Mountain Gods and Lovage.  
An Audioreportage from China’s Biodiversity Hot Spots  
Text of the recording

**Atmosphere**  
*A leaf blower is whistling a melody*

**Announcer**  
In the Wuling Mountains, in the subtropical province of Hunan. It is a cold, damp and foggy winter’s morning. Two dozen farmers, men and women, are standing together in an orange orchard. One of them is good at blowing tunes on plant leaves. It takes him a moment to overcome his shyness. Then he begins to play even better.

**Announcer**  
The men and women from Shimen village have gathered here for more training at the Farmer Field School, says one of the leaders, Chen Guangbo:

**Chen Guangbo**  
*(in Chinese)* In the Farmer Field School we discuss things which interest the farmers. The talk is about different, locally grown varieties. Generally speaking, this is a place for training local farmers. As regards to agrobiodiversity, we discuss why conserving agrobiodiversity is important, why it is important to preserve traditional knowledge and local species.

**Announcer**  
The farmers are learning how they can benefit from the many local varieties of crops which grow and flourish here. Chen Guangbo says that this knowledge had almost been lost here in Shimen.

**Chen Guangbo**  
*(in Chinese)* There used to be a lot more varieties of plants which we could use. It is only now in the Farmer Field School that we are learning that it is important to conserve them. We are now conserving those that we still have.
Together with his colleagues, the farmer Chen Guangbo has collected in jars and paper bags at the Farmer Field School the seeds of crops which had almost disappeared, but which have been rediscovered over the past few years. Plants which had actually always existed in Shimen, but which had disappeared from markets because the laws of globally interconnected agriculture had forced Chinese farmers to switch to fewer, but much more productive crops. In the Farmer Field School building, Chen Guangbo shows us the valuable seeds in the jars and paper bags: red and white maize, for instance, black and red beans, red rice, sesame or sunflower seeds. All have their special qualities and occur only here – they are rounder or fatter, some grow more quickly or are more resistant to cold. These plants have qualities stored in their genetic information, which, in future, could be extremely valuable for mankind. Because in times of climate change it is important to be able to fall back on a broad genetic spread – of plant varieties, for instance, which are able to flourish in flood conditions, or can survive periods of drought. Over the centuries, here in the region around Shimen, farmers have grown their own local seed – which is why it grows so well here. It is often better than store bought seed. Chen Guangbo:

These here, for example, are local chestnuts. They have a different taste from the introduced varieties, they taste very good. We can get high yields with them. We sell about 13,000 pounds a year. They are a wild variety which we gather in the forests. We have raised our income in the past few years with these chestnuts and other plants. For instance, we now package this traditional variety when we sell them on the market. They are something special, and we can get more money for them.

The Farmer Field School is an important part of the project on conserving agrobiodiversity – the agrobiodiversity project, for
short – in the mountains of southern China. This is a collaborative development effort between the Chinese Ministry of Agriculture and Deutsche Gesellschaft für Internationale Zusammenarbeit. The aim of the project is to conserve valuable agricultural diversity, agrobiodiversity, in the project areas. This is something to be treasured, says Huang Yuenan from the Chinese Ministry of Agriculture, director of the project in Hunan province, and which we want to use to stabilize China’s agriculture, and make it more productive.

Huang Yuenan (in Chinese) With agrobiodiversity, one can contribute to a broad distribution of genetic resources. It generates more plants with different genetic material. When a disease, or even an epidemic, occurs and attacks a particular plant variety, we still have a wide selection of other varieties which are resistant to that epidemic. This is of great advantage for our food security.

Announcer The loss of species diversity and agricultural crops in the last few decades has been dramatic – and on a worldwide scale. 50 per cent of all food is produced today from just three plant species: maize, rice and wheat. This is why, says Huang Yuenan, the findings of the agrobiodiversity project in China’s mountain regions are not only important for China:

Huang Yuenan (in Chinese) When we speak of agrobiodiversity, we are not, of course, just speaking of the advantages it brings to China and its population. When species diversity, when plants and seeds, are conserved here in China, then this is to the good of people globally because food security is then improved throughout the world. People everywhere profit from the conservation of this genetic diversity.

Announcer The old varieties of cultivated plants do not always immediately sell well at local markets. And Chinese farmers, with an annual average income per head of just about 550 euros, are amongst
the poorest people in China. How, nevertheless, can the project manage to convince farmers to invest precious time and effort in this form of agriculture? Huang Yuenan:

Huang Yuenan  
(in Chinese)  
The farmers will agree to an initiative of this kind if they can see some benefit for themselves. This is, of course, the case if it improves their income. It is, therefore, mainly a matter of showing them what particular varieties will earn well at market. These days, Chinese markets offer the consumer a lot of choice. Gradually, consumers are increasingly seeking out traditional specialities. This is what is winning farmers over – the hope that the project will boost their income. Mostly, the method we adopt is to begin with a small pilot project. And if that gets off the ground and is running well, then we extend it.

Atmosphere  
The rustling of paper bags. Fu Yanv is gathering up all her plants

Announcer  
Three hours south by plane. It is hot, and humid on China’s tropical island of Hainan. In Xialu, a small village two dozen kilometers from the city of Sanya, Fu Yanv is rummaging about in large bags full of bits and pieces of plants. Fu Yanv is over sixty, has large, dark-brown laughing eyes, and her wrinkled face tells the story of an eventful life. In the large bags she keeps the plants with which she treats the people of Xialu and other villages here in the region. Fu Yanv is a woman who heals, a doctor who treats her patients with traditional Chinese medicine:

Fu Yanv  
(in Chinese/Li Dialect)  
People come to me with serious diseases and complaints, many of them can hardly move, many can no longer walk. But I can help most of them with my plants.

Announcer  
Fu Yanv is one of the Li minority who live in China’s tropical south. She doesn’t speak Mandarin, China’s official language,
only the local Li dialect. Fu Yanv knows more than 300 plants and their healing properties. She has specialised in bruises, sprains, wounds and joint pains – particularly frequent complaints and injuries in this part of rural China. Experienced men and women like Fu Yanv have been treating people with traditional Chinese medicine for many hundreds of years. Doctors with university qualifications as we know them in the West are few and far between in China’s rural regions. Fu Yanv is also very well acquainted with Li traditions. She preserves the traditional clothes and practices the local faith. The gods live in the mountains, says Fu Yanv. It is people like her with knowledge who are important for the conservation of agrobiodiversity. Because they know which plants to use for dyeing cloth and what patterns have to be embroidered onto traditional clothing. They are the ones who know which plants used to be cultivated, and for what purpose, or which wild plants are edible.

**Atmosphere**

*Longmudong welcomes us with music*

**Announcer**

Longmudong, in Hunan, is typical of China’s rural regions. When visitors come to the villages, they are welcomed with traditional dances and songs and the whole village assembles on the central village square to celebrate with guests. China is a multi-national state, of more than 1.3 billion inhabitants. Roughly 90 per cent belong to the majority Han-Chinese – the remaining ten per cent are made up of 55 other nationalities, the so-called ethnic groups. They often live in remote regions which are only accessible with great difficulty – and this is where the highest level of agrobiodiversity and diversity of crops and livestock is to be found. If agrobiodiversity is to be protected in the villages, then help must be given to preserve the traditional knowledge of these people. Because without this knowledge, the knowledge of how best to use the many different varieties of crops and livestock will also disappear.
Atmosphere Farmer Field School, farmers are discussing and applauding when one of them finishes his speech.

Announcer Today, at the Farmer Field School, intercropping is on the agenda. Intercropping is an organic farming method of achieving higher yields from a particular piece of ground – this, too, is an important part of the project. Intercropping means scattering different seedlings in monocultures in order to utilize the space better and create more complex ecosystems. Li Zhiming practises intercropping of a special kind – the 37 year old grows the medicinal plant Sheng Xiang between rubber trees. He is hoping to do good business with it in the future:

Li Zhiming (in Chinese) If I plant Sheng Xiang under the rubber tree I can, in the future, earn more money than if I carried on, as in the past, just planting rubber trees. The medicinal plant grows very well in the shade of the rubber tree – so this new method of cultivation also means I don’t lose any space.

Announcer Li Zhiming is one of the farmers on the project who now no longer just grow produce for the local market – they also grow produce for export. By opening up new markets for valuable regional plants, the project is creating new income for the farmers. There is enormous potential lying dormant in these plants. And, they can be very important in the future for the German market, too, says German Project Director, Luis Waldmüller:

Luis Waldmüller (in German) We are not just limiting ourselves to arable crops, but also focussing on their wild relatives. And we are very clear that the important potential for the medical sphere of the substances they contain is of great importance to Germany, too. Just think now about the treatment of various diseases. It is often the case that substances are found in these old varieties, or in the wild...
relatives of these old varieties, which then turn out to have medicinal significance for us, too.

**Atmosphere**

*The clattering of computer keys*

**Announcer**

Change of location. We are at the HerbaSinica company in Germany, in the small Bavarian village of Rednitzhembach, not far from Nuremberg. Eberhard Hilsdorf is one of the first chemists in Bavaria to set great store by the curative effects of wild plants. In the middle of the 1990s, he founded the company HerbaSinica with his Chinese partner Wenjun Zhong. Today, HerbaSinica is one of Germany’s market leaders in the export of Chinese medicinal plants. Every year, they import 220 different medicinal plants and herbs, more than 30 tons, mainly from China, but also from other Asian countries. From here, they are delivered to chemists throughout Germany. And this, too, is where the first organically grown plant from the agrobiodiversity project in China is marketed – the plant is called *Chuanxiong Rhizoma*, or Szechuan lovage. *Chuanxiong Rhizoma* stimulates the circulation, helps with menstrual and lower abdominal pains, and also with swelling caused by falls or blows. HerbaSinica requires that farmers supplying them should follow strictly organic farming practices, and that they use neither pesticides, nor artificial fertilizers. The project supports farmers in this with know-how. In return, HerbaSinica pays a higher price, and also helps out when crops fail.

**Pharmacist Eberhard Hilsdorf:**

It is important, and this is what we in the project want to do, to conserve the plants in their original form. Unfortunately, and this is the same the whole world over, plants – in order to improve their marketability – get changed, with big companies coming along with their genetically modified seed. This, of course, is very bad for the conservation of these treasures, and it is well known that – particularly in the case of medicinal plants – these original forms are very much more effective,
have many more active agents, than all those which come onto
the market sometime later in genetically modified form.

Announcer Many of these treasures can still be discovered in China’s
mountain villages. And there is a promise of a much better
future for the farmers in those regions of China with a high level
of agrobiodiversity.