of agriculture and AAD (October 2005)

Agriculture in Baharak is undergoing a process of land intensification. The following recommendations need to take into account this change, as well as local diversity in order to be relevant in space and in time.

7.7 THE ADJUSTEMENT BETWEEN FOOD AND CASH CROPS

7.7.1 The stake

Baharak farmers want to generate more cash in order to buy new consumer goods which are sold in the bazaar. Poppy is the one crop that allows them to increase their purchase power yet most development programmes focus on wheat yield. Very few households (only types 1 and 2) are able to survive with the wheat crop alone. Wheat (seeds, fertilizers) will never be subsidised in the long term (Maletta, 2003) and although production costs are likely to increase, the selling price will not (Coke, 2004) or will stabilise (Favre, 2005). The selling price of wheat will not cover production costs. The question is knowing for how much longer wheat will continue to be subsidised.

It is essential to provide different alternatives for diversifying agriculture because this is the main solution for farmers who are interested in limiting risk factors (Chrisoplos, 2004). Raphy Favre writes that farmers have the capacity to adapt to change or hardship (Favre, 2003), which may explain why they are receptive to new farming systems. We have to propose farming systems based on cash crops, and development actors need to look at combining cash crops initiatives (fruit and vegetables) with food crops programmes (cereals).
7.7.2 Trials

7.7.2.1 Wheat programme: optimisation
The objective is not to eradicate wheat programmes but several points can be improved:

- Demonstration plots: the best way to understand the context
  All farmers are known to have insufficient financial means or labour force to apply the crop management sequence recommended by Afghanaid. The variety recommended by Afghanaid is based on its research on grain yield combined with optimal crop management sequence. There are two ways in which this can be improved:

1. Taking into account realities in the field
   The varieties are tested in optimal conditions (use of high performance fertilizers, etc.), and Afghan Aid recommends varieties that require substantial amounts of fertilizer. Afghanaid’s choice of best variety does not take into account how the same variety will perform with little, or no, chemical fertilizers. When a farmer asks whether the best variety is adapted to his needs (little cash to buy fertilizer, for example), Afghanaid is incapable of providing a response.

   Afghanaid has to take into account local diversity (farmer’s capacities) and needs to adapt their recommendations as a consequence.

2. Grain yield is not the only parameter
   Wheat is primarily used for making bread and this is a determining factor that needs to be taken into account by Afghan Aid. Many people from Baharak prefer the wheat which is grown in Kunduz. Over the next few years, transport is likely to improve and importing wheat from other areas will become less expensive. If the quality of wheat in Baharak does not improve, people will choose to buy imported wheat and all the efforts that have been made to develop wheat production in Baharak will be to no avail.

   Afghanaid needs to take into account consumer needs and grain yield is not the only parameter. The quality of flour is very important, as is straw yield (for livestock).

   People in Baharak would appreciate it if Afghanaid were to test for flour quality and eliminate varieties that produce poor quality flour. Afghanaid can also select varieties that produce high straw yields in order to help breeders.

   Afghanaid needs to diversify and redefine its selection criteria to ensure that that varieties selected respond to people needs.

- Selection of beneficiaries: useful and easy
  Afghanaid can also help the shuras to choose beneficiaries by proposing a scale indicating who is the consignee of any particular variety of wheat (an agro-breeder who needs large quantities of straw, a farmer selling his wheat and thus looking for quality to make bread, etc.). With regard to this last example, Afghanaid can refer to this study’s typology in order to identify farms which are able to sell wheat, i.e. farms that possess more than 1.25 jeribs per adult.

   Here the objective is obviously not to replace the shuras, which would make Afghanaid highly unpopular, but to help them choose beneficiaries.

7.7.2.2 Developing the fruit and vegetable network
Rebalancing food programmes with the so-called ‘income generation’ programmes should enable farmers to diversify their farming practices and thus promote the development of
certain alternatives. But in the valley, market gardening and arboriculture remain the most promising type of income generation agriculture.

- The market, the first issue at stake
When one wishes to develop some kind of income generation agriculture, access to the market is the first problem to be solved. Most farmers highlight how difficult it will be to sell any future produce. Indeed, it is possible to comment on the difficulties farmers experience in selling any type of produce in general: growers in Baharak are not used to selling goods. Their only point of reference is the opium poppy which, as a reminder, relies on a very strong network, notably as far as sales are concerned. Anyway, buying and selling agricultural produce remains a complex issue. Some kind of awareness campaign conducted by Afghanaid experts could come in useful.

There are two geographically distinct markets for farmers: one in Baharak itself and another elsewhere in the district. The table below shows the origin of vegetables and fruit eaten in Baharak. This data was compiled following discussions with traders in the bazaar and provides an indication for future debate.

Table 13: Origin of fruit and vegetables eaten in Baharak

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>From Baharak (%)</th>
<th>From elsewhere (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potato</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>Onions</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Gombo</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Cucumbers</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Garlic</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>Apple</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Apricots</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Melon</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Watermelon</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Peach</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Cherry</td>
<td>100</td>
<td>0</td>
</tr>
</tbody>
</table>

(Uzbekistan, Pakistan)
(Kunduz)
(Kabul, Iran)

This table shows that several types of fruit and vegetables are widely imported to Baharak from other areas. Producers are thus able to compete with imports as they enjoy a comparative advantage in a country where transport is expensive: they are already on the spot. Therefore, growing tomatoes, gombo, cucumbers, garlic, melons, watermelons and even apples offers a real potential.

Nevertheless, it is necessary to encourage traders and thus the people living in Baharak to eat local products. Awareness campaigns on the advantages of eating local products conducted by NGOs, traders and local leaders such as the mullahs, could be highly successful in the medium term. As well as influencing local consumers, farmers must produce enough good quality fruit and vegetables.

- Production
From a sales viewpoint, farmers must be allowed to produce enough produce of good quality. In order to do so, they need advice adapted to their means of production and to their environment. There is an obvious demand from the farmers who seem to lack knowledge in terms of disease and appropriate remedies. Of course it would be irrelevant to systematically propose chemical treatment, which are often far too expensive. An adapted crop rotation, the use of animal manure (not human excrement to reduce the risks of disease for humans), the ‘nitrogen punch’ (to fight against some diseases) and the diagnosis of deficiencies in trace...
elements are all cheap techniques. Therefore, it is all about teaching experts how to identify these diseases and how to treat them.

Climate is an important constraint for potential market gardeners and arboriculturist (long winters, hail, frost). There are different ways of effectively fighting against such climatic hazards. First, it is possible to limit the effects of long winters by using greenhouses. They allow farmers to grow tree seedlings about one month earlier. Thereby, this technique enables to harvest earlier and thus compete with possible imports from regions which produce earlier.

Plastic tarpaulin and protection nets are both ways of effectively fighting against climate hazards and/or harmful factors such as birds. Some farmers (leaders locally acknowledged in the field of agriculture) can act as research workers in these potential new programmes.

It is not socially acceptable for women to work in Baharak. Nevertheless, households that own a small piece of land and have to cope with insufficient male labour (types 4a, 6 and above all 4b) resort to including women in their workforce. These farms will therefore be the most open to programmes which rely on women as a means of diffusing information about new agriculture practices, new processing methods, etc.

• Storage
Apart from production, storage is one of the processes, which any farmer wishing to sell his produce, must control. Storage is an effective way of increasing profits by releasing goods onto the market when selling prices are on the rise. Unfortunately, although storage has financial incentives, it can negatively affect the quality of the goods and drastically reduce potential profits. As a result, farmers should be recommended appropriate storage techniques. Ensuring that damaged or rotten fruit and vegetables are not included in the harvest is the first step of a selling process (Laville, 1994). Fruit and vegetables must also be kept in a dark, cool and well ventilated place (Laville, 1994). Such precautions prevent the goods from deteriorating. But despite these measures, the use of pesticides is often necessary and represents an additional cost for the farmers.

• Possible processing
In the case of exporting goods to remote destinations, several days of transport are often necessary, which may have an impact on the quality of some products. In order to limit this constraint, processing is often a relevant solution: tomato powder, dried apricots, stewed apples or apple juice are all processing techniques that could be envisaged in Baharak. To dry fruit and vegetables, solar energy is a simple and cheap method (unknown author, 1989, p.1), provided that farmers are properly trained in these techniques by experts who themselves have also received prior training.

The few vegetables which are currently dried, such as tomatoes, are left on the bare ground, which should be discouraged because of dust and insects, and in the sun, which takes the colour out of the products and reduces their organoleptic qualities (unknown author, 1989, p.64). These examples illustrate that there is a real potential to improve processing techniques for products intended for the market.

• Transport
Transport can be time consuming and thereby expensive for farmers in Baharak. Cooperatives can be an effective way of cutting costs. We will see later on how to set up groups of producers.
7.8 FIGHT AGAINST OPIUM POPPY

7.8.1 Specific angles of attack

The fight against poppy crop must necessarily tackle several aspects. As poppy offers several advantages to farmers, the objective is to propose alternative crops which present the same advantages: optimising soil productivity, cash income, access to credit and a strong network.

7.8.2 Some leads

7.8.2.1 Cash income and optimising the soil

Farmers must be able to sell their crops in order to have cash and buy consumer goods (milk, carbonated drinks, jam, radios, clothes, medicine, generating units, televisions, etc.). To do so, wheat is certainly not the best solution for most farms. Therefore they need products which can be marketed. Market garden products and fruit are part of this category and can be eaten by the producer himself if sales are disappointing.

Spices represent another product that can be sold. Saffron, in particular, is an alternative crop which is often referred to as a strategy in the fight against poppy (Groupe URD, 2004) as it enables farmers to earn between US$400-3,200 per jerib (Ait-Oubabhou, El-Otmani, 2002). Even though high production costs must be deducted, this crop is still as profitable as opium poppy whose yield per jerib does not exceed US$1,200.

7.8.2.2 A solid network and markets

Even though saffron offers a cash income and a profitable optimisation of the soil, it is not based on a solid network. The comparative advantages of the opium poppy network are detailed in chapter 3. Indeed, the market for this product is stable. Afghanistan also has an advantage which very few countries currently have: widespread levels of anarchy which enables illegal production. Saffron already has potential clients but the possible producers will have to be competitive to enter a market controlled by Iran and Kashmir. Finally, the saffron market will certainly not be able to sell off the production of a large surface area such as the one needed to grow poppy (up to 130,000 hectares) (Afghanistan, Opium Survey, 2004, p.3), which would mean a potential production of 250 to 400 tonnes of saffron per year. For instance, the US, the third importing country, only buys 3 tonnes of saffron each year (Ait-Oubahou, El-Otmani, 2002). Therefore, saffron cannot be considered as the sole solution, many other alternatives must also be envisaged to be as effective as possible and above all to avoid making producers too dependant on one single product.

Given the strength of the poppy network, alternatives must not be considered as simple crops. We must consider alternative networks and take them as a whole, as suggested by Alain Labrousse in a seminar in 1989 (Alternative aux cultures tropicales illicites, 1989, p.25). Programmes must therefore necessarily include all the elements of the network, from the seeds to transport and the sale. Finally, even though poppy falls within the agriculture sector, alternatives aimed at its eradication can be non-agricultural, such as crafts (Platteau, Alternative aux cultures tropicales illicites, 1989).

7.8.2.3 Access to credit

Growing poppy makes producers creditworthy for potential lenders in the bazaar. It is therefore imperative to develop credit opportunities for people living in Baharak. Several projects based on microcredit have been set up and need to be strengthened, not as a means of covering one’s investment but to help the most vulnerable families bridge the gap.

7.8.2.4 Eradication

Repressive measures are essential to fight against poppy production. The government therefore needs to be present in the countryside. If this is currently the case, it is mostly to
inform on the wrongs of poppy production in collaboration with the local leaders, such as the mollahs. An overly aggressive eradication campaign might merely promote extremism as illustrated by the *Sentiers Lumineux* (Labrousse, *Alternative aux cultures tropicales illicites*, 1989). Cutting down poppy crops with a machete is thus useless, only placing producers in a position of increased hardship. Indeed, as shown in chapter 3, opium production mostly takes place in situations of economic strife following a severe upheaval for instance. Farmers must therefore not be driven to the wall or they might react violently.

### 7.8.2.5 What about legislation?

Poppy production encourages economic development in rural areas and can also act as a support for the peace process (Labrousse, 2003b). Moreover, reducing poppy crops implies an economic slowdown (less money in circulation, less credit, less work), as confirmed by David Mansfield and Adam Pain (2005). Finally, it is well known that poppy helps farmers to overcome crises. Therefore it is worth studying the legislation in Afghanistan and looking for solutions to support economic development. This is what the NGO Senlis Council is currently working on. Incidentally, the country’s Home Secretary, Ali Ahmad Jalali, is also exploring this avenue (Babakarkhail, 2005) but there are very few chances of succeeding rapidly as the government still only controls part of the country.

### 7.9 FERTILITY, A LATENT AND … DANGEROUS PROBLEM

#### 7.9.1 The origin of the problem

An increase in agricultural activities is often responsible for soil erosion and impoverishment (Achterstraat, 1983). Vigilance is therefore required to avoid soil erosion, which would be a disaster for this valley where a lot of farmers live. We know that growing wheat requires almost 10 tonnes of organic manure per hectare and per farm, but Baharak farmers do not have access to such large quantities of manure. Moreover, crops such as vegetables also require extensive fertilisation.

Even though the lack of manure and, as a consequence, of animals has not been mentioned very often, it seems to be obvious that this partly accounts for the deficiency in organic supply (Berger, 1996) and therefore the risk that the soil’s agronomic features may be reduced.

#### 7.9.2 Some leads

Compost is a simple and effective way of fighting against soil erosion. There are two types of compost (Martin, 2000), the so-called “in heaps” being the most famous one. With this type of compost, the closed tank has two advantages: the production of organic matter for agriculture and the production of methane for household use (Martin, 2000).

Making compost or manure requires a minimum knowledge which experts must be responsible for diffusing. For instance, one must remember to mix the manure so as to increase bacterial activity and reduce the production of undesirable products (Martin, 2000).

The use of green fertilizers should also be considered as covering the soil during the winter limits impoverishment and erosion, increases the proportion of organic matter and reduces the proliferation of weeds (Leclerc et al, 1995). The harsh winter reduces the choice of species that can be used as green fertilizers, but it would be relevant to consider the potential of fodder radish or the winter vetch, which stand up to frost (Leclerc et al, 1995). Nevertheless, there are financial constraints that need to be taken into account as the soil needs to be fertilised if its agronomic features are unsatisfactory, which also implies additional work notably in terms of irrigation to ensure a good growth in autumn and ploughing six weeks prior to the new sowing in spring (Leclerc et al, 1995).
7.10 BREEDING, AN OLD SPECIALISATION TO BE DEVELOPED

7.10.1 Issues at stake
Breeding has several advantages (cf. 3.1.2.3) which are worth taking into account: cash income, production of manure and capitalisation which, if necessary, can be used as credit.

7.10.2 Some leads

7.10.2.1 More fodder

- Developing the Shewas-Baharak link
Chapter 3 highlights some of the difficulties that breeders experience in finding enough fodder for their animals. The links (professional organisation, roads, etc.) between the Baharak valley and the Shewas, which are high-altitude pasture lands where a lot of grass grows, must be developed. The distance (2 to 4 hours by truck) can be overcome by potential hauliers.

- Optimal use of the lalmis
Cultivation on non-irrigated land is not highly productive and leaving land to lie fallow can significantly reduce intensification. Nevertheless, it is possible to reduce fallow by sowing leguminous plants. There is a variety of alfalfa which can be sown on pluvial land. Oxfam has successfully introduced this variety in the centre of Afghanistan and it would be interesting to consider the feasibility of such a programme in Baharak. It allows farmers to produce more fodder and to cover the lalmis and thereby prevent erosion.

7.10.2.2 Farm buildings, a central point
In order to improve processes, such as milk production, and in addition to improved feeding and veterinary practices (Favre, 2004), development programmes must also aim at helping farmers build better buildings. Several animal features must be taken into account by the experts and then by the breeders. For instance, small ruminants suffer in the cold and humidity, and being shut up as such conditions can lead to deadly infections (Lobry, Vandenbussche, Ponthus, Pelletier, 1972). Similarly, cattle must be penned up in well ventilated buildings (Lobry et al, 1972) so as to limit the proliferation of parasites. The litter and the food area, where excrement accumulates, must also be clearly separated (Lobry et al, 1972) to limit the spread of disease.

7.10.2.3 Water
Many diseases are transmitted by water. It is therefore necessary to raise awareness amongst breeders of how water channels may be polluted by human sewage. The people living in Baharak are aware of the diseases which can be carried by water and therefore take adequate precautions (such as drawing water directly from the spring and not in the water channels), which are used by breeders.

7.11 COOPERATION, HELP FOR THE FARMERS

7.11.1 Issues at stake
The notion of cooperative has never been properly developed in Afghanistan. Hostile feelings towards the cooperative system arose in reaction to the communist ideals spread following the Soviet invasion and can account for the caution shown by many Afghan farmers. Moreover, we have seen that the notions of private property and individualism, in reaction to any kind of cooperative system, are strong in Baharak. Although these two reasons alone help explain the absence of a cooperative in Baharak, there is another more rational explanation. As suggested by Monrose, the number of small farms and levels of training strongly influence the creation of cooperatives and notably cooperatives to pool equipment (Monrose, 1987). In order to ensure that agricultural machinery is cost-effective, they must
be used as much as possible, i.e. on large surface areas or for large quantities of produce. The smaller the size of farms and the more farms within the cooperative, the more complicated negotiations become. Finally, creating a cooperative requires basic knowledge on legal and financial matters, but the level of training of farmers in Baharak is currently far too low (few of them are literate, etc.).

7.11.2 Some leads

7.11.2.1 Reducing transport costs

For the farmers of Baharak, the cost of transport is too high to truly develop an import/export activity. Therefore, it would be more relevant to set up forms of cooperation between users. For example, shared rental of transport, according to the quantity, appears to be an appropriate solution. Nevertheless, there is one obstacle: farmers are not necessarily looking to sell their produce or purchase inputs at the same time. One farmer may need cash and chose to sell his products quickly, while another may prefer to wait until prices are more advantageous. This lack of harmonisation does not facilitate the creation of transport cooperatives. This strategy is based on a food crop mentality (although trade in agricultural produce has always existed) as opposed to income generation agriculture. Farmers are mainly used to eating what they produce. But poppy is a perfect counter-example as it proves that farmers are able to change their attitudes rapidly and adapt.

7.11.2.2 Exchanging information on techniques for global development

Exchanging, discussing or sharing experience about agriculture seems to be limited to the wider family circle. Very few discussions about agriculture can be heard in the bazaar and outside the mosque. Broaching more technical topics with groups of farmers can even be the source of discontent. For instance, a farmer had privately asked for information about saffron and when yet when we met him the following day and raised the topic of saffron production, he simply ignored us and pretended not to understand what we were talking about. He most probably did not want the others to know that he had saffron and did not wish to share this information.

Nevertheless, sharing knowledge in discussion groups remains a powerful way of developing agriculture in a region. What is essential is to identify potential members who are likely to share their experience. The members of groups must belong to the same family and to the same rechawan (cf. 2.3.3.6). Afghanaid is thus able to create groups and start up this type of activity, while offering courses on agricultural practices such as compost, cooperatives, sales techniques, etc.

7.11.2.3 Communal oven, a way of reducing the use of manure as fuel

Manure is widely used as fuel, which reduces its use in agriculture. Efforts to limit the use of organic matter as household fuel are relevant. Cooking bread requires large amounts of fuel, and yet the use of communal ovens may help households to reduce the use of tchapaks, the famous manure disks, as fuel. However, private ovens are not only used for cooking but also for heating the house during the winter. Therefore the use of communal ovens is only likely to be useful in spring, summer and early autumn.

7.11.2.4 AAD, other NGOs and the government

A final recommendation is directed at the institutions that work towards promoting development in Baharak. The specialisation of some NGOs in certain sectors could help improve the relevance of these programmes. This would also help beneficiaries understand the role of NGOs and their work, thus encouraging them to get involved in various projects. The objective of NGOs is in general to strengthen the resilience and thus independence of beneficiaries. In order to promote sustainability, NGOs are required to work closely with state institutions, and eventually to work directly for the government (farmers’ associations, etc.). Government officials for agricultural matters in Baharak do not have many resources but the only School of Agriculture in the whole of Badakhshan province is based in Baharak.
Therefore it is essential to work together with the students. Training young people always produces good results in the long term. Parcels of land reserved for practical work can be created within the school and practical classes organised. For Afghanaid, the advantages of working with young people are obvious, as they will soon become Baharak’s adults.

7.12 Development, a matter of urgency

This last point is more centered on the form rather than the content of agricultural development programmes. The aim is simply to instill a sense of emergency capacity into development programmes. In so-called developed countries, whenever a farmer must face a shock such as a hailstorm affecting fruit trees, or a trend such as overproduction (vineyards), they can rely on insurance companies for compensation, or the state for subsidies or grants. Similarly, when a region is affected by floods for instance, insurance companies are responsible for giving support to those affected. This emergency aid is essential for farmers as it helps them to continue working more or less normally, without significant loss of production.

In Afghanistan, the state is unable to support the farmers when a crisis occurs. Similarly, no insurance company is prepared to invest in an industry that is so uncertain.

This lack of protection is a real obstacle to the success of development programmes. Indeed, their successful outcome might be greatly jeopardised by potential upheavals and crises from which farmers suffer. Let’s take the example of a fruit tree project: the NGO sells fruit trees at a token price so as to develop arboriculture in the region. Three years later, the trees start producing fruit and the project seems to have been a success. However neighboring provinces, which provide fodder for livestock farmers in Baharak, are struck by a drought. Farmers do their best to keep their livestock alive but production costs are so high that they have no other choice than to reduce their capital. The recently-planted trees, which produce little but which represent an income, are then cut down and sold. The programme eventually turns out to be a failure.

The NGO, which tried to set up these development programmes, would have been well advised to create an anti-shock system, some kind of insurance to save farmers having to reduce their capital, thereby making the project sustainable. Even if the NGO must cover most of the costs, it is essential that the potential contributors participate in the process, thereby promoting ownership.

In this country which lacks the infrastructure for overcoming crises, emergency capacity (in the form of anti-shock insurance) should be integrated into development programmes so as to make them sustainable.
In brief, the possible improvements to projects aimed at Afghan women in rural areas, would include:

‘Mixed’ programmes
With a view to improving the image of women’s activities, it would be nonsensical to target women only in a society where trade transactions are mainly conducted by men. Therefore, taking the male community into account is essential for any project. Even under the pretext of a “Gender Approach”, there is no justification for development programmes which disturb the equilibrium between men and women. Finally, in rural areas such as Baharak, a large proportion of husbands are in favour of their wives participating in income-generating activities, as they thereby contribute to the improvement of the household’s living conditions. Thus it is in the men’s interest to support these programmes as much as it is for women.

‘Integrated’ programmes
Improving the quality of food depends on an increase in local production, particularly fruit and vegetables, a revival of the local market, consumption of processed products and nutrition education, which can be provided by women’s groups. Moreover, improving household incomes should be made possible through the monitoring of farm production and also by women’s individual or collective initiatives within microfinance groups. Programmes targeting women must involve various sectors of the local economy and society in general, to ensure that they are fully ‘integrated’.

Actors of development need to take a step back
One of the purposes of this study was to illustrate the importance of taking time to fully grasp local reality before starting any project. Concerning women’s programmes, it is essential firstly to take into account existing women’s networks in the village, possible access to the market, what motivates women and activities conducted by other NGOs operating in the region. Taking stock of the situation therefore requires time and resources, especially for training NGO staff in how to assess the context and what people’s expectations are. This recommendation is currently the subject of much debate within the development sector and is still worth highlighting even though it is by no means simple to put into action.
Glossaire

Abi : terre irriguée et cultivée.
Ailoqs : pâturages d’altitude.
Ambi : carrière de pierre.
Arbob : chef local élé par une shura.
Asal : miel.
Burka : vêtement qui recouvre le corps de la tête aux pieds et qui s’adresse uniquement aux femmes a partir de la puberté.
Buskachis : sport national ou les concurrents, tous à cheval, doivent s’emparer d’un corps de chèvres (Buz) d’où le nom du jeu, et le déposer à l’intérieur d’une cible.
Buz : chèvre
Chir : lait.
Daryâ : sage femme au savoir basé uniquement sur l’expérience.
Djoma : vendredi.
Gadic : race à viande ovine plus petite que la race Turki
(Chir)-Gaw : vache (à lait)
(Mard)-Gaw : bœuf de labour. Littéralement : vache mâle ; le fait que ce nom représente les bœufs de labour indique le peu d’intérêt des mâles pour la boucherie.
Gudjuri : Race caprine du Badakhshan
Guerao : hypothèque de terre.
Guzfan : mouton
Jerib : unité de surface afghane. Cela correspond à la surface nécessaire pour semer 4 sers (soit 28 kg) de blé. On considère que 1 jerib est équivalent à 0,2 ha.
Karlzassana : crédit dépourvu d’intérêt.
Kuchis : semi-nomades pachtounes extérieur au Badakhshan.
Kochlak : village éloigné du bazar central de Baharak. 20 min à pied suffisent à considérer le village comme kochlak.
Konjara : tourteau.
Kosni : plante du Badakhshan qui est utilisé pour soigner les crises de malaria.
Kroum : fromage très dur à base de lait de vache et de chèvre.
Lalmi : terre cultivée non irriguée.
Lewandi : Race bovine étrangère au Badakhshan dont les aptitudes sont supérieures, comme les coûts de production à celles de la race locale Syagow.
Marazar : espace appartenant à la communauté villageoise impropre à l’agriculture.
Maska : beurre
Moss : yaourt
Moudjahiddines : combattants musulmans pendant une guerre sainte.
Mourl : volaille.
Mouy é safed : littéralement les barbes blanches, autrement dit les plus anciens.
Mozabarcat : crédit dans lequel le prêteur partage les bénéfices ou les pertes éventuels de l’entreprise réalisée par le débiteur grâce au prêt.
Namaїnda : maire de village élu par une shura.
Nan : galette de farine de blé, c’est le pain traditionnel afghan.
Nuristani : race animale issu de la province du Nouristan (dans ce document, il s’agit d’un race caprine).
Osher : don des croyants (homme qui va à la mosquée) aux mollahs
Quatan : espace en plein air réservé pour parquer les animaux pendant l’hiver.
Quom : groupe familiale : deux individus sont du même quom s’ils se reconnaissent un ancêtre commun.
Rechawan : famille étendue.
Rok é sya : terre noire avec de bonnes caractéristiques agronomiques selon les paysans du district de Baharak.
Rok é zard : terre jaune avec de mauvaises caractéristiques agronomiques selon les paysans du district de Baharak.
Ser : unité afghane équivalente à 7 kg.
Shura : comité d'homme présidé par les mouy é safed, les barbes blanches, autrement dit par les plus anciens.
Sout : crédit avec un intérêt.
Syagow : Race bovine locale, rustique aux aptitudes (lait, viande, travail) moyenne tout comme ses coûts de production.
Tandour : four à pain.
Tchapak : disque de fumier utilisé comme combustible pour la cuisine et le chauffage.
Tchaka : fromage blanc.
Tchord é wali : muret de pierre qui sépare deux parcelles.
Tout : mûre locale.
Turki : race à viande ovine réputée pour sa haute taille.
Watani : locale, largement utilisé pour désigner une variété utilisée dans la zone depuis de nombreuses années.
Zambur-é-asal : abeille.
Zarsalak : plante du Badakhshan qui aurait les propriétés de soigner les maux de tête.
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(D’après le site de www. negar-afghanwomen.org)

<table>
<thead>
<tr>
<th>Année</th>
<th>Événements</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1919</td>
<td>L’émancipation des femmes de manière moderne a commencé dans les années vingt avec l’avènement du Roi Amanullah. Mais un livre de biographies de femmes du XIXᵉ siècle, écrit par Mme.Maga au début du XXᵉ siècle, cite les noms d’innombrables femmes savantes dans différents domaines, poésie, calligraphie, musique... issues des écoles traditionnelles privées ou éduquées par des précepteurs privés, dont certaines sont devenues ensuite membres des associations féminines et professeurs dans les écoles de filles.</td>
</tr>
</tbody>
</table>
- 1ère école moderne de filles « Mastourat » ; démarrant avec 50 élèves, elle passera peu après à 800 élèves.  
- Participation des femmes dans la sphère industrielle comme ouvrières ou directrices d’usine. |
| 1921  | 1ère magazine hebdomadaire féminin « Ershad-e-Naswan » qui dépendait de l'Association de Soutien aux femmes d’Afghanistan ; il soulevait les problèmes des femmes de l’époque, encourageait leur participation dans la sphère publique et politique, et donnait les nouvelles féminines au niveau international.  
Création du 1er hôpital pour les femmes, une maternité, et de la 1ère école d’infirmières et de sages-femmes. |
| 1923  | 1ères femmes élues à la « Majless-i-Bozorg » (Assemblée Nationale) qui comprendra 12 femmes. |
| 1924  | Révolte des religieux rétrogrades contre l’émancipation des femmes et leur volonté de porter des vêtements plus modernes. Le port du voile ou du chadri restait un problème au sein des associations ; pourtant son obligation n’est citée nulle part. La révolte est matée par l’état. |
| 1928  | Réformes gouvernementales concernant la demande d’émancipation des femmes : liberté vestimentaire, liberté de mouvement. L’âge du mariage était fixé à 18 ans minimum, la polygamie et le mariage temporaire interdit. Ouverture d’écoles modernes dans tous les départements, scolarisation obligatoire pour les garçons et les filles.  
Les 1ères bachelières partent en Turquie faire leurs études supérieures. |
| 1929  | Les Anglais considérant le Roi Amamullah comme une menace contre leurs intérêts dans la région, encouragent la révolte de religieux opposés à la transformation trop rapide de la société, en manipulant la révolte d’un opposant du nom d’Habibullah, ce qui aboutit à la chute du roi Amanullah. L’espace public conquis par les femmes est alors stoppé, avant d’être réoccupé petit à petit. |
| 1931  | Une école de filles est réouverte à l’intérieur du palais royal. |
| 1933  | Réouverture officielle de l’école de filles « Mastourat » par le ministère de la santé publique, dans le but de former des infirmières. Pour apaiser les religieux, les élèves s’y rendent voilées du chadri. |
| 1934  | Ouverture du lycée de filles « Anderabi » à l’origine des futurs lycées Malalai et Zarghouna. A partir de cette date, les lycées de filles se multiplient dans la capitale et les villes de province. |
| 1947  | Ouverture de l'Université aux filles. |
| 1959  | Proclamation de l’émancipation des femmes ; officiellement, elles ont le droit de ne pas porter le voile ou le chadri, bien qu’aucun décret n‘ait jamais imposé le port du voile ou du chadri. Quiconque contraignait une femme à porter non le voile était punissable par la loi. |
| 1963  | En préparation à l’avènement de la monarchie constitutionnelle, 6 femmes participent à la rédaction de la constitution. |

78 Le Chadri ou la Burka désigne le grand voile qui recouvre les femmes des pieds à la tête avec juste un grillage en tissu au niveau des yeux.
<table>
<thead>
<tr>
<th>Année</th>
<th>Événement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>La 1ère Constitution de l'Afghanistan rend la Monarchie Constitutionnelle :</td>
</tr>
<tr>
<td></td>
<td>- Droit de vote pour hommes et femmes</td>
</tr>
<tr>
<td></td>
<td>- Quatre femmes élues au suffrage universel à la 1ère Assemblée Nationale</td>
</tr>
<tr>
<td></td>
<td>- Égalité des hommes et des femmes devant la loi</td>
</tr>
<tr>
<td></td>
<td>- Scolarisation obligatoire pour tous les enfants, filles et garçons (Multiplication des écoles et lycées dans chaque département. Mais jusque dans les années 1980, par manque de moyens et aussi de volonté politique, cet article est resté loin d’être appliqué sur la totalité du territoire).</td>
</tr>
<tr>
<td>1965</td>
<td>1ère femme Ministre au Ministère de la Santé</td>
</tr>
<tr>
<td>1979-1991</td>
<td>De 1979 au retrait de l’armée rouge en 1989, 70% du territoire est détruit, 5 millions d’habitants sont réfugiés à l’étranger, la totalité de la population est déplacée à l’intérieur, le pays est entièrement miné. L’insécurité, les dangers dus à la guerre et la montée de l’islamisme dû à une volonté politique de la part des pays occidentaux ou à la difficulté de la vie quotidienne, ont énormément limité la liberté des femmes, et pour la première fois le port du chadri apparaît dans les zones rurales. A la même époque, les villes sous contrôle du gouvernement pro-soviétique connaissent un essor différent. Le nombre de citadins double, le pourcentage des femmes augmente avec la mort, l’exil, et la conscription obligatoire des hommes; de plus, le système de gouvernement démocratique favorise l’émancipation des femmes dans tous les domaines, les femmes peuvent exercer tous les métiers, même dans l’armée.</td>
</tr>
<tr>
<td>1996-2000</td>
<td>L’enseignement des filles et des garçons est encouragé. Malheureusement, Gulbuddin Hekmatyar soutenu par le Pakistan continuait à pilonner et à détruire Kaboul, sans réussir à la conquérir. Il est alors lâché par le Pakistan qui crée à sa place une nouvelle force militaire sous le nom de « Talibans », c’est-à-dire « Étudiants en Religion ».</td>
</tr>
<tr>
<td>2000</td>
<td>En juin, au cours d’une conférence organisée par l’association NEGAR, 300 femmes afghanes ont pu exprimer leur volonté en rédigant une Charte de leurs droits fondamentaux, la « Déclaration des Droits Fonimentaux de la Femme Afghane ». Cette dernière, diffusée ensuite au niveau mondial, affirmait leur opposition au régime Taliban, et dont le Manifeste de Soutien a ensuite été signé par des centaines de milliers de personnes dans le monde entier, dont beaucoup de responsables politiques européens et américains, qui s’engageaient ainsi contre la reconnaissance du régime Taliban.</td>
</tr>
</tbody>
</table>
Annexe 2: Histoire de l’Afghanistan depuis le VIème siècle av. J.C.


Véritable plaque tournante en Asie centrale, l'Afghanistan a toujours été très convoité. Ce pays constituait en effet la voie de passage vers la Chine, sur la Route de la soie, avant de devenir un État tampon entre l’Empire russe et la colonie britannique des Indes.

<table>
<thead>
<tr>
<th>Époque</th>
<th>Événements</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIème siècle av. J.-C</td>
<td>Invasion de la région par le Perse Darios Ier</td>
</tr>
<tr>
<td>328 av. J.-C</td>
<td>Le Grec Alexandre le Grand envahi à son tour la région</td>
</tr>
<tr>
<td>Il et Ier siècles av. J.-C</td>
<td>Invasions des Scythes, des Parthes et des Kouchans bouddhistes</td>
</tr>
<tr>
<td>Ve et VI siècles après J.-C</td>
<td>les Huns Hephthalites, ou Huns Blancs</td>
</tr>
<tr>
<td>L’Islam : VIème siècle à XVème siècle</td>
<td>Les Arabes introduisent la religion musulmane en Asie Centrale</td>
</tr>
<tr>
<td>Début du XIème siècle</td>
<td>Les Turcs, sous le règne du sultan Mahmoud de Ghazni, font momentanément de l'Afghanistan le centre de l'hégémonie et de la civilisation islamiques</td>
</tr>
<tr>
<td>Début du XIIIème siècle</td>
<td>Les Mongols de Gengis Khan envahissent l’Afghanistan et Timour Lang (ou Tamerlan) l'annexe à la fin du XIVe siècle</td>
</tr>
<tr>
<td>Au début du XVle siècle</td>
<td>Baber (ou Zahir al-Din Mohammad) établit un empire en Inde à partir de ses bases de Kaboul</td>
</tr>
<tr>
<td>Les premières dynasties afghanes : XVIIIème et XIXème siècles</td>
<td>1747 Les Pachtous, sous le règne d’Ahmad Khan, fondent la première dynastie afghane indépendante</td>
</tr>
<tr>
<td></td>
<td>1834-1863 Dost Mohammad (émir de Kaboul) établit une seconde dynastie.</td>
</tr>
<tr>
<td></td>
<td>(1880-1901 Abd-ar-Rahman Khan réussit le premier à exercer un véritable contrôle sur la totalité du pays.</td>
</tr>
<tr>
<td>XIXème siècle : Le Grand Jeu, L’Afghanistan entre Russie et Empire britannique des Indes</td>
<td>1838-1842 Face à la menace expansionniste Russe sur les Indes britanniques, le Royaume-Uni déclenche la première &quot;guerre afghane&quot; contre la Russie.</td>
</tr>
<tr>
<td></td>
<td>1842 L’armée britannique est décimée par une révolte populaire</td>
</tr>
<tr>
<td></td>
<td>1878-1880 2ème guerre afghane : le Général Roberts conquiert Kaboul et libère Kandahar</td>
</tr>
<tr>
<td></td>
<td>1907 Traité anglo-russe qui donne l’autonomie à l’Afghanistan</td>
</tr>
<tr>
<td></td>
<td>1919 3ème guerre afghane: le pays acquiert son indépendance, laquelle est concrétisée par le traité de &quot; Rawal Pindi &quot; en 1921</td>
</tr>
<tr>
<td>Le royaume d'Afghanistan : 1926-1973</td>
<td>1926 Le royaume est fondé par l’Emir Amanullah</td>
</tr>
<tr>
<td></td>
<td>14/01/1929 Amanullah abdique; des musulmans traditionalistes prennent le pouvoir. Situation anarchique</td>
</tr>
<tr>
<td></td>
<td>16/10/1929 Le Général Mohammed Nadir Shah devient roi</td>
</tr>
<tr>
<td></td>
<td>1933 Nadir Shah meurt. Muhammad Zaher Shah est proclamé roi de l’Afghanistan</td>
</tr>
<tr>
<td></td>
<td>1939-1945 L'Afghanistan conserve sa neutralité durant la seconde guerre mondiale</td>
</tr>
<tr>
<td></td>
<td>1953 Mohammed Daoud (1908-1978), cousin du roi devient Premier Ministre et établit un programme de modernisation économique et sociale avec l’aide soviétique</td>
</tr>
<tr>
<td></td>
<td>1963 L'opposition pousse Daoud à la démission et une monarchie constitutionnelle est mise en place. Les partis politiques sont interdits.</td>
</tr>
<tr>
<td></td>
<td>1965 Création du PDPA (Parti Démocratique du Peuple Afghan), pro-communiste et pro-soviétique</td>
</tr>
<tr>
<td>La République d'Afghanistan : 1973-1977</td>
<td>1977 Daoud est élu Président de la République</td>
</tr>
<tr>
<td></td>
<td>17/07/1973 Coup d'état de Daoud qui, avec l’appui militaire russe, renverse son cousin Zaher. Ce dernier abdique en août et s'installe en Italie</td>
</tr>
<tr>
<td></td>
<td>1973 Daoud est élu Président de la République</td>
</tr>
</tbody>
</table>
**d’Afghanistan (pro soviétique)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Événement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mai 1978</td>
<td>Mise en place d’un programme de réformes d’inspiration “kemaliste”</td>
</tr>
<tr>
<td>14/09/1978</td>
<td>Coup d’État d’Hafizullah Amin, assorti de l’assassinat de Muhammad Taraki</td>
</tr>
<tr>
<td>5/12/1978</td>
<td>Signature à Moscou d’un traité d’amitié avec le “Grand Frère” soviétique</td>
</tr>
<tr>
<td>25/12/1979</td>
<td>Entrée des troupes soviétiques en Afghanistan</td>
</tr>
</tbody>
</table>

**L’occupation soviétique : 1979-1989**

<table>
<thead>
<tr>
<th>Date</th>
<th>Événement</th>
</tr>
</thead>
<tbody>
<tr>
<td>28/12/1979</td>
<td>Nouveau coup d’État militaire soutenu par l’URSS, qui installe Babrak Karmal au pouvoir</td>
</tr>
<tr>
<td>Janvier 1980</td>
<td>Les troupes soviétiques envahissent la majeure partie du pays et combattent la rébellion anti-communiste</td>
</tr>
<tr>
<td>1980</td>
<td>Des Musulmans de nombreux pays (dont le Saoudien Oussama Ben Laden) rejoignent l’Afghanistan afin de se battre contre les soviétiques. La CIA commence à apporter un soutien matériel et financier à divers groupes de la résistance Afghane, dont les mouvements composés &quot;d’étrangers&quot;</td>
</tr>
<tr>
<td>30/11/1986</td>
<td>Mohammed Najibullah remplace Babrak Karmal à la tête du gouvernement</td>
</tr>
<tr>
<td>15/04/1988</td>
<td>Accords de Genève entre le gouvernement de Kaboul, l’URSS, le Pakistan et les États-Unis. L’opposition afghane ne reconnaît pas ces accords.</td>
</tr>
</tbody>
</table>

**La guerre civile : 1989-2001**

<table>
<thead>
<tr>
<th>Date</th>
<th>Événement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Février 1989</td>
<td>L’Armée Rouge est vaincue par le Dijihad. Début de la guerre civile qui oppose le gouvernement communiste et les rebelles</td>
</tr>
<tr>
<td>16/04/1992</td>
<td>Démission de Mohammed Najibullah. Fin du régime communiste et début de la guerre civile entre factions moudjahidin divisées selon des critères religieux, ethniques et régionaux</td>
</tr>
<tr>
<td>29/04/1992</td>
<td>Ahmad Shah Massoud, islamiste modéré tadjik, entre dans Kaboul avec plusieurs milliers d’hommes et devient ministre de la Défense en mai</td>
</tr>
<tr>
<td>28/06/1992</td>
<td>Burhanuddin Rabbani, islamiste modéré du Jamiat-e-Islami, est nommé président intérimaire, puis élu chef du gouvernement en décembre</td>
</tr>
<tr>
<td>1992-1995</td>
<td>Un gouvernement issu de la résistance afghane prend le pouvoir, mais il y a des dissidences internes</td>
</tr>
<tr>
<td>7/05/1993</td>
<td>Malgré un accord de Paix entre les factions rivales, les affrontements continuent au sud de Kaboul. Massoud démissionne du gouvernement, lequel est recomposé autour de Gulbuddin Hekmatyar, un fondamentaliste appartenant à l’ethnicité pachtoune, majoritaire dans le pays.</td>
</tr>
<tr>
<td>1996</td>
<td>La plupart des factions afghanes, à l’exception des taliban, se mettent d’accord pour former un gouvernement présidé par Hekmatyar.</td>
</tr>
</tbody>
</table>

**Le régime Taliban : 1994/1996-2001**

<table>
<thead>
<tr>
<th>Date</th>
<th>Événement</th>
</tr>
</thead>
<tbody>
<tr>
<td>27/09/1996</td>
<td>Prise de Kaboul par les taliban, qui s’emparent dès lors du pouvoir. Le Mollah Omar, chef charismatique du mouvement et &quot;Commandeur des Croyants &quot;, dirige le pays sans aucun titre politique ou constitutionnel</td>
</tr>
<tr>
<td>Mai 1997</td>
<td>Le Pakistan est le premier pays à reconnaître officiellement le régime taliban. Il sera bientôt suivi par l’Arabie Saoudite et les Emirats Arabes Unis</td>
</tr>
<tr>
<td>Juillet 1997</td>
<td>Les forces de Massoud prennent le contrôle des zones au Nord de Kaboul</td>
</tr>
<tr>
<td>Février 1998</td>
<td>Ben Laden et les responsables de quelques groupuscules islamiques extrémistes créent un &quot;Front Islamique International contre les juifs et les croisés &quot; dont la charte fondatrice précise les menaces contre les États-Unis</td>
</tr>
<tr>
<td>Avril 1998</td>
<td>Echec du processus de paix proposé par l’ONU</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>15/11/1999</td>
<td>Après le retour de l’ONU en Afghanistan et le nouvel échec des négociations de paix, un embargo aérien est mis en vigueur. Des sanctions financières sont votées par le conseil de sécurité de l’ONU qui, à l’instigation des États-Unis, avait adopté, le 15 octobre, une résolution donnant aux taliban un mois pour extrader Oussama Ben Laden.</td>
</tr>
<tr>
<td>27/07/2000</td>
<td>Le Mollah Omar décrète, sous la pression internationale, l’interdiction de produire du pavot en Afghanistan, ainsi que la destruction des récoltes.</td>
</tr>
<tr>
<td>12/10/2000</td>
<td>L’USS Cole est endommagé par un canot suicide dans le port d’Aden, au Yemen.</td>
</tr>
<tr>
<td>19/12/2000</td>
<td>Le conseil de sécurité de l’ONU inflige de nouvelles sanctions aux taliban en raison de leur soutien au terrorisme.</td>
</tr>
<tr>
<td>26/02/2001</td>
<td>Le Mollah Omar ordonne par décret la destruction de toutes les statues pré-islamiques, dont le bouddha de Bamiyan. Elles sont dynamitées le 9 mars, malgré les multiples protestations de la communauté internationale.</td>
</tr>
<tr>
<td>Octobre 2001</td>
<td>Bombardements américains sur les principales villes talibanes et bases d’entraînement terroristes.</td>
</tr>
<tr>
<td>Printemps 2002</td>
<td>Retour de Zaher Shah en Afghanistan en tant que simple citoyen.</td>
</tr>
</tbody>
</table>
Annexe 3: L'approche systémique\textsuperscript{79}

L’approche systémique utilise le cadre d’étude que reprend la figure suivante :

Figure 33: L’approche systémique

\textsuperscript{79} Cette annexe est commune avec JC Duchier, 2006.

De même, selon cet ouvrage (Memento de l’agronome, 2002, p. 351), « Un système de culture se définit, au niveau de la parcelle ou d’un groupe de parcelles traitées de manière homogènes, comme l’ensemble des modalités techniques mises en œuvre sur ces parcelles, il est caractérisé par :
- la nature des cultures ou des associations de cultures et leur ordre de succession ;
- les itinéraires techniques80 appliqués à ces différentes cultures
- les produits et les sous-produits, leurs rendements. »

Selon Philippe Lhoste, un système d’élevage se définit comme « l’ensemble des techniques et des pratiques mises en œuvre par une communauté pour exploiter dans un espace donné les ressources végétales par des animaux dans des conditions compatibles avec ses objectifs et avec les contraintes du milieu. » (BEDU L. et al., 1987, p. 17)

80 L’itinéraire technique est une « suite logique et ordonnée d’opérations culturales appliquées à une culture ou association de cultures. » (Memento de l’Agronome, 2002, p. 351).
Annexe 4: Calendrier de travail détaillé

En France :

– Février-mai 2005 : préparation du stage en France

Avant de partir, j’ai fait une recherche bibliographique sur l’Afghanistan, son histoire et son contexte actuel. Sur la question des femmes, j’ai lu différents ouvrages d’ordre général sur les femmes afghanes, leur position dans la société urbaine et rurale ainsi que leur place dans les enjeux de la reconstruction afghane. A partir de ces lectures et de l’approfondissement de la demande pour ce stage, par la rencontre de Peggy Pascal du Groupe URD, j’ai pu établir une première problématique et en dégager les principaux axes d’étude.

A Kaboul :

Dans la capitale, mon travail a consisté principalement à une recherche bibliographique et à la rencontre de personnes ressources, acteurs du développement en Afghanistan et intéressés par mon sujet. (Voir annexe n°5 avec la liste des personnes rencontrées)


– 1er-15 décembre 2005 : Le dernier séjour à Kaboul a été orienté vers une présentation orale au ministère de l’agriculture et la production d’un article en réponse aux objectifs du programme LRRD. J’ai donc du synthétiser au maximum mes résultats en lien avec la question des passages urgence-développement et faire ressortir les nouveautés apportée par mon étude parmi les multiples projets de recherche sur les femmes en Afghanistan. La présentation a fait l’objet d’un débat auquel ont participé des afghans et des expatriés, hommes et femmes confondus. Dans le même temps, une présentation réservée à AAD a eu pour intérêt de clore sur un bilan très positif ce stage de terrain et de discuter avec les responsables de l’ONG des évolutions possibles de leurs projets avec les femmes.

Dans le Badakhshan :

Le travail sur la zone d’étude, d’une durée de 4 mois et demi, s’est organisé en quatre étapes correspondant à mes trois axes d’études principaux et à une phase d’approfondissement.

– 16-19 juin : rencontre avec le personnel d’AAD à Faizabad

Nous sommes arrivés dans le Badakhshan mi-juin et avons tout d’abord fait connaissance avec les membres de l’ONG AAD présents à Faizabad. Nous avons pu alors échanger sur les objectifs de notre travail parmi eux et sur le fonctionnement des programmes d’AAD liés à l’agriculture et aux femmes, notamment avec la responsable du programme des jardins potagers pour toute la province.

– 20 juin-14 juillet :
Le travail sur la zone d'étude a commencé par la réalisation d'un diagnostic agraire en binôme avec Jean-Christophe. Pour des raisons de contraintes de logistique et d'emploi du temps, l'observation du paysage s’est faite au cours des premières enquêtes lors des trajets, souvent à pied, vers les villages de la vallée mais aussi tout au long de notre stage. Nous avons commencé la première semaine par nous laisser guider par les membres d’AAD qui travaillent dans la vallée de Baharak et sommes donc allés enquêtés les villages les plus proches du siège de l’ONG. Cette étape nous a permis, par des discussions avec le personnel d’AAD et nos interprètes ainsi que par quelques déplacements en voiture, de percevoir la diversité géographique de la zone et de situer les emplacements des villages.

Nous avons aussi consacré du temps à familiariser nos interprètes avec du vocabulaire technique agricole, à leur expliquer la méthode du diagnostic et à améliorer notre guide d’enquête auprès des hommes et les femmes interrogées. Enfin, nous avons fait la connaissance des autorités du district et nous sommes adaptés aux règles de vie de l’ONG et de la société locale de Baharak.

Après cette mise en condition, nous avons choisi une dizaine de villages de la vallée qui nous permettaient d’avoir une vision des différents ensembles géographiques que nous avions perçu du zonage géographique. Néanmoins, nous avions des contraintes de sécurité imposées par AAD, de disponibilité en véhicule et d’état des routes qui nous empêchaient de rejoindre certains villages du district. Ces contraintes font d’ailleurs partie d’une des limites de nos deux études, présentées dans la partie suivante. Les villages enquêtés se sont donc limités à la vallée mis à part deux villages situés plus en altitude sur les pentes des montagnes. Une fois arrivés dans les villages, nous nous adressions au hasard à un foyer disposé à répondre à nos questions. Il était possible pour moi et mon interprète (une jeune-fille de 18 ans) de frapper à la porte des habitations et d’y entrer sans gêne tandis que Jean-Christophe ne pouvait pénétrer, en tant qu’homme, dans cette enceinte où se trouvaient les femmes. Nous avons réalisé des entretiens semi-directifs à l’aide de deux guides d’enquêtes, le mien était spécifique aux femmes et à leurs rôles en agriculture et dans l’économie de leur ménage (voir annexe n°6).

La compréhension de l’histoire et de l’évolution de l’agriculture à Baharak s’est faite au cours de ces entretiens de diagnostic. Nous avons cherché à schématiser rapidement les principales périodes qui ont marqué l’agriculture de la zone (voir annexe n° 10 sur les schémas de l’histoire) afin de mieux percevoir les enjeux agricoles actuels de la vallée. De même que Jean-Christophe pour les systèmes de production agricole, j’ai continué à étudier l’évolution historique des rôles des femmes de la zone dans les autres phases de mon stage.

À la suite d’une trentaine d’enquêtes avec des femmes et des hommes de la vallée (voir annexe tableau des enquêtes), nous avons établi une typologie des ménages de la zone. Cette typologie s’est construite autour des systèmes d’activités agricoles et non-agricoles de ces ménages. Elle a eu pour objectif de distinguer les foyers les plus vulnérables et de comprendre leurs stratégies et leurs attentes.

Cette étude commune a eu le grand avantage de donner un regard « mixte » à ce diagnostic et donc une compréhension plus juste de la réalité. Par la suite, nous avons scindé nos études en deux parties distinctes afin d’approfondir chacun nos axes spécifiques d’étude. Pour ma part, il s’agissait de poursuivre sur la compréhension des modes alimentaires des ménages de Baharak.


Suite à la visite sur place de Charlotte Dufour, actuellement nutritionniste à la FAO (Food and Agriculture Organization), et à la lecture de son Guidelines81 (voir annexe 9), j’ai établi

81 Dufour C., Integrating Nutrition in Food Security and Livelihoods Interventions: Why and How in Afghanistan?, 2005
un nouveau guide d’enquêtes (voir annexe 6) destiné aux femmes de la vallée. N’étant pas formée aux concepts de la nutrition et dans un objectif plutôt qualitatif de mes résultats, je n’ai pas cherché à établir des enquêtes d’utilité statistique avec un grand nombre de personnes enquêtées et le calcul d’indicateurs nutritionnels classiques\textsuperscript{82}.

L’échantillonnage des personnes enquêtées s’est fait dans les villages déjà visités lors du diagnostic et auprès de femmes que je n’avais pas entretenu avant. J’ai pu, ainsi, mieux appréhender la diversité des femmes de la zone. De plus, ces choix ont été orienté par la typologie du diagnostic car j’ai essayé d’évaluer le lien entre cette typologie et les comportements alimentaires. Les femmes enquêtées devaient donc appartenir aux différents types de ménages du diagnostic.

Pour recueillir des informations relatives à la consommation alimentaire, j’ai utilisé plusieurs méthodes:

– Tout d’abord, j’ai essayé de mettre en pratique des outils pédagogiques participatifs tel qu’un « jeu de cartes-aliments » à disposer par la femme interrogée sur un plateau représentatif des saisons et avec des haricots (un haricot pouvait représenter 1kg) afin d’évaluer la quantité consommée par semaine sur chaque carte de chaque aliment. Cet outil s’est avéré trop difficile pour la plupart des femmes et s’est limité à un moyen ludique de faire parler celles-ci.

– Ensuite, je me suis inspirée des enquêtes menées par les nations unies en Afghanistan, le NRVA (National Risk and Vulnerability Assessment)\textsuperscript{83} afin d’établir, après une dizaine d’enquêtes, une liste d’aliments fréquemment consommés et cités par tous les ménages que j’ai appelé aliments « de base ». J’ai aussi utilisé leurs indices de fréquence de la consommation.

– J’ai aussi eu recours à la méthode du «jour précédent » qui consiste à demander le détail des aliments consommés lors des différents repas de la veille par une même unité de consommation.


Finalement, j’ai construit une typologie des consommateurs de la zone afin de donner une plus grande lisibilité de la diversité des ménages par rapport à leur accès à une alimentation de « qualité », c’est-à-dire diversifiée et saine.

Cette étape m’a permis de proposer des améliorations et des pistes de réflexion pour les programmes alimentaires dans la zone de Baharak.

– 10-25 août : évaluation des programmes d’AAD à destination des femmes à Baharak et dans les districts voisins:
L’évaluation des programmes d’AAD s’est faite par des discussions informelles avec le personnel de l’ONG ainsi que par des entretiens semi directifs (voir guide d’entretien en

\textsuperscript{82} Par exemple, un indicateur nutritionnel est l’indice poids/taille qui permet de déceler les problèmes de malnutrition « aiguë ».

\textsuperscript{83} D’après AI, Methodology for the National Surveillance System for Afghanistan, WFP, 2003, p.28-29.
annexe n°8) avec les femmes responsables de ces projets et quelques femmes bénéficiaires.

J’ai aussi assisté à des réunions de groupes de femmes menés par l’ONG et visité les centres féminins de formation dans les différents districts du Badakhshan où AAD est présent. J’ai surtout profité de ces visites pour observer le déroulement des réunions et le comportement des femmes participantes. J’ai essayé d’organiser de petits entretiens de groupes avec elles, à la fin des réunions, qui m’ont convaincu d’approfondir mon étude dans la compréhension des réseaux formels et informels de femmes.

Cette étape m’a permis de répertorier les différents programmes de développement en faveur des femmes sur la zone et de toucher du doigt les principaux atouts et contraintes des programmes d’AAD.

Dans mes rencontres avec des groupes de femmes, j’ai utilisé la méthode participative dans le sens où j’ai essayé de faire participer les femmes, chacune à leur tour à la réponse aux questions et de laisser émerger des propositions d’améliorations pour leur groupe de leur part. néanmoins, je ne me suis pas assez penché sur cette approche pour prétendre l’avoir maîtrisé et exploré sous tous ses aspects.


Grâce aux outils de l’observation et de l’anthropologie des savoirs et des techniques ainsi qu’une participation personnelle aux activités des femmes, les préparatifs de l’Eid84 de la fin du Ramadan m’ont appris comment les femmes travaillent à plusieurs et les principales contraintes de leur vie quotidienne.

De plus, j’ai organisé seule quelques réunions villageoises de femmes, de manière informelle, afin de leur donner la parole sur leurs attentes face aux programmes de développement et d’avoir un retour direct sur leurs avis quant à la proposition d’éventuels programmes.

J’ai regroupé au fur et à mesure tous mes résultats dans des tableaux et des schémas ainsi que dans la mise à plat sous forme rédactionnelle de mes enquêtes.

J’ai voulu réaliser une mini-étude de marché dans le bazar de Baharak afin de comprendre les principales contraintes et opportunités de ce marché vis à vis des produits transformés de l’agriculture comme les fruits secs, les produits laitiers, les confitures et le miel. L’idée était d’estimer les potentialités du bazar dans l’idée de développer la transformation agricole avec les femmes de Baharak. Pour cela, j’ai eu l’occasion d’enquêter deux revendeurs de Baharak (discussion, questionnement des prix de vente et d’achat au producteur). Le résultat de ces enquêtes m’a permis d’évaluer quelques tendances de l’offre et de la demande de ces produits sur la zone.


J’ai pu participé à la réalisation d’une étude de 10 jours en Hazaradjat pour l’ONG Oxfam en trinôme avec Peggy et Jean-Christophe. L’objectif était de comprendre la place des femmes dans les systèmes de production agricole et les possibilités de valorisation des activités des femmes au sein des programmes d’Oxfam dans le district de Lal. Ce séjour m’a ouvert sur la

84 Eid signifie une fête religieuse musulmane.
diversité des femmes en Afghanistan rural et sur d'autres problématiques de développement, ce qui a enrichi considérablement mon approche face à mes résultats du Badakshan.
Annexe 5: Liste des personnes « ressources »

Pour la préparation du stage en France :
– Pascale Moity-Maïzi (CNEARC) : anthropologue
– Ludovic Temple (CIRAD) : spécialiste des approches filières en production horticole.
– FrançoisGrünwald : président du Groupe URD.

A Kaboul :
– Holly Ritchie, Dr Homayoun, Nassreen et Kamgar (Afghanaid, Kaboul)
– Xavier (GERES) : responsable des projets de serres et de transformation des produits agricoles
– Floortje (AREU) : responsable de l’unité de recherche sur le crédit et les femmes en zone rurale.
– Arnaud Cochoi (Commission Européenne) : Bailleur de fond du projet LRRD, agronome.
– Saïd Mosquin (Ministère de l’Agriculture) : conseillé chargé, entre autre, des programmes « blé ».
– Sultana (Ministère de l’urbanisme) : chargée de projets d’urbanisme à Kaboul et militante pour la défense des droits des femmes afghanes.
– Marie et Stéphane (Afghanistan Libre) : coordinateurs de projets pour les femmes à Kaboul et dans le Panshir (artisanat, journal, prévention santé, écoles, …)
– Jo Grace (AKDN) : ancienne chercheuse d’AREU sur l’économie des ménages en zone rurale et la place des femmes.
– Fitsum (UNICEF, Ministère de la santé) : nutritionniste, responsable des programmes nutrition, notamment sur l’allaitement.
– Charlotte Dufour (FAO) : nutritionniste
– Ruxandra Boros : consultante
Annexe 6: Guide d'enquête pour le diagnostic agraire auprès des femmes

Part I: general information and historic of the household

1. Genealogy of the family: name and age of the woman, number of male and female, adults and kids (<12 ans), weddings of children. How many members are living here?
2. Ethnic group of the women and the men. “qaum”?
3. Did you live in an other district before (country during the war or other area)? Why did you chose this destination? Were you refugees? When did you arrived here, how?
4. Where did you born? And your parents? And your children?
5. History of the household since wedding: when did they get married, bride price, asset after the wedding (jerib, heritage, tools, animals) eventual crisis or improvements, evolution in activities, land, livestock, house, tools evolution,...
6. When you were child did you work in fields? Did your mother have a KG? what was the job of your father? How could you travel (roads, donkeys, by foot,...)? there was vegetables and fruits in the bazaar? It was cheaper or more expensive than nowadays? Did you care for animals? How did your mother cook (with dry manure, wood, others)? What did you eat? Did you eat wheat? Did the bread have the same taste?...
7. Now, how much jerib do you work? Which type of land is it? (lalmi, abi, other lands?)
8. Are you sharecropper (rules of land tenure), owner, landless?
9. Do you have livestock: cows (male and female), horses, donkeys, sheep, goats or poultry? (Are you shepherd or are giving your animals for shepherding?)
10. Do you employ daily workers, how many? Which months? Why?

Part II: cropping systems

1. Do you work in the fields? Just in the compound? When are you in the fields (season)?
2. Land: situation of the fields (is it far from the house),
3. Where do you find water? Irrigation system: turns for water canal, which problems? Do you have enough water during all the year for house and for cultures? Health water? Which price?
4. What crops do you grow? How much jerib in each land / quantity of seer sawed for each crop? Do you know the variety (improved or local)? Price of seeds (where do they buy it or who gave to you seeds)?
5. If no mustard, how do you have oil? (fluctuations of oil price)
7. Do you grow vegetable? One season for each one or also during winter? Which months do you have vegetable in your KG? Do you have access to any green houses (in village or private house)?
8. Where did you learn to grow vegetable?
9. Are there wild animals that can destroy your cultures? How do you prevent this risk?
10. For each crop: time of work if women are involved in field work, numbers of workers (men and women), cost or exchange of work, price and quantity:
   - Nursery (fertilizer, season, months)
   - Soil preparation (number of tillage? who is in charge of what, price of the different agricultural tools)
   - Organic fertilizer or manure (purchase or home-production)
   - Chemical fertilizers
   - Seeds: name and price (do you keep it?)
   - Digging, wedding, number of each task
   - Are you using any insecticide or other chemical products
   - Harvest: good and bad year (last years?)
   - Quantity of straw, residue, use of leafs,...
11. Do you sell part of the harvest? Who is in charge of selling?? Where? What are the prices (fluctuation)?
13. How do you store your production? Where? Which constraints (diseases, place of storage, climate)?
14. Do you dry vegetables? How? When do you use it?
15. How many months you have enough food produced by home for your household? Are you self-sufficient? And the last years? Price of the wheat in winter and spring?
16. Do you have fruits trees? If > 20: where do they come from, place, numbers, manure, time of work, harvest,...


18. Do you have others plants that you could sell? (Medicine plants, spices, trees)

Part III: livestock

1. Which type of animals do you have? Number of each one and gender (in average...), purchase/from house, do you want to keep it? To sell? Why? Who sells? Where? Price?

2. Progeny: disease, feeding (part of milk for kids and for household), mortality?


4. Do the animals graze? Where? With whom? How many hours per day? During which months? Who are in charge them at that time? Do you care animals of other households? How long time? Where?

5. Do you go to ailoqs (in Shewa)? Animals go? How long time? With whom? Where?

6. If yes, do you process milk there? (Dairy products like cheese, moss, kurut) what sort of activities do you have each day in the ailoqs?

7. When do you cut green grass? How long time per day? With others members (children, other women, men)? Where? Is it free? Which quantity and how frequently?

8. How do you feed animals during winter season? Quantity of grass in average for every season?

9. When do you clean the litter? Time of work and quantity of manure?

10. Are your animals used for others production like wool, skin, pelt, hide? Do you sell it? Where? When? Price?

Part IV: off-farm activities for women (calendar of activities):

1. Do you do carpet-weaving? If yes, time to do one? Where? How many do you do in a year? Which months (winter, summer,...)? Why? With others women or girls (numbers of workers in the household for this activity)? Have you got your own loom? Do you rent it? Costs of tools, wool, paint,...where do you buy it? Who buy and who will sell it? Where? Price? Who receive the income of this activity?

2. Do you do other handicraft? (same questions)


4. Do you would like to increase some one of these activities? Why?

5. What are you doing in winter?

6. When are you busiest (months, occasions,...)?

7. Do you work in other houses (to clean, to cook,...)? For whom? Are you paid for this work?

8. Can you describe a “classic” day for you (time for the different activities, time of lunch, time to be in charge of the children,...)

Part V: social life and decision making process in and out the household

1. Are you involved in Village Organization? To what sort of decision can you participate in? Are there other women? Which one?

2. Are you involved in Women Resources Centre? What do you do there? Is it interesting? If no, why not?

3. Do you think that your mother had more power than you: in and out the household’s decision? What has changed for the women since last 10 years?

4. Can you manage your incomes and your budget alone? Who decide of the expenditures for the household (domestic equipment, food, tools, livestock, clothes,...)? What can you buy within asking to other family members?

5. What are the “extra” expenditures in one year (wedding, Ramadan)? Do you spare money for that?

6. Do you have credit access to informal or formal financial systems: usurers, gifts, barter, self help group?

7. What relations do you have with your neighbours (women and men)? Do you work together? Exchange goods? You can ask help when you have some problems? With which villagers are you the most linked? Why?

8. Can you assist in the Shura? And in others meetings in the village? Which one?
9. Do your daughters go to school? Where? What is your wish for them? And for your sons? One of your sons will stay in the farm? Which one? Why?
Annexe 7: Guide d’enquête pour l’alimentation

Part I: general information and historic of the household (idem que pour le diagnostic)

Part II: presentation of the kitchen:
1. Where do you eat (separate room for women, who eat in fields, ...)?
2. At what time do you eat (breakfast, lunch and dinner)? The women eat after or before the men?
3. Who generally cook in the family? Why? Difference between women? (who prepare bread, who serve the food, difference between women in the household)
4. Observation of the kitchen: tools to cook and foods
5. Name in Dari
6. Which utensils are used to cook and how are they used
7. Are they used throughout the year?
8. If no, when and for which purpose?

Part III: food calendar (with the “food game”)
1. Can you choose the different aliments that you eat in every season? (Note the numbers of these type and if there are differences between months).
2. For every type of food: how frequently do you eat it (except for Ramadan and other festivals)?
   a. Rarely (1 time a month or less)
   b. Sometimes (2 to 3 times a month)
   c. Once weekly
   d. Twice weekly
   e. 3 to 5 times weekly
   f. Always
3. **(These frequency’s indicators come from the NSS 2003, “female household questionnaire”)**
4. For every type of food: can you show me the quantity that you use (beans represented seers or pounds on the calendar) in one month?
5. For the type of foods which are purchased:
6. Price? (Fluctuations in one year)
7. Where (in bazaar of Baharak, by neighbours, by relatives, in other districts,...)?
8. Who purchased food stuff (men or women)?
9. How do you do the transport of foods?
10. is the distance from the bazaar a problem for you? And for your husband?
11. Which months is it the most difficult to get food? Why?
12. How do you “bridge the gap”/ find money to buy food in these months? (Credit, help,...)
13. Are there food stuffs that you can not afford for your family, which one? Why?

Part IV: the last set meals calendar (“rappel des 24h”)
What did you eat for breakfast yesterday? For lunch? For dinner? (describe menus for each age, children and adults, men and women)

Part V: food and children
1. Can you describe the main difference of quantity of food between children and adults, women and men? (example number of breads and with the plate of beans)
2. For babies:
   a. Before 6 months (just breast milk?)
   b. Before 2 years, are they complemented, which type of food, why and quantity
   c. After 2 years? Do you have problems for feeding the babies with breast milk? Do you buy other milk? Do you receive health counsels?

Part V: eating habits
1. Which types of foods are good for the health? Which types are “bad” for health?
2. What are good and bad wheat?
3. What is “cold” and what is “warm”?
4. What is your favourite type of food? And set meal?
5. Where did you learn to cook?
6. Is your cook different of your mother’s one?
7. Can you tell me one counsel that gave your mother about cook and food? Or other person?
8. Which recipes and type of foods were not used by your mother?
9. Does your brother/father/husband like to cook? Which type of foods does he cook?
10. What are the new food products? Manufactured products (jam, honey, chocolate, noodles,...)?
   Do you like it? Where do you find it? Price?
11. Do you want to learn new recipes? Can you learn by neighbours?
12. Are there some women’s group for cooking?

If women are involved in KG programme:
What has changed in food with KG? Do you eat more vegetables?
What recipes do you use for these new vegetables? Have you receives cooking courses? With whom?
   Do you like these new products? Children too? What are the most constraints?
Annexe 8: Guide d’enquête pour l’étude d’impact des projets d’AAD

Evaluation of Kitchen Garden Programs:
KG presentation:
1. Which vegetable do you grow?
2. Since how many years for each one?
3. Why did you not grow it before?
4. Before the help of AAD, how did you received the seeds?

KG and historic of eating habits:
1. Did you eat these vegetables when you were a child?
2. What was the quantity when you were a child? And the quality?
3. Which quantity of each vegetable do you eat in one day? (for how many persons, children and adults?)
4. When you were a child, did you eat onions? How were the onions? Where did they come from?
5. Why do you eat vegetables with oil? Why not just with boiled water? And when you were child? Where did you find the oil?

Other programs:
1. Did you heard about the demonstration plots? When? What did you learn there? With whom?
2. Which women were chosen to explain to other women techniques for KG?
3. If you have to choose between different vegetable (seeds), which one do you choose?

Questions for the woman who was living in the house for the WRC:
1. Why were you chosen for the WRC? How did you know?
2. What is the interest for you?
3. Which problems did you have when your house was the WRC?
4. What is the opinion of your husband? Does he help you for the KG?
5. What will you do now? Will you teach to other women how to cook vegetables and grow KG? Why not?
6. Do you sell some products; fruits, vegetables, jam, bolonis,... (before and now)?

Questions for AAD staff in Baharak (Afsal, Maleha et Kamila):
1. Why did you choose this household? How did you choose? Is it important that the owner has one KG?
2. How do you choose the trainers? Who choose? Is the number of trainers limited?
3. Who present the WRC to the trainers?
4. If some trainers are late or lazy, what do you do?
5. Do the trainers receive some income or something else? (Seeds, clothes,...)
6. What do you do for trainers when the 6 months are finished?
7. What are the “women’s group” and the “teenagers group”?
8. Do you know the Mission East programmes? Why not?

Questions for Akila:
1. How many training did you do in 6 months for one WRC?
2. When?
3. What do you do in winter?
4. In which village did you do training in Baharak? How many women?
5. Who are the “namahinda” for agriculture? (Names in Baharak) what do they have to do?
6. Did you teach some cook to the women in Baharak?
7. Did you explain to the men in the villages what you will do with women? When?
8. Where are there the shops of women to sell products like jam, honey, and tomato past... is there one project like that in Baharak?
9. Which type of disease in KG do you know? Which type of products are useful? How do they can find it in Baharak?
10. Do you work with Mission East in Baharak? Why not?
Questions for the women, members in SHG:
1. How did they know this shura?
2. Why did they come?
3. Why some neighbours did not come?
4. Did they have before other village group? Which one?
5. Do they know all of them? Who are new in the village? Is it more difficult for them?
6. What do they want to buy with the benefit of SHG? Why?
7. Who do one KG? (same questions than in the beginning of questionnaire)
8. What would be the interest of the SHG for the local agriculture?
9. What is the role of your “namahinda”?
Annexe 9: Guide d’enquête du Guidelines de Charlotte Dufour

Questions for the needs assessment
An assessment entails understanding people’s needs, but this can only be derived from an understanding of their current practices and situation. In the present guidelines, we are interested to know:

- What foods do people consume and how frequently?
- What food is available and when?
- What foods do household produce and is it sufficient to meet their needs?
- What foods do they purchase, from where and with what income?

The detailed questions presented in Box 1 can be useful for understanding the food security situation during the needs assessment.

Box 1: Nutrition information to be collected during needs assessments (Ref to FAO ENA guidelines)

**Food consumption and diet diversity**
- How many meals are eaten per day?
- What main foods are eaten and how frequently?
- Is the diet lacking from energy and/or essential nutrients (such as energy from staples or fat/oil, protein, vitamins and minerals)? (see Annex 3 for food sources of energy and key nutrients).
- Are there differences in food consumption among household members?
- Are household members, in particular those responsible for providing and preparing food, aware of the importance of nutrition and of eating different types of foods?

**Availability and access:**
- What is the pattern of food supply throughout the year? Are there times of food scarcity, for which foods, and for how long?
- Where do these foods come from and what is the relative importance and reliability of each source (own production, collection, barter, purchase, gifts, food aid, nutritional programmes, social assistance)?
- What food storage, preservation and/or processing techniques are used to increase the shelf-life of foods, if any?

*Tip: establishing a seasonal calendar of available foods, through a focus group with villagers is a simple and visual way of obtaining information on seasonal variations in food availability. (see annex 2)*

**Household food production:**
- What foods does the household produce (crops, home gardens, animals, fishing) and with which constraints (climate, water supplies, storage facilities, etc)? Does the household own food production assets? (land, animals, farm equipment)?
- Do households sell their produce? What are the marketing opportunities for these produce?
- Are there signs of destitution and loss of productive assets?

**Food purchase**
- Do households have safe access to food and crop markets (distance, transportation means, cost)? Do they have marketing possibilities for their own production?
- Are key foods (particularly staples, oil, fruits and vegetables) affordable relative to average income in the area? Are there price fluctuations?
- What are the household’s income sources (sale of own production, savings, remittances, loans, gifts, social assistance etc.) and how important and reliable are they?

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85 C. Dufour, “Integrating Nutrition in Food Security and Livelihoods Interventions:
Annexe 10 : Questionnaire, guide d’enquête pour les hommes

Excepté la partie « généralités » pour les agriculteurs et les questions pour les commerçants qui était systématiquement posée, les autres questions ne l’étaient pas forcément, les sujets étaient abordés les uns après les autres en laissant l’agriculteur libre de répondre. Ce guide d’entretiens devait servir à ne pas oublier la question pertinente qui pouvait relancer une remarque de l’agriculteur. Ce guide permettait également de veiller à ce que tous les sujets soient traiter (dans la mesure du temps disponible).

AUX AGRICULTEURS

• GENERALITÉS :
  Village ?
  Nom ?
  Ethnie ?
  Age ?
  Où êtes-vous né ? Et vos parents, grands-parents (Pourquoi et quand ont-ils migré ici) ?
  Combien de personnes vivent chez vous (Sexe, âge, lien de parenté) ?
  Combien de jeribs possédez-vous (irriguée, non irriguée, pâturage…) ?
  Combien de jeribs travaillez-vous ? A qui louez-vous des terres ? Combien cela coûte, qui décide des cultures ?
  Un ou des membres de la famille travaille-t-il (travaillait-il) en dehors de l’éventuelle ? Où, combien est le salaire ?

• HISTOIRE :
  Combien de terre, d’animaux possédaient vos ancêtres ?
  Quels types de cultures existaient à l’époque de vos grands-parents ?
  Que mangiez-vous quand vous étiez enfants (plus de viande, sucre…) ?
  Quand avez-vous vu pour la première fois un sac d’engrais, une automobile, une radio, une télévision, un policier… ?
  Quand a été construite la route pour la capitale Faezabad ?
  Quand est arrivé le premier médecin, le premier instituteur ?
  Comment les gens se soignaient avant ?
  Qui contrôlait politiquement la zone ?
  Où sont les premiers villages ? Pourquoi ?
  Combien il y avait de maisons de votre village quand vous étiez enfants ?
  Comment viviez-vous pendant la guerre contre les Russes ? Pendant la guerre civile ?
  (Réfugiés, efforts de guerre, menace, manque de nourriture, décapitalisation…) 

• SYSTEME DE CULTURE :
  Pour chaque type de terre, quelles est la culture (voire variétés) cette année, l’année dernière, l’année suivante ?
  Avez-vous une stratégie quelconque quant à vos rotation ?
  Pour chaque culture, quel est l’itinéraire technique (labour, fumure, engrais chimiques, semis, densité, désherbage, pesticide, récoltes, rendements (bonne, moyenne et mauvaise année, sous-produits, précédents, dates, prix, durée pour chaque opération…) ?
  Comment s’effectue le transport, le stockage, la transformation éventuelle ?
  S’il y a vente, où, à qui, comment (transport), prix de vente (variation) ?

• SYSTEME D’ÉLEVAGE :
  Pour chaque type d’animal (race, âge, sexe) : race, nombre (aujourd’hui et au début et à la fin de l’année dernière), combien de femelle, combien de naissance, de mort (causes), de consommer (quand, pourquoi), de vente (à qui, où, prix (variation)) chaque année ?

Quelles sont les différentes saisons pour l'alimentation ?
Pour chaque saison, qualité et quantité de la nourriture ? Quelles sont les périodes alimentaires difficiles ? Achat éventuel (à qui, où, quantité, qualité et prix) ?
A propos de la transhumance : quand, qui, où, coût… ?
Quels sont les produits, (quantité, qualité), transformation (qui, quand) vente, consommation ?
Quels sont les maladies et les traitements (coûts) ?

• AUTRES INFORMATIONS :
   Avec qui discutez-vous d'agriculture ?
   Avez-vous des problèmes d'irrigation ?
   Où achetez-vous vos outils (prix) ?
   Avez-vous un crédit (type, à qui, depuis combien de temps, régulièrement, que ce passet-t-il si vous ne remboursez pas dans les délais…) ?
   Avez-vous une quelconque activité non économique en dehors de l'exploitation (groupe de discussion, ONG…) ?
   Dans votre budget mensuel, quel est la part pour l'alimentation, les médicaments, les fournitures scolaires, les vêtements, les combustibles, les transports… ? Qui fait les achats ? Quelles sont les dépenses exceptionnelles ?
   En cas de crise (maladie, mariage, décès, mauvaise récolte…) comment faites vous face ? (Crédit…)

AUX COMMERCANTS :
   Semences, engrais, pesticides : variétés, noms, origine, caractéristiques, qualité, prix (variations intra et inter annuelles et entre les commerçants, pourquoi) ?
Figure 34: Schéma de la vallée avant 1930

Légende :
- Terres irriguées cultivées en céréales locales, fourrages et autres cultures « rustiques » ou en jachère.
- Terres pluviales cultivées en orge et fourrages ou en jachère.
- Zones désertiques (colluvions et alluvions).
- « Silva* » de type arborée (arbres et arbustes).
- « Silva* » de type épineux (chardons, broussailles).
- Villages tadjiks construits dans la vallée.
- Villages tadjiks construits sur les pentes.
- Villages Ouzbeks
- Quatan : parcs pour les troupeaux de petits ruminants pour les mois d’hiver.
- Arbres fruitiers des jardins privés.
- * Zone de végétation spontanée utilisée pour la cueillette, la recherche de bois, la pâturage.
Entre 1930 et les conflits des années 80

Figure 35: Schéma de la vallée entre 1930 et 1980

Légende :

- Terres irriguées cultivées en blé, maïs, orge, moutarde, sésame, protéagineux et fourrages ou en jachère. (Jardins potagers près des habitations).
- Terres pluviales cultivées en orge, blé et fourrages ou en jachère.
- Villages Pachtounes
- Villages « multi-ethniques »
- Route principale et carrossable.
Depuis la fin des conflits (2000-2005)

Figure 36: Schéma de la vallée de Baharak aujourd’hui

Légende :

- Terres irriguées cultivées en blé, « cultures de rente » et fourrages. (Jardins potagers près des habitations).
- Terres pluviales cultivées en blé ou en jachère.
- Ville nouvelle autour du bazar et des principales infrastructures (clinique, gouvernement, ONGs, école, …).
- Villages de migrants venus de districts voisins ou de villages d’altitude, en construction (pas de canaux d’irrigation).
Annexe 12 : Tableaux de présentation des enquêtes « ménages ».

Ces enquêtes concernent des entretiens semi directs auprès de femmes d’une dizaine de villages de la vallée de Baharak. Ces entretiens se sont déroulés avec un seul ménage à chaque fois afin d’avoir une compréhension fine de leur fonctionnement.

Les zones indiquées dans le tableau suivant correspondent au lieu de l’enquête par rapport au zonage villageois de la vallée (voir annexe n°12 sur la construction du zonage):

- Zone A : ville nouvelle autour du bazar et des principales infrastructures.
- Zone B : villages de la vallée hors de la ville nouvelle (les *koshlaks*).
- Zone C : villages d’altitudes éloignés des infrastructures.
- Zone D : nouveaux villages de migrants construits sur le bas des pente (aussi parmi les *koshlaks*).

Seuls deux villages d’altitude ont pu faire l’objet d’enquêtes (zone C).

La colonne « statut » correspond au statut marital (veuve, femme mariée, jeune fille) des femmes interrogées.

La colonne « adulte » correspond au nombre de personnes âgées de plus de 12 ans dans le ménage (unité de consommation ou UC).

Les enquêtes en grisé correspondent aux enquêtes « alimentation ».

Abréviations ou anglicismes utilisées dans les tableaux :

- h : homme en âge de travailler.
- f : femme en âge de travailler.
- KG : Kitchen Garden (jardin potager)
- Shopkeeper : commerçant dans une échoppe de la vallée de Baharak.
- AAD : Afghan Aid
- ME : Mission East
- AKDN : Aghan Khan Development Network
- SHG : Self help Group (groupe de micro finance mené par Afghan Aid).
- WRC : Women Ressource Center (centre d’apprentissage pour les femmes mené par Afghan Aid).
- Literacy cours : cours d’alphabétisme, « rattrapage scolaire ».
- Jb : *jerib* (unité de terre cultivée, 0,2 ha)
- nsp : ne sait pas.
- Prof : instituteur ou institutrice (2500 afghanis/mois).

Les termes en italique sont en langue locale et sont définis dans le glossaire de ce rapport.

Les expressions « beaucoup » ou « peu » sont utilisées quand l’interrogée ne savait pas en terme chiffré mais donnait oralement ces qualificatifs.

Les cases remplies avec « ? » correspondent à des données qui n’ont pas été recueillies lors de l’entretien.
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<td>jardin</td>
<td>4</td>
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<td>Non</td>
<td>KG</td>
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Table 15: Résultats statistiques de présentation des enquêtes

Lieux où se sont déroulés les enquêtes :

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<th>Zone</th>
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<td>B</td>
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<td>C</td>
<td>5%</td>
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<td>D</td>
<td>9%</td>
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Caractéristiques des femmes interrogées :

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</tr>
<tr>
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<td>83%</td>
</tr>
<tr>
<td>Veuve</td>
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</tr>
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<td>Mariée</td>
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<td>A reçu semences</td>
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Caractéristiques des systèmes de production des ménagés interrogés :

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</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>Ruminants viande</td>
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</tr>
<tr>
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Typologie des ménages interrogés :

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Le contexte naturel (voir JC Duchier, 2006, p.23-28) montre que selon la topographie, trois espaces se dégagent clairement les uns des autres : les fonds de vallées, les pentes des montagnes et les hauts pâturages d’été. Ce critère topographique semble tout à fait pertinent dans ce contexte montagneux où l’altitude (et les différents climats qu’elle engendre) et la pente influent de manière évidente sur les conditions de vie des habitants.

La mise en valeur de l’espace par l’homme et son agriculture met en évidence plusieurs facteurs de différenciation. Cependant, le rayonnement que possède le nouveau bazar de la ville nouvelle semble avoir un impact majeur sur la vie des habitants du district. En effet, ce nouveau bazar est le centre économique, politique et social de la vallée. Plus on s’éloigne de celui-ci et moins son influence est évidente. Les habitants proches du bazar bénéficient de ses avantages mais aussi de ses inconvénients. Citons pour exemple que la politique d’éradication de pavot orchestrée par le gouvernement est plus forte sur une exploitation agricole si celle-ci se situe près du bazar et donc des bureaux du gouvernement. A contrario, les exploitations proches du bazar bénéficient plus facilement des éventuels conseils techniques des ONG dont leurs bureaux se trouvent dans la ville nouvelle.

Le croisement des facteurs « la topographie » et « le rayonnement du bazar » permettent de dégager quatre ensembles agro écologiques :

1. **Char-é-nau** : la ville nouvelle qui comprend les principales infrastructures.
2. **Les kochlaks** : les villages de la vallée « éloignés » du bazar
3. **Les villages des pentes** : situés en altitude par rapport à la vallée et difficilement accessibles par la route.
4. **Les Shewas**

Les deux derniers espaces n’ont pas pu être étudiés de façon approfondie du fait des restrictions de sécurité que nous avons évoqué dans les limites de cette étude. Ils ne sont donc pas présentés dans l’impact de la diversité géographique sur les ménages.
Annexe 14 : Le déroulement d’un mariage dans la vallée de Baharak

Le premier soir, les hommes de la famille du futur marié se rendent chez les parents de la jeune fille afin de lui offrir des vêtements pour les jours suivants, une robe verte et une robe blanche pour le dernier jour. Le deuxième jour est appelé chagui-e-hénna (mot à mot : « soir du henné »), les hommes invités par la famille du futur marié font la fête dans sa maison tandis que les femmes invitées chez la jeune fille maquillent celle-ci de henné, la coiffe et mangent ensemble chez elle. Le troisième et dernier jour est le jour qui célèbre vraiment les mariés car la jeune fille entre dans sa nouvelle maison et est donc reçue par sa nouvelle belle famille. C’est ce jour là que les deux jeunes époux peuvent se regarder officiellement et que les deux familles partagent le repas avec leur invités respectifs, hommes et femmes dans deux espaces séparés. Les hommes font la fête d’une part et ce ne sont que les hommes de la famille proche des mariées qui peuvent se rendre dans l’espace des femmes à la fin de la fête avec le cortège des époux.

Le nombre de convives peut atteindre plus de 200 personnes et la réception nécessite des quantités de riz, de viande, de thé ainsi que des ustensiles de services considérables.

Le lendemain du mariage, les amis et les proches de la famille du marié lui apportent divers cadeaux. Cette coutume appelée localement chagina veut que chaque personne porteuse d’un présent soit remerciée par un ouvrage brodé et cousu par la jeune mariée. Aujourd’hui, beaucoup de jeunes fiancées ne font que choisir le tissu et le porte chez une couturière chargée de confectionner ce trousseau de serviettes, mouchoirs, nappes.

Pendant la semaine qui suit le mariage, les femmes de la famille ou les voisines de la jeune mariée sont invitées à l'occasion de la fête de tart djami (= lit collecté). Elles viennent alors observer les premiers travaux de la nouvelle bru et sont là pour l’encourager, une expression locale dit que « c’est pour laver les cheveux de la belle mariée. »
Annexe 15 : Calcul des ratios « travail » et « terre » de la typologie du diagnostic

Cette annexe est commune avec JC. Duchier, 2006

- Le ratio « travail » : UC/UPM
  Afin de placer cette limite, il faut caractériser les familles en difficultés financières. Pour cela nous avons cherché à calculer combien de personnes peuvent faire vivre un journalier. L’activité professionnelle des journaliers est considérée comme la plus précaire car la plus instable dans le temps et la moins rémunérée. Nous considérerons que ce dernier gagne le salaire minimum de la zone, soit 150 afghanis par jour. Ce chiffre doit être modulé (première approximation) puisqu’un travailleur peut ne pas trouver de travail pendant certaines périodes. De plus (deuxième approximation), le salaire peut varier selon les travaux (150 à 300 afghanis par jour).

Il nous faut désormais évaluer les besoins journaliers d’un adulte ; on considère qu’un enfant de moins de 12 ans constitue une demi part.

Calcul du coût moyen de l’alimentation de base pour un adulte (> 12 ans) par jour (selon les saisons) :

1. Choix des aliments « de base »

Les aliments « de base » choisis sont :
- le pain (en quantité de blé)
- les pommes de terre
- le riz
- le lait
- l’huile
- le sucre
- les légumes frais
- la viande
- les noix (en hiver)

Explication du choix de ces aliments :
- Les condiments comme le sel et les oignons sont très importants dans la consommation locale mais leur coût est négligeable en comparaison des autres aliments. De plus, les quantités consommées sont difficiles à estimer car les femmes ne disent ne pas savoir combien elles en consomment.
- Les légumes frais choisis concernent les légumes en dehors des patates et des oignons. Ils ont été mis en vente au bazar de Baharak depuis 4-5 ans et sont donc consommés plus massivement par les ménages.
- Les produits laitiers autres que le lait ne font pas partie de l’alimentation de base car ils sont uniquement consommés par des ménages qui en produisent eux-mêmes ou en reçoivent comme dons. Le krout est consommé par beaucoup en hiver mais représente plus un aliment d’accompagnement (en quantité négligeable) qu’un aliment de base.
- Les légumes secs comme les pois, les lentilles, les haricots ainsi que les légumes séchés sont de même très consommés par les ménages mais sont des « condiments ». Ils sont consommés en très petite quantité et en cas de pénurie, ces aliments ne sont pas consommés.
- Les produits comme le miel, la confiture, les amandes, les fruits secs ne sont pas des aliments de base car ils sont d’abord destinés aux invités, aux occasions festives et ne sont pas consommés par les ménages les plus pauvres.
Les fruits frais sont consommés en été par la plupart des familles lorsqu’ils possèdent un jardin avec des arbres fruitiers. Les familles pauvres n’en consomment que très peu, si elles en œufs les vendent, sinon elles n’en achètent pas.

Les noix représentent entre 1 et 2 kg par mois et par adulte en hiver ce qui correspond à un coût non négligeable dans l’alimentation.

2. Calcul des quantités moyennes consommées par adulte et par mois :
(Voir les tableaux des quantités consommées par les ménages enquêtés présentés en annexe n°15)

Comme il m’a été très difficile d’obtenir des réponses en terme de quantités consommées pour les légumes et les fruits, j’ai choisi de questionner les femmes sur leur fréquence de consommation et d’estimer les quantités consommées à partir de ces fréquences de consommation pour les légumes frais et la viande :

<table>
<thead>
<tr>
<th>Fréquences</th>
<th>Codes pour mise à plat des enquêtes</th>
<th>Nombre de jours de consommation par mois</th>
<th>Portion quotidienne par adulte (kg légumes ou viande)*</th>
<th>Quantités moyennes consommées (kg/adulte/mois)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ts les jours</td>
<td>6</td>
<td>30</td>
<td>0,1</td>
<td>3</td>
</tr>
<tr>
<td>3-4 fois/semaines</td>
<td>5</td>
<td>15</td>
<td>0,1</td>
<td>1,5</td>
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<tr>
<td>2 fois/semaine</td>
<td>4</td>
<td>8</td>
<td>0,1</td>
<td>0,8</td>
</tr>
<tr>
<td>1 fois/semaine</td>
<td>3</td>
<td>4</td>
<td>0,1</td>
<td>0,4</td>
</tr>
<tr>
<td>2 fois/mois</td>
<td>2</td>
<td>2</td>
<td>0,1</td>
<td>0,2</td>
</tr>
<tr>
<td>1 fois/mois</td>
<td>1</td>
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<td>0,1</td>
<td>0,1</td>
</tr>
<tr>
<td>moins 1 fois/mois</td>
<td>0</td>
<td>0</td>
<td>0,1</td>
<td>0</td>
</tr>
</tbody>
</table>

*A partir des enquêtes et des quantités observées et pesées au cours des repas servis par AAD, on peu estimer à 100g par personne adulte une portion quotidienne de légumes ou de viande. Rares sont les familles qui en consomment plus sauf à l’occasion de fêtes ou d’invités.

Tableaux des consommations moyennes par saison de chaque aliment de base (quantités par adulte et par mois, données 2005) :

- La consommation moyenne (en Kg ou L par adulte et par mois) est calculée à partir de la moyenne des quantités relevées lors des enquêtes dans les tableaux de l’annexe n°15. Elles sont indiquées avec une précision à 100g prés.
- Les aliments sont consommés en plus ou moins grande quantité selon les saisons. Ainsi, les valeurs sont maximales (max) ou minimales (min) selon les aliments et selon les saisons. Le choix de ces optimums est issu des résultats quantitatifs (quantités consommées par aliments et par saison) des enquêtes auprès de 20 ménages de la vallée et de l’étude de la saisonnalité de l’offre du bazar de Baharak.
- Les prix varient eux aussi suivant les saisons, les prix indiqués dans les tableaux sont les prix du bazar de Baharak en 2004 et 2005. Ils sont indiqués en afghans (afs) par kilo. (50 afs = environ 1$)
### Table 17: Consommation des aliments de base maximale et minimale selon les saisons

<table>
<thead>
<tr>
<th>Aliments de base</th>
<th>Conso. été (Kg par adulte et par mois)</th>
<th>Conso. automne</th>
<th>Conso. hiver</th>
<th>Conso. Printemps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pdt</td>
<td>1,1</td>
<td>2,4</td>
<td>2,4</td>
<td>1,1</td>
</tr>
<tr>
<td>Blé</td>
<td>11,0</td>
<td>14,9</td>
<td>14,9</td>
<td>11,0</td>
</tr>
<tr>
<td>huile</td>
<td>1,1</td>
<td>1,4</td>
<td>1,4</td>
<td>1,1</td>
</tr>
<tr>
<td>Lait</td>
<td>2,3</td>
<td>0,8</td>
<td>0,8</td>
<td>2,3</td>
</tr>
<tr>
<td>légumes</td>
<td>1,8</td>
<td>1,8</td>
<td>0,8</td>
<td>0,8</td>
</tr>
<tr>
<td>viande</td>
<td>0,9</td>
<td>0,9</td>
<td>0,4</td>
<td>0,4</td>
</tr>
<tr>
<td>sucre</td>
<td>0,5</td>
<td>0,8</td>
<td>0,8</td>
<td>0,5</td>
</tr>
<tr>
<td>noix</td>
<td>0,0</td>
<td>0,0</td>
<td>0,8</td>
<td>0,0</td>
</tr>
<tr>
<td>Riz</td>
<td>3,8</td>
<td>3,8</td>
<td>2,2</td>
<td>2,2</td>
</tr>
<tr>
<td>total</td>
<td>1,9</td>
<td>2,2</td>
<td>2,0</td>
<td>1,6</td>
</tr>
</tbody>
</table>

### Table 18: Tableau des coûts de l’alimentation de base moyenne selon les saisons

<table>
<thead>
<tr>
<th>Aliments de base</th>
<th>prix été (Afs/kg)</th>
<th>prix automne</th>
<th>prix hiver</th>
<th>prix printemps</th>
<th>coût été (par adulte et par jour)</th>
<th>coût automne</th>
<th>coût hiver</th>
<th>coût printemps</th>
</tr>
</thead>
<tbody>
<tr>
<td>pdt</td>
<td>11,50</td>
<td>7,00</td>
<td>7,00</td>
<td>17,00</td>
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<tr>
<td>Blé</td>
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<td>11,50</td>
<td>14,30</td>
<td>14,30</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>5</td>
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<tr>
<td>huile</td>
<td>50,00</td>
<td>50,00</td>
<td>50,00</td>
<td>50,00</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>lait</td>
<td>25,00</td>
<td>50,00</td>
<td>50,00</td>
<td>25,00</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>légumes</td>
<td>40,00</td>
<td>40,00</td>
<td>40,00</td>
<td>40,00</td>
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<td>viande</td>
<td>150,00</td>
<td>150,00</td>
<td>200,00</td>
<td>200,00</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>sucre</td>
<td>30,00</td>
<td>30,00</td>
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<td>30,00</td>
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<td>1</td>
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<td>1</td>
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<td>60,00</td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Riz</td>
<td>28,50</td>
<td>28,50</td>
<td>43,00</td>
<td>28,50</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Total des coûts par mois (Afs/adulte/jour)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19</td>
<td>21</td>
<td>20</td>
<td>16</td>
</tr>
</tbody>
</table>
Chart 12: Coûts de l’alimentation de base selon les saisons (données 2005, Baharak)

<table>
<thead>
<tr>
<th>Saisons</th>
<th>Coûts (afg/adulte/jour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>été</td>
<td>20</td>
</tr>
<tr>
<td>automne</td>
<td>21</td>
</tr>
<tr>
<td>hiver</td>
<td>19</td>
</tr>
<tr>
<td>printemps</td>
<td>16</td>
</tr>
</tbody>
</table>

L’objectif de ce graphique est d’estimer combien d’argent une personne de plus de 12 ans à besoin chaque jour pour se nourrir avec les aliments « de base ».

On remarque que ces besoins sont en moyenne supérieurs en hiver et au printemps ce qui confirme qu’à cette période les problèmes d’argent sont encore plus grands.

En s’appuyant sur ces enquêtes alimentaires, un adulte consommerait donc de 17 à 23 afs de nourriture par jour. La variation illustre les différence entre les saisons : l’hiver, il faut près de 18 afs pour nourrir une personne par jour tandis que l’été, il n’en faut que 23.

En plus des aliments, l’achat de combustible est indispensable à la consommation alimentaire d’un adulte. Les quantités de combustible ne sont pas vraiment proportionnelles au nombre de personnes, il s’agit de dépenses fixes qu’on estime entre 50 et 100 afs par jour (voir annexe sur les combustibles n°16).

Trois adultes consommeraient (aliments et combustible compris) donc entre 100 et 180 afs par jour ce qui correspond au salaire journalier d’un homme à Baharak. Trois est le chiffre que nous retiendrons pour le ratio : un journalier peut subvenir au besoins de deux autres adultes. Le reste du salaire, s’il existe, doit permettre d’acheter vêtements, médicaments, ustensiles de cuisine,… Le ratio UC/UPM sera donc de 3. Au dessus de celui-ci, la famille peut avoir de graves difficultés à couvrir ses besoins vitaux.
• Le ratio « terre » :
Croiser le ratio « travail » avec celui du capital foncier / unité de consommation permet
 d’affiner la typologie. Il s’agit désormais de calculer le ratio CF/UC de façon pertinente.

La politique agricole de l’Afghanistan, comme l’alimentation de base est largement tournée
vers la production céréalière, en particulier le blé tendre : à Baharak, le pain représente 60 %
des aliments consommés (voir chapitre 4 sur l’alimentation de base à Baharak). L’action de
nombreuses ONG pour améliorer les rendements de cette céréale illustre son importance.
Enfin, la mentalité afghane paysanne est basée sur le blé : les surfaces sont estimées en
quantité de blé semé (1 ser équivaut à une surface sur laquelle on sème 7 kg de blé, soit
0,04 ha).

La typologie doit tenir compte de cette mentalité pour aider à la compréhension de
l’agriculture afghane. Aussi, nous nous baserons pour calculer ce second ratio sur le blé. Il
s’agit de définir la surface minimum qui permet de couvrir les besoins en blé pour un adulte.
Selon les enquêtes de terrain, un adulte consomme près de 240 kg de blé par an. Si on tient
compte du rendement moyen de la zone (35 Qx/ha), un hectare permet de nourrir 10 adultes.
Cependant, comme nous le verrons dans les chapitres suivants, les paysans cultivent
toujours le blé de façon biennales : une année blé, une année sans blé. Un hectare permet
donc de nourrir 5 personnes. 1 jerib (0,2 ha) couvre donc les besoins en blé d’un seul adulte.
Cependant, ce chiffre est à diminuer car il faut tenir compte des coûts de production fixes (25
sers par jerib) et variables (20 % de la production).

On considérera donc que pour couvrir les besoins en blé d’un adulte, il faut près 1,25 jerib.
1,25, ce sera le chiffre que nous retiendrons pour le ratio CF/UC. En dessous de ce chiffre,
le foyer ne pourra pas être autosuffisant en blé et devra s’adapter, au dessus, le foyer peut
dégager un surplus commercialisable.

Ces deux limites (3 adultes par travailleur et 1,25 jeribs par adulte) ne servent qu’à donner
une tendance qui nous est cependant indispensable pour la compréhension des stratégies
des ménages de la zone.
Annexe 16: Quantités consommées d’aliments de base pour les ménages enquêtés

Ces quantités journalières sont notamment issues de réponses sur le « rappel des 24h » pour un ménage et sur des quantités consommées au cours d’une semaine, d’une quinzaine ou même d’un mois pour les autres saisons et avec des unités de mesure locales. C’est pourquoi, la précision des valeurs présentées ici n’est que de 100g.

« Conso min » correspond aux quantités minimales consommées par le ménage, « conso max » aux quantités maximales et « conso moy » aux consommations moyennes calculées à partir des minimales et des maximales.

Les N° d’enquêtes correspondent aux n° du tableau de mise à plat de toutes les enquêtes « ménages » dans l’annexe n°11.

Les consommations sont exprimés en Kg/ mois/ adulte* avec une précision à 100g prés.

Table 19: Quantités consommées en aliments de base pour les ménages enquêtés

*adulte = homme ou femme âgé d’au moins 12 ans.

<table>
<thead>
<tr>
<th>N° enquête</th>
<th>conso min pdt</th>
<th>conso max pdt</th>
<th>conso moy pdt</th>
<th>conso min riz</th>
<th>conso max riz</th>
<th>conso moy riz</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>2,7</td>
<td>2,7</td>
<td>2,7</td>
<td>1,7</td>
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<td>1,8</td>
</tr>
<tr>
<td>31</td>
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<td>2,0</td>
<td>2,0</td>
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<td>2,2</td>
</tr>
<tr>
<td>32</td>
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</tr>
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Annexe 17: Les combustibles

Les combustibles représentent une des dépenses les plus importantes d’un ménage de la zone car le bois et le fumier sont en faible quantité vu la taille des troupeaux et l’absence de forêt. De plus, le gaz reste un combustible rarement utilisé car les villageois sont réticents à son utilisation (craindre d’explosions) et qu’il n’est pas utilisable pour la cuisine « traditionnelle ». En effet, pour faire le pain, les femmes utilisent le *tandur* qui nécessite un mélange de bois et de disques de fumier séchés. La chaleur ainsi dégagée par les braises sert aussi au réchauffement des autres aliments comme le thé, le riz, la soupe,… pourtant, si l’on compare les prix du bois et du gaz, ce dernier paraît moins cher. En effet, le tableau ci-dessous permet d’évaluer le montant des dépenses moyennes d’une famille à Baharak pour les différents combustibles.

Chaque ménage choisit le type de combustible qui est le plus abordable pour lui, le bois, le gaz ou le fumier. Mais il peut aussi utiliser au cours de l’année un peu de chaque, selon les disponibilités et les saisons. Aussi, certains ménages très pauvres n’achètent pas de combustible et se « débrouillent » par la récolte de fumier sur les chemins, au bord des rivières et par la recherche de broussailles dans les montagnes. Il s’agit donc ici de proposer une moyenne des dépenses afin de donner une tendance et non une valeur exacte !

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<td>Bois :</td>
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<td>Gaz :</td>
<td>40 afs / kg. Pour une famille (entre 5 et 10 personnes), une bouteille de 5kg fait environ 6 jours. Soit environ 2000 afs par mois/ménage ou 67 afs/jour.</td>
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<td>Fumier :</td>
<td>Prix du fumier : 280 afs/buji soit 5,6 afs/kg. Une famille moyenne (5 à 10 personnes) brûle environ 500 kg de fumier par mois. Ceci revient à un coût de 33 600 afg par an soit environ 90 afg/jour.</td>
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Pour les ménages, l’achat de blé revient à des coûts moyens de 6,3 à 10,7 afghanis entre l’été et l’hiver par adulte et par jour. Si, pour les mêmes quantités (de 0,5 à 0,75 kg/jour et par adulte) ils achetaient du pain à un boulanger leurs coûts seraient entre 14,5 et 21,5 afghanis par jour et par adulte (prix du pain à Baharak en 2005: environ 29 afghanis/kg). Ces coûts sont donc supérieurs à ceux du pain fait à domicile mais sont nettement inférieurs aux coûts induits par l’achat de combustible. Pour une famille de 5 adultes par exemple, qui ne possèdent pas d’animaux (ou seulement 1 ou 2), le coût des combustibles est entre 50 et 100 afghanis/jour (entre l’été et l’hiver), ce qui revient à un coût total (pain + combustible) de 81,5 afghanis en été et 153,5 afghanis en hiver alors que pour une famille de 5 adultes qui achéterait son pain, ces coûts se situerait entre 72,5 et 107,5 afghanis.

Les différentes discussions avec les ménages locaux montrent qu’ils cherchent à optimiser leur production en combustible et à trouver « gratuitement » du fumier et du bois. Pour cela, la confection des *tchapacks* est essentielle et constitue une des activités exclusivement féminines pendant la saison sèche. De plus, le travail des enfants est requis pour aller

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86 1 *buji* est égal à 50 kg environ
ramasser sur les terres, les chemins et les espaces pâturés (bords de rives, pentes des montagnes) les bouses de vache, les branches tombées des arbres dans les jardins, les tiges des plantes désertiques, couper les buissons,... Ainsi, la plupart des ménages pauvres parviennent tout juste à subvenir à leurs besoins en combustible. Ce point reste un facteur de vulnérabilité important pour les ménages qui doivent vendre leurs animaux pour cause de dettes ou ne peuvent les garder. De même, un ménage qui manque de main d'œuvre, notamment lorsque les enfants sont trop jeunes ou pas assez nombreuse, aura plus de mal à trouver des combustibles.

Le fumier des animaux qui pâturent dans les Shewas serait de meilleure qualité car lors de sa combustion il ne nécessite pas l'ajout de bois. Ainsi, les bouses sont partout ramassées dans les estives et certaines familles pauvres préfèrent garder elles-mêmes leur 2-3 vaches dans les Shewas pour conserver le fumier pour l'hiver plutôt que d'envoyer leur bêtes avec un gardien qui le gardera pour sa propre famille ou le vendra.
Annexe 18 : Les différents types de « crédit » en zone rurale en Afghanistan

La notion de prêt est courante mais celle d’« intérêt » est mal comprise. En effet, les crédits en argent sont moins fréquents que ceux en nature et les femmes ne savent pas exactement quels en sont les montants. Souvent elles parlent de prêt à 0%, ce qui est en accord avec la loi coranique mais semble peu probable sur le marché surtout pour les emprunts de blé en saison où les prix sont les plus hauts. C’est surtout au début du printemps que les crédits de blé sont courants car les greniers sont vides et l’argent difficile à trouver après l’hiver souvent chômé pour les hommes. De plus, les crédits en aliments sont plus souvent fait à du voisinage, de la famille éloignée qui ne demanderait pas d’intérêt. Au moment du Ramadan, comme les besoins en argent sont très importants, les femmes disent que leur mari emprunte à leurs proches de l’argent pour rembourser dans les mois qui suivent (2 ou 3 mois).

Trois types de crédits :
• « Reciprocity » : prêt d’un bien ou d’argent fait entre personnes qui se fréquentent souvent (voisinage, famille proche) basé sur une entente orale d’un remboursement sur une échéance plus ou moins longue (quelques jours à plus de six mois). Il n’y a pas d’intérêt et le débiteur peut devenir créditeur et inversement régulièrement. Très fréquemment utilisé en période de soudure (fin de l’hiver).
• « Credit » : prêt d’un bien ou d’argent entre un créditeur et un mécène, souvent un commerçant ou un riche propriétaire. L’accord est souvent oral mais implique un remboursement assez rapide (au maximum 1 mois) sinon il comporte un intérêt que le débiteur peut fixer à sa guise.
• « Gift » : don fait à une personne sans attente de remboursement.

87 D’après Floortje (AREU), Credit and Debt in Rural Afghanistan, Concept Note and Literature Review, September 2005.
Annexe 19 : Tableau des principaux légumes et fruits de Baharak

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<thead>
<tr>
<th>Légumes et fruits produits sur la zone</th>
<th>Caractéristiques agro éconmiques</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Les oignons</strong></td>
<td>10 sers (70 Kg) semés donnent 200 sers récoltés. En pleine saison (été), le prix est bas, 30-60 afs/ser (cet automne, 50 afs/ser, très gros oignons) mais en hiver et au printemps, pour les gros oignons c’est entre 150 et 300afs/ser. La pièce (bouquet de petits oignons vendus au printemps et en début d’été) = 5 afs. Les plus petits sont séchés, les beaux sont gardés en frais. Les oignons sont mangés frais ou cuisinés avec soupe. Les gros oignons sont récoltés en décembre.</td>
</tr>
<tr>
<td><strong>L’ail</strong></td>
<td>Semé au début du printemps et récolté en mai-juin. Il est consommé comme aromate comme le sel, l’origan (séché).</td>
</tr>
<tr>
<td><strong>Les tomates</strong></td>
<td>Récolte de Sombala (mi-août) à Qaws (mi-décembre). Les tomates locales sont vendues en pleine saison de 50 afs/ser alors que les variétés améliorées sont vendues 80-90 afs/ser. 1 ser de tomates donne 1 pound (0,5 Kg) de poudre séchée. 1 pound= 20-50 afs. Il faut 10-12 jours pour le séchage. Vente presque toujours en sec car problèmes de transports et prix en frais « peu intéressants », 1 ser=30 afs.</td>
</tr>
<tr>
<td><strong>Les navets</strong></td>
<td>Semés après récolte des concombre en mi-juillet (Asad) et récoltés en Qaws (décembre). En hiver, 40 afs/kg.</td>
</tr>
<tr>
<td><strong>Les carottes</strong></td>
<td>Semis en Jawza (mi-mai) ou après la récolte du pavot (car le sol est « propre » et déjà enrichi en fertilisants), récolte en automne.</td>
</tr>
<tr>
<td><strong>Les pommes de terre</strong></td>
<td>Celles qui viennent de Shohada ou des Shewas sont dites « meilleures », elles coûtent autour de 70 afs/ser. En été, 120 afs/ser, en hiver 70-90 afs/ser ou 50 afs/ser et au printemps 150 afs/ser. La récolte est en Mizan (mi-septembre) mais certains commencent à en récolter tous les jours dès Jawza (mi-mai).</td>
</tr>
<tr>
<td><strong>Le piment</strong></td>
<td>1 piment (vendu à la pièce) = 1 afs ou 0,5 kg= 50 afs (piment rouge). Séchage du piment vert à l’ombre (car donne une meilleure qualité), séche pendant 2/3 jours.</td>
</tr>
<tr>
<td><strong>Les haricots verts</strong></td>
<td>Les semences locales seraient meilleures que celles données par les ONG et achetées à Kaboul. Elles permettraient en effet une récolte plus abondante durant les mois de juillet et août. Si la récolte est bonne, les haricots sont séchés pour être consommés en hiver.</td>
</tr>
<tr>
<td><strong>L’origan</strong></td>
<td>Séchage au soleil pendant 2 jours.</td>
</tr>
<tr>
<td><strong>Les choux-fleurs et les choux</strong></td>
<td>Semis en Sawr (mi-avril) et récolte à la fin de Asad (mi-août). Beaucoup de pathologies pour les choux-fleurs (mauvaise croissance).</td>
</tr>
<tr>
<td><strong>Les pastèques et melons d’eau</strong></td>
<td>Semés après la récolte de blé ou orge, en Saratan (mi-juin). Les premières viennent de Faizâbâd ou de Kunduz, 120-200 afs/ser (dépend des arrivages) puis quand celles produites sur la zone sont prêtées, les prix chutent à 50-60 afs/ser, pour remonter en fin d’automne à 150-170 afs/ser.</td>
</tr>
<tr>
<td><strong>Amandes</strong></td>
<td>En été 130 afg/pound (avec la coque).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Différentes variétés :</th>
</tr>
</thead>
<tbody>
<tr>
<td>- <strong>Ralrsh</strong> : ce sont les pommes d’été (récoltées mi-juillet), rouges et blanches, vendues autour de 100 afs/ser. Elles se conservent mal et sont rarement séchées.</td>
</tr>
<tr>
<td>- <strong>Golamadi</strong></td>
</tr>
<tr>
<td>- <strong>Saousak</strong> (récoltées mi-août) : pommes vertes de fin d’été, peu appréciées car « âpres », elles sont vendues peu chères : entre 50 et 80 afs/ser.</td>
</tr>
</tbody>
</table>

**Les pommes** :


**Les cerises** :

Annexe 20 : Les Shewas

Cette annexe a pu être réalisée grâce à la rencontre d’éleveurs dans la vallée mais surtout d’un séjour de trois jours (mi-aôut) dans les villages Shewashis, seule avec la famille de mon interprète à l’occasion des campagnes électorales pour les parlementaires de septembre 2005.

La rapidité de cette expérience ne m’a pas permis d’analyser dans le détail le fonctionnement des habitants de ces hauts pâturages et en particulier le rôle des femmes, qui d’ailleurs ne parlaient pas le dari mais un dialecte local. J’ai donc réalisé quelques enquêtes sous forme de discussions traduites en deux temps, par la mère de mon interprète (candidat aux élections) et sa fille.

Ces pâturages d’altitude (ailogs) compris entre 2700 et 3000 m sont situés dans la direction du district de Sheghnan au nord-est de Baharak. Les plus proches de la vallée de Baharak se situent à une bonne journée de marche. Ces pâturages bénéficient d’une végétation spontanée composée surtout de graminées. Au cours des mois avril, mai et juin, cette végétation se développe non seulement grâce aux pluies mais aussi grâce à la fonte des neiges qui recouvrent abondamment ces espaces pendant les mois d’hiver (de décembre à mars).

Depuis quatre ans, une piste carrossable relie la route principale de Faizabad à Baharak à ces estives et jusqu’à ce district voisin ; elle a été construite par les ONGs AAD et AKDN. Ainsi, les véhicules à moteur peuvent depuis peu, en minimum deux heures, ravitailler certains villages Shewachis, habités toute l’année, ainsi que les campements semi-nomades des Kuchis (étrangers au Badakhshan) et Badakhshis (du Badakhshan).

- La tenure des terres :
  Du fait de l’occupation des terres des Shewas par trois groupes très différents d’éleveurs, la tenure des terres ce cet espace est particulièrement complexe et conflictuelle. En effet, l’histoire a, depuis près d’un siècle, accentué l’opposition de ces populations qui doivent se partager un même territoire de pâturage.
  - Les Kandaharis ou Kuchis : Durant le règne de Naher Chah, autour de 1930, des papiers officiels donnant le droit d’accès aux pâturages des Shewas ont été donné à de nombreux Pachtoones venus de provinces autres que le Badakhshan. Depuis, ils viennent avec leurs troupeaux de grandes tailles moutons, chevaux, chèvres et chameaux car la légitimité de leur occupation n’est pas contestée par le gouvernement afghan. Ces populations d’agro-éleveurs, possèdent des terres irriguées dans leurs provinces et sont souvent mal vus dans le Badakhshan. Ils sont craints des autres éleveurs par leur réputation d’hommes riches, armés et puissants. Ils ne restent dans les Shewas que trois mois et changent plusieurs fois leur campement de place en fonction de la végétation disponible.
  - Les Shewahis : ces agro-éleveurs sont originaires, pour la plupart, du district de Sheghnan et sont venus, depuis plusieurs générations, construire des maisons et cultiver la terre des Shewas car la pression foncière du Sheghnan ne leur permettait pas de subvenir aux besoins de leur famille. Pour ceux qui s’y sont installés depuis plus de 100 ans, ils n’ont pas acheté leurs terres qui n’appartenaient alors à personne et étaient désertiques. Mais depuis, l’arrivée des Kandaharis et l’augmentation des éleveurs sur un même espace a créé une compétition des espaces de pâturages et ils ont du justifier de leurs titres de propriété. C’est à la fin de la guerre contre les soviétiques que des Mudjahidins influents, commandants dans le Badakhshan, auraient distribué des titres de

88 Shewashis : habitants des Shewas toute l’année, de religion ismaélienne (courant chiite).
89 Le Sheghnan serait une zone de vallées encaissées un peu plus basse que les Shewas, avec la possibilité d’y cultiver des fruits mais avec des surfaces cultivables de taille aujourd’hui limitée.
propriété aux Shewashis, avec leurs noms et leurs surfaces cultivées et pâturables. 
Durant ces années de conflits, les éleveurs transhumants d’autres provinces étaient 
absents et les Shewashis ont pu acquérir une certaine reconnaissance des pouvoirs 
locaux. Aujourd’hui, la pression foncière grandissante oblige beaucoup de ces habitants 
à envoyer leurs bêtes dans d’autres estives d’encore plus hautes altitudes, avec des 
femmes et des enfants pour la transformation laitière, de la même façon que les 
Baharakis.

- Les Baharakis : La tenure de leurs pâturages est contrôlée par le gouvernement de 
chaque district et ils n’ont accès qu’à une partie des Shewas, la zone la plus proche des 
fonds de vallées de Baharak et de vallées voisines. Chaque village de la vallée de 
Baharak à donc acquis un espace précis de pâture et ses éleveurs transhumants se 
regroupent entre habitants originaires du même village.

Les échanges Shewas-Vallée de Baharak :
Les ailoqs et les vallées de Baharak sont fortement liés par leurs systèmes agraires 
complémentaires. En effet, les éleveurs de la vallée envoient leurs bêtes (bovins, caprins et 
ovins) pâturer dans les estives entre les mois de mai à octobre lorsque ces pâturages 
d’altitude ne sont pas recouverts par la neige et ont suffisamment d’herbe pour nourrir les 
animaux. Les ruminants y transhument trois ou quatre mois de juin à septembre, souvent 
avec une ou plusieurs femmes pour la transformation laitière selon la taille des troupeaux. 
Beaucoup d’éleveurs de la vallée regroupent leurs bêtes et les louent à un gardien qu’ils 
payent en blé ou en argent. Depuis les deux dernières années le coût de cette location est 
en forte augmentation du fait des hausses des salaires : production de pavot dans la vallée 
mais aussi pression foncière croissante des espaces pâturables entre Baharakis90 et 
Kandaharis91. Les éleveurs de la vallée possèdent des titres de droit de pâturage, souvent 
um par village, pour des emplacements précis dans les estives. Ils regroupent ainsi leurs 
tentes en « villages ». C’est surtout des femmes qui y séjournent avec des enfants, 
hommes viennent les aider à s’installer et à se déplacer trois ou quatre fois dans la saison en 
fonction de la disponibilité en herbe. Les bovins sont laissées en pâture libre et viennent près 
des tentes pour la nuit. Par contre, pour les troupeaux d’ovins et de caprins de plus d’une 
dizaine de têtes, des gardiens conduisent les animaux qui ne sont pas utilisés pour le lait. 
Ces petits ruminants peuvent rester près de 8 mois dans les pâturages d’altitude et ne 
redescendent dans la vallée que pour les mois les plus froids, entre décembre et mars. Ils 
logent alors dans des emplacements spécifiques appelés quatanes (espaces emmurés sur 
le bas des pentes).

En plus de la transhumance des animaux de la vallée, le stockage du fumier constitue un 
autre échange « estives-vallée ». Les bouses produites dans les pâturages sont nécessaires 
al la fumure des terres des fonds de vallées mais surtout comme combustible. D’ailleurs, de 
plus en plus d’hommes venus de la vallée en voiture ou en âne viennent chercher des 
bouses dans les estives pour les revendre aux habitants de la vallée. Ce commerce s’est 
développé depuis la construction de la route et l’augmentation de la population de la vallée.

Les échanges « estives-vallée » concernent enfin les liens entre les populations des villages 
Shewashis et les Baharakis. Parfois, les agro éleveurs d’altitude prêtent une ou plusieurs 
vaches à ceux des vallées pour l’hiver. Ces derniers pourront ainsi la nourrir avec du 
fourrage sec produit dans la vallée et bénéficier du lait à cette période. De même, des 
céréales, des fruits et des légumes produits sur les terres irriguées des fonds de vallées 
servent à l’alimentation des populations d’altitude, qu’elles soit Baharakis ou Shewashis.
Un climat rude qui limite la production agricole : L'espace géographique des Shewas est marqué par deux saisons principales : l'été et l'hiver. En effet, une épaisse couche de neige recouvre ces montagnes entre 6 et 7 mois par an, de novembre à avril. Les mois de mai et d'octobre marquent deux courtes saisons intermédiaires souvent pluvieuses et fraîches. L'été est sec et chaud pendant la journée, les températures peuvent atteindre 25-30°C au soleil.

La végétation connaît donc une croissance limitée et aucune culture d'automne n'est possible du fait des trop basses températures de l'hiver. Même l'été (de juin à septembre), les températures nocturnes peuvent descendre prés de 0 et empêchent la croissance des cultures pérennes et maraîchères. Il n'y a d'ailleurs aucune forêt ou arbustes et seuls quelques arbres récemment plantés pour le bois parviennent à pousser proche des habitations. En 2005, l'hiver a été particulièrement rigoureux avec des mètres de neige jusqu’en avril et les pluies printanières sont arrivées tardivement suivies peu après d'orages de grêles alors que les inondations faisaient rage dans les vallées de plus basses altitudes. Ceci a retardé les semis de blé au mois de juin et restreint dramatiquement la croissance des céréales à 3-4 mois avant les premières neiges de l'hiver. Les moissons ont d’ailleurs eu lieu sous les premières neiges, au mois d’octobre dernier.

L'agriculture des Shewashis :

Autour des habitations Shewashis et sur les pentes proches des villages, les terres sont cultivées en céréales et en légumineuses. Peu de ces terres sont irriguées, seulement quelques parcelles proches des cours d'eau et sur des terrains peu pentus.

Le blé et l'orge sont davantage cultivés sur des lalmis (terres pluviales) et sont les cultures dominantes (en surface) et les céréales à la base de l'alimentation locale. Les rotations alternent le plus souvent un an de jachère (avec ou sans labour) entre une culture de blé et une culture d'orge. La plupart des agro éleveurs cultivent encore aujourd'hui autant de blé que d'orge sur leurs terres et considèrent le blé comme une céréale plus « noble » et dont la farine est d'abord réservée aux invités. Souvent, ils manquent de semences de blé, gardées de la récolte précédente ou grains achetés, pour ne semer que du blé. De plus, l'orge est une céréale plus rustique et résiste donc mieux aux intempéries. En moyenne, le blé est cultivé une fois tous les quatre ans sur la même parcelle. Le blé est semé au printemps (mai) après un seul passage d'araire et de plane et est récolté en septembre. Les variétés de blé sont à la fois « locales » comme le « kalgondom » et améliorées comme le « buludân » et l’« omu ». Ces dernières ont été distribuées depuis 5 ou 6 ans par l'ONG AKDN qui a un office dans les Shewas. Leur croissance est plus rapide que les blés « locaux » mais nécessite plus de fertilisants et donc l'achat de plus d'intrants. Les rendements des variétés locales peuvent atteindre de 30 à 60 sers par jerib sur des terres pluviales (près du tiers des rendements de la vallée sur des terres irriguées) pour une bonne année (pluie en avril-mai, soleil et temps sec en été). Mais, pour une mauvaise année (pluies tardives et semis en juin), les rendements ne dépassent pas 12 sers par jerib soit le double de la quantité de grains semés.

Les légumineuses, la luzerne et le pois (mushang ou patok) sont destinées à l'alimentation en fourrages des animaux et la farine de pois est couramment consommée par les humains. Les animaux servent à fertiliser ces terres, quoique le fumier serve aujourd’hui surtout de combustible, les ânes et les chevaux sont utilisés comme animaux de bât et les bœufs au travail du sol.

Sur les petites parcelles irriguées, quelques locaux font pousser des pommes de terres et du tabac mais la rigueur du climat empêche de faire pousser plus de cultures maraîchères.

Les quantités de fertilisants chimiques varient beaucoup d’une exploitation à l’autre selon qu’elle utilise ou non des variétés améliorées et qu’elle a reçu des conseils techniques d’une
ONG. Ceux qui ont bénéficié de paquets techniques en semences et fertilisants amendent leurs terres d'environ 25 kg de DAP au moment du semis et parfois d'urée, un mois après le semis. Les autres continuent d'amender leurs parcelles en matière organique d'origine animale au moment du travail du sol.

- **Les rendements en « panification » :**
  Beaucoup de femmes disent qu'au goût, le pain fait avec de la farine issue de blé sur les terres pluviales est meilleur. Néanmoins, ce blé souvent d'origine « locale » donnerait une farine plus difficile à travailler pour le pain, parfois donne une pâte qui ne colle pas au tandur et qui s'étalerait moins bien. « Alors que l'on peut faire une quinzaine de pain avec 1 seer de farine achetée au bazar de Baharak, on ne peut en faire que 10 avec notre farine des *lalmis.* » De plus, la farine locale des blés des terres pluviales est souvent mélangée avec la farine d'orge, culture plus rustique, et donne un mélange difficile à panifier et « plus dur à manger ».

- **L'élevage et la transformation de ses produits :**
  L'élevage des fermes *shewashis* est à la fois destiné à la production de fumier, à la vente d'animaux en vie pour la viande et à la fabrication de produits laitiers et artisanaux auto-consommés ou vendus.

  Comme dans la vallée, les femmes sont chargées du séchage du fumier et de leur utilisation comme combustible ainsi que de la transformation des produits laitiers et des activités de couture et de tissage. Elles filent et tricotent la laine, tissent les poils de chèvre pour fabriquer des chaussons, des gants, des manteaux (en laine bouillie), des tapis,...qui sont rarement vendus, sauf aux éventuels voyageurs de passage ou au *Kuchis.*

- **L'alimentation des Shewashis :**
  Une alimentation peu diversifiée et « pauvre » en vitamines :
  - Presque pas de légumes ni de fruits frais
  - Le pain, à la base de l'alimentation (trois fois par jour avec du thé)
  - Les aliments, achetés dans les vallées : le thé, le sucre, le sel, l'huile et pour les plus aisés, du riz, des noix ou autres fruits secs.
  - L'aide alimentaire : lait à l'école de FOCUS. (AKDN durant la sécheresse)
Annexe 21 : Citations de « Les femmes afghanes »

Source : I. Delloye, 2001

- L’omniprésence de la tradition (p.35) :

« La religion a toujours imprégné la vie quotidienne afghane et, dans cette société, ce qui se fait et ne se fait pas est parfaitement connu de tous. Garçons et filles naissent et grandissent selon un rituel précis. Des aliments pour chaque moment de la vie, des jeux et des réjouissances prévues pour chaque fête. On y vivait au rythme de la tradition. La guerre a déchiré les familles, les villages et les clans, mais il semble que même en exil, les Afghans aient à cœur de maintenir cette tradition, dans l’éducation des enfants, dans les relations entre hommes et femmes, dans le respect de ce qui est permis et de ce qui ne l’est pas. »

- La place de la femme (p.37) :

« La fille est à son père et à ses frères avant d’être à un mari. Elle devient alors son bien et il peut en disposer comme il l’entend. »

- La succession des terres (d’après le Saint Coran, sourate 4, verset 11 et 12) :

« Au fils, une part équivalente à celle de deux filles. S’il n’y a que des filles, alors deux tiers de ce que laisse le défunt, s’il n’en a qu’une à elle la moitié. Quant aux parents du défunt, à chacun d’eux, le sixième de ce qu’il laisse s’il a un enfant au moins, s’il n’en a pas, à sa mère, le tiers et les deux tiers au père. S’il a des frères, à la mère le sixième, et l’autre sixième au frère. Si c’est la femme qui meurt, à l’homme ce que laisse sa ou ces épouses si elles n’ont pas d’enfant, si elles en ont, alors le quart au mari. Si l’homme meurt et qu’il n’a pas d’enfant, un quart à la ou les femmes, si il a des enfants le huitième à la ou les femmes. Sans héritier direct, aux frères et sœurs, à chacun d’eux un sixième jusqu’à un tiers maximum pour tous les frères ou toutes les sœurs. »

- Le mariage (p.45) :

« La vie d’une femme afghane tourne autour d’un événement majeur : le mariage. Elle y est préparée, elle le subit souvent puis lui donne un sens par la maternité. »

« Les parents sont rarement joyeux de la venue d’une fille, car celle-ci naît pour enrichir une autre maison alors qu’un fils marié restera chez son père, renforçant le patrimoine qu’il devra protéger. »

« Il y a traditionnellement un grand nombre de mariages consanguins en Afghanistan. Ce sont des alliances bénies du ciel, dit-on. La terre, bien sacré, restera dans la famille au moment de l’héritage ; plus la famille est forte, mieux l’on vit ; parfois même la survie du groupe dépend de ces alliances à l’intérieur d’une même famille. »

« La dot est à la charge de la famille du garçon, et parfois la première bru a « coûté » si cher que le beau-père n’a plus grand-chose à donner pour marier son second fils : il donne une de ses filles en échange à la famille du fiancé. »

- La maternité (p.56) :

« La femme en tant qu’objet sexuel est méprisée ; la mère seule est digne de respect. Par conséquent une femme sans enfant n’a pas de raison d’être, parce qu’elle ne remplit pas son rôle et peut craindre la répudiation qui la laissera démunie et sans espoir de mariage. »
• Le travail, l'exemple des boulangères (p.62-63) :

« En général on cuit le pain chez soi ; dans chaque maison il a en principe un tandour, ce four à pain fait d'un cratère en terre cuite situé dans un trou du sol. À la campagne, on s'organise entre voisines pour cuire un jour chez l'une, un jour chez l'autre. Mais en ville, les familles se morcellent et les femmes sont plus isolées. Elles ont donc été amenées, quand elles des quartiers éloignés du bazar qui est tenu par les hommes à créer des boulangeries de femmes. […] la journée commence avant le lever du soleil, pour allumer le four qu’elles alimenterons de bois jusqu’au soir. Un pain vaut deux afghanis chez le boulanger, au bazar. Le salaire de ces femmes ne pouvait être calculé selon les mêmes critères puisque la pâte est fournie par les clients.[…] Il leur faut cuire environ mille huit cents pains par semaine pour rentrer dans leur frais. »

• La cuisine et les symboles donnés aux aliments (p.84, 88):

- Les aliments « chauds » sont : thé noir, sucre, huile, ail, poivre, viande, riz long, graisse, œufs, aubergines, mûres, raisins secs, jujubes, amandes, pistaches, noix ou noyaux de fruits, grenades et raisins mûrs, menthe, anis, cardamome, safran,…
- Les aliments « froids » sont : autres fruits comme les raisins verts, citrons et oranges, pommes de terre, concombres, laitues, carottes, riz rond, sucre candi, maïs, lait de vache, yaourt, petit lait, fromage sec de vache.

Des aliments de fête :
- *Bolâni* : grands pains cuits à la graisse et fourrés de légumes.
- *Âshak* : sorte de macaronis très légers dans une sauce pimentée à base de fromage maigre.
- *Qâbouli* : riz afghan préparé de façon particulière.
- *Yakni* : viande bouillie que l'on mange avec le riz.
### Annexe 22 : Tableau des principaux plats cuisinés de la zone

<table>
<thead>
<tr>
<th>Les plats cuisinés</th>
<th>Préparations et commentaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Les « mantus »</td>
<td>Seraient arrivés avec les migrants de Kaboul et originaires d’Asie, sorte de ravioles (pâtes) fourrées à la viande et aux oignons. Cuit à la vapeur. Vendu au bazar à l’unité (3afs/pièce).</td>
</tr>
<tr>
<td>Le « palau »</td>
<td>Riz fris agrémenté de raisin secs, de légumes, d’épices et parfois accompagné de viande bouillie. (vient de Kaboul).</td>
</tr>
<tr>
<td>Le « dalda »</td>
<td>Mélange de pois, de lentilles et de viande. Cuisiné plutôt en hiver.</td>
</tr>
<tr>
<td>Les « bolonis »</td>
<td>Recette ancienne sur la zone, sorte de beignets fourrés aux patates ou légumes verts et fris.</td>
</tr>
<tr>
<td>Les brochettes de viande</td>
<td>Appelés « stick » et consommés en kebab, cette façon de cuire la viande à la braise et en petits morceaux est récente sur la zone (fin de la guerre).</td>
</tr>
<tr>
<td>Les « kotcha » (cookies)</td>
<td>Farine tamisée, ajout de levure et d’huile bouillie ainsi que d’un peu d’eau. Ensuite, façonner de petits gâteaux comme des sablés décorés à l’aide de lames de couteaux. Cuisson dans le tandur pendant 5 minutes. Les femmes peuvent cuire une centaine dans le même four. Le blé blanc (grains plus clairs) serait mieux pour ces gâteaux ainsi qu’une huile peu colorée (comme la margarine et pas celle du pavot). Beaucoup de femmes en font, comme cadeau ou pour recevoir. Ils peuvent se garder un mois si assez d’huile.</td>
</tr>
<tr>
<td>Le « kroutâb » et le « durnagôl »</td>
<td><em>krout</em> + eau + oignons + huile ou beurre chaud (plat d’hiver car très « chaud »). Pour le « durnagôl » (recette pachtoune), rajouter des tomates séchées, de l’ail et un peu de farine.</td>
</tr>
<tr>
<td>Le « kotchikrout »</td>
<td>Riz+lentilles+<em>krout</em>+beurre liquide. Cette recette est assez peu répandue.</td>
</tr>
<tr>
<td>Le « rulaangur »</td>
<td>Mélange de raisins verts (petits raisins locaux) broyés avec du sel et de l’ail et consommé comme condiment avec le poisson ou les pommes de terres.</td>
</tr>
<tr>
<td>La « nochasta »</td>
<td>Sorte de béchamel locale avec du lait et de la farine. Cuisinée pour les fêtes et les invités et mangée avec du pain.</td>
</tr>
<tr>
<td>Les bocaux de légumes au vinaigre</td>
<td>« otsor » : Carottes, courgettes, aubergines, navet (fin automne)</td>
</tr>
<tr>
<td></td>
<td>« tchagni » : tomates vertes, ail et piment.</td>
</tr>
<tr>
<td>Le « shula »</td>
<td>Mélange de riz rond avec du beurre, du sucre ou du sel, des pois des pdt et servi à la cuillère ou avec du lait. cette recette est très ancienne et était surtout répandue avant les années 80, lorsqu’il y avait du riz rond cultivé dans la vallée.</td>
</tr>
<tr>
<td>Le « cake-xanagi »</td>
<td>« Gateau-maison » fait dans les familles aisées pour le Ramadan, les invités ou des mariages avec des fruits secs (vient de Kaboul et d’Iran).</td>
</tr>
<tr>
<td>Les « kaïmekonis »</td>
<td>Sorte de beignets semblables au « bolonis » mais fourrés avec une pâte à la crème de lait, servis avec du thé comme un gâteau mais pas sucré.</td>
</tr>
<tr>
<td>L’ « alloua »</td>
<td>Sorte de nougat cuisiné pour l’Eid du Ramadan. Cette préparation est très longue et faite pendant le jour et la nuit du dernier jour du Ramadan (environ 4h), on peut y mélanger des noix, des graines de sésame, du sucre,... il existe deux types d’« alloua » : blanc et noir, le noir est moins festif car la farine utilisée est plus grossière, il est donc mangé plus souvent et par les ménages les moins aisés.</td>
</tr>
</tbody>
</table>
Annexe 23 : Evolution historique de l’aide alimentaire en Afghanistan

<table>
<thead>
<tr>
<th>Année</th>
<th>Événement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988-92</td>
<td>Réfugié la base dans le nord du Pakistan, les régions de montagne, où les convois illégaux, interventions médicales.</td>
</tr>
<tr>
<td>1992-95</td>
<td>Guerre civile dans le nord du Pakistan, réfugié la base dans le nord du Pakistan. L'organisation de la nourriture et des biens de base.</td>
</tr>
<tr>
<td>1995</td>
<td>Arrivée de nombreux agents d'aide, agences de coordination des besoins en Afghanistan.</td>
</tr>
<tr>
<td>1996-2001</td>
<td>Guerre civile, crise humanitaire dans certaines zones de Kaboul, mais instable dans de nombreuses zones, notamment dans le sud.</td>
</tr>
</tbody>
</table>

Source: C Dufour, 2005
Annexe 24 : Apports énergétique de l'alimentation de « base » des habitants de la vallée

Le tableau suivant présente les apports énergétiques des aliments de base (voir annexe 15 sur le choix de ces aliments) en fonction des consommations « minimales » et « maximales » de chacun de ces aliments pour la moyenne des enquêtes réalisées. Ces quantités consommées sont présentées en annexe 15 par mois du fait de la faible précision des réponses des ménages enquêtés. Afin de déterminer les apports énergétiques journaliers pour un adulte, il faut ramener ces quantités à un jour : l'ensemble des consommations ont donc été divisées par 30 et ramenées à une précision à 100 g près.

Les fiches de la FAO92 correspondent à des tableaux donnant la valeur énergétique apportée par différents aliments, produits et/ou consommés en Afghanistan. Pour les légumes, chaque variété possède sa valeur calorifique, j'ai donc choisi la valeur de l'oignon qui représente le légume le plus couramment consommé par les ménages de la zone. Le changement de cette valeur n'a de toute façon que peu d'incidence sur le résultat final car les légumes sont consommés en très faible quantité si l'on compare aux autres aliments. De même, pour la viande, la valeur retenue est celle de la viande de bœuf, la plus vendue sur le bazar de Baharak.

Table 20: Apport énergétique de l'alimentation de base des ménages enquêtés

<table>
<thead>
<tr>
<th>aliments de base</th>
<th>n° pr fiches FAO</th>
<th>kcal/100g aliments</th>
<th>kcal/kg aliments</th>
<th>conso min (kg/adulte/mois)</th>
<th>conso max</th>
<th>conso moy</th>
<th>Kcal/conso min</th>
<th>Kcal/conso max</th>
<th>Kcal/conso moy</th>
</tr>
</thead>
<tbody>
<tr>
<td>pdt</td>
<td>75</td>
<td>81</td>
<td>810</td>
<td>1,1</td>
<td>2,4</td>
<td>1,7</td>
<td>872</td>
<td>1928</td>
<td>1400</td>
</tr>
<tr>
<td>pain</td>
<td>18</td>
<td>369</td>
<td>3690</td>
<td>11,0</td>
<td>14,9</td>
<td>12,9</td>
<td>40430</td>
<td>54981</td>
<td>47706</td>
</tr>
<tr>
<td>huile</td>
<td>181</td>
<td>887</td>
<td>8870</td>
<td>1,1</td>
<td>1,4</td>
<td>1,2</td>
<td>9668</td>
<td>12241</td>
<td>10954</td>
</tr>
<tr>
<td>lait</td>
<td>138</td>
<td>66</td>
<td>660</td>
<td>0,8</td>
<td>2,3</td>
<td>1,5</td>
<td>521</td>
<td>1518</td>
<td>1020</td>
</tr>
<tr>
<td>légumes</td>
<td>69</td>
<td>46</td>
<td>460</td>
<td>0,8</td>
<td>1,8</td>
<td>1,3</td>
<td>347</td>
<td>842</td>
<td>595</td>
</tr>
<tr>
<td>viande</td>
<td>145</td>
<td>240</td>
<td>2400</td>
<td>0,4</td>
<td>0,9</td>
<td>0,6</td>
<td>876</td>
<td>2040</td>
<td>1458</td>
</tr>
<tr>
<td>sucre</td>
<td>188</td>
<td>398</td>
<td>3980</td>
<td>0,5</td>
<td>0,8</td>
<td>0,7</td>
<td>2140</td>
<td>3347</td>
<td>2744</td>
</tr>
<tr>
<td>noix</td>
<td>120</td>
<td>704</td>
<td>7040</td>
<td>0,0</td>
<td>0,8</td>
<td>0,4</td>
<td>0</td>
<td>5565</td>
<td>2782</td>
</tr>
<tr>
<td>riz</td>
<td>10</td>
<td>268</td>
<td>2680</td>
<td>2,2</td>
<td>3,8</td>
<td>3,0</td>
<td>5967</td>
<td>10184</td>
<td>8076</td>
</tr>
<tr>
<td><strong>AE total par mois</strong></td>
<td></td>
<td></td>
<td></td>
<td>17,8</td>
<td>29,1</td>
<td>23,4</td>
<td>60823</td>
<td>92645</td>
<td>76734</td>
</tr>
<tr>
<td><strong>AE total par jour</strong></td>
<td></td>
<td></td>
<td></td>
<td>2027</td>
<td>3088</td>
<td>2558</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

On remarque dans ce tableau qu'un adulte consomme, en moyenne, entre 2000 et 3000 Kcal par jour soit plus de 2500 Kcal par jour en moyenne sur l'année. Il s'agit ici d'une tendance pour la majorité des ménages de la vallée. La constatation d'un apport énergétique « suffisant » est confirmée par les dires des ménages enquêtés. En effet, aucune femme rencontrée ne déclare manquer de nourriture en volume (« on ne mange que du pain et du thé si on n'a plus rien »), elles se plaignent plus d’un manque de diversité et d’accès aux produits importés vendus au bazar.

Annexe 25 : Croisements des quantités consommées par les ménages enquêtés et de leur place dans la typologie du diagnostic

(Les consommations sont exprimées en Kg/ adulte/mois.)

Table 21 : Croisement des quantités consommées par les ménages avec la typologie du diagnostic

- **L’exemple du blé :**

Ce tableau n°1 montre qu’il n’y aurait pas de lien entre les types de ménages dégagés par le diagnostic et leur consommation en blé. En effet, les types 5 et 6 (les « plus vulnérables » ne correspondent pas forcément aux ménages qui consomment le plus de blé.

- **L’exemple du riz :**

Le tableau n°2 montre la même chose que pour le blé. Les ménages en « haut » de la typologie (1 et 2) qui possèdent plus de terre et donc plus de capital ne consomment pas forcément plus de riz, aliment souvent connoté « de riches ».

De même, les ménages qui perçoivent un revenu extérieur n’ont pas du tout les mêmes consommations en volume de riz (tableau n°3).

<table>
<thead>
<tr>
<th>Tableau n°1 : Types (d’après la typologie du diagnostic)</th>
<th>conso blé min</th>
<th>conso blé max</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6,7</td>
<td>10,0</td>
</tr>
<tr>
<td>2</td>
<td>8,0</td>
<td>14,7</td>
</tr>
<tr>
<td>2</td>
<td>10,0</td>
<td>13,3</td>
</tr>
<tr>
<td>2</td>
<td>10,0</td>
<td>18,7</td>
</tr>
<tr>
<td>2</td>
<td>12,0</td>
<td>16,7</td>
</tr>
<tr>
<td>3</td>
<td>12,0</td>
<td>13,3</td>
</tr>
<tr>
<td>3</td>
<td>1,3</td>
<td>5,3</td>
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<tr>
<td>3</td>
<td>6,7</td>
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<tr>
<td>4</td>
<td>4,7</td>
<td>9,3</td>
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<tr>
<td>4</td>
<td>10,0</td>
<td>16,7</td>
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<tr>
<td>4</td>
<td>13,3</td>
<td>16,7</td>
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<tr>
<td>4</td>
<td>13,3</td>
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</tr>
<tr>
<td>4</td>
<td>11,3</td>
<td>11,3</td>
</tr>
<tr>
<td>5</td>
<td>10,0</td>
<td>14,0</td>
</tr>
<tr>
<td>5</td>
<td>14,0</td>
<td>14,0</td>
</tr>
<tr>
<td>6</td>
<td>7,1</td>
<td>10,0</td>
</tr>
<tr>
<td>6</td>
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</tr>
<tr>
<td>6</td>
<td>17,3</td>
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<td>6</td>
<td>14,0</td>
<td>17,3</td>
</tr>
<tr>
<td>6</td>
<td>20,0</td>
<td>23,3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tableau n°2 :</th>
<th>conso riz min</th>
<th>conso riz max</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3.8</td>
<td>5.6</td>
</tr>
<tr>
<td>2</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>3.5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>2.5</td>
<td>3.5</td>
</tr>
<tr>
<td>3</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>3</td>
<td>1.5</td>
<td>2.5</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>1.2</td>
<td>5.2</td>
</tr>
<tr>
<td>5</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>3.5</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tableau n°3 : revenu extérieur</th>
<th>conso riz min</th>
<th>conso riz max</th>
</tr>
</thead>
<tbody>
<tr>
<td>non</td>
<td>3</td>
<td>3.5</td>
</tr>
<tr>
<td>non</td>
<td>1.5</td>
<td>2.5</td>
</tr>
<tr>
<td>non</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>non</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>non</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>non</td>
<td>3.5</td>
<td>4</td>
</tr>
<tr>
<td>oui</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>oui</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>oui</td>
<td>2.5</td>
<td>3.5</td>
</tr>
<tr>
<td>oui</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>oui</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>oui</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>oui</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>oui</td>
<td>1.2</td>
<td>5.2</td>
</tr>
<tr>
<td>oui</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>oui</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>oui</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>oui</td>
<td>1</td>
<td>3.5</td>
</tr>
<tr>
<td>oui</td>
<td>3.8</td>
<td>5.6</td>
</tr>
</tbody>
</table>
Annexe 26 : Les attributs culturels de l’alimentation pour les habitants de la vallée

« Certains aliments aux goûts particuliers sont emblématiques de certains groupes sociaux ou de certaines cultures. Leur consommation permet de manifester l’appartenance au groupe et de marquer sa différence par rapport aux autres. Ainsi, dans de nombreuses sociétés étudiées par les anthropologues ou les ethnologues, les autres groupes culturels voisins ou connus sont souvent désignés par les aliments particuliers qui les distinguent. » (Lalhou, cité dans N. Bricas, 1998)

1. Des aliments pour les fêtes et pour recevoir :

   - Les fêtes religieuses :
     - Le Ramadan (30 jours)
     - L’ « Eid roza » de la fin du Ramadan (3 jours)
     - L’ « Eid qurban » (fête du mouton, 70 jours après le premier Eid)

   - Les fêtes de la nouvelle année (1 jour)
   - Les événements sociaux :
     - la fête d’une naissance
     - le mariage (3 jours)
     - le deuil

Les noms locaux de plats cuisinés sont définis en annexe 21 et dans le glossaire.

<table>
<thead>
<tr>
<th>Le Ramadan « Roza »</th>
<th>La fin du Ramadan « Eid Roza »</th>
<th>La fête du mouton « Eid Qurban »</th>
<th>La nouvelle année (21 mars)</th>
<th>Les événements sociaux</th>
<th>Pour les invités</th>
</tr>
</thead>
<tbody>
<tr>
<td>- bolonis</td>
<td>- Alloua blanc</td>
<td>- viande de mouton bouilliée puis frite</td>
<td>- Nau roz ou nazri bazaar</td>
<td>- Ailoua blanc</td>
<td>- miel</td>
</tr>
<tr>
<td>- mantus</td>
<td>- gâteaux secs</td>
<td></td>
<td></td>
<td>- riz sela</td>
<td>- beurre</td>
</tr>
<tr>
<td>- riz palau</td>
<td>- viande</td>
<td></td>
<td></td>
<td></td>
<td>- lait, œufs,</td>
</tr>
<tr>
<td>- viande</td>
<td>- gâteaux secs salés et sucrés</td>
<td></td>
<td></td>
<td></td>
<td>moss, tshakah</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- kotcha</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- fruits secs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- pois grillés</td>
</tr>
</tbody>
</table>

2. Les aliments et les rites religieux :

   - les sacrifices d’animaux (lors de la sécheresse)
   - offrandes de riz (avec viande, légumes, œufs, si la famille est riche) pour les mendiants ou aux mullahs (chaque vendredi en période de deuil, qui dure au moins deux ans après le décès d’un proche)

3. Les bienfaits et les dangers de certains aliments :

   - Les huiles végétales :
     L’huile est un élément essentiel de l’alimentation et même s’il est cher, toutes les familles en consomment, certains en boivent même « pure » dans des tasses avant d’aller travailler.

     L’huile de pavot est qualifiée de « froide », elle est dite mauvaise à la santé lorsqu’elle est chauffée, elle se conserverait mal et elle peut donner la diarrhée. Ce n’est donc pas la
meilleure huile pour la cuisine, d’après les femmes. En plus, sa couleur foncée n’est pas appréciée pour la cuisine des cookies et autres gâteaux.

L’huile de moutarde locale est appréciée pour frire le riz et pour ses qualités hydratantes pour le corps mais sa couleur foncée l’empêche d’être utilisée pour les gâteaux, son goût aussi serait moins bon.

Ces deux huiles locales (moutarde, pavot) sont aussi parfois dites de « basse qualité » car elles sont mélangées au moulin avec des résidus d’autres huiles.

La margarine importée (« naboti ») est utilisée comme de l’huile dans la cuisine et est très appréciée car elle ne colore pas les aliments et serait plus digeste.

- **Les fruits secs** :
  Ils sont utilisés pour recevoir les invités mais aussi comme médicaments (abricots, cerises griottes et mures noires réhydratés dans de l’eau bouillante et laissés macérés) contre les fièvres et la malaria (en été). Ils sont aussi consommés en hiver pour leur caractère énergétique (noix, amandes).

- **Les aliments dits « mauvais à la santé »** :
  - Les œufs sont dits être souvent source de mal de ventre et rarement mangés par les femmes qui disent ne pas les digérer.
  - La viande de chèvre : elle donnerait une sorte d’urticaire et des problèmes de circulation sanguine.
  - Les aubergines : donneraient des aigreurs d’estomac.
  - Il est aussi très déconseillé de boire du thé en même temps que de la pastèque ou des cerises griottes, car les risques de maux d’estomac et de diarrhées sont imminents.
  - Le *patok* : sorte de petits pois dont le fourrage est donné aux animaux et qui serait source de paralysie, de déformation des pieds. Consommé durant les années de sécheresse comme unique légume sec du fait de la grande pénurie des céréales, notamment dans les villages reculés (villages des Shewas, du Wakhan).

- **Les aromates et plantes médicinales** :
  - le pavot : très peu consommé par les habitants de la vallée.
  - le hachich : pour soulager la douleur, cultivé dans les jardins et parfois destiné à la vente.
  - *Kawar* : fleurs des montagnes qui, une fois séchées sont des plantes médicinales très recherchées (environ 800 afs/kg).
  - *Truchpuchok (= peau acide)* : plantes des montagnes utilisées en infusions pour calmer les nerfs.
  - Le cumin (zira) : trouvé sauvage en montagne, il parfume les plats et calme les fièvres des jeunes enfants à l’aide de cataplasmes.
  - *Sarsarack* : fleurs jaunes dont la décoction soignerait la malaria.
  - L’origan, la menthe, la coriandre, le piment : poussent dans les potagers, consommés séchés ou frais dans la cuisine courante.
Annexe 27: Calcul des ratios de la typologie des consommateurs.

- Les N° d’enquêtes correspondent aux numéros du tableau de présentation des enquêtes en annexe 11.
- Les prix moyens sont basés sur les prix du bazar de Baharak entre juin et novembre 2005 ainsi que les prix de 2004. (50 afg=1$ environ)
- Les consommations moyennes proviennent des valeurs « max » et « min » des tableaux précédents des consommations des aliments de base en Kg par adulte et par mois, présentés dans annexe 15.
- Les lettres « M » et « A » du premier tableau signifient que les aliments sont à 100% « produits » (M) par le ménage ou à 100% « achetés » (A) ; parfois pour un même aliment, la moitié sera acheté et l’autre sera produite selon les stocks du ménage, c’est pourquoi on trouve « A+M » dans les tableaux suivants (50% achetés et 50% produits).
- On estime le coût de chaque aliment à partir du prix de vente de cet aliment au bazar et de sa quantité consommée. Si 100% de cet aliment est acheté, son coût sera le même dans la colonne « coût total » et « coût A ». Par contre, si il est à la fois acheté et produit par le ménage, on estime que 50% du coût total est égal au « coût A » et les autres 50% au « coût M ».

Table 22: Répartition des aliments achetés ou produits selon les ménages enquêtés :

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<th>riz</th>
<th>sucre</th>
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Table 23: Coûts de consommation en pommes de terre pour les ménages enquêtés :

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### Table 24 : Coûts de consommation en riz, en sucre, en légumes frais, en blé et en huile pour les ménages enquêtés :

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Page 198
### Table 25: Coûts de consommation en viande, noix et lait pour les ménages enquêtés :

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### Table 26: Répartitions des aliments achetés et produits pour la totalité de l’alimentation « de base » des ménages enquêtés

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| moyenne    | 515,5                           | 291,1                           | 806,6                           | 64%                         |
Chart 13: Comparaison des coûts des aliments de base et de leur origine (achetés ou auto-produits)

Ce graphique (données 2005) permet d’illustrer le tableau précédent des résultats totaux de la répartition entre les aliments achetés et les aliments produits par les ménages. Il donne, pour chaque ménage, le coût total de ces aliments achetés (en afs/adulte/mois, histogramme bleu), le coût total des aliments produits (histogramme violet) et le coût total de leur alimentation, aliments achetés et produits confondus (histogramme jaune).

A partir de ce graphique et du dernier tableau de cette annexe on peut calculer les ratios de la typologie des consommateurs pour chaque ménage enquêté :

- Grâce aux histogrammes bleus et jaunes et à la colonne « % des achats dans la consommation totale » du tableau, on peut donner la part des aliments achetés par rapport à la totalité de l’alimentation et on peut donc distinguer les ménages qui achètent plus de 50% de leur alimentation. Par exemple, le ménage n°30, achète pour 61% dans sa consommation totale, il dépasse donc les 50%.

- Pour calculer le second ratio, on peut utiliser la limite (ligne rouge) des 900 afghanis par adulte et par mois (soit 30 afs/adulte/jour) pour distinguer les ménages qui dépassent ce minimum des autres (histogramme jaune qui dépasse la limite). Ces ménages correspondent donc aux enquêtes n° : 36, 38, 39, 40, 42, 43, 44 et 48.
Annexe 28: Conceptual framework “vision” for AAD’s community development programme

Figure 37: Schéma du cadre conceptuel des programmes d’Afghanaid

Source: AAD Report, 2005
Annexe 29: Zonage géographique

Afin de mieux appréhender la réalité, il faut savoir parfois la simplifier. Simplifier la réalité peut revenir à regrouper des espaces et à en séparer d'autres. Pour réaliser ce zonage, il nous faut dégager des facteurs pertinents qui permettent de regrouper certains ensembles et d’en différencier d’autres. Ces critères de différenciations doivent être le plus objectifs possibles afin d’éviter tous jugements de valeur qui pourraient venir biaiser ce zonage. Enfin, pour plus de clarté, nous nous appuierons sur un seul facteur issu du milieu naturel et un seul issu de sa mise en valeur par l’homme.

La partie 2.2.1.1 (Le contexte naturel) montre que selon la topographie, trois espaces se dégagent clairement les uns des autres : les fonds de vallées, les pentes des montagnes et les hauts pâturages d’été. Ce critère topographique semble tout à fait pertinent dans ce contexte montagneux ou l’altitude (et les différents climats qu’elle engendre) et la pente influent de manière évidente sur l’Homme.

La partie 2.2.1.2 (La mise en valeur) met en évidence plusieurs facteurs de différenciation. Cependant, le rayonnement que possède le nouveau bazar de Shar-é-nau semble avoir un impact majeur sur la vie des habitants du district. En effet, ce nouveau bazar est le centre économique, politique et social du district de Baharak. Plus on s’éloigne de celui-ci et moins son influence est évidente. Les habitants proches du bazar bénéficient de ses avantages mais aussi de ses inconvénients sur les autres habitants. Citons pour exemple que la politique d’éradication de pavot orchestrée par le gouvernement sera plus forte sur une exploitation agricole si celle-ci se situe près du bazar et donc des bureaux du gouvernement. A contrario, les exploitations proches du bazar bénéficient plus facilement des éventuels conseils techniques des ONG dont leurs bureaux se trouvent à Shar-é-nau.

Les croisements des facteurs « la topographie » et « le rayonnement du bazar » permettent de dégager quatre ensembles agro-écologiques:
1. Shar-é-nau
2. Les kochlaks
3. Les villages des pentes
4. Les Shewas

Reprenons les principales caractéristiques pour chacun de ces ensembles agro-écologiques.

1. Shar-é-nau
Shar-é-nau est le centre politique, économique et social de Baharak. Les institutions politiques et les ONG y possèdent leurs bureaux. Le bazar, avec ses nombreuses échoppes, attire tous les habitants du district et même d’au-delà. Il s’agit d’une capitale qui monopolise tous les services du district (médecins, pharmaciens, police, écoles, vétérinaires…), ses habitants possèdent ainsi un ascendant pratique et social sur ceux des kochlaks.

2. Les kochlaks
Lorsque l’on s’intéresse aux activités des femmes permettant de dégager un revenu, une des conséquences de l’éloignement est la difficile commercialisation des produits agricoles comme les fruits, les légumes frais, les produits laitiers et des produits non agricoles d’artisanat (broderie, couture, pâtisseries,…). Le difficile accès à l’éducation (école à plus de 30 minutes à pied) est une autre conséquence de cet éloignement, notamment pour les jeunes filles adolescentes souvent gardées à la maison pour les travaux domestiques.

93 Nous définirons ici un espace agro-écologique comme un espace naturel que l’homme a transformé (agriculture, routes, écoles…).
Dans les villages dits « koshlaks », des fonds de vallées ou isolés, la plupart des habitants ont des liens de parentés plus ou moins proches et sont issus d’une ou deux branches familiales différentes. Il y a donc des liens très forts entre voisins et on a parfois l’impression d’une seule et même grande maison lorsque l’on pénètre les murs d’enceinte de ces villages. Ainsi, les femmes se déplacent plus librement entre les maisons et les échanges de produits de premières nécessités (lait, œufs, riz,…) sont très communs.

3. **Les villages des pentes**
Les villages de Warshir, de Dashtok et de Formulagh sont tous les trois à flanc de montagne et éloignés des rivières. Proche des villages, ils bénéficient de sources d’eau pour les jardins et l’alimentation mais pas en suffisance pour l’irrigation des terres qui sont en majorité des terres pluviales.

4. **Les Shewas**
Pour les villages Shewashis, peu de terres sont irriguées et la majorité de l’espace est allouée aux pâturages. Ce facteur est discriminant pour le développement des cultures à haut rendement, du maraîchage et de l’élevage entre les ensembles des fonds de vallées et les ensembles des pentes et des estives.

La figure suivante reprend sous forme de schéma le zonage géographique. Le centre Sharé-nau apparaît en rouge foncé, les kochlaks en rouge clair, les cercles de couleurs rouges représentent les villages des pentes et enfin, une flèche indique le dernier espace : les Shewas, hauts pâturages.
Légende :

Terres irriguées cultivées principalement en blé, en fourrages et en « culture de rente ».

Terres pluviales cultivées en céréales ou en jachère.

« Silva* » de type épineux (chardons, broussailles).

« Ville nouvelle » autour du bazar et des infrastructures récentes : clinique, gouvernement, ONGs,

Zone d’habitats regroupés en villages appelés koshlack.

Villages d’altitude.

Route principale et carrossable.

Arbres fruitiers et potagers de jardins privés.
Annexe 30: Calcul du coût moyen journalier alimentaire de base d’un adulte

Annexe tirée du rapport de Cécile Duchet

1. Choix des aliments « de base »

Les aliments « de base » choisis sont :
- le pain (en quantité de blé)
- les pommes de terre
- le riz
- le lait
- l’huile
- le sucre
- les légumes frais
- la viande
- les noix (en hiver)

Explication du choix de ces aliments et non choix des autres :

- Les condiments comme le sel et les oignons sont très importants dans la consommation locale mais leur coût est négligeable en comparaison des autres aliments. De plus, les quantités consommées sont difficiles à estimer car les femmes ne disent ne pas savoir combien elles en consomment.
- Les légumes frais choisis concernent les légumes en dehors des patates et des oignons. Ils ont été mis en vente au bazar de Baharak depuis 4-5 ans et sont donc consommés plus massivement par les ménages.
- Les produits laitiers autres que le lait ne font pas partie de l’alimentation de base car ils sont uniquement consommés par des ménages qui en produisent eux-mêmes ou en reçoivent comme dons. Le krout est consommé par beaucoup en hiver mais représente plus un aliment d’accompagnement (en quantité négligeable) qu’un aliment de base.
- Les légumes secs comme les pois, les lentilles, les haricots ainsi que les légumes séchés sont de même très consommés par les ménages mais sont des « condiments ». Ils sont consommés en très petite quantité et en cas de pénurie, ces aliments ne sont pas consommés.
- Les produits comme le miel, la confiture, les amandes, les fruits secs ne sont pas des aliments de base car ils sont d’abord destinés aux invités, aux occasions festives et ne sont pas consommés par les ménages les plus pauvres.
- Les fruits frais sont consommés en été par la plupart des familles lorsqu’ils possèdent un jardin avec des arbres fruitiers. Les familles pauvres n’en consomment que très peu, si elles en œufs les vendent, sinon elles n’en achètent pas.
- Les noix représentent entre 1 et 2 kg par mois et par adulte en hiver ce qui correspond à un coût non négligeable dans l’alimentation.

2. Calcul des quantités moyennes consommées par adulte et par mois :
(Cf. le rapport de Cécile Duchet 2006, chapitre 4)

Comme il a été très difficile d’obtenir des réponses en terme de quantités consommées pour les légumes et les fruits, il a été décidé de questionner les femmes sur leur fréquence de consommation et d’estimer les quantités consommées à partir de ces fréquences de consommation pour les légumes frais et la viande :
Table 27: Tableau explicatif des calculs suivants

<table>
<thead>
<tr>
<th>Fréquences</th>
<th>Codes pour mise à plat des enquêtes</th>
<th>Nombre de jours de consommation par mois</th>
<th>Portion quotidienne par adulte (kg légumes ou viande)*</th>
<th>Quantités moyennes consommées (kg/adulte/mois)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ts les jours</td>
<td>6</td>
<td>30</td>
<td>0.1</td>
<td>3</td>
</tr>
<tr>
<td>3-4 fois/semaines</td>
<td>5</td>
<td>15</td>
<td>0.1</td>
<td>1.5</td>
</tr>
<tr>
<td>2 fois/semaine</td>
<td>4</td>
<td>8</td>
<td>0.1</td>
<td>0.8</td>
</tr>
<tr>
<td>1 fois/semaine</td>
<td>3</td>
<td>4</td>
<td>0.1</td>
<td>0.4</td>
</tr>
<tr>
<td>2 fois/mois</td>
<td>2</td>
<td>2</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>1 fois/mois</td>
<td>1</td>
<td>1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Moins 1 fois/mois</td>
<td>0</td>
<td>0</td>
<td>0.1</td>
<td>0</td>
</tr>
</tbody>
</table>

*A partir des enquêtes et des quantités observées et pesées au cours des repas servis par AAD, on peut estimer à 100g par personne adulte une portion quotidienne de légumes ou de viande. Rares sont les familles qui en consomment plus sauf à l’occasion de fêtes ou d’invités.

- La consommation moyenne (en Kg ou L par adulte et par jour) est calculée à partir de la moyenne des quantités relevées lors des enquêtes dans les tableaux de l’annexe n° du chapitre 4 du rapport de Cécile Duchet 2006.
- Les aliments sont consommés en plus ou moins grande quantité selon les saisons. Ainsi, les valeurs sont maximales ou minimales selon les aliments et selon les saisons. E= été ; A=automne ; H=hiver ; P=printemps.

Table 28: Consommation alimentaire moyenne

<table>
<thead>
<tr>
<th>aliments base</th>
<th>conso moy E (Kg/adulte/jour)</th>
<th>conso moy A</th>
<th>conso moy H</th>
<th>conso moy P</th>
<th>coût (afg/adulte/jour)</th>
<th>E</th>
<th>A</th>
<th>H</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pdt</td>
<td>0.04</td>
<td>0.08</td>
<td>0.08</td>
<td>0.04</td>
<td>0.41</td>
<td>0.56</td>
<td>0.56</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>Blé</td>
<td>0.37</td>
<td>0.50</td>
<td>0.50</td>
<td>0.37</td>
<td>4.20</td>
<td>5.71</td>
<td>7.10</td>
<td>5.22</td>
<td></td>
</tr>
<tr>
<td>Huile</td>
<td>0.04</td>
<td>0.05</td>
<td>0.05</td>
<td>0.04</td>
<td>0.08</td>
<td>0.84</td>
<td>0.84</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>Lait</td>
<td>0.08</td>
<td>0.03</td>
<td>0.03</td>
<td>0.08</td>
<td>0.03</td>
<td>0.84</td>
<td>0.84</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>Légumes</td>
<td>0.06</td>
<td>0.06</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.84</td>
<td>0.84</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>Viande</td>
<td>0.03</td>
<td>0.03</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.84</td>
<td>0.84</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>Sucre</td>
<td>0.02</td>
<td>0.03</td>
<td>0.03</td>
<td>0.02</td>
<td>0.01</td>
<td>0.84</td>
<td>0.84</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>Noix</td>
<td>0.00</td>
<td>0.00</td>
<td>0.03</td>
<td>0.00</td>
<td>0.00</td>
<td>0.84</td>
<td>0.84</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>Riz</td>
<td>0.07</td>
<td>0.07</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
<td>0.84</td>
<td>0.84</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1.74</td>
<td>2.10</td>
<td>2.17</td>
<td>1.74</td>
<td></td>
<td>18</td>
<td>20</td>
<td>23</td>
<td>17</td>
</tr>
</tbody>
</table>

Table 29: Coût alimentaire

<table>
<thead>
<tr>
<th>aliments base</th>
<th>prix E (afg/Kg ouL)</th>
<th>prix A</th>
<th>prix H</th>
<th>prix P</th>
<th>coût (afg/adulte/jour)</th>
<th>E</th>
<th>A</th>
<th>H</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pdt</td>
<td>11,50</td>
<td>7,00</td>
<td>7,00</td>
<td>17,00</td>
<td>0.41</td>
<td>0.56</td>
<td>0.56</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>Blé</td>
<td>11,50</td>
<td>11,50</td>
<td>14,30</td>
<td>14,30</td>
<td>4.20</td>
<td>5.71</td>
<td>7.10</td>
<td>5.22</td>
<td></td>
</tr>
<tr>
<td>Huile</td>
<td>50,00</td>
<td>50,00</td>
<td>50,00</td>
<td>50,00</td>
<td>4.82</td>
<td>2.30</td>
<td>2.30</td>
<td>1.82</td>
<td></td>
</tr>
<tr>
<td>Lait</td>
<td>25,00</td>
<td>50,00</td>
<td>25,00</td>
<td>25,00</td>
<td>1.92</td>
<td>1.32</td>
<td>1.32</td>
<td>1.92</td>
<td></td>
</tr>
<tr>
<td>Légumes</td>
<td>40,00</td>
<td>40,00</td>
<td>40,00</td>
<td>40,00</td>
<td>2.44</td>
<td>2.44</td>
<td>1.01</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>Viande</td>
<td>150,00</td>
<td>150,00</td>
<td>200,00</td>
<td>200,00</td>
<td>4.25</td>
<td>4.25</td>
<td>2.43</td>
<td>2.43</td>
<td></td>
</tr>
<tr>
<td>Sucre</td>
<td>30,00</td>
<td>30,00</td>
<td>30,00</td>
<td>30,00</td>
<td>0.54</td>
<td>0.84</td>
<td>0.84</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>Noix</td>
<td>60,00</td>
<td>60,00</td>
<td>60,00</td>
<td>60,00</td>
<td>0.00</td>
<td>1.60</td>
<td>1.60</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Riz</td>
<td>28,50</td>
<td>28,50</td>
<td>43,00</td>
<td>28,50</td>
<td>2.12</td>
<td>2.12</td>
<td>5.45</td>
<td>3.61</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
<td>20</td>
<td>23</td>
<td>17</td>
</tr>
</tbody>
</table>
L’objectif de ce graphique est d’estimer combien d’argent une personne de plus de 12 ans à besoin chaque jour pour se nourrir.

On remarque que ces besoins sont en moyenne supérieurs en hiver et au printemps ce qui confirme qu’à cette période les problèmes d’argent sont encore plus grands.

En s’appuyant sur ces enquêtes alimentaires, un adulte consommerait donc de 17 à 23 afghs de nourriture par jour. La variation illustre les différence entre les saisons : l’hiver, il faut près de 25 afghs pour nourrir une personne par jour tandis que l’été, il n’en faut que 25.

En plus des aliments, l’achat de combustible est indispensable à la consommation alimentaire d’un adulte. Les quantités de combustible ne sont pas vraiment proportionnelles au nombre de personnes, il s’agit de dépenses fixes qu’on estime entre 50 et 100 afghs par jour (toujours selon les saisons). En effet, le tableau ci-dessous permet d’évaluer le montant des dépenses moyennes d’une famille à Baharak pour les combustibles.

**Remarque** : Chaque ménage choisit le type de combustible qui est le plus abordable pour lui, le bois, le gaz ou le fumier. Mais il peut aussi utiliser au cours de l’année un peu de chaque, selon les disponibilités et les saisons. Aussi, certains ménages très pauvres n’achètent pas de combustible et se « débrouillent » par la récolte de fumier sur les chemins, au bord des rivières et par la recherche de broussailles dans les montagnes. Il s’agit donc ici de proposer une moyenne des dépenses afin de donner une tendance et non une valeur exacte !
**Bois :**
Pour une famille moyenne (5 à 10 personnes), il faut environ 7 kg de bois par jour en été et 20 kg en hiver. Le prix est d'environ 6 afghs/kg en été et 8 afghs/kg en hiver (bois de districts voisins). Chaque mois, une famille dépenserait donc pour le bois environ 1250 afghs en été et 4800 afghs en hiver. Pour une année ceci revient à une dépense de 36300 afghs par an soit près de 100 afghs/jour.

**Gaz :**
40 afghs / kg. Pour une famille (entre 5 et 10 personnes), une bouteille de 5kg fait environ 6 jours. Soit environ 2000 afghs par mois/ménage ou 67 afghs/jour.

**Fumier :**
Prix du fumier : 280 afghs/\textit{buji}\textsuperscript{94} soit 5,6 afghs/kg. Une famille moyenne (5 à 10 personnes) brûle environ 500 kg de fumier par mois. Ceci revient à un coût de 33 600 afghs par an soit environ 90 afghs/jour.

Trois adultes consommeraient (aliments et combustible compris) donc entre 100 et 180 afghs par jour ce qui correspond au salaire journalier d'un homme à Baharak. Trois est le chiffre que nous retiendrons pour le ratio : un journalier peut subvenir au besoins de deux autres adultes. Le reste du salaire, s'il existe, doit permettre d'acheter vêtements, médicaments, ustensiles de cuisine,... Le ratio UC/UPM sera donc de 3. Au dessus de celui-ci, la famille peut avoir de graves difficultés à couvrir ses besoins vitaux.

\textsuperscript{94} 1 \textit{buji} = 50 kg (environ)
Annexe 31 : Les différentes cultures de la zone

Le blé, culture principale

- Les variétés :
  Il existe deux types de blé : le blé tendre (nommé simplement blé dans cette étude) et le blé dur. Ce dernier n’est pas panifiable et n’est donc pas semé par les paysans de Baharak sur leurs champs. Il faut également distinguer deux autres sortes de blé : le blé d’hiver et le blé de printemps. Le blé de printemps permet aux paysans des régions à hiver très rude d’en produire. Cependant, le blé d’hiver est plus apprécié car il permet généralement de meilleur rendement ; il est donc utilisé en priorité lorsque le climat le permet comme celui de Baharak. Dans cette région, près d’une douzaine de variétés sont connues par les agriculteurs.

Le blé de printemps est semé sur les terres qui sont en altitude, le climat y est plus rigoureux. Ces terres sont exclusivement pluviales (lalmi). Sur les terres irriguées ou non (abi et lalmi) de la vallée, c’est le blé d’hiver qui est semé. Sur lalmi, les paysans choisissent le plus souvent des variétés dites locales tandis que sur lesabis, la plupart sont dites améliorées :

Table 30: Les différents types de blé utilisés

<table>
<thead>
<tr>
<th>Type de terre</th>
<th>Type de blé</th>
<th>Variétés</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lalmi en altitude</td>
<td>Blé de printemps</td>
<td>Variétés dites locales</td>
</tr>
<tr>
<td>Lalmi dans la vallée</td>
<td>Blé d’hiver</td>
<td>Variétés dites locales</td>
</tr>
<tr>
<td>Abi</td>
<td>Blé d’hiver</td>
<td>Variétés dites améliorées</td>
</tr>
</tbody>
</table>

Les raisons quant au choix de variétés améliorées ou non seront abordées dans le chapitre suivant sur les règles de décisions.

Les variétés dites locales sont issues de la période d’avant guerre. La recherche afghane, les échanges technologiques (notamment avec l’URSS) ont fourni différentes variétés de blé qui sont considérées, 25 ans plus tard, comme locales. Les variétés améliorées sont celles qui ont été introduites récemment via les ONG, la FAO ou des agences gouvernementales étrangères comme l’ambassade de France par exemple. Ces variétés sont issues de la recherche menée par la FAO, L’ICARDA ou encore des organismes de recherche étrangers.

- Itinéraires techniques, temps de travaux et rendements :
  Trois itinéraires techniques sont utilisés dans la zone d’étude. L’un concerne les terres irriguées, les deux autres les pluviales. La figure 7 indique les différents itinéraires techniques du blé.
Table 31: Itinéraires techniques et temps de travaux du blé

<table>
<thead>
<tr>
<th>CULTURE</th>
<th>Octobre</th>
<th>Novembre</th>
<th>D</th>
<th>J</th>
<th>F</th>
<th>Mars</th>
<th>Avril</th>
<th>Mai</th>
<th>Juin</th>
<th>Juillet</th>
<th>Août</th>
<th>Septembre</th>
<th>Quantité de travail nécessaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blé sur lalmi d’altitude</td>
<td>Labour + semis + labour (1 Hj)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Récolte (5 Hj)</td>
<td>10 dont 25% en déplacement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blé sur lalmi de vallée</td>
<td>Labour+semi-labour (1 Hj)</td>
<td>Possible apport d’urée</td>
<td>Récolte (4-5 Hj)</td>
<td>possible apport de fumier et labour (1 Hj)</td>
<td>5 à 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blé sur abi</td>
<td>Labour+semilabour + confection des canaux d’irrigation+apport d’urée (15 kg) et de DAP (30 Kg) (2 Hj)</td>
<td>Désherbage (4-5 Hj) + apport d’urée (15 kg) + début de l’irrigation quasi-hebdomadaire</td>
<td>irrigation</td>
<td>Récolte (4-5 Hj)</td>
<td>possible apport de fumier et labour (1 Hj)</td>
<td>9 à 13 Hj</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sur lalmi, la première différence entre les deux ITk concerne le type de blé utilisé (d’hiver ou de printemps) suivant l’altitude des parcelles. La date de semis sera donc différente (tout comme la date de récolte). De plus, selon ses moyens et selon le climat : s’il pleut, l’agriculteur peut apporter des engrais (organique et/ou chimique) sur les lalmis proches de l’exploitation, c’est-à-dire sur les lalmis situés dans la vallées ensemencés avec du blé d’hiver. Les lalmis d’altitude sont trop éloignées de l’exploitation pour permettre au paysan de Baharak d’y apporter de l’engrais.

Le premier labour est réalisé si possible après une averse sur lalmi ; l’irrigation remplace les pluies hypothétiques sur abi. Cette pluie (ou cette irrigation) permet d’humidifier la terre ce qui facilite le passage de l’araire.

Après les semis, un passage d’araire permet la confection de petits remblais. Ces remblais servent à diviser la parcelle en différentes planches de 2 m sur 4 environ. Ainsi, l’agriculteur pourra irrigué planche après planche et s’assurer ainsi d’un bon recouvrement de l’eau sur la totalité de la parcelle. Cette irrigation est nommée irrigation en planche.

Les engrais ne sont apportés que sur les parcelles qui ont les meilleurs rendements, c’est-à-dire sur les terres irriguées. Rappelons que si la pluie le permet, certains lalmis, qui sont proches des exploitations, peuvent bénéficier d’un apport.

Le désherbage est un travail long et fastidieux car il est manuel. Là encore, cette opération n’est réalisée que sur ces parcelles qui permettent les meilleurs rendements, c’est-à-dire sur les abis.

Les agriculteurs de la région de Baharak affirment que ces deux opérations (apports d’engrais et désherbage) n’ont pas assez d’effets positifs sur les parcelles non irriguées. Ils se refusent donc d’augmenter leurs coûts de production (achat d’engrais) ou leur temps de travail (désherbage) sur des parcelles qui de toute évidence ne pourront jamais permettre de haut rendement. Rappelons que les variétés utilisées sur les lalmis sont dites locales. Il est difficile de savoir l’effet d’une variété améliorée sur le rendement de ces terres pluviales. Actuellement, aucune variété améliorée n’a pu remplacer celles qui sont locales malgré le travail d’ONG comme Focus.

Le blé irrigué est donc la base de l’agriculture, les paysans assurent leur année agricole avec cette culture. Ce sont ces blés qui demandent le plus de travail : 9 à 13 Hj contre 5 à 5 Hj. Selon les paysans interrogés, l’irrigation permet une meilleure pénétration des engrais dans le sol. C’est pourquoi l’apport d’engrais sur les terres pluviales doit s’accompagner de pluies.

Dans cette étude, nous entendons par labour un travail du sol à l’araire. Notons qu’il ne s’agit pas d’un réel labour puisque celui-ci implique un retournement de la terre que l’araire ne permet pas.

97 Hj : Homme jour. Unité de temps de travail, elle est égale à une journée de travail d’une personne adulte.
7 pour le pluvial. Ce blé pluvial peut être considéré comme un pari dont le résultat est très incertain car dépendant du climat.

La densité de semis varie également entre abi et lalmi. Sur ces premiers, les agriculteurs sèment entre 4 et 8 sers de blé par jerib soit 140 à 280 kg par ha88. Selon diverses sources, cette haute densité empêcherait un développement trop important des mauvaises herbes. D’autres personnes affirment que les températures hivernales provoquent des dégâts d’où une forte densité pour combler ces pertes. Sur lalmi, les paysans sèment 2 à 4 sers de blé par jerib soit 70 à 140 kg par ha. Pour les mêmes raisons indiquées plus haut, les agriculteurs de la zone considèrent le blé pluvial comme un pari et refusent donc de « miser » une trop grosse quantité de blé. Après les moissons de juillet (ou septembre pour le blé de printemps), le blé est laissé sur la parcelle pendant une semaine afin qu’il soit totalement sec. Les moissons s’étaient sur une petite vingtaine de jours. 4 à 5 Hj sont nécessaires pour moissonner un jerib, un actif pourra donc récolter 3,5 à 4 jeribs. Au-delà de ce chiffre, il devra embaucher des ouvrier ou faire appel à la main d’œuvre familiale. On considérera 3,75 comme la surface maximum en blé qu’un actif seul peut cultiver.

Puis les paysans regroupent tous le blé d’une parcelle en un seul tas. Cet unique tas permet de gagner du temps pour le battage. Contre 10% de la récolte, la plupart des agriculteurs louent les services d’une batteuse que possèdent quelques rares commerçants. La batteuse (d’origine pakistanaise) est amenée sur la parcelle via un tracteur (d’origine soviétique) et réalise un gain de temps considérable (2 jours par jerib). De moins en moins utilisent les bovins pour battre le blé. Cependant, ces derniers écrasent mieux la paille la rendant plus appétente pour les animaux. En effet, de la batteuse ne ressort que de la paille complètement achève.

Les rendements en grain varient fortement selon les terres et selon les années. Les agriculteurs raisonnent de la façon suivante : sur abi, 1 ser de semé permet de produire en moyenne 6 à 15 sers soit un rendement variant entre 10 et 35 Qx/ha. Cette variation dépend des conditions naturelles et des variétés utilisées. La rouille, une maladie issue d’un champignon est le fléau le plus grave dans cette région ; cette année est considérée comme particulièrement mauvaise à cause de cette maladie. Sur lalmi, 1 ser de semé permet d’obtenir 2 à 6 sers soit un rendement variant de 1,5 à 8,5 Qx/ha.

Les rendements de paille sont difficiles à évaluer car variables d’une variété à l’autre. Il semble que les agriculteurs stockent près d’une tonne de paille par jerib.,

- Les différentes utilisations et le prix:
   Cette paille est stockée dans les bâtiments alloués aux animaux. Les grains de blé sont stockés dans des silos à l’intérieur des maisons. Les paysans le transforment au fur et à mesure en farine via les moulins hydrauliques (avec un coût de 5% de la transformation) ou électriques (le coût est alors de 10%). La farine est également stockée dans des silos. La paille représente un produit important. Elle est stockée et sert de litière pour les animaux, de matériaux de construction pour la maison et d’aliment pour les moutons et les bovins. Les prix du blé varient entre 60 et 90 afghs le ser. Les différentes variétés au moment des semis et la saison en général expliquent ces différences : au moment des moisson, les prix sont bas, ils augmentent pendant l’hiver (MALETTA, 2004, P. 7). La paille vaut 200 afghs le jowal juste après la récolte soit un peu moins de 3000 afghs (60 $ US) la tonne. Pour des raisons d’offre qui diminuent et de demande qui augmente, ce même jowal peut valoir 500 afghs l’hiver.

88 La densité de semis du blé recommandée généralement varie de 125 à 150 kg par hectare.
99 On peut considérer le jowal comme ce que peut transporter un âne. Un âne peut transporter un gros sac à la fois (question de place sur l’animal). Les paysans estiment qu’un gros sac de paille pèse environ une dizaine de sers soit 70 kg environ.
L’orge

- Les variétés :

Deux variétés d’orge sont utilisées par les agriculteurs de Baharak. « Safejaw » (orge blanc), et « Caljaw » (orge bouillie). La première est vendue un peu plus cher, de l’ordre de 70 afghs/ser contre 50 pour la seconde. Les agriculteurs dont les besoins en orge sont variables selon les exploitations semblent ne pas avoir un intérêt particulier pour telle ou telle variété. La seule en orge reste relativement faible par rapport à celle du blé, le prix des semences n’a donc pas un impact majeur sur les coûts de production de l’exploitation. Seuls les paysans qui ont des bœufs de labour et des ânes (la majorité de agriculteurs) ont besoin pour cette céréale.

- Itinéraire technique et rendements :

Comme pour le blé, l’orge peut être cultivé sur trois terrains différents, les lalmis d’altitude, ceux des vallées et les abis des vallées. La figure suivante reprend les différentes étapes des ITk. Notons que l’irrigation est comme pour le blé en planche.

**Table 32: Itinéraires techniques de l’orge**

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Orge sur lalmi d’altitude</td>
<td>possible apport de fumier et labour (1 Hj)</td>
<td>Labour+semi-labour (2 Hj)</td>
<td></td>
<td></td>
<td>Récolte (4-5 Hj)</td>
<td>8 à 10 Hj (donc 25% en déplacement)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orge sur lalmi de vallée</td>
<td>possible apport de fumier et labour (1 Hj)</td>
<td>Labour+semi-labour (2 Hj)</td>
<td></td>
<td></td>
<td>Récolte (4-5 Hj)</td>
<td>6 à 8 Hj</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orge sur abi</td>
<td>possible apport de fumier et labour (1 Hj)</td>
<td>Labour+semi-labour (2 Hj)</td>
<td>Désherbage (3-5 Hj)+début de l’irrigation quasi-hebdomadaire</td>
<td></td>
<td>Récolte (4-5 Hj)</td>
<td>9 à 13 Hj</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Les rendements de l’orge sont un peu plus faibles que ceux du blé soit sur abi, 8 à 30 Qx/ha. Sur lalmi, le rendement varie de 1,5 à 8,5 Qx/ha

- Les différentes utilisations :

L’orge est largement utilisée pour l’alimentation animale. Considérée comme très énergétique, elle est donnée aux équins et aux bœufs de labour avant le travail de la terre. La paille utilisée comme celle de blé (alimentation animale, matériaux de construction, litière animale).

**Le pavot à opium**

- Les variétés :

Différents noms de pavot (cf. photo suivante) existent dans la zone d’étude. Ces noms dépendent avant tout de la variété utilisée mais aussi de l’aire de culture. Toutes les variétés ne sont pas cultivées dans la zone mais elles sont cependant connues de certains agriculteurs et commerçants que l’on peut suspecter de jouer un rôle même mineur dans la filière.
Il est cependant impossible de savoir si l’un ou l’autre de ces noms représentent une même variété. En effet, le nom peut changer selon la région où le pavot est cultivé. Par exemple, le nom générique watani (locale) peut désigner différentes variétés selon la province où elle est cultivée. Une des variétés cultivées dans le district de Warduj est nommé watani par les habitants de Warduj et Warduji par les habitants de Baharak.

Le tableau suivant indique les différents noms (ou variétés) qui ont été notés lors des différents entretiens. Toutes les variétés sont alternatives, c’est-à-dire qu’elles peuvent être semées en automne comme au printemps.

**Table 33: Les différentes variétés de pavot à opium connues dans la zone d’étude**

<table>
<thead>
<tr>
<th>Variété</th>
<th>Rendement</th>
<th>Qualité du pavot</th>
<th>Utilisé dans le district de Baharak</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>+</td>
<td>+</td>
<td>OUI</td>
</tr>
<tr>
<td>Watani</td>
<td>+</td>
<td>++</td>
<td>OUI</td>
</tr>
<tr>
<td>Irani</td>
<td>+</td>
<td>?</td>
<td>NON</td>
</tr>
<tr>
<td>Rudusi</td>
<td>++</td>
<td>+</td>
<td>OUI</td>
</tr>
<tr>
<td>Kashlami</td>
<td>?</td>
<td>?</td>
<td>NON</td>
</tr>
<tr>
<td>Warduji</td>
<td>+</td>
<td>++</td>
<td>NON</td>
</tr>
<tr>
<td>Caduci</td>
<td>?</td>
<td>?</td>
<td>OUI</td>
</tr>
<tr>
<td>Jalalabi (Jalalabad)</td>
<td>+</td>
<td>+</td>
<td>OUI</td>
</tr>
<tr>
<td>Shalrami (Jalalabad)</td>
<td>++</td>
<td>+</td>
<td>OUI</td>
</tr>
<tr>
<td>Jonymani (Jalalabad)</td>
<td>?</td>
<td>?</td>
<td>OUI</td>
</tr>
<tr>
<td>Shirtchagâl (Jalalabad)</td>
<td>++</td>
<td>+</td>
<td>OUI</td>
</tr>
</tbody>
</table>

- Itinéraires techniques et rendements :
  Il existe deux périodes de semis possibles pour le pavot dans la zone d’étude. L’hiver est assez doux pour permettre une plantation en octobre sur les terres situées en fonds de vallée. Les lalmis d’altitude ne le permettent pas, le pavot est semé au printemps. Dans les fonds de vallée, si le pavot d’automne atteint le stade 2-3 feuilles, il pourra résister sans problème au froid de l’hiver.
Les agriculteurs sèment également le pavot au début du printemps, certains sèment au cours des deux saisons. L’avantage d’un semis en octobre permet de dégager un temps précieux aux agriculteurs au début du printemps. De plus, il semble que le rendement du pavot semé en automne soit meilleur que celui semé au printemps. Enfin, le pavot d’automne se récolte courant juin, cela permet aux agriculteurs qui le souhaitent de semer un *patic* ou un trèfle juste après la récolte du latex.

Cependant, l’interdiction de cultiver du pavot rend les agriculteurs prudents et certains préfèrent suivre l’évolution politique le plus longtemps possible avant de prendre la décision de semer ou non du pavot. Enfin, le pavot de printemps se récolte en juillet, les pluies y sont quasi inexistantes. Or, un temps pluvieux pendant les récoltes diminue fortement la qualité du latex de pavot. En effet, il faut que le latex soit le plus concentré possible. L’eau des pluies risque de diluer la qualité du pavot.

Hormis cette différence dans la date de semis, les itinéraires techniques sur *abi* sont les mêmes, par contre, il diffère sur *lalmis*. La figure suivante présente les différents itinéraires techniques ainsi que la quantité de travail nécessaire pour un *jerib*.

### Table 34: Itinéraire technique du pavot à opium

<table>
<thead>
<tr>
<th>Culture</th>
<th>Octobre</th>
<th>Novembre</th>
<th>D.J.F.</th>
<th>Mars</th>
<th>Avril</th>
<th>Mai</th>
<th>Juin</th>
<th>Juillet</th>
<th>A.S.</th>
<th>Quantité de travail nécessaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavot sur lalmis d'altitude</td>
<td>Labour+plane+(fumier) +semis (1kg)+labour+plane (2 Hj)</td>
<td>Irrigation + désherbage (30 Hj)</td>
<td>Récolte (40 Hj)</td>
<td>90 dont 25% en déplacement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pavot sur lalmis de vallée</td>
<td>Labour+plane+(fumier) +semis (1kg)+labour+plane (2 Hj)</td>
<td>(Préparation sol et semis éventuel)</td>
<td>Irrigation + désherbage (30 Hj)</td>
<td>Récolte (40 Hj)</td>
<td>72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pavot sur abi</td>
<td>Labour+plane+(fumier) +DAP (50 kg)+semis (1kg)+labour+plane+connexion de canaux d'irrigation (4 Hj)</td>
<td>(Préparation sol et semis éventuel)</td>
<td>Irrigation + désherbage (30 Hj)</td>
<td>Irrigation+ désherbage (30 Hj)</td>
<td>Récolte en juin si semis d'automne ou en juillet, août si semis de printemps</td>
<td>134</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Les temps de travaux sont très élevés, les paysans qui choisissent de cultiver cette plante doivent employer des journaliers, notamment pour le désherbage. Il s’agit d’un coût important pour les paysans. Ce facteur et d’autres seront analysés dans le chapitre suivant. Notons que le pavot d’automne peut être suivi d’un *patic*, d’un trèfle ou d’un maïs juste après sa récolte, en juin. Le pavot de printemps, récolté en juillet, ne le permet pas. Ces doubles cultures annuelles, avec le pavot, sont rares puisque cela implique de nettoyer rapidement la parcelle pour éviter une repousse du pavot et de la préparer pour la culture suivante. Ces travaux prennent un temps qui est précieux aux paysans car ils se situent aux moments importants des moissons.

- Les différentes utilisations et le prix :  
  Le pavot est d’abord cultivé pour son latex que les paysans vendent. Ce sont quelques commandants ou commerçants qui rachètent l’opium pour soit la revendre telle quelle soit la transformer en héroïne dans des laboratoires locaux. L’opium ou l’héroïne seront de toute façon vendues au Pakistan, à moins qu’elles ne soient saisies par la police auparavant. Nous verrons plus en détail cette filière de la drogue dans le chapitre suivant.

Cependant, la drogue n’est pas le seul débouché pour cette plante. Elle possède d’autres vertus que les habitants de Baharak ont su utiliser.
La guerre a ravagé le pays laissant notamment peu de forêt dans les vallées du Badakhshan. Le gouvernement a depuis interdit la coupe de bois pour permettre la reforestation et ainsi lutter contre l’érosion. Cette interdiction pose un problème aux habitants de la région qui sont obligés de remplacer la part que prenait le bois pour la cuisine. Les cannes de pavot, une fois récoltée et séchée peut faire office de combustible. Cependant, il n’a que l’avantage de diminuer un peu l’utilisation du fumier pour la cuisine. En effet, le pavot brûle très vite si bien qu’il en faudrait des quantités énormes pour remplacer la lente combustion du fumier.

Les graines de pavot sont petites et très nombreuses à l’intérieur de chaque fruit. Ces graines peuvent être utilisées pour faire de l’huile. Les fruits sont écrasés et les graines sont récupérées par tamisage ; 200 kg de graines par jerib soit 1000 par hectare peuvent être ainsi récoltés. Le taux de transformation des graines en huile est de l’ordre de 0,2. Il est possible de récupérer près de 20 kg d’huile par jerib soit 100 par hectare.

Contrairement à d’autres huiles produites dans la région, celle du pavot n’est utilisée que pour la cuisine. Ses propriétés pour la cosmétique seraient moins intéressantes que l’huile de moutarde par exemple. L’huile de pavot est considérée par les habitants de Baharak comme « froide »100 », c’est-à-dire sans énergie (DUCHET, 2006, p.57).

Deux sous-produits de l’huile sont actuellement utilisés à Baharak : le savon et le tourteau. Le savon, fabriqué par les femmes, n’a été que très rarement mentionné. Ce débouché ne semble avoir que peu d’intérêt. Par contre, le konjara (tourteau) est largement utilisé comme aliment animal. Il est surtout donné aux bœufs avant le travail du labour, il s’agit d’un aliment énergétique très intéressant dans la région où les bœufs ont un rôle agricole majeur.

Cultivé traditionnellement sur de petites surfaces depuis de nombreuses décennies, le pavot à opium (papaver somniferum) était consommé localement. Connu pour ses caractéristiques analgésiques, les Badakhshis utilisaient le latex de cette plante comme un médicament (LABROUSSE, 2003a). Il y a une cinquantaine d’années, le secteur de la santé était quasi inexistant au Badakhshan. Aussi afin de soulager d’éventuelles douleurs ou maladies, les habitants fumaient le pavot : « j’avais mal au ventre, quelqu’un m’a conseillé de fumer un peu de pavot ; juste après, je me suis senti mieux et je n’ai plus eu mal au ventre » souligne un vieux paysan de Baharak.

De plus, pour lutter contre le froid qui peut être mortel dans les montagnes, les habitants utilisaient également le pavot. Cette consommation provoquait une sensation de chaleur agréable.

Enfin, le pavot pouvait être utilisé pour calmer les enfants un peu trop turbulents, notamment au moment du coucher, les parents recrachant la fumée dans le nez des enfants.

Aujourd’hui, avec le développement des infrastructures et notamment des cliniques, l’utilisation du pavot cultivé comme pour ses vertus thérapeutiques est en forte régression. Les paysans rencontrés dans les districts de Baharak, Faizâbâd, Warduj et Shohada nous ont certifié qu’actuellement personnes n’utilise le pavot comme médicament mise à part quelques rares personnes âgés qui fument encore le pavot pour des raisons thérapeutiques. Le schéma suivant résume les différentes utilisations du pavot à opium.

100 Culturellement, les Badakhshis séparent les aliments en deux catégories : les chauds et les froids. Les « chauds » sont des aliments considérés comme énergétiques et consommés habituellement pendant la saison froide (graisse animales, aubergine, légumes cuits, viandes, pain). Les « froids » sont des aliments considérés comme peu énergétiques et consommés davantage pendant la saison chaude (yaourt, légumes crus, fruits frais...).

Les légumes
- Quels légumes :
De nombreux légumes sont cultivés dans la région de Baharak. Les jardins potagers permettent cette diversité (pomme de terre, navet, tomate, aubergine, chou-fleur, oignons, melon d’eau, pastèque, concombre, laitue…). Cependant, l’activité en plein champs concerne surtout trois légumes : la pomme de terre, l’oignon et le melon d’eau. L’étude de ces trois légumes suffira à donner une tendance générale du travail nécessaire à la culture des légumes en général.

Les paysans disposent de différentes variétés. Les variétés dites locales sont encore largement utilisées, notamment pour l’oignon : les nouvelles variétés d’oignons distribuées par la FAO auraient une résistance moins bonne au stockage. Pour les pommes de terres, la diffusion de nouvelles variétés (par les ONG) permet de meilleurs résultats qualitatifs et quantitatifs. Les melons d’eau proviennent de la région de Kunduz, il est difficile de savoir quels types de variétés sont utilisés.

- Itinéraires techniques et rendements :
Exclusivement cultivés sur les terres irriguées, les légumes demandent de nombreuses journées de travail.
La figure précédente montre que la culture de pomme de terre et d'oignons demandent beaucoup de travail. Le melon d’eau demande beaucoup moins d’effort mais sa culture ne s’étale que sur 3 mois tandis que les deux premières s’étalent sur 7-8 mois.

La pomme de terre et l’oignon sont complémentaires (dans le temps) avec la culture des céréales. En effet, pendant le mois de juillet, ces deux légumes ne demandent que peu de travail alors qu’il s’agit du mois des moissons pour le blé ou l’orge.

Pour le melon d’eau, le semis se fait juste derrière l’orge, c’est-à-dire pendant les moissons. Les paysans n’ont pas le temps de préparer une trop grande surface pour semer leur melons d’eau.

- Les différentes utilisations :

  Les légumes des potagers sont largement utilisés pour la consommation domestique. Seule les familles les plus vulnérables vendent leur faible production au bazar de Shar-é-nau. Ce sont les enfants qui sont chargés de la vente directe sur le bazar des quelques kilogrammes de tomates ou d’aubergines.

  Les légumes des champs sont destinés à la vente et l’autoconsommation. Une partie de la récolte est directement vendue, une autre stockée. Les hommes chargent leurs ânes et vont vendre aux commerçants du bazar. D’autres vont déposer leurs sacs de 50 kg légumes sur le bord de la route principale qui se dirige vers Faizâbâd. Ils attendent le passage d’un camion (de Faizâbâd ou des provinces voisines comme Tajar) pour vendre leurs marchandises.

  Les légumes qui ne sont pas vendus sont stockés. Ils seront consommés au fur et à mesure par la famille ou vendus plus tard dans la saison. La loi de l’offre et la demande explique cette vente tardive : le paysans n’a pas réussi à vendre car la demande est trop faible par rapport à l’offre et personne ne souhaite acheter ou alors à un prix qui n’est pas acceptable pour le maraîcher. Au moment des récoltes, l’offre de légumes est très forte et beaucoup de paysans préfèrent stocker. Les plus gros producteurs peuvent se permettre de vendre leurs légumes à prix réduit, ce manque à gagner est compensé par la quantité vendue. Les paysans les plus vulnérables, ceux qui ont un besoin urgent d’argent (remboursement d’une dette, maladie, mariage…) sont bien souvent obligé de vendre leurs productions rapidement à des prix souvent faible.
Ceux qui peuvent se permettre de différer la vente s'obligent donc à stocker. Cette opération est donc primordiale pour la vente de légumes et de sa qualité va dépendre des bénéfices. Les pommes de terre sont enterrées dans de grands trous. Les agriculteurs en creusent plusieurs afin de diminuer le risque de perdre leur production (attaque d'insecte, humidité…). Les oignons sont placés dans les habitations et résiste bien au stockage.

Les melons d'eau doivent être vendus le plus tôt possible. Il s'agit d'un fruit qui se consomme surtout par temps chaud. La plantation en juillet (après les moissons) induit une récolte tardive (septembre, octobre). Cette récolte se situe juste avant l'apparition des premiers froids et n'incite pas à consommer ces fruits. Aussi, les agriculteurs vendent rapidement leurs melons d'eau à des prix souvent bas.

Notons que quelques légumes font l'objet de transformation comme la carotte (en confiture) et la tomate (en poudre). Nous verrons ces activités plus loin dans ce document.

**Les arbres fruitiers**
- **Quels fruits :**
  Dans le district de Baharak, de nombreux arbres fruitiers indiquent un fort potentiel. Les pommes (différentes variétés), les griottes, les abricots et les mûres locales sont les fruits principaux du district. L'amateur de fruits trouvera également des pêches, prunes, noix, grenades, amandes, poires. Les vergers sont cependant rares et mal entretenus, la taille n'est utilisée que pour nettoyer l'arbre des branches mortes. La plupart des fruitiers poussent dans les jardins potagers où il n'y a aucun travail particulier selon les agriculteurs. Seule la récolte (et un peu d'irrigation) constitue l'itinéraire technique des arbres fruitiers.

Par contre, l'irrigation des quelques vergers de la zone demande du temps. De plus, ces arbres sont l'objet d'un soin particulier au moment de leur plantation : préparation du terrain avec du fumier, plantation, et apport d'engrais azoté pendant les deux ou trois premières années. Ces vergers requièrent toujours un garde, souvent payé en nature. Ce dernier doit donc vendre une partie de la récolte pour voir son salaire transformé en monnaie.
- **Les différentes utilisations :**
  Comme pour les légumes, les fruits sont soit consommés par la famille soit vendus. La vente s'effectue sur le bazar de Shar-é-nau ou sur la route de Faizâbâd. Le stockage est quasi-impossible, seule la transformation le permet : certains fruits sont séchés (abricots et mûres locales), d'autres servent à confectionner de la confiture comme la pomme mais cette dernière activité est extrêmement rare malgré les tentatives des ONG de développer cette transformation. Nous reparlerons de ces activités plus loin.

**Les plantes fourragères**
- **Les variétés :**
  Trois plantes fourragères sont utilisées dans la zone d'étude, il s'agit de la luzerne, du trèfle persan et d'une légumineuse locale nommée patic.
- **Itinéraires techniques et rendements :**

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101 Les mûres sont issues d'un arbre qui peut atteindre plus de 20 m de haut. Le fruit de cet arbre ressemble aux mûres européennes à la différence que celles de Baharak sont blanches. Les habitants du district nomment ce fruit tout que le traduit par mûre, c'est pourquoi nous appelons ce fruit mûre locale dans le texte.
Table 36: Itinéraire technique des cultures fourragères

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<tbody>
<tr>
<td>Trèfle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Labour croisé+semis+labour+plane+canaux (2 Hj)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>8 Hj</td>
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<tr>
<td>Trèfle dans le blé</td>
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<td></td>
<td></td>
<td></td>
<td>Labour+plane+labour+sems (la première année) (2 Hj)</td>
<td>Semis quand le blé est au stade épiaisons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>3 Hj</td>
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<tr>
<td>Luzerne</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Labour croisé+apport de fumier+semis+labour+plane+canaux (2 Hj)</td>
<td>Irrigation tous les 10 jours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15 Hj</td>
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<tr>
<td>Patic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Labour croisé+semis+labour+plane+canaux (2 Hj)</td>
<td></td>
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<td>10 Hj</td>
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La luzerne, à cause de ses 3 ou 4 coupes annuelles demande près de 15 Hj de travail. Le trèfle semé dans le blé profite de ce dernier et ne demande quasiment pas de travail sauf pour la récolte.

Le battage du patic demande un travail important. Celui-ci, réalisé dans l’enceinte des habitations, peut être effectué par les femmes.

- Les différentes utilisations :
Séchées, ces plantes servent de fourrages l’hiver pour les animaux. L’éventuel surplus est vendu localement aux voisins ou aux commerçants du bazar qui le revend ensuite. Les prix d’un *ser* (7 kg) de fourrage varient autour de 1 $ US, 50 afghs, deux fois le prix de la paille. Notons que le pois du patic sert d’aliment énergétique pour les bœufs de labour. Ce pois peut, quelques fois être consommé par les familles les plus vulnérables. Selon plusieurs personnes interrogées, le patic peut être responsable d’une intoxication dont les conséquences sur la motricité peuvent être importantes.

Les oléagineux
Les oléagineux représente une part importante dans l’alimentation à Baharak (DUCHET, 2006, p. 59). Les agriculteurs cultivent surtout la moutarde. Le tournesol dont l’huile ne semble pas correspondre aux attentes des consommateurs locaux est peu cultivé. C’est pourquoi, nous ne décrirons l’itinéraire technique que de la moutarde. Il existe deux variétés de moutarde : la locale et la russe. La moutarde russe peut être semée avec le patic, contre, la moutarde locale doit être seule sur sa parcelle pour ne souffrir d’aucune compétition. L’avantage agronomique de la moutarde locale serait un meilleur rendement par rapport à la variété russe si celle-ci est semée avec un patic, sinon, les rendements sont quasiment équivalents. De plus, les qualités gustatives de la variété locale seraient supérieures à celle de la variété russe.

Table 37: Itinéraire technique de la moutarde

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</tr>
</thead>
<tbody>
<tr>
<td>Moutarde</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Labour croisé+apport de fumier+semis+labour+plane+canaux (2 Hj)</td>
<td>Irrigation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10 Hj</td>
</tr>
</tbody>
</table>
Les grains d moutarde (ou de tournesol) sont ensuite écrasés pour obtenir de l’huile et du tourteau, aliment énergétique pour les animaux, notamment les bœufs de labour. Le tourteau quelque soit son origine coûte approximativement 50 afghs (1 $ US) le ser, les 7 kg. Le litre d’huile coûte environ 1 $ US, 50 afghs mais n’ai jamais vendu. Les agriculteurs et leur famille n’en produisent pas assez pour espérer dégager un surplus. Ce prix correspond aux huiles (d’origines végétales diverses) importées et vendues sur le bazar.

**Quelques autres cultures**

Hormis les cultures décrites précédemment, les agriculteurs de Baharak cultivent ponctuellement quelques autres plantes. Il ne s’agit pas ici de les décrire mais juste de les évoquer afin de garder à l’esprit la diversité agronomique de la zone. Quelques paysans cultivent le tabac pour leur consommation personnelle. Aucun usage agronomique n’a été décelé lors des entretiens.

Le maïs est également cultivé dans la zone. Cette plante est actuellement en perte de vitesse à cause d’une compétition féroce et inégale avec le blé. Les paysans utilisaient les grains de maïs pour faire de la farine, puis du pain. Cependant, les efforts des ONG et du gouvernement pour développer la culture du blé ont été responsables d’une nette diminution de l’intérêt du maïs par rapport au blé. Cette plante quelques fois semée en culture d’été a rarement le temps de produire un épi satisfaisant pour être consommé par l’homme. Aussi, cette culture d’été sert bien souvent d’aliment pour le bétail.

D’autres agriculteurs cultivent le cannabis. Cette plante peut être soit semée en plein champs avec la pomme de terre soit semée dans les habitations. Les paysans coupe la plante, la hache, la mélange avec de l’eau et obtiennent ainsi un « pain » illicite revendu à des commerçants qui eux-mêmes le revendent à des personnes de Jalalabad, proche de la frontière pakistanaise.

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Annexe 32: Principales caractéristiques des élevages à Baharak

Les bovins (Gaw)

• Quelles Races ?
Deux races de bovins sont actuellement élevées dans la vallée de Baharak. La plus commune est celle dite local, nommé *Syagow* (vache noire). Ces vaches ont la caractéristique d'être petite : entre 1 m et 1,15 de hauteur au garrot (BOUY, DASNIERE, 1994, p. 246). La robe foncée de cette race explique son nom. L'autre race est moins fréquente, les habitants l'appellent *Lewandi*, elle vient des provinces voisines du Badakhshan (notamment Tajar). Contrairement à ce qu'observent BOUY et DASNIERE (1994, p. 246) dans le district de Jurm, voisin de Baharak, cette race est bien présente. Un éleveur nous a affirmé que la taille, plus grande, de la *Lewandi* ne serait pas la seule différence : cette race donne plus de lait, plus de viande et travaille mieux que la race locale *Syagow*. Toutefois, ce même éleveur insiste sur les coûts de production plus élevés pour la *Lewandi*.

• Quels produits ?
Le lait, la force de travail pour le labour et le fumier sont les trois principaux produits des bovins dans le district de Baharak. À Baharak, les bovins ne sont pas utilisés pour le transport contrairement à d'autres zones (GRACE, PAIN, 2004, p. 42).

Les produits laitiers :
Selon les éleveurs, une vache donne 4 à 7 litres de lait par jour. La plupart des foyers de la zone possèdent peu d’animaux pour le lait, celui-ci est donc largement autoconsommé. Cependant, dans les *koshlaks*, les villages éloignés de Baharak, l’échange, le don de produits laitiers est fréquent entre voisins, il n’y a jamais de vente. Dans Shar-é-nau, le centre du district, le commerce de lait commence à se développer. La plupart des habitants de Shar-é-nau n’ont pas d’animaux et sont donc des clients potentiels de produits laitiers. Les éleveurs proches du centre peuvent donc vendre leurs produits laitiers.

Outre le lait (*chir*), il existe quatre produits laitiers dont nous décrirons la transformations un peu plus loin :
- Le *moss*, sorte de yaourt
- Le *tchaka*, sorte de fromage blanc
- Le *maska*, beurre
- Le *krout*, fromage

La viande :
La viande de bovins est n’est pas un produit commun à Baharak. Les nombreuses maladies tuent beaucoup d’animaux comme nous le verrons plus loin. La plupart des animaux sont gardés pour le renouvellement du troupeau. Quelques-uns sont vendus pour renouveler le troupeau d’un voisin, d’un ami ou d’un membre de la famille. D’autres, plus rarement, sont vendus pour la viande. Il s’agit de veaux d’un ou deux ans que des courtiers des provinces voisines viennent acheter pour les engraisser. Le prix de vente varie entre 5.000 et 8.000 afgs (selon la taille). La vente s’effectue toujours après la descente des pâturages, lorsque les animaux ont pu se nourrir correctement et engraisser le plus possible. À Baharak, aucun boucher n’achète des bovins pour la viande. Force est de constater que si de nombreuses chèvres et moutons sont abattus chaque jour devant les échoppes des bouchers, nous n’avons jamais aperçu le moindre bovin.

Les peaux :
Les peaux sont vendues 300 à 400 afgs à des courtiers des provinces voisines qui eux-mêmes les revendront pour l’exportation au Pakistan. Avant, à Baharak, les peaux étaient utilisées pour la confection de chaussures.
La force de travail :
Le labour est un des produits principaux que fournissent les bovins et plus précisément les bœufs dans ce cas particulier. Fin septembre, octobre, mars, avril et juillet sont les mois pendant lesquels les bœufs sont mis à contribution. Nourris correctement, une paire de bœufs peut labourer 2 *jeribs* par journée. Nous avons vu que les paysans possèdent de petites surfaces, toute moto mécanisation ne serait pas soutenable économiquement : les bœufs de labour ont donc encore toutes leur place dans le fonctionnement de l'agriculture de Baharak.

La guerre et la sécheresse qui a frappé l'Afghanistan n'ont pas épargné le Badakhshan où les éleveurs ont dû vendre une partie de leur cheptel. Les bœufs de labour doivent donc être partagé entre tous les paysans de la zone. C'est ce que confirme les rapport SMU (1994, p. 21). Ce partage n'est pas évident car les coûts de location deviennent problématiques : « Je n'ai pas de bœufs, et je ne peux pas en louer, je n'ai pas assez d'argent, je suis obligé de louer mes deux *jeribs* à quelqu'un et faire un autre travail » affirme un paysans dont le cas est loin d'être exceptionnel. Selon le Saint Coran, si quelqu'un apporte les bœufs de labour, il gagne 20 % de la récolte ; à Baharak, le coût est fixe et approche les 500 aghs par jour soit près de 10% d'une récolte de blé. La plupart essaient d'utiliser gratuitement les bœufs d'un membre de la famille, d'un voisin compréhensif…mais cette démarche n'est pas toujours couronnée de succès.

Le fumier :
Le fumier est un produit vital pour les agriculteurs de la zone. Renouveler la fertilité de leurs champs coûte cher. Les agriculteurs essaient d'épandre cet engrais organique un an sur deux afin d’alterner avec les coûteux engrais chimique. Malheureusement, le manque de combustible pour la cuisine pousse à consommer le fumier comme tel sous forme de disque les *tchapaks*.

- L'alimentation
Les bovins se nourrissent d'herbes fraîches d'avril à octobre. Qu'ils soient dans les pâturages ou qu'ils restent dans la vallée, le régime est le même. Notons cependant que les quantités sont plus faibles dans la vallée, les animaux ayant passé leur été dans les Shewas redescendent mieux nourris que ceux resté dans la vallée103 dont les besoins d’entretien ont tout juste été couverts. Les bœufs qui restent dans la vallée bénéficient d'une ration supplémentaire pour couvrir leurs importants besoins d'entretien.

L'hiver (de novembre à mars), la ration est composée essentiellement de fourrages secs (tréfle, luzerne, *patic*, paille, coupe d'herbes de montagnes). Ces apports alimentaires sont loin de couvrir les besoins de animaux qui maigrissent dangereusement pendant cette période malgré les restes des repas humain (pain sec mélangé à de l'eau notamment). Certains animaux demandent ponctuellement plus de nourriture. Il s'agit des bœufs aux moments des labours et des vaches gestantes. Le tourteau, l'orge et les pois du *patic* sont indispensables aux bœufs pour qu’ils puissent travailler à plein régime. Les vaches gestantes sont nourris (si les stocks ou la trésorerie le permettent) de la même façon pendant l’hiver.

- Les maladies
Les maladies sont nombreuses et les conséquences désastreuses. Citons la douve du foie, la gale et la fièvre aphtreuse. Ces maladies aggravées par la malnutrition de l’hiver provoque

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103 Il est possible que la qualité herbagère soit meilleure dans les pâturages d’altitude que dans la vallée.
la mort de 25 % des animaux selon les paysans interrogés et BOUY et DASNIERE (1994, 247).

Les conditions sanitaires sont les causes principales du développement de ces maladies. L’insalubrité de certains canaux amenant l’eau interdit tout consommation par les humains, les animaux sont certes moins sensibles mais le reste cependant. Les problèmes d’eau seraient responsables de la plupart des maladies selon le technicien vétérinaire d’Afghanaid travaillant à Baharak. Si l’eau est un vecteur de maladie, les bâtiments sont les nids : très peu d’ouverture (aucune ventilation, pas de lumière), les déjections mélangées à la nourriture...

Ce sont les veaux qui pâtissent les premiers de ces conditions sanitaires, beaucoup de morts nés mais aussi beaucoup qui ne passeront pas le premier mois. Les naissances ont lieu généralement en février mars, juste avant la montée dans les pâturages. Les femelles gestantes, mal nourries soumis à une pression parasitaire fortes ont beaucoup de difficultés à faire vivre leur veau juste après la mise-bas.

**Les caprins (buz)**

- Les races

- Les produits
  Les caprins permettent trois produits : le lait, la viande et le fumier. Les chèvres peuvent donner 1 litre de lait par jour. Comme pour celui de la vache, le lait peut être consommé tel quel ou transformé en sous produits comme le moss, tchaka, maska, krout. En plus des produits laitiers, les chèvres sont vendues pour leur viande. Les bouchers de Shar-é-nau sont les premiers acheteurs, les transactions s’effectuent tout au long de l’année. Comme pour les bovins, des courtiers viennent des provinces voisines pour acheter les caprins après la transhumance, en automne, période pendant laquelle les animaux sont les plus gras. La viande de caprins n’est pas la plus appréciée, les habitants de Baharak préfèrent celle de moutons. Comme les bovins, les déjections servent à la confection du fumier et des tchapaks éventuels. Enfin, les peaux de caprins (100 afghs) connaissent le même parcours que celle des bovins, à savoir qu’elles sont destinées à l’exportation vers le Pakistan via des courtiers.

- L’alimentation
  Les caprins sont soumis au même régime alimentaire que les bovins, avec, évidemment, des quantités moindres. Toutefois, ils ne bénéficient pas d’un apport énergétique tels que le tourteau, l’orge ou le patic. L’hiver, les femelles gestantes sont complémentées avec du pain sec mélangés à de l’eau.

Les chèvres qui restent dans la vallée pour leur lait au moment de la transhumance sont surveillées par les enfants. Ces animaux ont la fâcheuse possibilité de pouvoir grimper dans les arbres ce qui peut les abîmer. Cette particularité constitue avec sa viande peu appréciée les inconvénients propres aux caprins. Ces inconvénients sont contrebalancés par l’aptitude à produire du lait contrairement à son homologue ovin.

- Les maladies
Comme pour les bovins, les caprins sont exposés à de nombreuses maladies que les bâtiments d’élevage font proliférer et que la sous-alimentation hivernale rend particulièrement mortel. Citons l’anthrax, la douve, la fièvre aphteuse ou encore la gale.

**Les ovins (guzfan)**

- Les races
  Le *Gadic* et le *Turki* sont les deux seules races ovines répertoriées à Baharak. Le *Turki* qu’illustre la photo suivante est la race privilégiée par les éleveurs.

**Figure 41: Le mouton turki, un des plus grands du monde (novembre 2005)**

Considérée comme performante pour la viande, cette race mesure plus de 75 cm de hauteur au garrot et figure parmi les plus haut moutons du monde (BOUY, DASNIERE, 1994, p. 247). Les moutons *Turki* sont facilement reconnaissables grâce à la poche de graisse située sur leur postérieur.

- Les produits
  Les brebis ont le désavantage de produire juste assez de lait pour leurs agneaux, pas pour la consommation humaine. Cependant, la viande d’ovins est très appréciée à Baharak, c’est d’ailleurs l’animal indispensable à l’Aïd ul-Adha (deux mois après la fin du Ramadan) fête religieuse musulmane. Les agneaux sont sacrifiés et partager avec voisins, famille, amis. En plus de la viande, les ovins peuvent être tondus pour leur laine. La tonte a lieu l’été, si un pâtre est engagé pour la transhumance, c’est lui qui s’adjugerait la laine dont le prix varie entre 40 et 50 afgs/kg. Cependant, les éleveurs de la zone affirment, tout comme BOUY et DASNIERE (1994, p. 247) que la race *Turki* n’est pas réputé pour sa laine souvent peu épaisse.

   Comme les bovins et caprins, les ovins fournissent des peaux (100 afgs) et grâce à leurs déjections fumier combustible.

- L’alimentation
  L’alimentation est semblable à celle des caprins. Notons toutefois que les ovins n’ont pas cette capacité à monter dans les arbres comme les caprins et sont appréciés pour cela.

- Les maladies
  Les mêmes maladies touchent les caprins et les ovins, c’est-à-dire anthrax, douve, fièvre aphteuse, gale.

**Les ânes (rard)**

- Les races
Deux races sont élevées à Baharak. L’une de petite taille est considérée comme locale, la seconde, plus grande, plus robuste et donc plus cher vient des province voisine du sud.

- **Les produits**
  Les ânes sont utilisés comme moyen de transport. Hommes et marchandises profitent des capacités physiques de l’animal. Indispensable aux moments des récoltes, ou pour acheter des marchandises au bazar, les ânes peuvent supporter une charge d’environ 100 kg.

En plus d’être un moyen de transport, les ânes, grâce à leurs déjections fournissent fumier et tchapaks.

- **L’alimentation**
  Les ânes sont nourris avec des fourrages et de l’orge. Au travail, la ration céréalière est augmentée afin de couvrir les besoins de l’animal.

**Les chevaux (asp)**

- **Les produits**
  Rares sont les habitants de Baharak à posséder des chevaux. Ces derniers sont chers à l’achat et à nourrir. Outre les déjections et donc la production de fumier et de tchapaks, deux raisons expliquent leur place dans la zone : le transport des hommes et le buskachis, ce sport national qui requiert un cheval.

Outre ces intérêts, le cheval permet de révéler son statut social. En effet, posséder des chevaux indique une richesse supérieure à la moyenne du district.

- **L’alimentation**
  Les chevaux, comme les ânes, sont nourris avec des fourrages et de l’orge, l’avoine est également utilisée par les rares gros éleveurs du district.

**L’oviculture (moulr)**

- **Les races**
  Deux races semblent exister dans la vallée de Baharak. L’une locale et de couleur beige foncé est plus petite que celle importé de France selon BOUY et DASNIERE (1994, p. 247).

- **Les produits**
  Les œufs et la viande sont les seuls produits avicoles utilisés par les habitants de la vallée.

- **L’alimentation**
  La volaille est véritablement livrée à elle-même comme l’attestent BOUY et DASNIERE (1994, p. 247), aucun poulailler n’a été répertorié sur la zone. Très peu d’alimentation semble être distribuée aux poules qui doivent donc chercher dans leur propre nourriture.

- **Les maladies**
  Le froid de l’hiver semble responsable d’une mortalité importante. Quelques-uns ont cité la maladie de Newcastle lors des entretiens mais il n’a pas été possible de vérifier ces affirmations.

**L’apiculture (zambur-é-asal)**

- **Les races**
  Toutes les abeilles élevées dans le district de Baharak proviennent du Pakistan. Elles ont été importées par les ONG.
• Les produits
Le miel (asal) est l’unique produit exploité par les habitants de Baharak. Il est vendu près de 300 aghs le kg. Notons que les abeilles ne peuvent pas butiner les fleurs de pavot. Ces dernières ayant été très nombreuses l’année dernières, la production de miel du district fut loin d’être satisfaisante selon les aviculteurs.

• L’alimentation
L’été, les aviculteurs transportent leur ruches plus haut en altitude dans les vallées transversale, voire même dans les haut pâturages des Shewas. Les raisons de cette transhumance s’expliquent facilement par les nombreuses fleurs présentes en altitude pendant l’été. L’hiver, les ruches sont redescendues dans la vallée. Les aviculteurs s’emparent de tout le miel produit par la ruche et ajoute, à la place, du sucre pour que les abeilles puissent survivre l’hiver.
Annexe 33: Pourquoi telle ou telle variété de blé ?

**De nombreuses variétés**
Plus de 15 variétés ont été répertoriées lors de cette étude. L'immense majorité de ces dernières sont dites améliorées, c'est-à-dire qu'elles ont été introduites ces cinq à dix dernières années. Comment les agriculteurs choisissent entre telles ou telles variétés ?

**Les paramètres importants**
Selon les paysans, nous pouvons regrouper les variétés de blé via quatre facteurs :

- La résistance à la sécheresse
- Le rendement en grain
- La qualité de la farine
- Le rendement en paille

Les variétés dites locales ont l'avantage d'être résistantes à la sécheresse et de produire une farine de qualité. Les variétés améliorées ne sont pas résistantes à la sécheresse et peuvent ou non avoir un bon rendement, une bonne farine et de la paille en quantité.

Déterminons tout d'abord ce que signifient ces quatre facteurs. Une bonne résistance à la sécheresse permet à la variété de se développer sur les terres non irriguées. Cette qualité est donc indispensable à la culture sur l'almis. Un bon rendement doit atteindre, selon les paysans, le niveau suivant : 1 ser semé permet d'en récolter 15 à 20, soit 21 à 28 Qx par hectare. Une bonne farine doit permettre d’une part, le collage facile de la pâte à pain dans le tandour (four à pain), et d’autre part, de conserver ce pain plus de 24 heures. Enfin, la paille doit être abondante pour pouvoir nourrir les animaux pendant l’hiver.

Les paysans tiennent compte (ou non) de ces éléments selon divers facteurs que la figure suivante reprend.
Cette figure nous montre également comment sont choisis les variétés. Il existe deux possibilités :
- les ONG imposent leurs semences aux agriculteurs bénéficiaires
- les paysans évaluent le comportement des variétés au cours de la dernière campagne et tentent de choisir les semences en fonction.
Annexe 34: Distribution de la typologie avec des rendements de 80 quintaux par hectare

Sur un rendement de 80 quintaux par hectare, il faut en retrancher 20 %, soit 1600 kg, de charges variables et 875 kg de coût fixe. Sachant que le blé est cultivé une année sur deux, il permet de produire : \( (8000-1600-875)/2 = 2760 \) kg par hectare. Un adulte consomme 240 kg de blé par an. Il faut donc 240/2760=0,087 hectare pour satisfaire les besoins de cet adulte soit \( (0,087/0,2) 0,45 \) jeribs.

Le graphique suivant montre le nombre d’exploitations agricoles enquêtées qui serait autosuffisantes en blé avec un rendement improbable de 80 quintaux par hectare.

Figure 43: Distribution des foyers enquêtés sur la typologie avec un rendement moyen en blé de 80 quintaux par hectare

Près de 50 % des exploitations agricoles ne pourraient pas être autosuffisantes en blé avec un rendement de 80 quintaux par hectare. Ce graphe montre bien que les programmes «blés» ne peuvent pas être intéressantes pour de nombreuses exploitations.