# WATER IN THE GOBI

#### **Sound effect:**

Woman singing, milking a camel (fade under)

#### Oyunaa:

Hello and welcome to "Water in the Gobi" - a co-production of Radio Mongolia and Deutsche Welle Radio

#### **Sound effect:**

Woman singing, milking etc. fade up and out)

# Oyunaa:

This is the voice of a Gobi woman singing while milking her camels. Nambar is a woman of about fifty, and after having finished her work she took us to her ger, the traditional dwelling of Mongolian nomads.

Take 1 (Nambar, in Mongolian) 26"

## Oyunaa:

She tells us that her family settled down here in 1984, and since then they have been breeding camels. Besides camels they have some horses, goats, and sheep.

They live exclusively from the animals by selling dairy products and wool.

**Sound effect:** (Woman talking up and off, fade in camel sound)

### **Narration:**

The Gobi - a huge shallow basin -, and this is what the word GOBI actually means in the Mongolian language: A shallow basin where sometimes moulded hills or pointed rocks all of a sudden raise from the ground. The dry soil is covered by harsh grass, shrubs, and bushes. One of the few tree-like species to succeed in growing in this arid and semi-arid region is the saksaul with twisted greyish stems, the longish thin leaves of which are a delicacy for camels. But these small forests which can be still found in some places are rapidly decreasing in size and height since the hard wood of the tree is used by the nomadic population as an excellent fire wood.

The Gobi is the most scarcely populated area of Mongolia, with only 1 person for every 4 square kilometer in some provinces. It stretches 2000 km from east to west, and about 800 to 1000 km from north to south. Situated to the South of the capital city Ulaanbaatar, it constitutes almost half of the territory of Mongolia.

In summer, temperatures can rise up to 40° Celsius; in winter it's not unusual to measure minus 40°. Extreme living conditions for humans and animals!

Take 2 (Nambar, in Mongolian) 14"

### Oyunaa:

Animals are the most important factor in life for the pople of the Gobi and the main source of living. Nambar says that she owns about 100 head of livestock. This is a comparatively small herd as she has given most of the animals to her children when they married. When we asked

her about the main problems she faces she mentions water for her animals. There are as she said not enough wells for livestock or even humans, and in winter the situation deteriorates when nearby rivers and wells freeze.

Take 2 (Nambar up again on water, off)

#### Narration:

And water **is really** a problem in the Gobi as we found out on our journey to the South. There are two main reasons for it:

Water has always been lacking in this desert area because of little rainfall. While most rivers dry up during the hot summer season, animals and people alike have to rely on underground water from wells or on spring water. What makes the situation worse is that in most places the water is of bad quality, and often hardly suitable for consumption.

The other reason has to do with the break down of the former socialist system and Mongolia's transition to the market economy. The political and economic changes which have occurred within the last 10 years have also changed the life of most people, created a lack of laws, regulations and proper management, and left the herders in a state of uncertainty.

Take 3 (Gansukh, in Mongolian, fade under) 16"

### Oyunaa:

Gansukh, an expert in water and desertification problems, together with other scientists and consultants of various national and international organizations studied the fragile balance of water-pasture-animals and people in the Gobi. In the last years, he says, the Gobi experienced a considerable increase in people and animals with the effect that water has become an even more crucial problem than before. Gansukh works today with the German Agency for Technical Cooperation, GTZ, in a project on Nature Conservation, and his colleague Dr. Sabine Schmidt adds:

## Take 4 (Schmidt, in English) 36"

"The increase of herders has also to do with the collapse of the collective system, with a change to market economy in Mongolia. Because many people lost their jobs in the rural areas. Many people that were in former times drivers, or mechanics, or accountants, or shop keepers etc in the so called negdels, in the collectives, in the rural areas, almost all of them lost their jobs, and the only livelihood in Mongolia at the time was to go back to the country side and become a herder."

#### **Narration:**

The negdels were state farms or cooperatives, and until 1992 the state owned all livestock and pastureland, and was solely responsible for maintaining a proper balance of both. This was successful among other reasons also because of a well-functioning animal and meat trade between Mongolia and the former Soviet Union.

Since then, old and new herders have become private owners of their animals, and with the aim of improving their living standard have begun to increase the size of their herds. In fact, in Southern Gobi Province alone the number of livestock increased by about 70%, but pastureland remained constant. Meanwhile a severe drop in live animal and meat export volume since 1990 has exacerbated the problem.

The pressure on land is only one problem - with the massive increase of animals, the water problem is becoming acute as never before in the Gobi.

**Sound effect** (at the well, goats)

Take 5 (herder woman/herder family on taking the herd to the wells) 57"

#### Oyunaa:

On our trip we stopped at a pastureland well and talked to the mother and the daughter of a herder's family. Water for animals and people is really a problem in the Gobi, they complain, "We used to have more wells, but now there is only one left. And even this one is on the edge of breaking down", the mother says. She continues that they cannot move where they want but have to go to meadows where there are already lots of animals around the operational wells. They sometimes use springs or small lakes which however are not permanent. The daughter joins her mother and says that ocassionally they travel 3km with their animals to a well in a small settlement and take drinking water from there.

**Sound effect:** (Water at a well, fade under)

#### **Narration:**

In 1990 thirteen thousand wells were registered in the Gobi. There were different types, such as machine-operated deep drilled pump wells, especially engineered short-chimney wells and manually operated simple-mined wells. Almost all of them were used for watering animals.

**Sound effect** (water off, fading in wind)

#### Narration:

Driving through the Gobi, we saw quite a number of these water points, but many of them were in sad condition. The stones around the bore hole to protect the water in the well were broken, the old Russian electrical pumps were not working anymore or they had disappeared completely. Within the last 10 years, the number of operational wells dropped by about 16%, the number of engineered wells even by 80%. Some of these wells which formerly worked with pumps are however still used by herders who now lift water with rubber buckets. Fewer wells however means more herding families settling down near the same few wells aggravating overgrazing which disturbs the ecological balance and increases the risk of desertification.

# Take 6 (Jargal, Undraga, in Mongolian) 17"

Before 1990, the whole system of water points in Southern Gobi province used to belong to the State Water Management Board, says Jargal, the director of a private well construction company. After the Privatization Law was passed, all those wells were divided among the then existing cooperatives and the settlements. But the cooperatives were later dissolved, and the wells and water points were left without proper ownership. The director thinks that if they still belonged to the former state Board, things wouldn't be so bad.

#### **Narration:**

Before 1990, the private company Undraga was a state company of Southern Gobi Province. It was responsible for drilling and repairing wells, and also today after having been privatized, it does all the boring and maintenance work not only in the province but even in the neighbouring ones. Clients are now local administrations, private persons, tourist camps and institutions such as schools and health centres. But also Mongolian and international aid organizations which have come to alleviate the water problem.

**Sound effect** (of machine repair)

Take 7 (Jargal, Undraga, in Mongolian) 31"

#### Oyunaa:

The director who took us around, says that since the State Board was made a private company, it has repaired over 100 wells and built a dozen new wells in pasture areas. But it's just the beginning, there will be a lot more work to do in the future.

#### Narration:

However, there is certain insecurity regarding the legal situation. While the Constitution, the Law on Environment and the Law on Water all declare that "water resources are state property", the ownership, proprietorship, the use and maintenance of wells remain unclear. A draft procedure by the Ministry of Agriculture and Industry foresees some regulations related to the introduction of users' fees for maintenance, the installment of well proprietors or contractors responsible for minor maintenance and repair, and the local governments for major repair works.

While it might be easy to implement these regulations in settlements with local authorities, the problem is likely bigger when it comes to wells in remote areas, where nobody feels responsible: neither the far away local authorities, nor the nomadic people who may stay only for a short time, and up till now do not pay any fees at all.

Mongolian Music (fade under)

**Take 8** (Herder family, in Mongolian) 20"

#### Oyunaa:

The mother and the daughter we talked to before, invited us for a cup of hot milk tea. We learned from them that they are concerned about the quality of water in the Gobi. The older woman is 52 years old, and she suffers from liver and gall illnesses. All these diseases, she is convinced, seem to be caused by bad quality water.

### Narration:

This is a phenomenon that has been known for a long time. Let's listen to Gansukh, the consultant with the German Technical Cooperation Project:

Take 9 (Gansukh, in Mongolian) 1'30"

### Oyunaa:

The Gobi water is very hard, explains Gansukh, and has excessive contents of minerals, heavy metals and salt. Therefore, it causes the diseases like kidney, liver, stomach and gall disorders. But there is an additional aspect: In some places, the herders drink the same water with their livestock but water points used for watering animals are not suitable for people because the water is contaminated by animals. Because of both reasons, some people travel every day long distances to take better water which of course is very time consuming and inefficient.

**Take 9** (Gansukh up)

## Oyunaa:

"Since time immemorial, we have been used to this water" - this is how herders calm themselves down - anyway many of them, especially poorer families have no choice as Gansukh points out.

Take 10 (Boy, in Mongolian) 9"

# Oyunaa:

This young herder we met in the field, does not care a lot about water quality: For the young people, he says, the water effect seems to be less, but he agrees that it has an impact on older people. They have stomach problems for example.

#### **Narration:**

What the old woman and the boy said is proved by a professional in the province centre Dalanzadgad. Dr. Oyungerel gives us more details:

Take 11 (Oyungerel, in Mongolian) 15"

### Oyunaa:

Young people tend to be less sensitive to liver and gall disorder. Elderly people of 60 years and over have a high risk of suffering from liver cancer.

Take 12 (Oyungerel, in Mongolian) 1'00"

### Oyunaa:

Dr. Oyungerel tells us that there have been surveys conducted in each province. According to them, the water in Southern Gobi has high content of heavy metals. Because of this the rate of disease is high. The survey also shows a high content of fluoride in the water which makes teeth yellowish and more prone to cavities.

Take 13 (Oyungerel, in Mongolian) 31"

# Oyunaa:

We asked Dr. Oyungerel if any measures have been taken to purify the Gobi water, and she replies that so far nothing has been done, but she heard of portable and cheap purification devices which could neutralize to some extent the harmful elements in water.

#### **Mongolian Music**

**Sound effect** (of pumping at a Wash-21-well, fade under)

# **Narration:**

It was one and a half year ago that the new water point in Hanhongor, a small settlement in Southern Gobi province was built. At first glance, it's a small mud house, painted in brilliant white with a flat roof to protect it from sun, rain and snow. Upon entering the little house, you'll find yourself in a room which is equipped maybe with a small table and a chair, and the most important thing: an Indian made hand pump. The bore hole is entirely closed with a concrete floor to protect the water source. A flexible plastic tube or sometimes a long metal tube carries the water from the pump through a hole in the wall to the outside where people wait with their tins and cans. It's mainly the task of the children to take water.

# **Sound effect** (of water pouring fade under)

#### Narration:

Healthy water for people in settlements - this is the aim of Wash-21, a project which built this water point here in Hanhongor. Wash-21, scheduled from 1997 to December 2000, is funded by various national and international organizations such as UNDP Mongolia, the Mongolian, Australian, Swedish and Dutch Governments, and the World Bank. The project drills new wells, and repairs old ones in community areas where the shortage of good quality water requires urgent measures. At the same time, it aims to train staff members at the local level who will develop responsibility for water, sanitation and hygiene education and raise awareness among the people of settlement areas. Awareness also to maintain the waterpoint, the pump, the little house and the surroundings.

Take 14 (Woman of the water committee, in Mongolian) 1'11"

#### Oyunaa:

One of the 7 members of the Hanhongor water committee who has been trained by Wash-21, is Gereltuya. She explains that the committee informs the people about the importance of using clean underground water and about risks of using contaminated water. The committee also collects water fees from households and organizations who take water from this particular well. This money is used for paying a salary to the person who looks after the water point and for repair works of the well.

Gereltuya tells that it was agreed that one family should pay 300 Tugrugs, or about a quarter Dollar a month for the use of water. About 80 % of the people in this settlement benefit today from the new Wash-21 well.

### Narration:

According to the project idea, the involvement of local people in maintenance and decision making is essential to make water users feel directly responsible for the protection and proper use of their water resources. After many decades of a centralized government system, it was not easy at the beginning to encourage local people to take their own initiative. Odontschimeg from the head-quarters of Wash-21 in Ulaanbaatar tells about her experiences:

## Take 15 (Odontschimeg, in English) 39"

"About the attitude before the 90ies, I think the people usually just wait, just wait someone say something to help them and their is no any own initiative of the local communiy. Usually they have a habit, that they will listen, they never say what they really want. So our first task is to make people talk about what they are thinking. I am sure they can do, but it will take long time. So our approach is, we are really working with the community, with the grass root people."

### **Narration:**

Within the last three years, Wash-21 drilled 116 new wells in 66 settlements. Most of them situated in the Gobi Provinces. Normally, two wells are built in one community - enough for about 500 households. The places for the bore holes are chosen according to the wishes of the families after the water quality is proved to be suitable for human consumption. Myadagsuren is the Wash-21 representative in the province centre Dalanzadgad, and she points out that more attention has to be paid to better water quality in the Gobi.

# Oyunaa:

The provinces will soon be provided with portable water testing equipment within the project framework, says Myadagsuren. It will enable the settlements to have instant analysis results of all the chemical elements in water.

In future, Wash-21 also plans to raise the issue of analyzing water in pasture areas.

#### Narration:

When the international support for Wash-21 ends in December 2000, the organization hopes that the now existing user groups and committees will encourage people from other settlements to follow their example. Because their is no alternative to water!

# **Mongolian Music**

Take 17 (American couple) 26"

- I am Dan and this Mary, we are from Appleton Wisconsin in the US.
- We like to take different vacations. Ones that normal people don't take. And so we've been looking at Mongolia for about four five years, and I did some research.
- It is such a remote country, and I thinkk you need a spirit of adventure to come here, and we have that. So it had a lot of the things that appealed to us.

#### **Narration:**

Although the critical water situation in the Gobi affects first and foremost the local population and their livestock, there is another aspect that on the long run cannot be neglected: We talk of tourism which plays a more and more important role in the economic development of the region. Tourists come to enjoy the unique landscape of the Gobi, the mountains and valleys, the Singing Sands, the wildlife. They stay in tourist camps, eat local food, leave money in souvenir shops by buying local handicrafts, and in doing so contribute to the income of the herders. It's the declared intention of Mongolia to promote tourism. But all efforts might be in vain, if there is a lack of infrastructure - with water being one of the most critical factors. Water for drinking, water for cooking, water for having a shower in the morning.

# Take 18 (American couple) 29"

- A shower....
- Sometimes you have a shower, and sometimes you don't have...
- Then if you like those things which we do, you love Mongolia.
- Did you have any water problems?
- Not really, we have used bottled water for drinking, of course, but we found water in the camps where we have been, it hasn't always been a huge volume of water, but there's always been water there, so we had not any problems.
- Do you know where the camp here gets its water from?
- No!

#### Ovunaa:

But we wanted to find out from the cook of the camp where they take water from.

Take 19 (Cook, in Mongolian) 28"

# Oyunaa:

For Rina who has to cook for 60, sometimes even for 100 tourists a day, the water issue is a real challenge. The camp's water tank gets water for kitchen, toilet and shower from a place 50 km away. About 3 tons of water are usually used up within three days.

Take 19 (cont. Aryuna, in Mongolian) 33"

#### Oyunaa:

Also the manager of the Camp, Aryuna, is worried about the water situation. They use, as she says, water from three different wells around. But the water from only one of them is suitable for drinking as chemically tested. The water from the other two wells can only be used for toilet and shower because it's just too salty.

Mongolian Music (fade under)

Take 20 (woman, in Mongolian) 12"

### Oyunaa:

I wish there were enough drinking water for people, I wish there were enough wells for animals, I wish the pasturelands had many wells around.

Music (up again and fade under again)

Take 21 (Garalsaikhan, in Mongolian) 21"

# Oyunaa:

I am proud that I was born in the Gobi, it's a beautiful place. The only problem for the Gobi is water but I hope that this problem will be solved one day. So I am very optimistic about the future of Gobi.

**Music** (up again and cross fade with the singing of the woman, then singing fade under)

#### Oyunaa/Bolor:

This has been **"Water in the Gobi"** - a co-production of Radio Mongolia and Deutsche Welle Radio.

The programmme was produced by Chulontsitseg, Petra Reategui, and Oyunchimeg. It was presented by Oyunchimeg and Bolor.

**Sound effect** (Nambar singing, fade up and off)