To cooperate or not to cooperate...?: collective action for rehabilitation of traditional water tunnel systems (qanats) in Syria

Wessels, J.I.

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Chapter 5  Shallalah Saghirah

Introduction
This chapter is the social, historical and ethno-geographical description of the case study site of the village of ál Shalaall ál Saghiir\textsuperscript{37}. An anthropological field study and a short hydrogeological assessment form the basis of this chapter. It is an account of events that happened during the years 1998 to 2003. It is aimed at giving insight into the internal dynamics of a typical qanat community in rural Syria. Appendices 1 and 2 give background information about the pilot site such as detailed maps as well as an overview of important marriage alliances of the users community.

Organisation of this chapter
The first part of this chapter deals with the local geography of the case study. Specific focus is given to the use and characteristics of the qanat. An account is given on the present groundwater use near the site and its effects on the aquifer that is feeding qanat. The second part looks more at historical, political and social transformations at community level. It describes a detailed history of the village, the various family ties and the social relationships between the users.

\textsuperscript{37} The proper transliteration for Shallalah Saghirah is ál Shalaall ál Saghiir which means “little waterfall”. For the sake of consistency, the local term Shallalah Saghirah is used here. This term is also used in the official 1:50.000 topographical map of the Republic of Syria no. Ni.37-XIV-D-c.
5.1 Background of the site and its qanat

This section describes the historical and geographical background of Shallalah Saghirah located in northwest Syria. Although rapid changes took place over the past 100 years, the village did not have electricity at the time of fieldwork, educational levels were low, the schoolteacher from Aleppo province rarely visited the school building, and there was public transport only on request. The village was too small to exist in the demographic statistics. But it had its own autonomous water supply, a Byzantine qanat.

5.1.1 Shallalah Saghirah, small village on the fringe of the Syrian steppe

Perched on the hillside, the first striking characteristic of the village is the presence of the traditional dome shaped houses (*kubbeh*) as displayed in Figure 9. This type of buildings is characteristic for North Syria. It is without doubt, the style that is best adapted to the harsh climate. It stays very cool inside during the hot summers and warm during the cold winter months. Built on a square foundation of thick mudbrick walls, the *kubbeh* lets little light through. With an occasional window, most houses only have little square shaped holes that let in some draught for cooling in summer. To create a spacious living quarter, two squares are connected with an arched opening, sometimes even three squares are connected to create a longitudinal room for events like weddings and group gatherings. The *kubbeh* was the first type of houses that Bedouins in Syria inhabited when they gave up living in tents.

*Figure 9 - Entrance to Shallalah Saghirah*

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38 The supply of electricity was planned for the year 2004; when last visited in 2003 signs on the dwellings were made by the electricity company to designate where contact points should be made.
permanently (Hamidé, 1959). The origins of the model are not well known but a similar shape has been recorded since pre-historic times. The houses each have their own designated use ranging from living/bedroom, storage, kitchen, barley or cotton storage (See Figure 9).

Smaller *kubbeh* are built for the storage and drying of chicken dung to use for fuel. Old houses of deceased family members are not re-inhabited. These old houses are used for sanitary purposes. The village does not have septic tanks or latrines; most male inhabitants toilet in the corners of the *wadi*, whilst female inhabitants use the old houses or sheep pens. Water in a plastic pourer called “*ibrik*” is used for washing and cleaning.

As well as the traditional *kubbeh* style houses, the village has been increasingly introduced to the modern square houses. These houses have a flat roof and are built using reinforced concrete and cement. Mudbrick storage buildings are usually kept as the traditional bread oven (*tanour*) which is used on special occasions. The advantage of the modern house is that it does not require annual maintenance by adding mud. But the disadvantage is the heat in summer and difficult to keep warm in winter. In winter, all households install iron diesel stoves with a pipe that is guided through a hole in the wall. The stove is placed in the middle of the room to give

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**Figure 10 - Typical lay-out of a dwelling in Shallalah Saghirah**

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**Figure 11 - Rainfall Shallalah Saghirah in the year 2000**
maximum heat all around.

Around 25 households live in the small village of Shallalah Saghirah. It lies between the 200-mm and 250-mm rainfall isohyets and has a semi-arid climate of hot dry summers and relatively cool winters with rain showers. Precipitation occurs as winter rain and falls between November and May, with a peak in January (see Figure 11). The village area comprises a watershed that lies between 300-600 m above sea level and is situated on the eastern feet of Jebel al Hoss hill range. The total surface of the watershed is about 5.5 km². The slopes and the plateaus are extremely stony. Hydrologically, Shallalah Saghirah is located in the Jabul catchment and the drainage pattern is directed east towards the nearby Jabul saltlake.

5.1.2 Historical background and development of qanats around the pilot site

The water in the village is supplied by a 1500-year old qanat. Although it is the only working system in the vicinity, the qanat in Shallalah Saghirah is not isolated (See Map 6). An important site near Shallalah Saghirah is the old Byzantine site of Ras’m al Nafl. This village is strategically located northeast of Shallalah Saghirah along the road between Sfeereh and Khanasser. The origin of Ras’m al Nafl is late Roman/early Byzantine era. The main evidence of Byzantine settlement is the concentration of church foundations west of the modern village towards the Jebel al Hoss. In their aerial research on Roman Syria, Mouterde & Poidebard (1945) observed the remains of several churches and an underground qanat that cut into the hills of Jebel al Hoss, a site called Mu'allaq. He reckoned the sites were part of a Roman military range that later became Byzantine settlements. According to the nearby farmer, it has dried up since the 1930s.

The village of Ras’m al Nafl is located at a strategic site on the fringe of a major saltlake. During the early Byzantine Empire it formed part of a second line of defense against nomadic raids and invasive troops in an effort to push back the borders of the Byzantine Empire. The first line of defense was situated more towards the Euphrates in the East (Haasse, 1983). In the 5th Century A.D. Syria formed part of the Byzantine Empire after the dissolution of the Western Roman Empire. Looking at other Byzantine settlements in the Khanasser Valley and Jebel As-ShbAYh, one can assume that the outposts were positioned in two rows running parallel to each other from North to South; a line of outposts on the eastern side of Jebel As-ShbAYh, with the plateau as buffer zone and a line on the eastern side of Jebel al Hoss. In the between the rows of settlements lay the Khanasser Valley, closed off the South by the town of Khanasser.
(then called Anasartha) and few military outposts like al Hammam. This buffer zone of defense was suitable for agriculture and hence could provide supplies to the border troops. It protected the villages north and west of Jebel Al-Hoss and, most importantly, prevented invaders pushing through to the city of Beroea (Aleppo) and the northern Byzantine cities like Antioch, the second most important city of the empire, where the main monasteries and philosophical schools of the eastern Byzantine Empire were located.

After Emperor Constantine had made Christianity the state religion, the Byzantine Empire was constantly threatened by attacks from outsiders. The defenses were necessary in the late Roman-Early Byzantine 6th century because the Sassanians in the East were a constant threat to the state. In the late sixth and early seventh century, two great powers, the Byzantine and the Sassanians, ruled the Near East (Bloom & Blair, 2000). The Byzantines had inherited the East Roman Empire that stretched from Byzantium or Constantinople (present day Istanbul) to the south of Syria. Emperor Justinian (r. 527-65) brought relative peace to the Empire. Justinian and his general Belisarius re-conquered many of the further reaches of the empire. To celebrate his victories, Justinian spent a considerable amount of time building churches, monasteries and schools. In 550 he rebuilt the famous Hagia Sofia in Constantinople.

Yet despite his successes, Justinian still faced a constant threat from the Sassanians in the East. These Persian-speaking Zoroastrians ruled a territory roughly covering modern day Iraq and Iran (Bloom & Blair, 2000). For centuries the Sassanians and Byzantines waged wars against each other and the border between the Persian and Byzantine Empire was moving periodically. Procopius, historian and chronicler of Justinian and his general Belisarius, mentioned in his history of the wars that in April 531 A.D. the Byzantine army encamped in the city of Chalcis (modern Kinnesrin). The enemy troops were in a place called Gabboulon (near the Jabul saltlake, north of the Khanasser Valley) one hundred and ten stades (approximately 20.2 km) away from Chalcis (Procopius translated by Dewing, 1914). Once they learned of the proximity of the Byzantine army, the Persian army retreated to the city of Callinicus.

In 540 the Sassanians sacked Antioch in northern Syria and were controlling the region. The continuous fighting between Sassanians and Byzantines continued over almost a century until the mutually ignored threat from the South determined the future of the Syrian province; in 633 A.D. the Muslim Arabs conquered Syria and ultimately brought it to the centre of the Islamic empire when the capital was moved from Medina to Damascus by the Ummayads in 661 A.D (Hitti, 1959).

One stade is approximately 184.4 meters
the bank of the Euphrates. The Byzantine army followed suit. A long battle followed that finally ended in the retreat of the Persians. The Syrian province had now been freed from the invaders. It gave way to a period of prosperity. Justinian made use of this period by rebuilding and restoring fortresses and towns like Antioch, Chalcis and Sergiopolis (modern Rusafa). The Emperor bestowed the same careful attention on all the towns and forts which lie on the farthest borders of Euphratesia, namely Barbalissus and Neocaesaria and Gaboulon (Procopius translated by Dewing, 1914). All these locations lie in the area around Shallalah Saghirah and the Khanasser valley. It is most likely that the many churches and qanats in the Khanasser valley were built during Justinians’ reign.

In order to assure the safety of the Syrian province, military zones such as the ones in the Khanasser Valley were thus needed and very important. Obviously, the border outposts needed water supply, hence the presence of qanats. Exactly in this period Justinian built many water supply works like dams, sluices and aqueducts. Although qanats are not literally mentioned, Procopius describes in his book “Buildings” how Justinian rebuild the water supply of the city of Cyrus (modern Chorres);

The interior of this city had been destitute of water from ancient times; outside of it there had been a certain extraordinary spring which provided a great abundance of water fit for drinking….so he (Justinian) dug a channel outside the city all the way to the spring, not allowing it to be seen, but concealing it as carefully as possible, and thus he provided the inhabitants with a supply of water without toil or risk (Procopius translated by Dewing, 1914)

The origin of most qanats in the Khanasser valley is therefore probably Byzantine, more specifically Justinian. The fact that the current local population calls them “Qanat Romani” does not necessarily refer to

Figure 12 - Oil lamp found in qanat Shallalah Saghirah

*Near modern Meskaneh (north east of Khanasser Valley)*

*modern Jaboul*
a Roman origin, it refers to an ancient origin. In fact, the Byzantines, although they spoke and wrote Greek, considered themselves to be the only true Romans and Arab authors later acknowledge the Byzantines’ claim by referring to them as “Rum” meaning Romans in Arabic and calling the Europeans, including the pope of Rome, the Franks (Bloom & Blair, 2000). Although Safadi (1990) says that the appellation for qanats in official Syrian documents is “Foggara”, we prefer to use the colloquial term “Qanat Romani”. It is very well possible that the term “Qanat Romani” in fact refers to “Byzantine Qanats”.

Further evidence of the likelihood of Byzantine origin of qanats in the Khanasser valley has been found in Shallalah Saghirah. Underneath the kubbeh houses basalt remnants of foundations, most probably from Byzantine buildings, can be found. One of the main rooms, contains a basalt doorpost. In addition, in one of the tunnels of the qanat of Shallalah Saghirah, we found a Byzantine oil lamp during the renovation in the summer of 2000 (See Figure 12). Ancient diggers or maintenance workers most probably used the oil lamp. Because of the finding we can approximately date the age of the qanat. The precise dating of qanats is virtually impossible, unless their construction was accompanied by documentation or, occasionally, by inscriptions (Lightfoot, 1996). With the found artifact we have some idea about the age. Two Byzantine crosses were carved in the sides of the walls, probably diggers died in these spots or water was found. The lamp has been officially dated in the first half of 6th century by archaeologists. This period coincides with the reign of the Emperor Justinianus (527-565).

The qanat of Shallalah Saghirah was most likely a drinking water supply system for nearby military outposts guarding the plain between Jebel al-Hoss and Jebel As-Shbayth. Remnants of buildings and pottery fragments show the presence of either a small farm or permanent outpost. The presence of the churches in the Khanasser valley indicates that the zone was relatively peaceful, more a place to rest and be fed for the soldiers who need to relax after the frontier battle duties. Remnants of terraces or water harvesting systems can be observed on the hill slopes surrounding the wadi where the qanat draws its water. It suggests that relatively large-scale farming was practiced to feed the soldiers on the frontiers. Haasse (1983) suspects the terraces were used for vineyards due to the location towards the direction of the sun but the shape of the terraces does not suggest a particular crop. Some terraces run along vertical lines from top to bottom and the width of the walls does not suggest they have been used for grapes specifically. Thorough archaeological research is needed for clearer suggestions on the agricultural use of these remnant terraces. During their transects in 1938, not far from Shallalah Saghirah, at the valley of Ruwayhib
Boutma), Mouterde & Poidebard (1945) found basalt remnants of a
church foundation. One of the lintels bore the inscription dedicated to “the
glorious Mother of God, the Virgin Mary” by “the famous leaseholder of
the saltworks, Theodule” and was dated 553 A.D. Assumedly, during that
time, the nearby Jabul salt lake was actively exploited and well protected
as a commodity.

During Justinian’s reign, it is assumed that the qanat of Shallalah
Saghirah was regularly cleaned and maintained by the Byzantine state
institutions. The construction of qanats in Byzantium was a state affair as
Tate explains: « La construction d’ouvrages d’irrigation, le creusement
ou l’entretien des réseaux de qanats aux confins de la steppe, enfin, ont
exigé des resources dépassant de loin celles des villageois : d’une
manière ou d’une autre l’intervention de l’État a été nécessaire ». (Tate,
1992)

All but one of the qanats present in the Khanasser valley have
dried up or been neglected. The most well known qanat is the system of
the town of Anasartha (modern-day Khanasser). This qanat was estimated
to be 12 kilometers long (Hamidé, 1959). In 1959, Hamidé (1959)
observed and described the qanat of Khanasser. At that time it irrigated 15
Ha of gardens and had a discharge of 8 litres per second. The qanat of
Khanasser stopped flowing in 1975 after the introduction of pump-wells
in the area west of the Khanasser Valley. In the modern town of
Khanasser the Byzantine remains are visible in the street, in newly built
walls and inside residential houses. The amount of artifacts, foundations
of house and churches indicate a flourishing Byzantine settlement that
needed a substantial water supply.

Other antique qanats and water harvesting dams in the Khanasser
valley can be found on the southern fringes of Jebl As-Shbayth, the
settlement of Kleya and various other places. In the area around al-
Hammam south of Jebl As-Shbayth, we found a line of airshafts with
original casings. The water in the qanat was standing still but according to
the local population, the qanat has flowed and in times of heavy rain, the
reservoir fills up with harvested rains. There has not been a systematic
archaeological survey or excavation of qanats in the Khanasser Valley.
This study has not further regarded dried up qanats. The likelihood of the
presence of more underground water tunnels hidden underneath
unexcavated Byzantine settlements is high.

5.1.3 Physical characteristics and hydrogeology of the
qanat in Shallalah Saghirah

The qanat of Shallalah Saghirah is 406,9 m long, with eight
airshafts of which seven are open and one is filled with debris and basalt
stones. The shafts provide oxygen and a draft of air through the main tunnel that cools down the water. The accumulation of debris in airshafts happened over a long period of time during flash floods of the wadi, that deposited basalt stones from the layer on top of the surrounding hills in the airshafts. Furthermore, children and local inhabitants have thrown debris into the shafts. Two shafts above the main tunnel were closed by one basalt stone covered with topsoil. These two shafts provided the habitat for bats. Both of these were located during renovation and opened by the workers. See Map 1 for a detailed map of the qanat.

Map 1 - Detailed map of the qanat in Shallalah Saghirah

The qanat taps its water from the Middle Eocene rock formation, which is fractured at certain places. The qanat is fed by two springs. The local names of the springs are called Jub al Saghir (Airshaft 8) meaning “small well”, and Ras al Nebe’, meaning “head of the source”. The Jub al Saghir is 15.80 m deep and the water is colder than the Ras al Nebe’. The Ras al Nebe’ is directed into the wadi and does not have an airshaft located above it. The Ras al Nebe’ is the main supplier of water while the Jub al Saghir can be considered as a second helping spring. The qanat can be entered from the main entrance called Jub al Sunduq (Airshaft 7) meaning “the well box” which is an airshaft or maintenance shaft of 12.20 meters deep. The sunduq is a rectangular shaped airshaft of 1.70 by 0.80
on each side of the shaft, small steps are carved out which are used for descending.

The original qanat diggers started digging the sunduq and searched from this point for the groundwater level. At the bottom of the sunduq, two dry tunnels progress in opposite direction; one tunnel goes in southern direction towards Airshaft 8, the other continues in northeastern direction towards a crossing called Arba’a mafaraq (‘the four crossings’). Airshaft 8 looks like a natural cave. The rock in the cave is highly fractured. Around 20-60 cm of water is present. The water in the cave does flows very slow and irregular. On the bottom of the cave irregular holes can be observed. When the water was pumped out during the cleaning, these karstic holes refilled with water from below. The depth of one of the karstic holes is up to 1.80 m with a diameter of 80 cm. Below airshaft 8, another tunnel of 10 m. has been dug that is cut by two cracks on the bottom. This tunnel has a dead end.

From Airshaft 8 water is flowing through a small natural tunnel towards a reservoir just before the main tunnel (sarab arra’iz). The width of the small tunnel is about 60 cm with a height of 30-40 cm. The tunnel is so small that only the workers with small bodies can crawl through. The
workers can only crawl through the tunnel when the water is pumped out because the tunnel is normally filled with water. There was a small karstic hole in this same tunnel from which water was flowing out. The reservoir where the small tunnel ends, is a small basin just before the crossing *Arba’a mafaraq*. Between the reservoir and the *Arba’a mafaraq*, basalt remains are found of a wall that separates the reservoir from the main tunnel. Suggested is that the purpose of this wall was to stop the water flow from airshaft 8 in wintertime when irrigation water was not needed. Thus the reservoir would then act as winter storage.

From the *Arba’a mafaraq* towards the North, a tunnel of 1.40 m width and 60 cm height leads to the source called *Ras al Nebe’*. The tunnel has a layer of 20 cm of water. The tunnel, which looks natural, leads an enlarged natural cave. The rock that forms the walls of the chamber is highly fractured. About 40 cm of water is standing in the cave. A karstic tunnel is located in the northwest corner of the cave. It is not known how long the tunnel is since it is impossible to continue for humans after 7 meters. When we first entered, the cave formed a habitat for a colony of bats. The villagers said that the water from the *Ras al Nebe’* is warmer than the water in airshaft 8. In summer both waters measured a temperature of 21°C.

The flow of the qanat increased significantly during the winter of 2000/01 after several rain showers of up to 50 mm per storm. The temperature of the water in airshaft 8 was 13°C at the bottom and 15°C just under the surface. At the crossing where both waters meet, the temperature was 16°C at the bottom to 20°C just under the surface. The difference in temperature indicates that the response of aishaft 8 on a rainstorm is higher than that of the *Ras al Nebe’*. It is likely that the *Ras al Nebe’* provides the base flow while the *Jub al Saghir* (airshaft 8) gives the peak flow.

The section *Jub al Saghir* - *Ras al Nebe’* - *Arba’a mafaraq* can be seen as the main water production zone of the qanat. At the *Arba’a mafaraq* both waters come together and flow through the main tunnel where it becomes the water transport zone of the qanat. From the *Arba’a mafaraq* the tunnel leads towards the *Jub al Mai* (‘water well’), in Map 1 this is called airshaft 6. In between these two points, a Byzantine cross carved in the northern wall of the tunnel was discovered. Just east of this cross, a wider section in the tunnel shows heaps of debris on both sides. It is not clear what this widening is but it seems that it was filled with sand purposely. The villagers believe this was where the tunnel collapsed in the past and some diggers died (hence the presence of the cross). Airshaft 6 used to a well from which Bedouins took water before the discovery was made that the well was part of a qanat. In the floor of the tunnel a hole of 1.20 m is dug just under airshaft 6 so the buckets could be lowered under
water. On the sides of the main tunnel there are several places with filled up holes in the walls. Expected are more tunnels located behind these holes. According to the villagers more airshafts can be seen in the South when the valley is covered in snow. On these locations the snow is melting faster than the surroundings. These airshafts probably belong to side branches of the main tunnel.

Another interesting section is where the tunnel makes a curve between airshaft 3 and 4. Progressing from airshaft 2 to 4, the main tunnel is approximately 2.5 m. high of good construction and the limestone is almost not fractured until it reaches the curve and the tunnel is only 1.45 m of height. It is believed that the diggers dug so low to keep the structure as strong as possible because the rock in this area is heavily fractured. Suspected is that water is lost in this section. Similarly, in 1984/85 water was lost just West of the Jub al Mai in a karstic hole. During the renovation, the cloth that filled the hole, was removed and the hole was closed with a cement plug. At places where the rock is heavily fractured the tunnel is not regular, it has small chambers and curves. These are the results of the channel walls collapsing, during digging and cleaning. During the renovation pieces of limestone came loose from the side of the main tunnel and had to be brought up to the surface. Between airshaft 1 and the outlet, the qanat is dug in quaternary deposits. In this part, the ceiling of the qanat is constructed of basalt stones. The outlet is called Al ‘Ayn, “the source”.

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*Table 6 - Chemical analysis of the water in the qanat of Shallalah Saghirah*
The chemical water quality of the qanat has been measured twice (see Table 6). The results are compared to drinking water standards of the WHO (Appelo and Postma, 1993). From the table can be seen that the water is drinkable. Water was also tested on its microbiological quality before and after the renovation (see Table 7). Both samples were taken in duplo and show that the water is not according to WHO standards. The presence of bats in the tunnel and airshafts of the qanat cause the microbiological pollution. Their excrements drop in the water and flow to the spring. The presence of sheep close to the outlet is another source of pollution. Health problems can be prevented by adding hypochlorite to the water or by cooking the water.

The electro conductivity of the water flowing from the qanat varies around 0.85 dS/m. Electro conductivity values rose to 1.4 dS/m after the rain showers of the winter of 2000-2001. These means more minerals were dissolved in the water. The flow of rainwater through the pores and along the walls of the qanat probably dissolved the calcium carbonate, which was available in the hardrock. According to one of the villagers “soap did not foam well” and “the tea got a strange color”. The soap indicates that a lot of calcium or magnesium was dissolved in the water.

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Table 7 - Biological analysis of the water in the qanat of Shallalah Saghirah

The chemical water quality of the qanat has been measured twice (see Table 6). The results are compared to drinking water standards of the WHO (Appelo and Postma, 1993). From the table can be seen that the water is drinkable. Water was also tested on its microbiological quality before and after the renovation (see Table 7). Both samples were taken in duplo and show that the water is not according to WHO standards. The presence of bats in the tunnel and airshafts of the qanat cause the microbiological pollution. Their excrements drop in the water and flow to the spring. The presence of sheep close to the outlet is another source of pollution. Health problems can be prevented by adding hypochlorite to the water or by cooking the water.

The electro conductivity of the water flowing from the qanat varies around 0.85 dS/m. Electro conductivity values rose to 1.4 dS/m after the rain showers of the winter of 2000-2001. These means more minerals were dissolved in the water. The flow of rainwater through the pores and along the walls of the qanat probably dissolved the calcium carbonate, which was available in the hardrock. According to one of the villagers “soap did not foam well” and “the tea got a strange color”. The soap indicates that a lot of calcium or magnesium was dissolved in the water.
5.1.4 Early modern use of the qanat

There is no evidence of the status of the qanat during the time between the Byzantine use and the arrival of the current inhabitants on the site. Although we can assume that other groups than the Byzantines reused it during periods of relative prosperity. A number of scholars have attributed some of the qanats in Syria to the Umayyad caliphate (A.D. 661-750) when the Islamic Empire was at a political and geographical zenith (Lightfoot, 1996; Sourdel, 1968; Goblot, 1979; Kobori, 1982). The re-use of Byzantine qanats by Islamic groups is quite acceptable.

When the first modern inhabitant, arrived at the village in the beginning of the 20th century, the qanat was abandoned. Except for the airshaft 6 called Jub al Mai that was used by Bedouins as water well. With hired labour, the first inhabitant cleaned out the main tunnel. The water was collected at the end and used for the irrigation of barley and some trees. The qanat was a valuable source of water and the first inhabitant could maintain his family completely with the production of the irrigated land. The surplus he invested in labour for agriculture and the buying of land property. When the first inhabitant died, it became common property of his descendants. The responsibility of maintaining and cleaning the qanat lies with the owners of the rights on irrigation water also called al haquun. They decide on the necessity of cleaning. The cleaning was done as soon as less water was coming out of the qanat and maintenance was done one a yearly basis just after the winter. With a bucket on a rope, one of the haquun would walk through the main tunnel and remove all debris and sediment that was formed during winter. With the disintegration of social cohesion and a schism that developed between the haquun, the regular maintenance and cleaning stopped. A more detailed description of the social history and current use of the qanat will be given in later sections.

5.1.5 Present groundwater use near the qanat

The sustainability of qanats highly depends on the development of wells in its vicinity as both compete for the available groundwater. In the watershed of Shallalah Saghiraıııııı three wells are drilled. Well 504 at household (15) gives brackish water. It gives in 24 hours only two cubic meters of water. The water is used for cleaning and as drinking water for sheep. An electric pump pumps the water. The amount this well takes from the groundwater is not threatening the qanat. Another well (503) drilled by household (18) is 60 m deep, was drilled in 1984. The groundwater level in this well is at 30 m below ground level. The owner says that when he drilled it the groundwater level was 15 m. The well has a discharge of about one liter per second. An electric pump pumps the
water. The quality of this water is good and the water is used for drinking water for the livestock and people and to irrigate a small vegetable garden and a few fruit trees. The well is about three kilometres away from the qanat source and it does not seem to affect its discharge. The third well (506) is present on the southern side of the garden, this well does not have a pump, it is abandoned and covered by a rock.

A significant amount of wells have been dug in the valley between Jebel al Hoss and Jebel As-Shbayth where they pump the phreatic groundwater. The valley between Jebel al Hoss and Jebel As-Shbayth is called the Khanasser Valley. The phreatic groundwater in this area is mainly used for irrigation. Water for domestic purposes is brought to the houses by tankers, which are filled from a tap at Ras’m al Nafl that gives water from the Euphrates water scheme. A well survey in the Khanasser Valley showed that a peak of well drilling occurred between 1990 and 1995, with the maximum in 1993 (Hoogeveen and Zöbisch, 1999). The main part of those wells is drilled in the center of the Khanasser Valley. Wells (17) and (18) located in the western part of the Khanasser Valley. Figure 14 shows the monitoring of wells in the vicinity of the qanat between March 1998 and January 2001 (Hoogeveen & Zobisch, 1999; ICARDA). At Jebel al-Hoss, nearby wells 204-209 are monitored from April 1999-January 2001 (ibid.) Both the qanat and the wells in its vicinity receive their water from the Middle Eocene formation.

![Figure 14 - Groundwater levels of tube wells in the vicinity of the qanat over time](source: Hoogeveen & Zobisch, 1999)
This formation is not a highly productive aquifer and these wells are mainly providing domestic water supply. The groundwater levels show some fluctuation. All the wells show a slight fall in the groundwater level. This fall is most likely a trend that is caused because of the two dry years that were experienced in the winter 1998-1999 and 1999-2000. The small number of wells and their relatively stable groundwater level indicate that the water supply to the qanat from the Middle Eocene is not threatened by pumped wells.

5.2 The users community of Shallalah Saghirah

I first visited the village of Shallalah Saghirah in November 1998 when I was working as information officer for the International Plant Genetic Resources Institute (IPGRI) in Aleppo. It was a beautiful spot to relax and rest from the hectic office, so my husband and I often returned in the weekends. The village did not have a mosque, electricity or a modern water supply. The village has a governmental school building for primary school education but lessons are not given on a regular basis. The village consists of 25 dwellings of which 17 are inhabited. Six extended households are present and 12 nuclear households. When I arrived, a total of 122 people lived in the village. All people descended from one man, who started to live in the village at the end of the 19th century. He was from the Hariri clan and his ancestors migrated from the Hawran in southern Syria, to the area around Sfeereh, a town some 15 kilometers north of the village.

5.2.1 Household characteristics

The group of inhabitants in Shallalah Saghirah, is what is called a patronymic group, a group identified by a common surname (Mundy, 1995). Table 8 gives an overview of the household characteristic in 2000. Map 4 in Appendix 1 gives a detailed household map of the village. The descendants in Shallalah Saghirah are divided into five groups. In Arabic, they are referred to as bayt (pl. buyut) or hosh (pl. howaash). In this study we will refer to them as bayt. This is a unilineal descent lineage group in which the membership rests on patrilineal descent from one of the brothers of the first generation.

Until 1965, all descendants were resident in the village. The strain on land and water resources caused some households to leave the village in 1970; the descent group became too large for the land property. Economic pull drove some of the families to urban areas like Aleppo and Raqqa. In that period there was a strong mobility of people in Syria. Data from 1970 on total migration flows in Syria show that 66% was rural to
urban (Ashram, 1990). Tully reports that on very small farms, household members migrate so that subsistence farming is possible for those remaining behind (Tully, 1990). The migration of some in Shalalah Saghirah did not result in the self-subsistence of those who remained. The village has become a place from where households developed different types of income activities to survive, whether on-farm or off-farm. Three lineages of the original family remained in Shalalah Saghirah; bayt Hatim (HA), bayt Amir (AM) and bayt Khaled (KH). The first family we met was household 11 (HA). It was logical that we met them first, because they live in the oda; a room that used to be the common family room. For any first time visitor to the village, this is the first household to meet. The fact that bayt Hatim owned the oda in the village also is a sign that their status in the village is high or at least used to be high in the past. In Turkish villages, Sterling (1998) describes how the oda functions as a place for gathering and prestige. In Shalalah Saghirah the oda partially has this function and the Hatim regard themselves as the most important family in the village.

43 Oda is not an Arabic word but derives from the Turkish word oda meaning “room”. The oda is, in fact, a male club and sitting-room, used not only for male guests, but also for gatherings of male neighbours and kinsmen. The oda contains built-in divans, covered with rugs, usually running parallel from the door at one end to the hearth at the other. By the hearth is the seat of greatest honour, by the door that of least honour. In the spring and autumn the men gather in these oda at sundown, especially if the weather is cold enough to make a fire desirable. Roughly, each of these was the meeting place of a lineage group, plus neighbours and matrilateral and affinal kin. (Sterling, Paul, 1998) Turkish Village, Centre for Social Anthropology and Computing, University of Kent.
<table>
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<th># members</th>
<th>nuclear/extended</th>
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<th># sheep</th>
<th>irr right</th>
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</tbody>
</table>

122 884

\( Y = \text{yes} \quad N = \text{no} \quad RN = \text{outsider from the nearby village of Rasm el Nafl} \)

Table 8 - Household characteristics Shallalah Saghirah d.d. 2000

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44 Used acronyms for lineage names in Shallalah Saghirah in order of birth of the head of the lineage are: \(KH=\text{Khaled}, \ SH=\text{Shakir}, \ HM=\text{Hamzah}, \ HA=\text{Hatim}, \ AM=\text{Amir}. \) Further: \(AHKH = \text{Ahmed, son of Khaled} ABKH = \text{Aboud, son of Khaled}.\)
**Annual cycle and daily life**

An ordinary day in Shallalah Saghirah is mainly organized around sheepherding and starts at 05:00 a.m. in the morning, when young boys herd the sheep to the pastures. 07:00 a.m. is breakfast time; some yoghurt, *za’ater* paste, olives with flatbread and cheese. At 11:30 the sheep return from the pastures to drink and be milked. Around 13:00 there is lunch, which is similar to breakfast. At 17:00 the sheep return for the evening, are milked, fed barley and placed in their pens. The evening meal is taken around 18:00; warm dishes are prepared usually containing potatoes, eggs, tomatoes, with onions, eggplant or some rice. Most food is bought from local markets. Expensive meat is not often on the menu.

Sunset is the time for socializing and visiting each other informally. Diner is prepared and eaten with the extended family members and guests. As soon as night falls, the generators are switched on to provide light. If the household does not have a generator, gas lamps are used. The men usually spend the evening socializing with other men and the women go to bed at 21:00 with the children. The men follow not long after the women. All mothers, daughters and young sons sleep together in one bedroom whilst the father and older sons share a room. Where a household has a television, the nuclear household will watch a soap series after diner and go to bed later.

Agriculture, both rainfed and irrigated, does not provide sufficient subsistence for the livelihoods of the villagers. Paid employment, off-farm work, work in urban areas, trading, sheep-rearing and shearing, labour migration abroad provide additional income for the majority of the households. Rabo (1986) reports a similar situation of villagers near the town of Raqqa. There is no standard strategy or solution to cope with the economic challenges that the households face. Each household allocates its resources at any given time when they think it is best. Most choices of where and how to get income are based on trends and seasonality. However there is an annual cycle, closely related to the agricultural cycle, that determines which types of work are more favourable than others.

*Autumn* – Before the winter rains, any rainfed barley land to be cultivated is ploughed and sowed. The irrigated land is cleared and prepared for barley for those who have sheep. Young men who do not have their own land, work off-farm in constructing new buildings for customers in nearby villages, salt harvesting or catching birds of prey to trade. The attraction of catching birds of prey is the fact that they can make money fast. A bird of prey can be sold for up to 10,000 USD to Gulf Arabs through offices in Aleppo. Trading of goods from the urban areas in the villages is also done. The waiting is for the rains.
Winter – Winter is a quiet time, those who have paid work or have off-farm work continue working. Some unmarried men would try to go abroad. Lot of time is spent on socializing and playing manakah. Sometimes just after the first rains have fallen, the village is visited by some Bedouin friends who are on their way South to their winter camps. They will stay in one of the empty houses for a week or two before they carry on with their journey. Irrigation of the garden continues despite rains, the trees have to be watered and winter crops irrigated.

Spring – Early spring, depending whether the rains have been good in winter, is a busy time for the villagers. All that is good (khayr) will occur when the rains have been good45. Those with sheep will be busy with the pastures and the barley they irrigated for grazing. For the women comes the work of milking, preparing yoghurt and butter (semna ‘arabi) for own consumption and trade. If there are enough dairy products, the household will sell via the daily baker that visits the village early in the morning or the bus that arrives once or twice a week to take people to the city. Once a week, a bi’a (literally “seller”), visits the village with his motor cart to sell household goods and other domestic products. The men are busy irrigating and preparing the sale or purchase of lambs depending on their financial situation. Young men without sheep will look for work in sheep shearing with the large Bedouin flocks. Together with groups from other villages the men will try to get access to Saudi Arabia and shear the sheep flocks there. It promises a good income. However visas are not always granted.

Summer – The beginning of summer is the time when those households with flocks of sheep prepare to migrate to the northern pastures of ‘Azzaz. Women and children prepare the summer tents and the men arrange for transport of the sheep, household items, tents and occasionally a donkey that is hauled into the truck. Since the sixties, the families of Shallalah Saghirah have an agreement with a landowner in ‘Azzaz to work on his land and in return be able to graze their sheep and collect the stubbles for fodder.

During these times, the women take care of the sheep and collect barley residues, which are sold on the market. The young men work on construction sites, help the women collecting and later at the end of summer may work in the olive harvest. In autumn, on their way back to the village, some households will make a stopover with their sheep to

45 “Khayr al ard min khayr al semma” = The good of the soil comes from the good of the heaven (Arabic idiom)
graze cotton residues before settling back into their dwellings. All households that rely mainly on sheep husbandry return back into the village before the winter rains start in October/November.

Households without or with a little number of sheep, will stay in the village during summer. If the men have paid employment with the government the whole household will stay in the village. Other men will prepare to work in construction in urban areas such as Beirut. With the same group of men they work with in sheep shearing, they will try to get work in Lebanon for a few months. If they are married, their wives and children remain in the villages.

**Income, wealth distribution and age groups**

The ideal of most men in the village is to have large flocks of sheep to support their lives. The socio-economic circumstances in the village do not allow this. There are six extended families, in the village, three are from bayt Amir (AM) and the other three are from bayt Hatim (HA). In numbers of people, bayt Amir (56) outnumber the Hatim’s (43) with 13 members. Bayt Hatim (HA) owns 214 sheep whilst bayt Amir has 520 sheep plus 90 sheep from bayt Khaled and 60 from an outsider (household no. 13). Household (13) of bayt Amir is the only matrilocal household living in the village, which is important to note because this has been the subject of conflicts. The outsider household does not have irrigation right from the qanat whilst the Hatim and Amir lineage each have three households with irrigation right and the Khaled lineage has two households with irrigation right.

The Amir’s are wealthier in terms of sheep, land and number of members whilst the Hatim’s claim to be the most important family in the village because they own the oda. For their livelihood strategy, bayt Amir has focused on relatively steady incomes coming from sheep husbandry and regular jobs. This is reflected in the fact that all factory employees are from the Amir lineage whilst the Hatim’s livelihoods are supported mainly through the more insecure migration work and seasonal labour. There is a distinct local division between young men who are employees (muwaddafiin plur.) and seasonal workers (‘ammaal plur.). Four households from the Amir lineage work at the local governmental defence factory. The four households of these employees are resident in the village throughout the year. The rest of the households migrate during spring and summer, except for elders who do not have a lot of sheep and depend on income from their sons who work on construction sites. One household receives a governmental stipend because one son was killed during the Lebanese war in 1984.
Two households of bayt Amir depend on a considerable amount of sheep. The rest cannot depend on either agriculture or sheep husbandry. For two months a year, in spring, a large group of men from Shallalah Saghirah travels to the Syrian desert interior or Saudi Arabia to shear sheep. They bring their own equipment in the form of scissors or will use electrical shearing machines if the owner of the flock can afford this. One sheep will pay 15 SYL and the men aim at doing 100 sheep a day. Doing this work for two month will provide the bulk of a yearly income.

The young married men grasp every opportunity to raise income for their families. The unmarried men look for jobs as soon as they leave school or army service, to save money for their future bride, an expensive investment. Within Syria they try to get construction jobs, or build small businesses with relatives living in the urban areas. They prefer having sheep and most of them have a small amount, but when life is getting too expensive, they sell the sheep and start working off-farm. The destinations vary as well as the type of work (see Table 9). Short-term thinking is evident in this age group. For unmarried men the drive is to earn money for their bridewealth\(^{46}\). If they pay a high amount of bride wealth they will be able to marry a respectable woman from a powerful family and consequently step higher on the social ladder.

In the age group of 20-30, most of the men work in construction jobs. Another favourite type of work is sheep shearing, but this can only

\(^{46}\) Bridewealth (ṣadaq or mahr), found commonly in patrilineal societies, and especially in pastoral ones, is a payment by a man or his kin to the kinsmen of the bride (Ingold, 1994)
be done in spring. The search for jobs seems to bond the men. The men find jobs through their network of friends and personal relations. They will share this knowledge because family members are expected to pass on any information on upcoming jobs. If the opportunity is there the men travel to Saudi-Arabia for this type of work since the salary is high.

The age group between 30-50 years is mainly concerned with shearing sheep in spring and relies either on sheep husbandry or seasonal work for its main income. Some of the younger members of this age group carry out construction work. The age group of 50 years and more rely on sheep husbandry and income from their sons. Members of this group sometimes do the shearing of sheep however this happens rarely. One elder is known for his construction work and still works occasionally in the construction of rural houses.

Figure 15 - Sheepshearing is one of the main income sources

Shallalah Sagirah is a patrilineair descent group; the predictable patterns in which people combine and dispute, can generally be explained in segmentary theory. The descent group is represented in the first nuclear household consisting of the first inhabitant and his five sons. All of its members are deceased. The households’ identity is based on lineage groups representing descendants of the first five sons. Moreover the lineage defines the place of residence of a household within the village territory. An integral element of segmentation is the high value placed upon the autonomy and honour of persons, and a balanced opposition of honour bearing persons and groups (Eickelman, 1989). For example, in internal conflict, members of one lineage group will choose the side of
their brothers against their cousins from another lineage. For external conflict, a person will choose the side of their cousins against an outside enemy.

Divisions along lineages continue to take place even outside the village. In the summer of 2000, young members of bayt Amir and bayt Hatim left together for the Bekaa Valley in Lebanon where they worked in construction. The competition for financial resources continued there. Young men of one lineage for example did not inform the other men about a job opportunity that arose and kept it for their fellow bayt members.

The principle of segmentation and associated notions of person, responsibility, and honour serve as “native” models of the social order in many tribal societies throughout the Middle East (Eickelman, 1989). But this anthropological explanation does not always hold true. In fact there are other overriding reasons for political action and one of the grounds can be identification with the members’ age group. The oldest generation resident in the village represents an age group of 48-71 years. The fourth generation of the descent group and contains residents from age 2-55. It is the largest generation. The youngest generation resident in the village and consists of people ranging from 0-25 years. Age group members are called “jiil”. The age groups of different generations overlap, which is sometimes the cause of conflicting loyalties47 between members. Especially when the polarisation between young and old, modern and old-fashioned, liberal and conservative, comes to surface in daily activities and conflicts. In severe conflicts, some members can be torn between choosing the traditional segmentary side of their partilineair identity or revolting and choosing the side of other groups on different political grounds.

5.2.2 History of settlement in the village

To understand the structure of personal links in the village, we start with the establishment of the village to explain the relationships between the lineages. The first inhabitant of the village had five sons, in order of birth; Khaled (KH), Shakir (SH), Hamzah (HM), Hatim (HA) and Amir (AM). Descendants of these five sons now make up the five lineages of the village. Each lineage is called bayt. Before the first inhabitant settled at the qanat site, he was living with his brother Muḥammad in a village west of Shallalah Saghirah. Both brothers’ family came originally

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47 Conflicting loyalties exist when people have to be solidair with each other based on a family relationship but might be against each other based on other social ties. People who experience these conflicting loyalties, usually act (or try to) as mediator in conflicts.
from the southern province of Hawran and their family had had their fair share of life’s challenges. Their great-grandfather Bakour had moved from the Hawran to a village near the town of Hama in the beginning of the 19th century.

At the beginning of the nineteenth century, conditions in the southern Syrian desert had greatly deteriorated. Tribal clashes between the large Bedouin tribes of the Shammar, Mawali and the Anizah had made life quite intolerable for peasants. According to Norman Lewis (1987, 2000), the movement of these tribes northwards was given further impetus by the raids and the campaigns of Sa’ud ibn Abdul ‘Aziz and the Wahhabis. Wahhabi plundering and tax-raiding gravely affected the Syrian desert between 1808 and 1810. Sa’ud himself led a great raid into the Hawran (Lewis, 2000). Douwes (2000) describes how in 1810 the Ruwala tribesmen led the Wahhabi warriors to the Hawran. Indeed the Wahhabi raids made life very difficult for people in the Hawran. This was most likely the reason why Bakour Hariri left the Hawran for safer grounds at Hama. However from that time until roughly the end of the nineteenth century, on and off, the northern desert was an area without any form of control. Douwes explains that the Ottoman authorities lacked sufficient intelligence on the tribes and did not have adequate military power to stop the invasions and insecurity that prevailed in the desert interior (Douwes, 2000).

During the time of the Ottoman Empire in the second half of the 19th century, peasants who did not want to join the active army, could become irregular troops. A group of peasants from the Hawran which included Bakour, decided to take up this opportunity and flee the Wahhabi plunderings in the Hawran. They settled in Ma’ardis, near Hama, where they joined others in cultivating and protecting the land. The Ottoman Government employed these forces to protect the roads and to check Bedouin raids across the desert border (Ma’oz, 1968). Bakour established a family and settled in Ma’ardis. It was not an easy alternative from the Hawran. Crop failures, drought and resulting famines had pushed the Bedouin tribes to carry out attacks on pastures and lands around towns like Hama in search of food (Douwes, 2000). In 1827 tribes attacked Hama and troops were sent to expel them. In the course of 1830, some powerful Bedouin tribes like the ‘Anaza were contained by military force (Douwes, 2000). The governor of Egypt occupied all of Syria in that time. But as soon as the Egyptians had left, the raids started again. Douwes describes how in 1842 the ‘Anazah and Hadidiyyin factions attacked pastures near Hama; around 200 women and children drowned in the river ‘Asi, trying to escape the tribesmen (Douwes, 2000).

It was after the attack in 1842 that the Hawrani’s at Ma’ardis fled to lands around the northern city of Aleppo. Near Aleppo the Ma’ardis
group roamed around with their children. In the Khanasser valley the descent groups are still known as “the people from Ma’ardis”. According to the oral history, they lived in caves on the plains of Jebl al Hass and Jebl As-Shbayth, which was considered a harsh and dangerous environment. The drift northward of the ‘Anazah tribes had brought a major force that vied with the peasants for living space (Lewis, 2000). Bedouin often did co-exist peacefully with villagers, but were nevertheless usually perceived as a danger to the lives and property of the sedentary population (Lewis, 1987). By paying so-called khawa\textsuperscript{48}, brotherhood money or protection tax to ruling shaykhs, the peasants could ensure their protection against raids of other tribes.

During the reign of Sultan Abd al-Hamzah, prospects changed for the people of Ma’ardis. For peasants it was possible to work on the personal estates of Sultan Abd al-Hamzah who reigned from 1876 until 1909. These private domains were to expand enormously and tribesmen and peasants were encouraged to settle and farm the land as the Sultans’ tenants (Lewis, 1987). Jebl al Hass was incorporated into the personal domains of Sultan Abd al-Hamzah. It is during this time that the people from Ma’ardis settled in the village of Fi’jdan, located at the personal estates of Sultan Abd al-Hamzah. It is here that the first inhabitant grew up as a young boy.

Settling at the abandoned site of Shallalah Saghirah, the first inhabitant paid khawa to chiefs of the dominating Feda’an tribe. The Feda’an were a powerful and armed camel-herding tribe and an offshoot of the renowned greater Anizah confederation\textsuperscript{49} (Batatu, 1999). The Feda’an tribal order consisted of five status groups: the shaykhly families, families of heads of subdivisions, favoured slaves (of African descent) of the dominant shaykhs, rank-and-file tribesmen and lastly the al-lafiif, literally ‘the attached’ or al-atba’, the followers or subjects (Batatu, 1999). Anyone who paid khawa belonged to this last group.

Having secured his protection, the first inhabitant discovered the qanat tunnel, hired some helpers and cleaned the qanat tunnel out. He started to settle in the old Byzantine village during summer and married a bride from the Feda’an tribe. This move was to secure his future livelihood. During that time, the Feda’an tribe that was located on Jebl Shbayth opposite the village and ruled over the area. Its foremost leader

\textsuperscript{48} “Khuwa” or “Khawa” (Arabic, ikhawa ‘ brotherliness’): ‘a term formerly used in the Arabian peninsula for payments made in return for the right to enter alien territory and for protection while staying there’ IV 1133a (Encyclopaedia of Islam CD-ROM edition 1999 v.1.0 1999 Koninklijke Brill NV Leiden, The Netherlands) (Lewis, 2000).

\textsuperscript{49} The present royal family of Saudi Arabia belongs to this confederation.
was Emir Mujhim bin Muhayd, who in 1919-1920 threw his weight against King Faisal and in 1921 served the interests of France by subduing on its behalf the Dayr Az-Zur and other regions of the Euphrates. In the 1940’s he owned, among other properties, 50,000 hectares on Jebl Al Shbayth and dominated the twenty villages surrounding “His Capital” of Jubb al ‘Ali (Batatu, 1999). The first inhabitant was in fact a peasant\textsuperscript{50} not an original Bedouin, but marrying a bride from the Feda’an tribe, probably paying a high bride wealth, was a clever political step through which he established strong links with this powerful Feda’an to secure his future and status.

5.2.3 Water rights and landownership in the irrigated garden

The first inhabitant started to buy the land of several owners around the qanat. In the end he owned in total 300 Ha of which 160 Ha is situated in the vicinity of the qanat. The borders run just to the edge of the small watershed. When his first son Khaled died in 1926, he divided the qanat land in five equal parts and the sons of Khaled shared the part of their father. In 1930 the first inhabitant died and a rotation system based on five equal days was established and implemented after this year. The first generation also decided upon the place of the dwellings for each lineage. In 1954 the second son Shakir died and his sons divided the land unofficially. They kept the basic irrigation period of five days.

\textsuperscript{50} Musa could be described as what Batatu calls an agricultural peasant (al-fallah az-zira’i ) akin to the Bedouins in their values and mode of conduct. The Hawran peasants were a type of mobile peasants who wandered from one village to another to avoid conflict and escape harrassment. They were not tied to any particular spot unless the land proved to be very fertile.
The land reform of Syria, which started in 1958, reached the village about ten years later. Since the village territory was only 160 Ha and one patronymic group was living in the village, the government decided not to re-divide the land. Therefore the water rights and landownership have not changed dramatically in Shallalah Saghirah. Every day at sunset, one of the households that own irrigation rights opens the irrigation reservoir (birkeh).

Table 10 shows the allocation of water rights in 2000. See Map 4 for locations of households. The rights are based on a 15-day rotation based on the initial five day rotation. A day corresponds with an allocated turn called dor. Each household keeps a record of the turns. The landownership in the irrigated garden corresponds with the water rights based on the land division in originally five equal parts.

The current heads of the households acquired the rights through three main means; inherited from their father and divided among themselves and their brothers (including the irrigation days), purchased from other family members or land that is officially not theirs but they rent it through their wives’ brothers who live outside the village. As a customary rule, anyone who owns a right but is not living in the village should give their part to the remaining brothers. If none of their brothers is present, they can rent it through their sisters to their brothers-in-law. In 2000, eight households held the irrigation right. Household (7) and (8a) were brothers of the younger generation; their eldest brother held the right

<table>
<thead>
<tr>
<th>Day</th>
<th>Number days</th>
<th>Household</th>
<th>Means of acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,4,11,12</td>
<td>4</td>
<td>18 (AM)</td>
<td>Rented through wife (HM), purchased garden land (SH) and inherited (AM)</td>
</tr>
<tr>
<td>2,6,9</td>
<td>3</td>
<td>20 (AM)</td>
<td>Rented through wife (HM), purchased garden land (SH) and inherited (AM)</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>8a(KH)</td>
<td>Inherited (KH)</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>11 (HA)</td>
<td>Inherited (KH)</td>
</tr>
<tr>
<td>7,14</td>
<td>2</td>
<td>15 (AM)</td>
<td>Purchased garden land (SH) and inherited (AM)</td>
</tr>
<tr>
<td>8,15</td>
<td>2</td>
<td>23 (HA)</td>
<td>Rented through wife (KH), Inherited (HA)</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>9 (HA)</td>
<td>Inherited (HA)</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>7 (KH)</td>
<td>Inherited (KH)</td>
</tr>
</tbody>
</table>

Table 10 - Allocation of water rights in Shallalah Saghirah d.d. 2000

The land reform of Syria, which started in 1958, reached the village about ten years later. Since the village territory was only 160 Ha and one patronymic group was living in the village, the government decided not to re-divide the land. Therefore the water rights and landownership have not changed dramatically in Shallalah Saghirah. Every day at sunset, one of the households that own irrigation rights opens the irrigation reservoir (birkeh).

Table 10 shows the allocation of water rights in 2000. See Map 4 for locations of households. The rights are based on a 15-day rotation based on the initial five day rotation. A day corresponds with an allocated turn called dor. Each household keeps a record of the turns. The landownership in the irrigated garden corresponds with the water rights based on the land division in originally five equal parts.

The current heads of the households acquired the rights through three main means; inherited from their father and divided among themselves and their brothers (including the irrigation days), purchased from other family members or land that is officially not theirs but they rent it through their wives’ brothers who live outside the village. As a customary rule, anyone who owns a right but is not living in the village should give their part to the remaining brothers. If none of their brothers is present, they can rent it through their sisters to their brothers-in-law. In 2000, eight households held the irrigation right. Household (7) and (8a) were brothers of the younger generation; their eldest brother held the right
and gave a share. In effect this make it seven households that hold the water rights. They are called “al haquun”.

<table>
<thead>
<tr>
<th># ha</th>
<th>Lineage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.62</td>
<td>HA</td>
</tr>
<tr>
<td>0.91</td>
<td>KH</td>
</tr>
<tr>
<td>0.70</td>
<td>HM</td>
</tr>
<tr>
<td>0.72</td>
<td>AM</td>
</tr>
<tr>
<td>0.79</td>
<td>AM</td>
</tr>
<tr>
<td>3.72</td>
<td>Total</td>
</tr>
</tbody>
</table>

*Table 11 - Ownership of irrigated garden d.d. 2000*

*Figure 16 - Irrigation schedule individually kept by a member of the haquun*
Domestic use

Customary rules for domestic water use, divide the locations of access to the qanat water into three categories; 'ayn, saqieh and birkeh\(^{51}\). Table 12 shows the types of water use according to location and means of retrieval. The 'ayn is the point where young girls and women collect the drinking water using a round metal large cylindrical bucket called qaduz (see Figure 18). The water from the 'ayn is regarded as the purest type and used for drinking, making tea, preparing food and washing dishes. Furthermore herders are leading their sheep to this point for drinking after grazing. Also this spot is the gathering place for social talk, gossip and latest news about relatives or people in other villages. Water from the open canal or saqieh is considered less pure than from the 'ayn. The households are allowed to draw this water freely during the daytime for other domestic purposes like washing clothes, cleaning the house, building walls and dwellings and also for small animals.

\(^{51}\) See appendices for detailed map of the households and their relationship to the different locations of water access.
### Table 12 - Types of water use according to location and means of retrieval

<table>
<thead>
<tr>
<th>USE</th>
<th>LOCATION</th>
<th>RETRIEVAL</th>
<th>STORAGE</th>
<th>GENDER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Irrigation use</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bustan</td>
<td>Birkeh</td>
<td>Opening</td>
<td>Birkeh</td>
<td>Men</td>
</tr>
<tr>
<td></td>
<td></td>
<td>outlet/irrigation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>canals of sand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic plots</td>
<td>Saqieh</td>
<td>Rubber pipes</td>
<td>Tank/Barrel</td>
<td>Men/Women</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Domestic use</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making tea</td>
<td>‘Ayn</td>
<td>Qaduz</td>
<td>Qaduz/Plastic tank</td>
<td>Women</td>
</tr>
<tr>
<td>Preparing food</td>
<td>‘Ayn</td>
<td>Qaduz</td>
<td>Qaduz/tank</td>
<td>Women</td>
</tr>
<tr>
<td>Washing dishes</td>
<td>‘Ayn</td>
<td>Qaduz</td>
<td>Qaduz/Barrel</td>
<td>Women</td>
</tr>
<tr>
<td>Washing hands &amp; body</td>
<td>‘Ayn/Saqieh</td>
<td>Qaduz/rubber pipes</td>
<td>Qaduz/Barrel/Tank</td>
<td>Women/Men</td>
</tr>
<tr>
<td>Washing clothes</td>
<td>Saqieh</td>
<td>Rubber pipes/qaduz</td>
<td>Tank/Barrel</td>
<td>Women</td>
</tr>
<tr>
<td>Cleaning house</td>
<td>Saqieh</td>
<td>Rubber pipes/qaduz</td>
<td>Tank/Barrel</td>
<td>Women</td>
</tr>
<tr>
<td>Building dwellings</td>
<td>Saqieh</td>
<td>Rubber pipes/qaduz</td>
<td>Tank/Barrel</td>
<td>Men/Women</td>
</tr>
<tr>
<td><strong>Drinking</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human</td>
<td>‘Ayn</td>
<td>Qaduz</td>
<td>Qaduz</td>
<td>Women</td>
</tr>
<tr>
<td>Animal</td>
<td>‘Ayn/Saqieh</td>
<td>Qaduz/Tanakah</td>
<td>Tank/Barrel</td>
<td>Women/Boys</td>
</tr>
</tbody>
</table>

The households living south (19-23) and east (17) of the *sagieh* draw their domestic water with a rubber hosepipe towards their plot (see Map 4). The dwellings that use hosepipes are located lower than the *sagieh*. Households (20) and households (23), have dug their rubber pipe 20 cm underneath the floor of the wadi that runs through the village. Household (23) is collecting its domestic water into a tank of 2m3. The use of rubber pipes was introduced by the head of household (16) in 1996.
and immediately followed in subsequent order by household (2), household (19), household (20) and household (23). Domestic use of the water is mainly the task of women and young men or boys. The irrigation use is mainly the work of men, the women will take this responsibility when men are away. In general the households are not allowed to use water from the ‘ayn or from the saqieh for irrigation purposes on their dwellings.

Despite these customary rules some households irrigate home gardens with water from the saqieh (see Figure 17). Their access to the qanat water is easier compared to other households located in the village. Through his marriage to a woman from the Khaled lineage, the head of household (23) gained direct access to the water source and he exploits it by filling a tank of 2m3 every 5 days for his domestic use. Also household (2) irrigates the dwelling plots, which contain trees and vegetables. The direct access to domestic water gives both households more power than the amount of land they own. Both households are from the Hatim lineage. This causes a considerable unbalanced situation with regard to water use by the individual households in comparison to one another (see Table 13). In spring, household (23) migrates every year to the northern area of ‘Azaz to travel with the sheep flock they own. The water level meter used for this study recorded a sudden rise in water level in the saqieh exactly at that period.

So although the Amirs own most of the irrigation and land rights, the Hatim dwellings are closest to the water source and the alliance through marriage with Khaled gives them first domestic access to the qanat water. This plot used to belong to household (5) but is now used by household (23) as a sheep pen (see Figure 19). Unequal access to productive resources can create inter-generational competition (Tully, 1990).

<table>
<thead>
<tr>
<th>HH 16</th>
<th>HH 23</th>
</tr>
</thead>
<tbody>
<tr>
<td>m3/day</td>
<td>0.02</td>
</tr>
<tr>
<td># members</td>
<td>8</td>
</tr>
<tr>
<td>m3/person/day</td>
<td>0.0025</td>
</tr>
</tbody>
</table>

Table 13 - Comparison of water use between hh16 and hh23
Figure 17 - "Illegal" irrigation of a homegarden plot

Figure 18 - Social talk at the outlet
Figure 19 - Aerial picture of HH5, the dwelling owned by HH23

Figure 20 - Filling up a qaduz near the birkeh

Figure 21 - Irrigating the bustan at sunset
5.2.4 A conflict between households

When I entered the village, I first made contact with bayt Hatim. Gradually I built up a rapport with the family of household (11) from bayt Hatim. My husband and I were invited to weddings not long after. On one wedding in particular all descendants in the village were invited and this gave us the opportunity to meet some of the other lineages of bayt Amir and bayt Khaled. A week later we returned with pictures of the wedding. We had lunch with the newly weds. The husband showed us the new bedroom that he had built and decorated for his new bride. He was proud that his bride was from outside, “that’s much better” he said. It broke with the tradition of marrying your cousin (“bint ‘amm”). He regarded himself as member of a young, modern and new generation.

After lunch we returned to the oda, on the North side of the wadi that runs through the village. There we sat together with sons of the household. While we were talking, we suddenly heard a gun shot outside. The son jumped up and ran outside. We came with him to see what was going on. On the other side of the wadi people were running back and forth. There was a fight going on between the households of bayt Hatim and bayt Amir. It looked like a serious situation. A crowd of people was throwing stones at each other. Everything went very fast. There was a lot of screaming. Suddenly it went quiet; an older man came to us with two men who looked very upset. He asked us if we could drive them to Shallalah Kabirah\(^2\), the village down the road. There they had a gathering with the head of the village to start a reconciliation process. It was clear that there was a serious dispute between the two lineages.

5.2.5 Sociopolitical history of family ties between households

To completely understand the issues between bayt Hatim and bayt Amir the various structures and historical dimensions that define the relationships between the two lineages (bayt) should be considered. It seems that although the community of Shallalah Saghirah is highly mobile, the system of roles and statuses within the community remain, largely the same in the minds of the community members. Eickelmann (1989) describes how Emrys Peters recognised the same during his research in the 1950s of Lebanese rural society. However in Peters’ re-analysis twenty years later, he sees that the “system” that the researcher is looking for is inevitably open-ended and must be explained, at least in part, by looking for historical transformations (Eickelmann, 1989).

\(^2\) The proper transliteration for Shallalah Kabirah is ál Shalaall ál Kabīr
To understand the violence and power struggle, Arab kinship patterns must be understood. The Arabic preference for patrilateral cousin marriage or *bint 'amm* (FBD) marriage is well known. A structuralist can describe the basic forms of Arab kinship with enviable economy; conceptual dichotomy of the genders, pre-eminence of agnation and filiation, construction of the feminine as the object of masculine honour, and preference for kin endogamy achieved through the classificatory extension of FBD marriages to wider groups of patrilineal relatives (Mundy, 1995; Bonte, 1991).

The preferred marriage in Syrian rural society is the parallel-cousin marriage. A young man is expected to look for his first bride among the daughters of his father’s brother. In fact he has the right to marry one or more of them. The FBD marriage is often claimed to be a custom intended to keep the property of land amongst the patrilineal relatives. According to Mundy, writing on Arab kinship and domestic organisation has not developed a vast body of comparison, therefore it is difficult to generalise. Looking within the dynamics inside a village community, it is clear that the cultural pattern is not consistent. In fact there are many varieties. It appears that the FBD marriage and its many varieties is far from a merely secondary alliance, a shuffling exchange of women between men who make society; marriage is itself structuring, or so at least it is among those with property (Mundy, 1995). The variety of combinations is all too clear in Shallalah Saghirah, where cross marriages have moulded relationships between lineages over the past hundred years. Marriage alliances are a form of power gaining strategies. When focusing on the marriages between the lineages there are some striking features that show the different strategies of the first five brothers to gain and maintain power.

The conflict concerned the relationship between two married cousins of *bayt* Hatim and *bayt* Amir. They had been in a conjugal fight days after the wedding. On the day we visited the newly weds to show the pictures, the wife had snubbed to her husband and said that she would have been happier with a man from outside the family. At this remark, her husband hit her in the face and immediately she ran to the neighbouring house of her parents to seek refuge. Upon which her father exploded in anger, grabbed his hunting gun and shot in the air whilst shouting “It is always the same with these Amir’s!” He started to fight with his neighbour. It accumulated in a fight involving both men and women. This is the fight we witnessed.
Finally, they went to the mukhtar\textsuperscript{53} of Shallalah Kabirah to resolve the conflict. This mukhtar was the only neutral party. The conflict was resolved partially with an apology and the woman returning to her husband who promised not to hit her anymore. However, the conflict has its deeper roots in a complex social history. Only by reconstructing this social history can the collective community governance of the water supplied by the qanat be explained. I have divided the events that influenced the enabling environment for collective action negatively and those events that influenced it positively (see Table 14).

\begin{table}[h]
\centering
\begin{tabular}{|l|}
\hline
\textbf{Events in social history that influenced the social cohesion positively:} \\
\hline
• Leadership of the first inhabitant 1900-1930 \\
• Building of water reservoir (birkeh) 1952 \\
• Establishment of water rights system approx. 1930 \\
• Drying up of qanat 1984/85, repaired collectively by villagers \\
• Badilah marriage of household (1) and household (16) 1992 \\
• Ramadan 2000 (observed) \\
• Badilah marriage household (2) 2000 (observed) \\
• Cleaning the birkeh collectively April 2000 (observed) \\
• Cleaning qanat August 2000 (observed) \\
\hline
\textbf{Events in social history that influenced the social cohesion negatively:} \\
\hline
• Death of first inhabitant 1930 \\
• Death of first son 1954 \\
• Introduction of daughters of Hariri shaykh 1963 \\
• Migration to urban areas in Syria (Aleppo/Raqqa) ’70s \\
• Selling of land to Amir by bayt Shakir ’70s \\
• Conflict in Fi’jdan and subsequent abandonment 1977 \\
• Change of surname to Hariri ’80s \\
• Deaths first descent group ’80s \\
• Conflict January 1999 (observed) \\
• Conflict May 1999 \\
• Conflict during cleaning of qanat August 2000 (observed) \\
\hline
\end{tabular}
\caption{Events in social history and the relation to social cohesion}
\end{table}

\textsuperscript{53} Mukhtar (Arabic “the selected or chosen”) is the common denomination of village leader, someone becomes a mukhtar either by inheritance or by displaying leadership characteristics and respected virtues such as hospitality, fair judgement, honesty and integrity (Hopkins, 1997).
In the beginning, the village knew a relative social balance; one nuclear family, guided by the first inhabitant. He mediated conflicts. When his first son died, he arranged the division of the land, keeping in mind the competition between his sons. When he himself died in 1930, nobody actively took over the power although by Islamic law, the responsibility was with Shakir. The younger Hatim developed into a diplomat. He was respected by all villagers and maintained the good relations that his father had established with the local Bedouins of the Feda'an tribe. Like his father, Hatim was generous to many visitors. He built the common guestroom called oda (room) and served coffee to all guests.

Khalaf (1993) describes the madafa (guestroom) in Northern Syria, as a politico-social institution for Bedouin shaykhs and shaykhly families. The oda in Shallalah Saghirah could be regarded as a small version of a tribal madafa. It was used as a meeting place to invite important guests and for achieving greater consensus for political and social domination. Although the villagers could not be considered as real Bedouins, they had adapted many of the tribal customs in their daily life, also through the marriage of the first inhabitant with a Bedouin woman. You could consider them “Bedouinised”. The strong affiliation with the Feda’an Bedouins between 1900-1960 meant protection and social benefit.

Finally when Shakir became too old, Hatim was regarded as the mukhtaar of the village. A fair five-day rotation system of irrigation was implemented and Hatim was able to unite the village households in building the irrigation reservoir (birkeh) in 1952. The collective building was done in relative harmony and there was a recognised leader (Hatim) to mediate between conflicts. He became the mukhtaar of the village. In 1954, Shakir died and his sons inherited the land and water right but did not officially divide it. The pressure on the land was becoming high and finally the lineage members were looking for other means of survival. Tensions arose between family members and living space shrunk. The period between 1958-61 is said to have been a dry period with little rainfall, and although 1959 was a good year, the general drought contributed to the tensions. In this time, bayt Amir and bayt Hamzah became related through three cousin marriages. Competition for land grew and the buyut started to split into factions, with the buyut Amir and Hamzah on one side and the Khaleds and Hatims on the other. The Shakirs were neutral. The mukhtaar Hatim kept the buyut together.

By the end of the sixties, all the sons of Shakir decided to leave the village for the urban environment of Raqqa. They sold most of their land for 30,000 SYL to bayt Amir. This meant a radical change of the equally divided system of landownership. The Amirs became the biggest
landowners. The deal polarised the community. Small disputes and jealousy about missed chances became worse. Growing competition for land and a search for better livelihoods gradually caused more households to migrate from the village.

An outside conflict with dramatic consequences

In 1977, a conflict broke out between two herder boys in Fi’jdan and resulted in the death of one of the boys. Both of these boys were distant relatives of the families in Shallalah Saghirah going back to the earlier described group of Ma’ardis. The result of the homicide was a blood revenge that put fear in the hearts of the residents in Shallalah Saghirah. It meant all descendants of the first inhabitant were in danger of being killed in revenge. Especially bayt Hatim had close ties with the endangered lineage through the marriage of the mukhtar Hatim. As a segmented descent group, the villagers collectively decided to abandon the village territory to prevent bloodshed. Segmentary theory explains the fact that when a conflict occurs outside the descent group but within a larger family group, the descent group joins together and takes collective action in cases of threat or revenge. The village and its qanat were left abandoned for several years. Most households went to relatives in Raqqa or Aleppo, while others wandered with their sheep from village to village.

The village site was empty for some years. Members of the family did not return until they were absolutely sure it was safe. Some villagers did not return at all and those who did return, took custody over the lands of their brothers in exchange for rent. All was done in order to prevent outsiders from buying the land. During these years, the village was destroyed and the fence, which surrounded the birkeh was stolen. Some households returned, mainly the ones who depended on sheep husbandry. These were of bayt Amir and two of bayt Khaled. All of bayt Hamzah and bayt Shakir decided not to return back and stayed in Raqqa. At that time Raqqa was little more than an urbanized village, many of the men began working in agriculture or sheep-rearing (Rabo, 1986). With the cotton boom and the mechanized steppe agriculture, Raqqa became an important trading centre (ibid.). With the prospect of a better future, these two buyut stayed in Raqqa.

In 1982 Amir died and not long after it was Hatim’s turn. He was the last of the first five brothers to die in 1985. Now, the mukhtar was dead and there was nobody willing to take his place. The logical successor, his eldest son, he did not want to take up the responsibility since he was living in the city. His other son was in the village on and off but did not want to take care of the leadership. His younger son did not care about the village. He was involved in urban employment, business
and gaining a good pension for himself. The youngest was too young and inexperienced. Consequently the village was left without leadership.

**Poverty, drought and rain**

The year of 1984/85 was disastrous for the village. A new economic crisis arose with Syria’s involvement in Lebanon and its political isolation in the Arab world, and partly as a result of the world economic crisis (Rabo, 1986). The years were also particularly dry. The garden was greatly affected by drought and many trees died during these 2 years. The qanat dried up completely due to a hole in the main tunnel. Bayt Amir drilled a well in the middle of the rainfed fields and managed to survive, they shared the water with other residents. Then two friends, one from bayt Amir and the other from bayt Hatim, investigated the main tunnel and observed the hole. They fixed it with cement and after 4 hours, the water flowed back into the qanat. This collective action meant a boost of morale and cohesion between the two buyut.

In 1988, which is generally known as a good agricultural year in Syria, the head of household (11) indefinitely returned back from the urban sprawl of Aleppo to the village. The rains had been good and prospects of a good harvest were positive. He re-settled in the village, where bayt Amir, some of Khaled and household (23) and household (9) of Hatim were still present.

5.2.6 The importance of identity and marriage links as sources of power and mediation

The return of the head of household (11) created tension in the village. Having been outside of the village for a long time, he and his wife, had to adjust to village life. He loved returning to the countryside but his wife was less pleased with the return. She preferred the urban environment of Aleppo, it was comfortable and had more status. Moreover, she was a Hariri born in the Hauran, daughter of a shaykh and she considered herself as better than the rest. She did not want to live with these ‘peasants’. In fact her marriage had been forced as part of a lucrative and political deal between Hatim and the higher ranks of the Hariri clan. Her arrogance towards mainly bayt Amir, raised tense situations with neighbours.

This marriage requires a closer look to understand the importance of marriage alliances in order to increase and maintain power. Appendix 2 shows an overview of important marriage alliances in Shallalah Saghirah. A Moroccan once told Hildred Geertz that “arranging marriages is a highly serious matter, like waging war or making big business deals” (Geertz, 1979). In Shallalah Saghirah, the first inhabitant consolidated his
power in the region by marrying a Bedouin daughter and linking his household to the powerful Feda’an Bedouin. The abolition of tribal law by the state in 1956 and the implementation of the Agrarian Reform Law of 1958, led to the demise of the political influence wealthy Bedouin shaykhs, at least at the national level (Batatu, 1999). These developments meant for the descent group of Shallalah Saghirah that their original relationship and alliance with the powerful Bedouins on the Jebl As-Shbayth could not provide them any longer with necessary social power and financial back up. They had to change strategies, which can be divided in three, often intertwined, strategies;

• migration; leaving the land and moving to urban areas to start up businesses or rent (irrigated) farmland where new social power relations were to be established

• retaining and reviving tribal affiliations with powerful members of the larger Hariri family clan seated in the Hauran

• remaining on the old territory, searching for internal marriage alliances and conducting seasonal migration or off-farm work

Batatu (1999) mentions the decline and weakening of tribal bonds. In the case of Shallalah Saghirah there was an opportunity to replace the lost tribal power base with family affiliations. Being a diplomatic man, Hatim looked at various possibilities to strengthen his social position.

The increasing political influence of the Hariri clan, with its main seats at Da’il and Shaykh Miskine (Batatu, 1999), was attractive and challenged Hatim to use his diplomatic skills. He regularly visited the seats of the clan in the South. Consequently he arranged a marriage in 1958 between two of his sons, with two daughters of a respectful shaykh of the Hariri clan. The question remains why a respected shaykh would give away two of his daughters to a distant cousin in Northern Syria?

The marriages consisted of a total of three marriages; first Hatim’s son asked the shaykh’s daughter in a badileh54, which, means the son offers his sister as bride wealth (ssadq or mahr). However, such a marriage would not be beneficial for the shaykh and he would not have agreed to it. Hatim played his politics well and offered that his second son would pay a high bride wealth to marry another daughter of the shaykh. In this way the deal was lucrative; the shaykh’s son did not have to pay bride

54 These marriages usually take place when there are not enough financial resources to pay the full bride wealth and the bride is “exchanged” for the sister of the groom. In this case it is used as a bonus.
wealth and the *shaykh* would receive a high amount of bride wealth. In return, strong trade relationships between Hatim and the *shaykh* were consolidated. Introducing two members of the higher part of the Hariri clan would give the sons of Hatim more social status. The deal was made and the two brides entered the village (See Appendix 2: Figure 62). Both of the brides did not want to leave to this far away village but were forced by their father, even the sons of Hatim initially had other plans but could not argue with their father. The deal was made. Ties strengthened.

Other households were also looking for new strategies. Some migrated and gradually started to work in urban areas. The informal rumours about an upcoming Euphrates irrigation scheme near Raqqa attracted. In 1963 the Syrian government decided to build a large dam in the Euphrates River and to reclaim and irrigate steppe land. A golden future for the region’s inhabitants was officially proclaimed (Rabo, 1984).

Whilst Hatim was looking for marriage alliances higher up in the patrilineal descent line, Amir took a different route and was looking to gain more wealth and land ownership within the closer ties. Through three marriages of his sons with *bayt* Hamzah (See Appendix 2: Figure 63), he eventually gained most of the land and water rights. This brought them potential increase in agricultural income and strengthened their ties with the family members of *bayt* Hamzah. *Bayt* Shakir had migrated and lived in Raqqa. They sold their rights to Amir. The land and water right ownership deal that Amir made and the linkage with *bayt* Hamzah secured his sons of the patronage of most of the land and water rights.

Three sons of Hatim left for Aleppo some time before the conflict in Fi’jdan broke out and the villagers abandoned the *qanat* village. Two of them worked in construction and their sons migrated to the Gulf countries or gained positions within the government. The eldest was very successful in increasing their financial resources with the help of their relatives in the Hauran. During the mid-70’s this household was doing so well in Aleppo that they could invest in real estate and import/export trade; the link with the Hariri clan was more profitable for them than the identity with Shallalah Saghirah. Both households decided to stay in Aleppo and build up their lives. They did however kept their ties with Shallalah and remained owners of land. The irrigation use was divided among their remaining brothers.

The third son who migrated experienced difficult times during the period of 1977-1985. He worked in well drilling, construction and cotton harvest to provide the financial income for his family. He bought a house next to his brothers in Aleppo and although he tried to raise a good income, he remained financially dependent on his brothers and older sons. There was a significant difference in wealth between him and his brothers. In her study of a Moroccan extended family, Hildred Geertz, finds a
similar situation; she suggests that economic and political achievement in Morocco is almost entirely an individual matter (Eickelman, 1989; Geertz, 1979). An ambitious man may use the help of kinsmen in his climb and in return may help them, but these exchanges are personally arranged and by no means obligatory (Geertz, 1979). So when in 1988, the agricultural prospects were good, the third son and his wife from Hauran returned to the village. His school going sons were taken care of by their uncles. His oldest son came with them.

In the meantime, the relatives in the village were struggling to survive in a harsh environment. In Middle Eastern society, how family ties are formulated depends substantially upon the economic situation of the families involved (Eickelman, 1989; Hopkins, 1997). Both as a good marketing tool and as a statement of rejecting the “lower” status of the village descent, the two urban families changed their surname to “Hariri”. Even though the family relationship was matrilineal, the economic gain of adapting the surname “Hariri” attracted. The name Hariri was better known in Syrian industry and thus would give a better change in business and politics. Household (11) followed together with household (23). During the eighties, the increasing association with the name of Hariri and urban business, not only widened the economic gap but also the attitudes and values between household (24) and their fellow peasant relatives in Shallalah Saghirah (cp. Khalaf, 1993). The patronymic group, was now divided in two groups. The descendants closer to the Hariri clan through matrilineal descent, perceived themselves as higher in social status than those who did not carry the surname Hariri.

After the deaths of both Amir and Hatim, small daily disputes took place between several households of the buyut. They would be about the access to the ‘ayn or trespassing over the land of Hatim. In the meantime, a younger generation of grandchildren had grown up in the village. A particular strong friendship had grown between the eldest son of household (11) of bayt Hatim and the second son of household (18) of bayt Amir. Both of these young men were convinced that the elders should bury the old feuds between the buyut. The eldest son of household (11) did not change his name to Hariri. He did not think this was a wise decision. The young friends had also helped the village out after the drought of 1984/85 when the qanat dried up. They had plugged a hole in the water transportation section of the qanat to prevent it from drying out.

After some time, these men had spoken about a way to adhere the feuding parties. In 1992, they suggested that they would marry each other’s sisters as a means to glue the relationship between the two buyut. The marriage was a badileh. (See Appendix 2: Figure 64). But the intention of reconciliation did not succeed. In the first years, social pressure from bayt Hatim on the newly married son was great. The
financial demand from his parents increased and he felt he should be more independent from his parents. His wife encouraged him also to do so in an attempt to escape from the control of her mother-in-law. So he built his own dwelling. In reaction his parents accused his wife of manipulation and conspiracy, after all she was still an Amir at heart. Social tensions between the households remained.

Tully (1990) describes the household lifecycle, she states that when a son establishes his own household, individual attempts to gain greater control of economic assets at the expense of other family members may split a household along generational lines. In this case, the parents’ demands and attempts to gain greater control of financial resources took place at the expense of their newly married son. The social situation of both cousins of bayt Hatim and Amir was determined by the increasing competition over land and water rights and the generation gap between them and their fathers. The young married men did not want to go into a competition with their cousins. Firstly, they regarded themselves belonging to an age group and secondly to a certain lineage. They tried to overcome this conflict of loyalties by resolution and mediation but encountered heavy social constraints in doing so. The cousins saw the past as something, in which rights were well arranged and people were better behaved. The local population pressure and the socio-economic situation forced people to become jealous and competitive. One cousin said “The life is harsh and since there are too many people here, we have to fight for it. The first five brothers were just enough, they made the wall around the bustan and took care for the common good”. A young man of household (17) said that “nobody thinks about another person anymore, the unity is gone. They only think about money and themselves.” They rejected the attitudes of their parents which they call “stone headed”. Despite the social problems, the cousins preferred living in the village above the city because “there is no shame”. They preferred the living space and the relative freedom their wives and children enjoy in the countryside. Now they work occasionally in the urban areas.

But life in the village does not come without complications. Having had schooling and lived and worked outside of the village and abroad, the cousins have developed different worldviews. They idealize the first inhabitants but criticize the old fashioned and “stone headed attitude” of their fathers. In their struggle to adhere to their fathers and uncles, they are constantly challenged to choose between conflicting loyalties.

5.2.7 Transformations in society

When I asked the oldest resident in the village what had changed most in the village, she replied: “over the years what has changed most
are the modern things, we did not have a diesel heater in winter, or
generators and televisions. We never had seen a car before and now we
see them sometimes. It all changed the last twenty years”. Over the past
30 years many transformations have taken place in Shallalah Saghirah.
The livelihood assets of all households changed. Migration started by mid
sixties to take shape. At the same time the landreform in 1958, which
changed regional power bases and the emergence of the Ba’ath
Government meant a change in the political climate in Syria. The
construction of roads and wider infrastructure was given a boost in the
first terms of Hafez al-Assad’s rule. It meant an opening up of the rural
areas to cities and towns. Economic opportunities arose to work abroad, in
urban areas or in the big irrigation schemes. All these developments
affected the worldview and attitudes of the people.

In the eighties, literacy levels of the village population rose and
the modernisation in the cities took shape. The introduction of televisions
opened the window to other parts of the Arab world, albeit heavily
censored. Most of the young people in the village have grown up under
Ba’athist rule, so they have never experienced any form of political
democracy. But some of the young men who worked abroad were exposed
to western culture. They came back from their migration work either with
contempt for the eroded values of the West or interest into how the West
would really be like. During the late nineties, Syria was rapidly changing
and opening up to the rest of the world. Whilst in 1997 much of the news
was censored, two years later satellite dishes had made their entry on a
wide scale and into rural areas and people were exposed to other news
feeds and programmes. Internet cafés in the urban areas followed suit
soon after.

This somewhat contradicted the old party system in the
countryside. Although there are no local members of the Ba’ath Party in
Shallalah Saghirah, the arm of the Ba’ath government is relatively long.
Some claim that during the years 1997 and 2000 at least 1 in 4 Syrians
was an informant for the secret police. The party politics of feuds and
power struggles are reflected in the manner in which people in Shallalah
socially interact. There was always a latent knowledge that some part of
the Ba’athist security system was monitoring life in Shallalah. The men
who worked in the governmental factory, for example were seen as
representatives of the party. This made some villagers suspicious towards
them. At least one of the employees was said to be an active informer. In
fact, some warned against him whilst living in the village. Our team had
been open in our research approach and arranged permits with the
regional head of police in Khanasser, who also acts as the head of the
secret police. Despite the alleged presence of informers, Ba’athist politics
does not strongly affect daily life in the village. Villagers are quite open
and some issues are just not discussed with those who are suspected of informing. It does mean that levels of trust between households are affected.

It all started to change rapidly when the old Hafiz Al-Asad died on June 10, 2000, after 30 years in power. His son Bashar al-Assad succeeded him on July 10, 2000 with an election win of 97.29% of the votes (George, 2003). Despite this undemocratic election, the young Bashar posed hope for the future. Within days, the propaganda posters of the old President and his sons were removed from walls, taxis and cars. Syrians became more open in their political discussions. When the new president assumed power, he called for economic reform to bring growth and political liberalisation to Syria (George, 2003, Landis, 2004). Immediately opposition members demanded free democratic elections and organised political salons and civil society forums in Damascus. All this was followed on the radio by some of the young men in Shallalah Saghirah. It caused concern and hope at the same time. Hope for a better economic future and concern of the prospect of loosing a system with which they had felt comfortable. It was a confusing time for Syrians and a process of national power plurisation started (Landis, 2004). But where economic reform was accepted, the “old guard” did not accept political reform. The famous “Damascus Spring” lasted only until February 2001 when the government started to crack down again on all civil forums and reformers (George, 2003).

5.3 Conclusions

Only supplied with water from an ancient qanat, Shallalah Saghirah lies in a semi-arid climate and its community has a history of hard struggle to survive in this environment. A find of an oil lamp during cleaning work in the qanat indicates that the qanat is likely to be of Byzantine origin, more specifically of the era of Justinian. We suppose that the qanat was a drinking water supply system for nearby military outposts guarding the plain between Jebl Al-Hoss and Jebl As-Shbayth. The site is located at the edge of the Khanasser valley where more qanats have been found. All of them are dried up. The qanat is of the spring-based type and receives its water from the Middle Eocene formation. The present groundwater use around the site does not heavily affect the aquifer.

The first modern inhabitant rehabilitated the qanat in the beginning of the 20th century. The current user’s community consists of one patronymic group descending from this inhabitant, divided into five lineages of which three are permanently resident in the village. The main income sources are animal husbandry, sheep shearing and off-farm work. The users group is widely linked to the outside world. The destinations for
off-farm work vary per age group and concern countries like Lebanon, Jordan, Turkey, Russia and Saudi-Arabia. Landownership and water rights are based on a customary system. Social structures at the site follow the principle of segmentation and are determined by blood relationship and marriage alliances.

One of the main social dynamics is a continuous power struggle between the resident lineages of bayt Hatim and bayt Amir. This originates from a fraternal competition for resources and leadership. The Amirs are wealthier in terms of sheep, land and number of member households whilst the Hatims claim to be the most important family in the village because they own the original oda, the former seat of the village head (mukhtaar). Moreover, whilst the Amirs own most of the irrigation rights, the Hatims' dwellings are closer to the qanat water outlet giving them first domestic access. This gives the Hatims considerable bargaining power.

The local history of settlement and politics shows several events that can be identified that influenced the social cohesion in the village either positively or negatively. Among the positive events are the various leadership period where the village had a mukhtaar mediating between disputing parties, establishment of the rights system, the building of an irrigation reservoir and several exchange marriages to adhere the lineages. Among the negative events were several deaths of key extended family members, the introduction of brides from the higher echelons of the Hariri clan, migration to urban areas, “unlawful” selling of land amongst cousins, a conflict in the larger extended family in another village that resulted in a blood feud in the 70s and other conflicts among resident family members.

The abolition of tribal law in 1956 and the Agrarian Reform Law in 1958 led to a decrease of the power base of the descent group who had strong connections with the local Bedouin tribes. We identified three strategies; definitive migration to urban areas, retaining and reviving tribal affiliations with the higher echelons of the Hariri clan in the Hauran and/or searching for internal marriage alliances and conduct seasonal migration or off-farm work. The Hatims mainly chose to revive tribal affiliations whilst the Amirs chose the latter option. Out-migration that started in the early 70s disrupted the social cohesion. Modern transformations in society also caused a juxtaposition between the young and the old generation. A combination of these endogenous dimensions of the users community led to a weak social cohesion at village level and a lack of collective action to carry out maintenance work on the qanat system.