

AT THE CROSSROADS BETWEEN EAST AND WEST
IN THREE HOSPITABLE COUNTRIES
AGRICULTURE AND BREEDING WERE DEVELOPED SINCE THE NEOLITHIC
COPING WITH THE RHYTHMS OF THE SEASON
A TREASURY OF GENETIC RESOURCES IS MAINTAINED IN GARDENS

TO MAKE BREAD, CHEESE AND WINE

PASTORALISTS AND FARMERS MANAGE THE LANDSCAPES
RURAL PEOPLE KNOW AND USE WILD PLANTS AND ANIMALS

COMBINING BIODIVERSITY, HEALTHY ECOSYSTEMS AND SMALLHOLDERS' DEDICATION:
A PATHWAY INTO THE FUTURE

Հացի, պանրի և գինու պատրաստում

Çörək, pendir və şərab hazırlanması

პური, ყველი და ღვინო

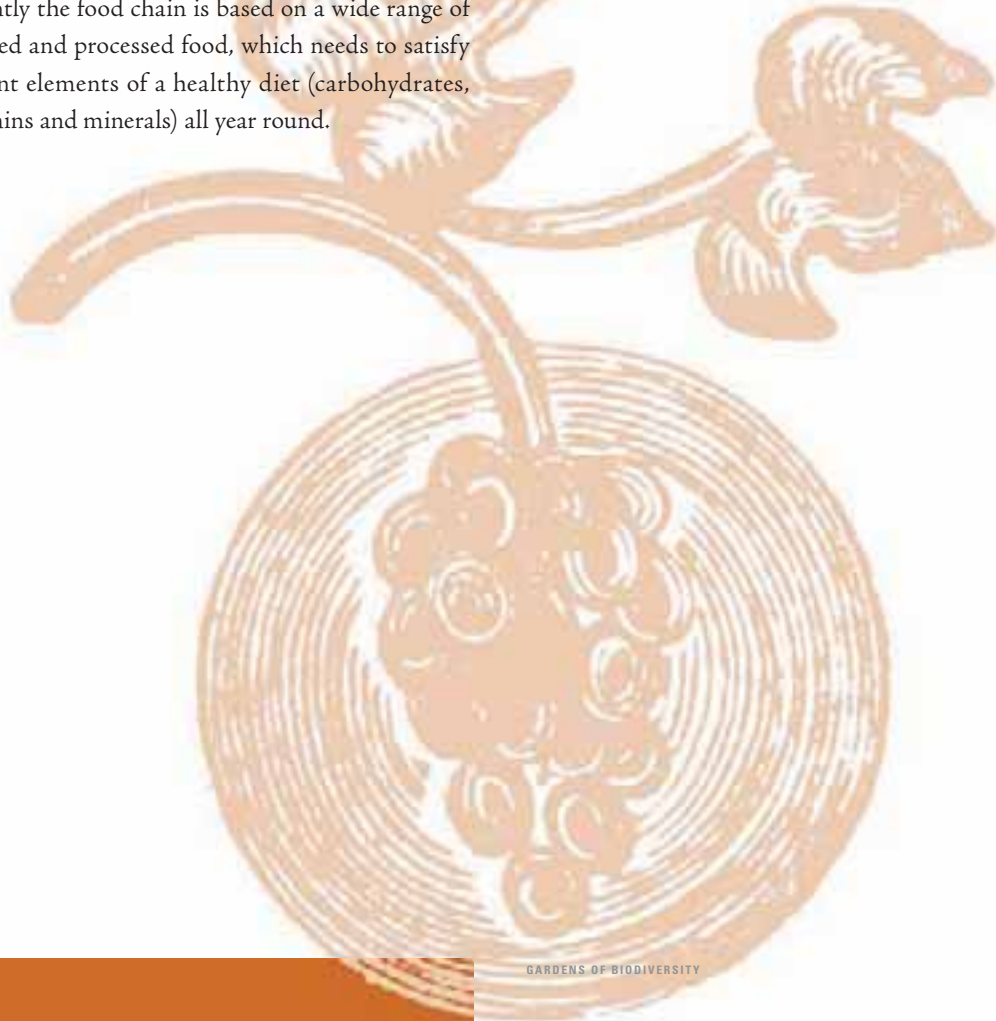
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INTRODUCTION

FOOD PRODUCTION IS INEXTRICABLY LINKED TO PEOPLE'S CULTURE AND LANDSCAPES. THE SOCIAL AND CULTURAL TRADITIONS OF FOOD PREPARATION HAVE BEEN PASSED DOWN FROM GENERATION TO GENERATION TO THE PRESENT DAY. WHEN THERE IS A CELEBRATION AND A SOCIAL GATHERING, DELICIOUS FOOD IS PREPARED TO SHARE WITH FAMILY AND FRIENDS. BUT THE DAILY BASIC MEAL FOR MILLIONS OF PEOPLE IN THE SOUTHERN CAUCASUS IS COMPOSED OF BREAD, CHEESE AND WINE.

*T*he mountains of the Caucasus oblige many farmers and pastoralists to reside in remote rural areas that are quite isolated from main markets, and consequently the food chain is based on a wide range of locally produced and processed food, which needs to satisfy all the different elements of a healthy diet (carbohydrates, proteins, vitamins and minerals) all year round.

Consequently, the Caucasus displays a range of food products building upon socially and geographically embedded local production.





In rural areas, the food chain is based on a wide range of locally produced and processed food according to seasonality and territoriality. This contributes to healthy diets and reduces transportation costs and food wastage

LINKS BETWEEN TRADITIONAL KNOWLEDGE AND LOCAL CUISINE

The cuisine of the Southern Caucasus uses a wide range of herbs, spices and aromas, vegetables, all types of legumes, and meat in the preparation of exceptional soups, stews and roasts. Many traditional food preparation secrets are passed down through the generations and form a family heritage. A wealth of different bread and cheese types is prepared in each different region and delicious preserves are made from fruits grown in family gardens and from berries collected in the wild.

In Armenia, Azerbaijan and Georgia, people have a preference for lamb but many poultry, game and beef dishes are consumed, particularly on special occasions. Fish from the many lakes and rivers are a prized delicacy. The style of cooking in the Southern Caucasus is at the crossroads between East and West and has some common elements with Middle Eastern dishes, but the singular perfume of its herbs, the many bread and wine types that reflect the climates and soils of this territory, and the



The rich biodiversity of plants and animals is reflected in the variety and delicacy of the many dishes prepared in the Southern Caucasus
Vine leaves sold at the market to make dolma (left). Traditional preparation of cheese (right)

creativity of people in the Southern Caucasus have generated a unique culinary style not easily found elsewhere in the world. The common elements in the diets of the three countries are bread, cheese, grapes, honey, nuts, eggplants, legumes, yoghurt and lamb. Many variations and differences exist, depending on the season, traditions and recipes, and the influence of neighbouring countries. Even if the three countries prepare the same dishes, each country adds a particular spice, herb or fruit or uses a cooking method (such as the diverse bread ovens described in the following pages) that makes the dish unique. According to Sonia Uvezan, spit-roasted chicken is traditionally accompanied by sliced cucumbers, tomatoes and lemon in

Armenia, pomegranate syrup in Azerbaijan and sour plum sauce in Georgia, resulting in three completely different-tasting dishes. Each country has specific recipes that cannot be found in the other two countries and uses its own wild and local plants to give an exclusive taste to its dishes, while bringing out the best of the territory and its resources and maintaining a lively link with national traditions. This inextricable link between biodiversity and local agriculture, cuisine and the social and cultural traditions of people in the Southern Caucasus shows that it is possible to reach a balance between livelihoods and natural resources.



WOMEN AND FOOD PRODUCTION

Caucasian women have always played a major part in creating a great variety of food products. Apart from making different types of bread (*tandır chorek*, *sac chorek*), milk products and daily and festive dishes, female labour and taste are incomparable in making preserves from fruits, pickled vegetables, marinades and other foodstuffs during certain periods of the year. Women pass down their recipes and their culinary secrets to their daughters, and family culinary traditions are a strong component of the cultural and social identity of families in the Southern Caucasus.

Men only take on the preparation of certain dishes such as *kabab*. In most cases, neighbours and relatives help each other in turn to prepare various foodstuffs for winter such as jam, syrups, preserves, *bakmaz* (boiled-down mulberry and grape juice) and pickles from wild fruits and vegetables. While involved in these activities, women sing and recite *bayaties* (a kind of Azeri folk poem).



Family culinary traditions are passed down through generations to maintain the cultural and social identity of families. At family and religious celebrations, delicious dishes are prepared and shared with friends and relatives





Bread has a special place in daily life in the Southern Caucasus. The whole family participates in bread production, as shown here at the Karabezian home in Garni, Armenia. The critical phase of bread rising is carefully checked

BREAD

Bread connects human life with nature and agriculture. Bread is not only food, but it is a symbol, a medicine, a communication tool that connects different social groups.

Bread is the most consumed food in the world. Even the Armenian expression “to eat, to take a meal” sounds like *bats utel*, i.e. “to eat bread”.

Good-quality bread has a particular place in the life of people in the Southern Caucasus because it is the basis of their daily

food and, when dried, preserves its quality, does not get stale or spoil, can be stored for a long time and retains its softness and freshness after being sprinkled with water.

When we eat bread, we do not immediately think of its main constituent, wheat. However, the origin of a good piece of bread is the wheat seed that is maintained, selected, cultivated, stored and cooked by millions of farmers. The Southern Caucasus is considered to be the place of origin for many wheat species. Botanists, geneticists, biochemists, embryologists



Bread being placed in the traditional buried oven. Bread can be produced in large quantities thanks to special techniques that enable it to be stored for a long time

and cytologists from all over the world have focused on the Southern Caucasus, identifying the region as a natural museum for wheat, because of the wide number and diversity of wild and cultivated species.

Yet nowadays these diversities are slowly disappearing and the entire world should be engaged in preserving such important resources. A rich collection of wild and cultivated wheat, mainly representing local species and populations, is maintained in the gene banks of the Southern Caucasus, with very little financial

support, thanks to the dedicated work and love for science and agriculture of national scientists. For example, at the Genetic Resources Institute of the Azerbaijan National Academy of Sciences, approximately 2 500 accessions are maintained, studied, regenerated, protected and used efficiently.

Wheat is not only maintained in gene collections but is still cultivated by small farmers to produce the type of bread they want to consume, and to adapt it to their farming practices.



Wheat diversity enables many different uses and functions. *Zanduri* produces a particularly soft bread and its long stems provide essential insulation for houses. >>Right: *dika* can grow in damp conditions and could become very important in adapting to climate changes

Zanduri

Over the centuries, people have developed ways of using the genetic potential of wheat at each evolutionary stage. An ancient pair of wooden tongs, found in Georgia and called *shamkvi*, was created to harvest *zanduri* soft wheat, which has particularly fragile ears.

Zanduri is a form of wheat selected by local communities in western Georgia who prized the variety not only as a food source but also to insulate their dwellings. With its long and strong stem, this wheat variety was used to make straw matting that could then be inserted under the roof to provide extra warmth.

Despite the fact that the wheat is found only in Georgia, it could be useful for cropping systems based on zero tillage. These cropping systems need straw residues for covering the soil and avoiding soil erosion between harvesting and the next planting period. Moreover, the flour made from *zanduri* wheat is rich in starch and produces a particularly soft bread that keeps well for long periods; this characteristic is appreciated by consumers since it reduces the energy consumption needed to preserve bread. Currently, only a few farmers grow local varieties of wheat (including *zanduri*), mainly because they lack seed sources and supporting policies that exploit crops adapted to their specific ecosystem.

Dika

Many farms in the Southern Caucasus grow wheat in wet mountain areas. Farmers observed that under these conditions wheat germinated soon after ripening, losing both its nutritional and market value. To counter the problem, they selected a variety called *dika* (*Triticum ibericum*) that matures earlier when temperatures are still low and thrives even in damp conditions, making it suited to wet mountain locations. Even if this wheat variety is harvested while it is still damp, the seeds do not germinate.

Dolis puri

Farmers have managed to turn what would normally be considered negative traits into positive ones. The Georgian wheat, *dolis puri*, is a variety of soft wheat that has two defects: it is sensitive to bending by the wind and, given the right hygrothermal conditions, its grains germinate easily once released from the chaff. However, these wheat grains are not easily released even in hail or strong winds, a factor which was originally considered a disadvantage, since it made threshing (using a heavy mallet or *kevri*) more laborious. In times of war, however, this shortcoming turned into an advantage. Farmers were unable to decide exactly when to harvest and were often forced to wait. In such cases, they often chose to cultivate *dolis puri* for the same reasons for which they shunned it in times of peace.

Ipkli

Ipkli, an autumnal variety of wheat, is grown in western Georgia, mostly in moisture zones. It has a high resistance to fungal attacks and adapts easily to barren soils in wet environments. It has a stable harvest. Its large grains may be red or white; the variety produces a flour that is excellent for bread-making.





Hulugo

This spring variety is grown in the high mountain regions of western Georgia and in the Kakheti region of eastern Georgia, where *dika* wheat is also grown. It has a high resistance to fungal attacks and has dense ears; it is sensitive to temperature variations. *Hulugo* is rich in gluten and is good for bread-making.

Emmer

Emmer has a high resistance to fungal attacks and adapts easily to poor soils, both in dry and wet environments. Its flour produces flavoursome and aromatic bread, which stays fresh for a long time. *Emmer* was formerly used for religious ceremonies, particularly to cook a special dish called *korkoti*. This tradition is still popular, but *korkoti* is now made with any kind of wheat. All farmers make *korkoti* on special feast days. *Emmer* and *korkoti* were mentioned in one of the oldest Georgian sources – *Life and activity of Grigol Khandzteli* by Giorgi Merchule (sixth century AD). Information about *emmer* and *korkoti* also exists in other ancient Georgian literary and historical works.

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This variety has been developed through individual selection of germplasm introduced from the International Maize and Wheat Improvement Center/International Centre for Agricultural Research in the Dry Areas (CIMMYT/ICARDA). It is highly productive and resistant to diseases, lodging and shattering. The height of the plant is 70–80 cm. The variety is early ripening. Its bushing out is erect. The diversity is *graecum*. Ears are medium-sized and of average density, white and cylindrical. The ear scale is oval; awns are medium size, white and weak-charactered. The potential yield is 8–9 tonnes/ha.

At the Selection Achievement Testing Station in Asureti, many wheat varieties are maintained and selected. This white *ipkli* is particularly prized for its resistance to fungal attacks



Bread links food production, nature, social and religious life. *Above:* the traditional Armenian dance after the first wheat harvest. *Below:* the large oven, now electric, built in the basement of Sioni Cathedral in Tbilisi





Two phases of wheat processing in the village of Musachyan, Armenia: fresh water washing (left), and hand threshing (right)

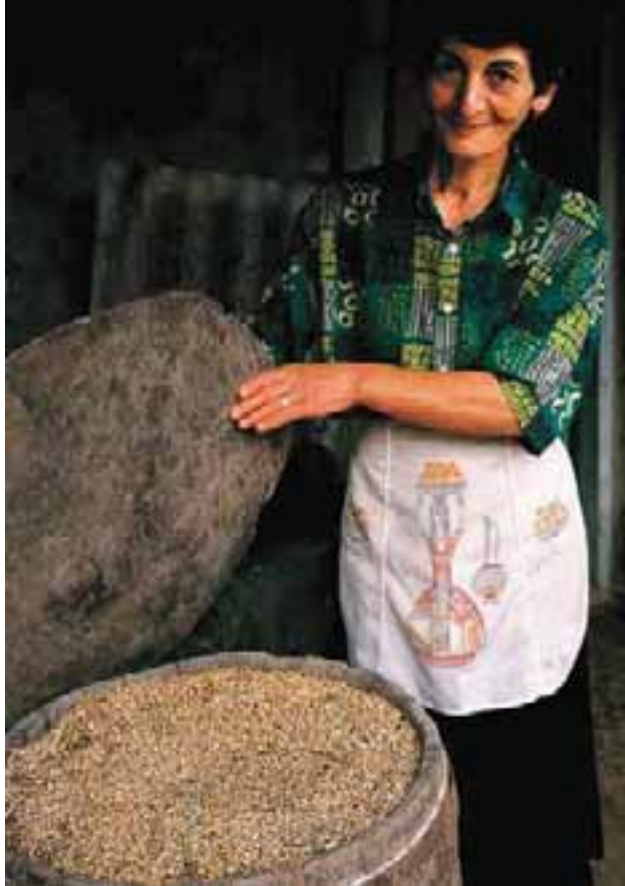
FROM FIELD TO TABLE

In the Caucasus, the end of the harvest and the beginning of threshing are marked by much festivity, and villages celebrate with traditional songs and dances. Harvesting takes place at the end of July. The ripe wheat is bundled into sacks that are stacked in the courtyard of each house. Two weeks later, the threshing starts, and subsequently the grains are washed and then left to dry before being stored in special amphoras known as *ambar*.

The wheat is milled to make whole-wheat flour, without separating out the bran. Throughout the rural areas of the Caucasus it is still quite common to find families using hand-operated mills to process small quantities of wheat when they need it.

In 1991, during the energy crisis in the region, mills throughout the Caucasus were once again used to make flour. Among them were a number of water-powered mills, such as the one in Agner, an Armenian village of 1 000 people.

In Armenia, whole-wheat flour is used to make flat bread called *lavash*, which can be dried and kept for as long as a year. Before eating the bread, it has to be moistened with water, a fact which made it popular in former times with travellers, and which still makes it attractive to shepherds who take their livestock into the mountains during the summer. An old Armenian proverb praises the bread, saying: “If you don’t eat large quantities of it, it means you must be ill”.



Wheat can be stored for many months in wooden barrels, thus ensuring a secure source of food in case of scarcity (left). Village water mills are used by each family to make their own flour (right)

Today, Armenian communities continue making their traditional *lavash*. Two to three people working for 12 hours can make approximately 300 loaves, enough to supply the whole family for days and still have some over to sell at market.

Lavash is also the national Azeri bread. This type of bread-making was developed by tribes of migrant animal breeders who used to lay in stocks of bread for three to four months when migrating. The bread is still consumed in all regions of Azerbaijan. High-quality *lavash* is made of durum wheat, which has long been cultivated in Azerbaijan. *Lavash* is eaten with cheese, butter, dried ricotta, vegetables and sometimes meat, which is wrapped inside it. *Lavash* filled with vegetables

is cooked on a *sac* (an iron disc for making bread) and eaten with fresh butter made inside a hollowed-out large tree trunk, or *nehra*, which is about 1.5 m in length.

In Azerbaijan, the above-ground oven is called a *tandir*. It is constructed from a mixture of materials: grey clay, hay, horse dung and goat wool are placed in a tub and macerated in water in the open air for 40 days until the mixture can be used to create the vault of the oven, which is 50–70 cm high and open at the top. When the vault is raised, using an object with a smooth surface, it is pressed to give it a stronger consistency and to model the shape. The oven floor has a hole for air during the burning of the wood.



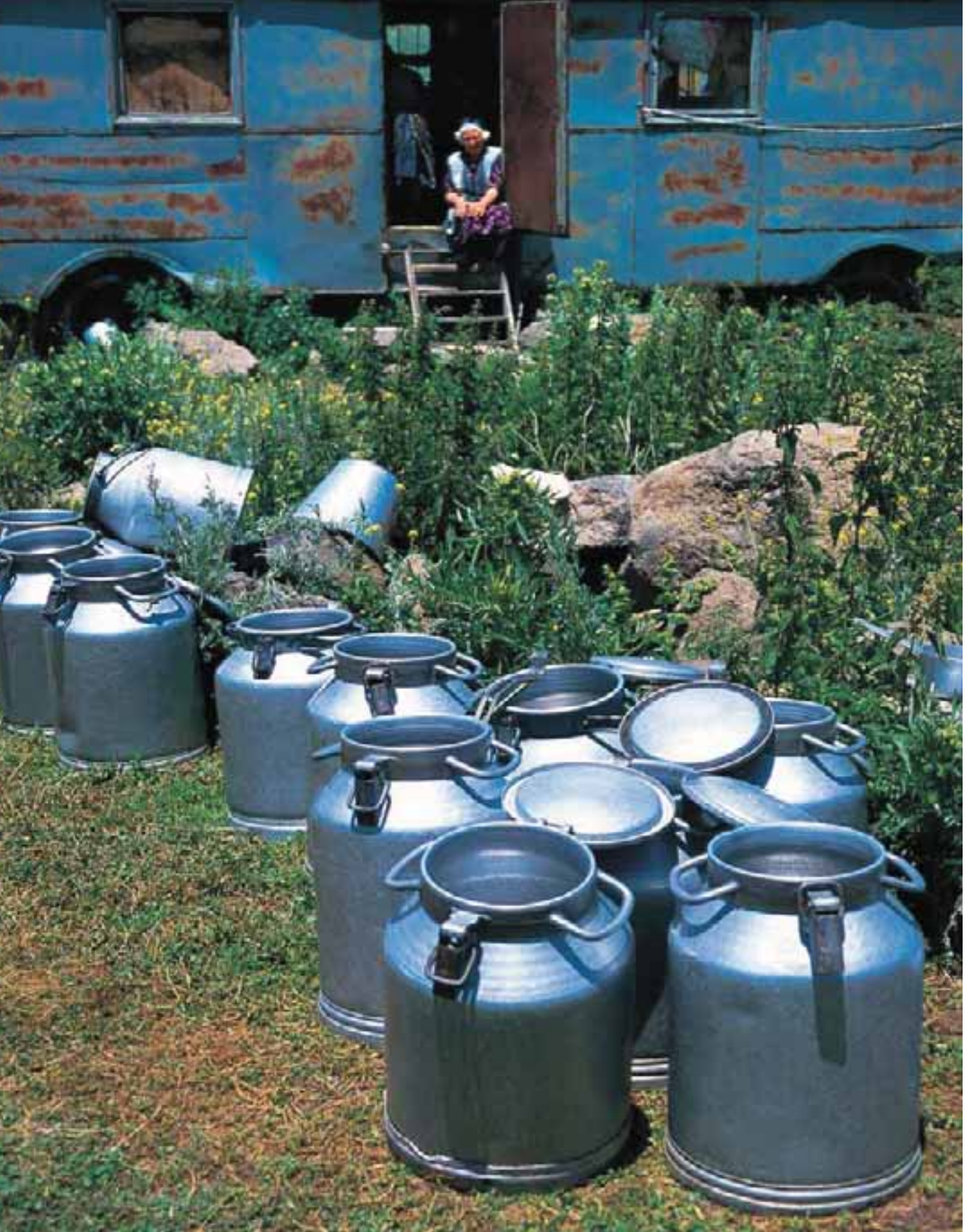
A fragrant loaf of bread on the table is the result of a process that starts with wheat seeds maintained, selected and cultivated by farmers. The Southern Caucasus is a natural museum for wheat, thanks to its large number of wild and cultivated species. Preparation of *khachapuri*, a typical Georgian bread filled with cheese (left)

The upper hole is closed with a lid during combustion and the oven is blazed until the wood has a whitish colour. This indicates that the oven has reached the necessary temperature for baking the bread. Before the bread is put in the oven from the top, the walls of the oven are sprayed with a mixture of water and salt in order to prevent the main surfaces of the bread from burning during baking, where the bread is “glued” to the oven walls.

The *tandir* is not only used for cooking bread. It is also used for cooking various delicious dishes, including those with meat. These types of dishes are called *tandir khoraklari*.

In Georgia, the oven for baking *lavash* is called *tonnè*. Since it is constructed above ground, it is easier to manage. One of these ovens can be seen near Tbilisi’s seventeenth century cathedral. Here, bakers churn out *djuris puri* – loaves of bread in the shape of flattened clubs that are thicker than *lavash* loaves. There are also other types of bread-making ovens. One has two openings, the first for the wood and the second for the bread. The extra opening can also be used to blow in more air when the fire shows signs of dying and allows the baker to regulate the temperature more carefully. This type of oven is particularly suited to producing popular Georgian *khachapuri* cheese pastries.







The Southern Caucasus is rich in summer pastures, which enable the production of many different types of quality cheese and other dairy products. In order to safeguard this production and consequently the livelihood of rural people, it is important to promote safe small-scale processing and distribution

DAIRY PRODUCTS

In the Southern Caucasus, milk has been traditionally produced by sheep, goats, cows and buffaloes. Each region still produces typical products that are sold at local markets and much appreciated by the local population. Most cheese is produced during the summer when animals have access to better-quality pastures and feeding resources.

The importance of cheese in the culture of the Southern Caucasus is illustrated by the Azeri traditional way of swearing one's loyalty: "I swear upon my bread and cheese".

A few examples of the traditional dairy products of the Caucasus are given in the following pages.



Photo by E. Cattaneo



It is crucial to link producers and consumers, ensuring that agriculture can meet both the needs of farmers (to maintain their livelihoods, their work and their land) and consumers (to have sufficient, healthy and diversified food at a reasonable price). Dairy products such as yoghurt and dried ricotta are widespread throughout the Southern Caucasus. They can be consumed fresh or preserved for the winter

YOGHURT

Acid yoghurt is very popular and is called *matsun* in Armenia, *gatiq* in Azerbaijan and *matsoni* in Georgia. To produce this yoghurt, milk is boiled and fermented. Approximately 100 cc of old yoghurt is added to 10 litres of milk and then covered to cool the milk slowly. When old sour yoghurt is not available, *makardakhot* (bedstraw – *Galium L.*) may be used instead. The quantity of the ferment, the temperature of the milk and the locality condition the degree of acidity of the product. Yoghurt may be consumed on its own or in other dishes, mixed with garlic, *tolma*, steamed herbs, etc. It is used for making old Armenian *matsnapur* and *matsnabrdosh*. Butter and *tun* are produced by beating up *matsun* in a churner. In order to keep *matsun* for longer (for winter), it is usually strained and stored in clay pots, covered with a piece of leather. Sometimes the cream of *matsun* is also preserved for winter. In Azerbaijan, yoghurt made of sheep milk is considered the best. People also make *suzma qatiq*, a type of yoghurt filtered through cheesecloth.

DRIED RICOTTA

Ricotta cheese is produced by boiling buttermilk. In Armenia (Syunik, Shirak and Tavush regions), once the ricotta surfaces, the whey is churned, thereby obtaining further ricotta clots that are left to dry – these are the so-called *chortan* beads. The beads, rehydrated when needed, will then take on the normal shape. This is a strategic food, formerly a true stock item that was often used in the past, but that could now be a good addition to quick business lunches.

Another type of ricotta is prepared in Azerbaijan. It is called *shor* and is a salted ricotta. The fresh ricotta is put in a sheep's leather bag turned inside out (with the woolly part inside) and a mixture of boiled water and salt is added. The bag is closed and the contents mixed. The bag is then left on the ground in a dry place in the shade, and the ricotta gradually dries until it becomes thick and is ready to eat.



Cheese is produced from cow, sheep, goat and buffalo milk. Pakisa Abdullazade makes a typical cheese called *scian-scian*. Overleaf: Mrs Gigolashvili makes *chechil*, a braided cheese

CHEESE

In the Southern Caucasus, cheese is still made by using specific local types of rennet. For example, in Azerbaijan, near Quba, part of a lamb's stomach (abomasum) is washed, spread with salt, rice and wheat, dried, and then added to milk whey in a terracotta recipient.

In both Armenia and Georgia, *chechil* is a very popular stringy cheese. Cow milk is set aside for approximately three hours in Armenia and for 24 hours in Georgia to encourage the milk to turn sour, adding ferments that will cause the curd cheese to precipitate after 10–15 minutes. Without separating it from the whey, the curd is gradually collected in a single portion on which the “extension” part of the process is carried out (in order to obtain the stringy form of the cheese) and the “twisting” (to obtain the typical braided form). When the braid is ready, the cheese is extracted from the whey and left in the open for 10–15 minutes. It is then salted and pressed

with wood for two to three days before it is conserved in jars (marjoram is sometimes also added). The cheese can be kept for approximately one year in these jars at room temperature.

In Armenia, a green (mouldy) cheese that somewhat resembles Roquefort is prepared. It is made of thread-like (braided) and country cheeses. Pieces of cheese are put in clay pots and then salted. Holes are later made in the pots in order to allow air to enter (for mould formation).

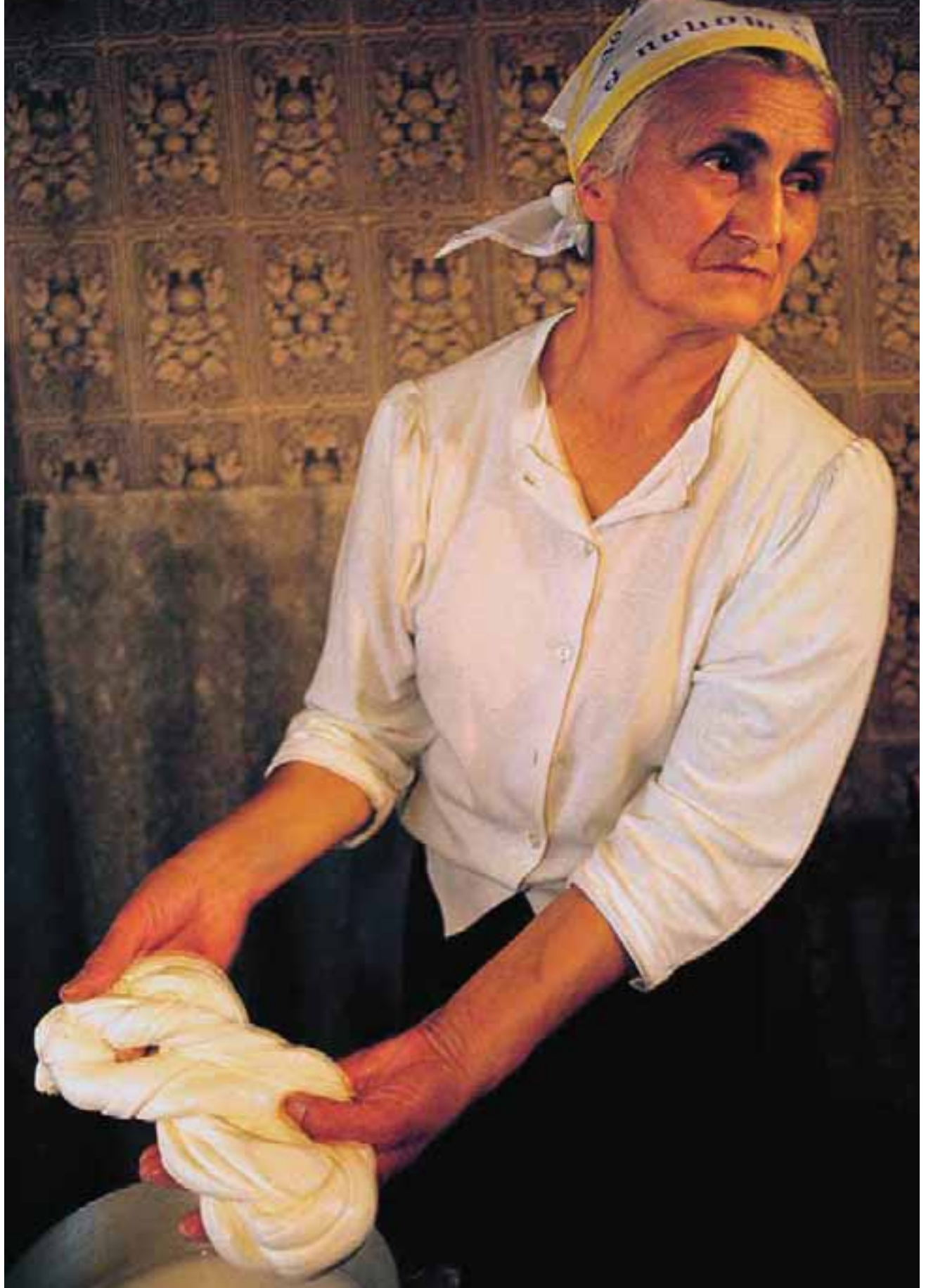
An Armenian cheese that is characterized by having “eyes” (holes) is *ankash panir*, which is obtained from curdling fresh cow milk. In Azerbaijan, a cheese named *scian-scian*, also with “eyes”, is made by mixing colostrum with flour. It is then set to cook on a hotplate, turning it several times until the “eyes” appear.

Some soft cheeses should also be mentioned. In Georgia, the soft cheese *sulguni* is prepared from an ordinary or semi-mature cheese, and is eaten as is, or used in specific dishes (for instance, in the preparation of the pan pizza *khachapuri*). The cheese is thinly sliced (about 1 cm thick), put in a pot filled with hot water and, as soon as it has softened, transferred to a basin where it drips off and is left to harden.

In Azerbaijan, *pendir* is the typical soft fresh cheese. It is made by boiling full milk (not skimmed). After approximately half an hour, curd is added and the curd cheese divided into small pieces. The cheese is then put in cloth bags. In order to preserve the softness of the cheese for the longest time possible, in some areas the cheese is covered with ricotta.

Buried cheese is like *motal* cheese. Chopped and salted aromatic herbs (mint, thyme) are mixed with a mass of fatty white cheese and put into clay pots, covered with a piece of gauze. The pots are turned upside down in order to drain the cheese. Finally, the pots filled with the cheese mass are buried in the soil until the end of autumn.







SUPPORT FOR THE PRODUCTION AND PRESERVATION OF *MOTAL* CHEESE IN THE SOUTHERN CAUCASUS MOUNTAINS

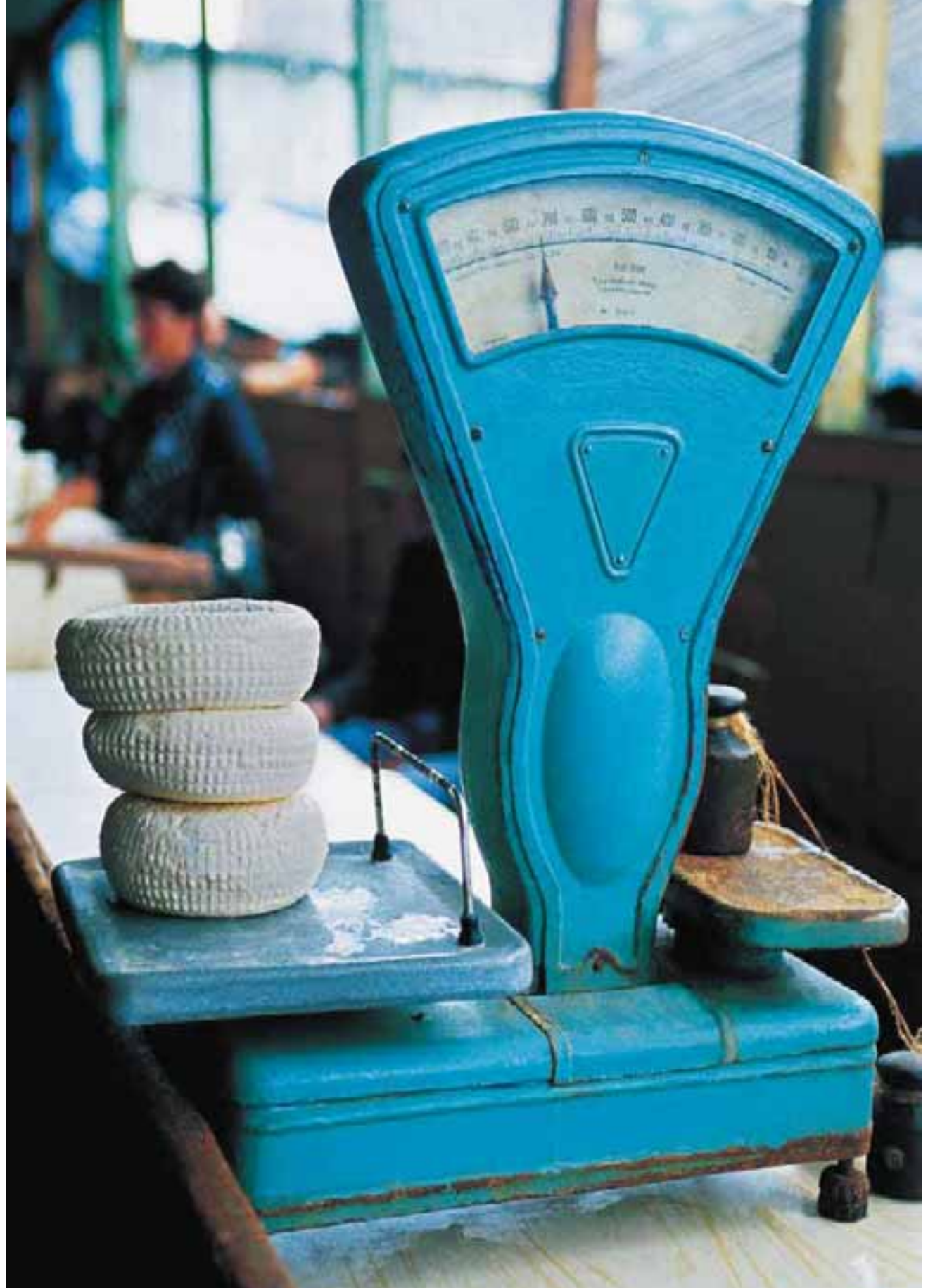
Motal is a type of cheese produced throughout the Southern Caucasus from sheep or goat milk or a mixture

of the two. It is traditionally preserved in terracotta pots or in sheepskin. In the mountainous regions, it is produced by shepherds who rear 40 to 150 goats in a harsh climate, in isolation, and with scarce financial resources. Consequently, they often sell the cheese directly

to consumers or through entrepreneurs just after it has been taken from the brine, instead of preserving it for longer in terracotta, as the traditional technique requires.

In the last few years, some projects have been started in Armenia with the objective

of enabling producers to work together, improve their cheese-making techniques and equipment, and obtain sanitary authorization to sell their products both nationally and internationally, while at the same time preserving traditional production techniques.





WINE

Vitis vinifera or grapevine was one of the first fruits to be domesticated. The Southern Caucasus and northern Islamic Republic of Iran are considered its primary centre. Natural hybrids between the wild and cultivated forms result in newer cultivars.

The importance of wine in Southern Caucasian agriculture in the past is also evidenced by a number of archaeological findings. Of the recovered material, the most attractive are the grape seeds. According to morphological and ampelographic analysis, which was also harmonized with a number of seeds of modern vine varieties, the seeds found at the Shulaveri site in Georgia are considered to be those of the cultivated vine – *Vitis vinifera* L. spp.

The seeds, from the fifth to the sixth millennium BC, are ancient not only for Georgia, but for the whole Eurasian continent. The results of archaeological observations also prove that Georgia is a genetic centre of origin of vines and that in the area seven to eight thousand years ago there were signs of land cultivation, especially of viticulture.

A reference to Armenian viticulture can be found in the Mesopotamian epic poem of Gilgamesh, written around 2000 BC. In the seventh century BC, the Greek historian Herodotus described how the Shiite King Madi raided the territory of present-day Azerbaijan to steal its wine, whose fame had reached the ears of the Babylon people.

The importance of vines in the Caucasus is testified by the ancient traditions of preserving wine in buried jars and by the richness of germplasm of *Vitis* spp. in the region.

At present, there are numerous large- and small-scale wineries producing many types of wines, and Armenian cognac is known worldwide.



Shamam melon, grapes and raisins at a market in Mashtot. The Southern Caucasus is considered a centre of origin of the grapevine. Diversity of landraces/farmer varieties has been declining, however many local varieties can still be found in family gardens.
<<Left: freshly picked grapes from the Shamakhi region

In west Georgia, at the source of the River Rioni, there is a small, beautiful region – Racha. Up to now, Racha has retained its language, folk and living characteristics because of the geographic and ethnographic border.

Field husbandry and viticulture were developed on its fertile fields and riverbanks even in ancient times. In the forests of this region, many wild grapevine species exist. Here, manual labour plays a significant role and the ancient rules of viticulture and land cultivation are still active.

In this region, the population has always cultivated high-quality vines and has its own specific rules for viticulture and wine-making. Even today, the people use the old working tools for vine cultivation such as clippers and axes and the containers for carrying grapes: *salasto*, *gideli*, *khakhali* and *godori*; vessels for measuring wine: barrels or *dora*; leather vessels for wine transportation: *tkhier*; and wooden, horn, clay, glass, pumpkin, gold and silver bowls for drinking wine. Farmers constructed special stone or wood buildings for storing wine, the so-called *marani* – wine cellars.



According to Sulkhan Saba Orbeliani, “*Marani* is a wine house”. These cellars have a ground floor where clay jars (*churi* or *kvevri*), the characteristic pitchers for storing wine, are buried. In lower Racha, on the right bank of the River Rioni, is the microzone for quality vineyards and wine.

The wine *khvanchkara* is made here, one of the first naturally sweet wines in the world. Farmers from Racha are incomparable masters of viticulture and wine-making. Because of lack of land, Racha farmers sowed maize, beans, peas and pumpkins in vineyards.

The German scientist Giuldeshtedt (eighteenth century) remarks that “vineyards in Racha are gardens at the same time”.

Peach was favoured for planting because it is small-sized and did not overshadow the vine. On the verges of vineyards, the population grew plums, pears and apples.

The German researcher A. Pettsholdt (nineteenth century) gives the highest plaudits to the activities of Racha farmers in *The essays of Caucasian wine-making*, published in 1875. Farmers empirically classified vine species by zones, according to their maturity period.

It is a pity for this wealth of local knowledge to be lost, along with many folk customs for the protection and cultivation of slopes, and for the preservation of some high-quality local vines that are currently at risk of becoming extinct.



Grapes are widespread in the Southern Caucasus. They are consumed either fresh or preserved. Agricultural production systems should adapt to the changes that take place not only in the environment but also at economic and social levels, in order to maintain their sustainability





THE TOAST

In the Southern Caucasus, the tradition of the toast has survived political and social changes. The toast has its own rules and is conducted by the Tamadà, or “Master of the Toast”. Each glass of wine can be drunk only after a wish has been expressed by one of the guests on a theme selected by the Tamadà. This tradition is so popular that there are many anecdotes about it, such as the one about “the last toast”, which is the toast dedicated to guests’ safe journey home.

A man refused to participate in the last toast because he was afraid of getting drunk and losing his way home. So he said goodbye and left on his donkey. He was almost home when he hit an iron wire stretched across his path and fell to the ground. He immediately thought that what had happened was caused by his refusal to drink the last glass of wine, and decided to go back to the banquet and have a proper last toast. When he left again, he was really drunk. By the time he arrived where the wire had hit him, he had



In Armenia and Georgia, the toast has its deeply rooted rules. The “Master of the Toast” decides on the subject about which each guest has to express a wish before a glass of wine can be drunk

completely forgotten about it, but he was so low on the donkey’s back that this time he passed safely below the wire. Immediately afterwards, he noticed that he had escaped danger and exclaimed: “It is true! One must never refuse the Last Toast!”

The importance of this tradition is shown by the attention in sociocultural literature to “How to behave at the table”. The toast in Georgia is also demonstrated in the *Anthology of*

Georgian Poetry. Below is the first strophe of a poem about a toast, written by the poet Joseph Grishashvili.

Toast

*In your honour, new year
I drink with my father’s silver cup
To your health and welcome fervently these wishes
Sons of hearts as pure as pearls.*



The Southern Caucasus is a treasure trove of biodiversity of wild and cultivated vines. Better policies and efficient agreements should be implemented to maintain and use these valuable resources [Source: МИНИСТЕРСТВО ВКУСОВОЙ ПРОМЫШЛЕННОСТИ СССР. 1946. АМПЕЛОГРАФИЯ СССР, СОСТАВИТЕЛИ ПЕРВОГО ТОМА: I. ЧЛЕН-КОРРЕСПОНДЕНТ АКАДЕМИИ НАУК СССР П. А. БАРАНОВ Я. Ф. КАИ, М. А. ЛАЗАРЕВСКИЙ, ПРОФ. А. М. НЕГРУЛЬ, ПРОФ. И. В. ПАЛИБИН, ПРОФ. Н. Н. ПРОСТОСЕРДОВ. ГОСУДАРСТВЕННОЕ ТЕХНИЧЕСКОЕ И ЭКОНОМИЧЕСКОЕ ИЗДАТЕЛЬСТВО, ПИЩЕПРОМИЗДАТ. МОСКВА.]





Photo by V. Borgianelli

THE VINE GROWERS SOLIKO TSAISHVILI AND RAMAZ NIKOLADZE

by Soliko Tsaishvili,
Ramaz Nikoladze and
Valerio Borgianelli Spina

From time immemorial, vines and wine have been spread across the entire territory of Georgia, influencing everyday life and reflected in religion, art and folklore. For a Georgian, a plain was where vines grew, and where the mountains started was where vines could no longer be cultivated. Although Georgia is a small country, its climate and soil are amazingly diverse and rich, which explains why over 500 different grapes are grown here, each perfectly adapted to its place of origin.

Soliko Tsaishvili says: "I am a Doctor of Philology, and from 1998 to 2003, I was editor and reviser of the journal *Literature and Art*. I am also a translator from German and Russian.

Wine-making has been my hobby for a long time. I made my first wine in 1987 and I worked on the wine production chain with passion and love until I was 42 years old in 2003. Then, I decided to change my life completely, giving up my very interesting career, and dedicating myself entirely to vine-growing and wine production.



Photo by V. Borgianelli



Photo by V. Borgianelli

A fundamental element in this decision was my meeting with the wine producer Giorgi Tushmalishvili, who introduced me to the secrets of growing grapes and their possibilities.

With three friends, I bought a small house with a hectare of vineyards in Kakheti, east Georgia. I still remember that day in May quite vividly. It was the first time I had seen the vine blossom at close quarters. Then, practically under my eyes, this turned into tiny soft seeds. A little later these green, poorly attached, fragile pellets turned into beautiful clusters of the *Rkatsiteli*, *Saperavi*, *Mtsvane* and *Khikhvi* grape types.

In the meantime, it was already mid-September so, just like our forefathers had done for many centuries, we pressed our harvest – heavy, healthy, sweet

grape juice – into *kvevri*, huge earthenware amphoras dug deeply into the ground. And, following the rules laid down by our ancestors, we added some cluster stalks and grape skins to what would become white wine and only the grape skins to what would become red.

Although we hadn't added any yeast, in a little while the juice began to ferment in the pots. But why was it so surprising? We hadn't tried to enrich the soil with any chemicals or modern additives. The fermentation was quite even, neither too strong nor too weak, which must definitely be attributed to the *kvevri* – this wonderful clay invention of the past. Dug deeply into the ground, these oval amphoras create ideal conditions for natural fermentation. For our part, we certainly assisted the process.



Photo by V. Borgianelli



Photo by V. Borgianelli



Photo by V. Borgianelli

Just like our ancestors, we stirred the juice with a special long pole four or five times a day so as not to allow the grape skins to retain unnecessary and unwanted gases at the bottom.

In about three weeks, fermentation was complete, the *kvevri* were filled to the brim and securely sealed, but not airtight since the second stage of fermentation was not far off. In December, the *kvevri* were sealed for good, with a thick layer of soil above them. The next three months passed in tense anticipation. It was only in March that we were able to taste the result of our hard work.

Both wines, the white and the red, proved to be rich, with a distinct aroma and texture and simply delicious. The white had a fiery taint to it, while the red was the colour of a ripe pomegranate. After taking a sip or two for testing, we all decided we wanted to drink more. And we did, which was followed by a lot of singing. We certainly enjoyed it ... When I woke up in the morning, I realized I had turned into a true vine-grower and wine-maker – literally overnight!”

Ramaz Nikoladze works for the European Union Security Service as a bodyguard and tells us: “My ancestors cultivated vineyards in

Nakhshirgele village, Imereti region, and natural wine was at the heart of both my area and my family. They cultivated grape varieties such as *Tsistka*, *Tsolikouri*, *Krakhuna*, *Zvelshavi* and *Aladasturi*. In their backyards, *kvevri* were buried in the earth; they also owned *marani* (wine cellars).

Once I had tasted real, natural, *kvevri*-made wine in the mountain village, I decided I had to use *kvevri* to produce wine myself. I researched modern enological literature and talked to elderly people about the traditional methods of wine-making. I washed the old, abandoned *kvevri* thoroughly and used beeswax for their internal surface. I crushed the grapes by foot, and I poured the juice into the *kvevri* without any yeast; however, I did not follow the advice of my elders but did the fermentation without grape skins. The wine was excellent, but not perfect.

So, the following year, I added some grape skins to the grape juice and, after that, I increased the amount of skins to 6 percent as in the past and left the juice to macerate for four months. As a result, I obtained a bright gold, normal acid and excellent wine.

In 2004, I was invited to ‘Terra Madre’, organized by the international organization





'Slow Food', where farmers gathered from all around the world to share common experiences. I talked to the managerial personnel of the Slow Food Foundation for Biodiversity about the forgotten phenomenon of *kvevri* wine. We decided to set up a project on 'Georgian amphora wine'.

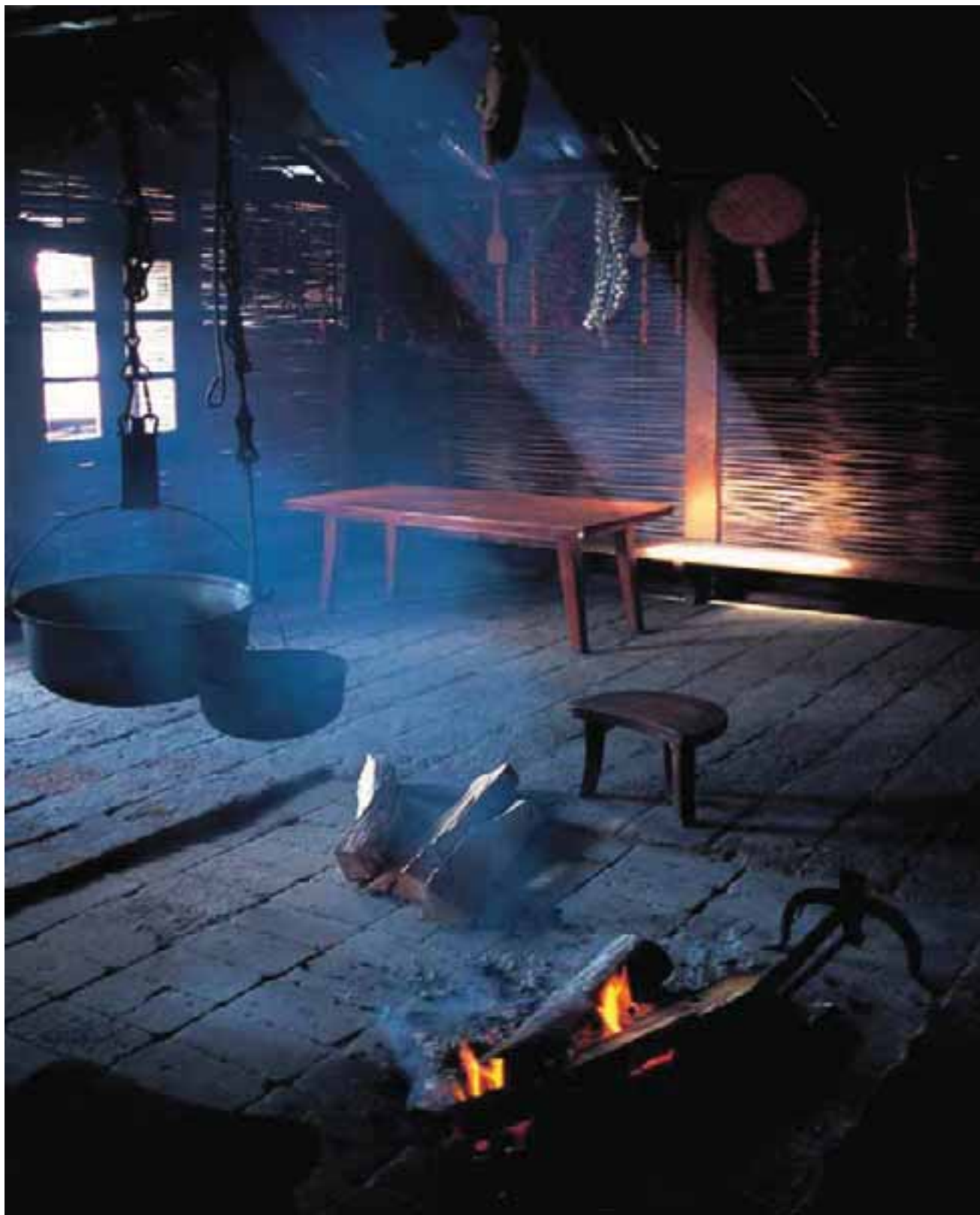
During my work and research, I met people who had experience working with traditional

methods of wine-making; although some were novices they were, like me, full of enthusiasm. Under the project, ten wine-makers were selected from the Kakheti region and six from the Imereti region. We created a management protocol and set up an ethical codex for each participant in the project. We do not use chemical inputs, and we adhere to the Slow Food slogan: Good, clean, and fair."



Photo by V. Borgianelli





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BIBLIOGRAPHY TO MAKE BREAD, CHEESE AND WINE

- Abdullayev, I.K.** 1981. *Genetics and selection problems of Azerbaijan grape*. Baku, Elm Publishing House. 75 pp. [in Russian]
- Aivasian, P.K. & Aivasian, G.P.** *New varieties of grape selected by the Academy of Agriculture of Yerevan*. 13 pp. Manuscript received from the authors. [in Russian]
- Akparov, Z.I. & Mammadov, A.T.** 2007. Information system on PGR of Azerbaijan. *Proceedings of the Azerbaijan National Academy of Sciences (ANAS), Biological Sciences*, 3/4: 35–48. Baku, Elm Publishing House. [in Azeri]
- Akparov, Z.I. & Mammadov, A.T.** 2007. Information system on PGR of Azerbaijan. The Electronic Scientific Edition (Journal). *Modern problems of science and education*. No. 6 (November–December). Moscow. http://www.science-education.ru/download/2007/06/2007_06_01.pdf/ [in Russian]
- Aliyev, J.A.** 2006. Wheat breeding in Azerbaijan. *Proceedings of ANAS, Biological Sciences*, 3/4: 3–32. [in Russian]
- Amanov, M.V.** 1998. *Wild grape of Azerbaijan*. Baku. 266 pp.
- Babayev, T.A.** 1988. *Azerbaijan is a land of ancient grape cultivation*. Baku. 86 pp.
- Borrini, T.** 1958. *Segreti della frutta*. Turin, Italy, Minerva Publishers. 208 pp. [in Italian]
- Brailashvili, N.** 1990. *Ethnography of Georgia*. Tbilisi, Helovneba Publishers. 179 pp. [in Georgian and Russian]
- Bregadze, N.A.** 1982. Articles of agro-ethnography of Georgia. Tbilisi, Metsniereba Publishers. 167 pp. [in Georgian and Russian]
- Burchak-Abramovich, N.I.** 1953. Wild grape *Vitis sylvestris* Gmel. in eastern Gobustan (Azerbaijan). *News of National Academy of Sciences of Azerbaijan SSR*, 10: 49–52.
- Cervadze, N.V.** 1987. *Botanic classification of vines cultivated in Georgia*. Yerevan. 52 pp. [in Russian]
- Dekaprilevich, L.L.** 1954. *Georgian species, varieties and variety-populations of wheat*. Scientific work of Farming Institute VIII. [in Russian]
- Dorofeyev, V.F.** 1972. *Wheat of Caucasian countries*. Leningrad. 202 pp.
- Elkana.** 2008. *Georgian vine varieties*. Part I. Georgian Biological Farming Association (Elkana).
- Georgian Minister of Agriculture.** 1971. *The Viticulture Scientific Museum at the Institute of Horticulture, Viticulture and Wine-making*. Tbilisi, Metsniereba Publishers. 42 pp.
- Goghia, M.** 2001. *Everything about Georgian dishes*. Doneski Publishers. 220 pp. [in Russian]
- Goldstein, D.** 1999. *The Georgian feast: the vibrant culture and savory food of the Republic of Georgia*. Berkeley and Los Angeles, USA, University of California Press.
- Grossheim, A.A.** 1945, 1950, 1952, 1962, 1967. *Flora of the Caucasus*. Vols III, IV, V, VI, VII. Moscow-Leningrad. [in Russian]
- Grossheim, A.A.** 1949. *Determinator for flora in the Caucasus*. Moscow, Nauka. 747 pp. [in Russian]
- Guliev, G.A.** 1996. *Ethnographic livestock problems in Azerbaijan*. Baku, Elm Publishing House. 225 pp. [in Russian]
- Institut de recherche viticole et oenologique de l'URSS.** 1972. *Les meilleurs cépages de l'URSS*. Magaratch. [in French and Russian]
- Kedzhioveli, N.N.** 1948. *Cultivars for wine in Guria, Megrelia and Adjara regions*. Tbilisi, Shroma Publishers. 325 pp. [in Russian]
- Lomouri, I.N.** 1950. *Grainy culture*, pp. 174–268. Vol. II.
- Maqashvili, A.** 1991. *Lexicon botanicum (Nomina plantarum)*. 3rd ed. Tbilisi, Metsniereba Publishers. 246 pp. [in English]
- Mustafayev, I.D.** 1976. *Genepool of cereals of Azerbaijan and its utilization in interspecific and intraspecific hybridization*. Symposium on wheat biology devoted to 50-year anniversary of RIA of Armenia. Echmiadzin.
- Naskidashvili, P.** 1997. *Wheat atlas of Georgia*. 245 pp. [in Georgian and Russian]
- Naskidashvili, P.** No date. *Genetics and selection of Georgian wheat*. Manuscript received from the author. [in Russian]
- Naskidashvili, P. & Dzidzishvili, R.** *The role of endemic species in the selection and evolution of Georgian wheat (Triticum)*, pp. 198–205. Georgian State Agrarian University.
- National Information Sharing Mechanism on Plant Genetic Resources for Food and Agriculture.** 2006. Baku. www.pgfa.org/gpa/aze/ [in Azeri and English]
- Negrulia, A.M.** 1973. *Ampelography of the Azerbaijan Republic*. Baku. 402 pp. [in Russian]
- Phruidze, L.A.** 1974. *Viticulture and wine-making in Georgia*. [in Georgian]
- Ramishvili, M.A.** 1986. *Ampelography*. [in Georgian]
- Rollov, A.H.** 1908. *Wild plants in the Caucasus*. Tbilisi, Caucasian Committee of Phyllosera. 600 pp. [in Russian]
- Second National Report.** 2006. *The State of Plant Genetic Resources for Food and Agriculture*. Baku. <http://www.pgfa.org/gpa/aze/azerbaijan2.pdf> [in English]
- Sulakvelidze, T.P.** 1988. *Georgian dishes*. Tbilisi, Sapciota Sakartvelo Publishers. 353 pp. [in Russian]
- Uvezian, S.** 1974. *The cuisine of Armenia*. (updated 2004)

LINKING PRODUCERS AND CONSUMERS

TRADITIONAL METHODS OF MAKING REGIONAL FOODS ARE UNDER THREAT FROM SOCIAL, ECONOMIC, REGULATORY AND ENVIRONMENTAL PRESSURES. FOR THE INTEGRITY OF AGRICULTURE, IT IS CRUCIAL TO WORK ALONG THE ENTIRE FOOD CHAIN, FROM PRODUCERS TO CONSUMERS, ENSURING THAT AGRICULTURE CAN MEET BOTH THE NEEDS OF FARMERS (TO MAINTAIN THEIR LIVELIHOODS, THEIR WORK AND THEIR LAND) AND CONSUMERS (TO HAVE SUFFICIENT, HEALTHY AND DIVERSIFIED FOOD AT A REASONABLE PRICE). FOR THIS TO HAPPEN, GENETIC RESOURCES THAT ALLOW SUSTAINABLE PRODUCTION BY FAMILY FARMERS MUST BE MAINTAINED.

New technologies must be developed to reduce the impact of agriculture on the environment while promoting sustainable agricultural production (through, for example, methods that enhance soil fertility, reduce water consumption and pollution and reduce greenhouse gas emissions).

New accounting systems for payments for ecosystem services should be introduced. There is a need to organize and promote safe and small-scale food processing units and provide microcredits to farmers and decentralized investments.

Local policies need to be put in place to create farmers' markets in cities and support online distribution methods facilitating interconnections between producers and consumers. Last, but not least, the entire society should contribute to maintaining local cuisines.

Educational programmes need to be developed on the numerous recipes treasured by each family in the Southern Caucasus for dishes that are creative, make efficient use of the many species and varieties cultivated locally and are extremely healthy and full of flavour.

