ViTour
European World Heritage vineyards

www.vitour.org

EUROPEAN GUIDELINES FOR WINE CULTURAL LANDSCAPE PRESERVATION AND ENHANCEMENT

WITH SPECIAL REGARD TO ENDANGERED AREAS AND VINEYARDS

Edited by Giuliana Biagioli, Michèle Prats and Joachim Bender

INTERREG IVC
INNOVATION & ENVIRONMENT
REGIONS OF EUROPE SHARING SOLUTIONS

European Union

The VITOUR LANDSCAPE project is part-financed by the EU - E.R.D.F. 2007-2013 – Objective 3 – Territorial Cooperation Programme INTERREG IV C. The Interregional Cooperation Programme INTERREG IVC, financed by the European Union's Regional Development Fund, helps Regions of Europe work together to share experience and good practice in the areas of innovation, the knowledge economy, the environment and risk prevention. EUR 302 million is available for project funding but, more than that, a wealth of knowledge and potential solutions are also on hand for regional policy-makers.

INDEX

PREFACE

THE VITOUR LANDSCAPE PROJECT AND ITS PARTNERS
(Giuliana Biagioli)

The cultural landscapes we are dealing with are different in history, economic and demographic structures, and they are ruled differently according to the various institutions which are in charge of their protection and enhancement. Different also are the laws and regulations – national and international - which should provide for this item. There is a great variety about sites:

- First of all, in terms of dimension: from the larger area, a surface of 2.943 square kilometers, Loire Valley, to the much smaller 1.368 hectares of the "core-zone" of Lavaux.
- The variety of size means also a more or less complicated dealing with state/ regional/ local public and private stakeholders and the existence from the beginning of the inscription of management structures and plans, nowadays under revision, or a lack until now in some sites of such instruments, structure and plans.

See, for the variety of situation, the case of the Val de Loire - two regions, four Departments, 161 local authorities and a consistent number of private stakeholders, being the third largest wine-producing area of France. Or the case of Upper Middle Rhine Valley - two federal States with their federal laws, three Directions, five administrative districts, 53 Municipalities. And again Fertö – Neusiedlersee - two nations, the first a federal state, the second a centralised one.

- Quite often, there are other protection types and structures in or near the UNESCO sites: see the Cinque Terre National Park , the ANPIL (Protected area of local interest) for Val d'Orcia, and also the numerous National or Regional Parks for other sites.

So there is also a problem and a scale of importance (and of cooperation) of these organisms, from the case of Cinque Terre in which the National Park overcame, at least from the administrative point of view, the existence of the UNESCO site, the public engineer structure, the interregional syndicat of Val de Loire.

- There is an important difference, which needs further analysis, between sites more dependent on a federal or a regional or even more local government (as in Austria, Germany, Pico, Lavaux), sites of a sort of "mixed" situation (presence of the State but decentralised powers to regions, as in Italy) and more centralised institutional framework.
- The legislative framework, either European or national or regional and local, appears to be adequate at least to the preservation of all sites, in many cases also favouring the enhancement. But we know very well that good legislation does not avoid all risks and problems. In particular, problems related to development in many sites, and/or the population getting older and older, or urban pressure in other sites.
- There is a variety of management structures and plans. The majority of the sites have management plans approved by UNESCO. Only four did not have a UNESCO management plan approved by UNESCO by April 2012: the two Italian sites Cinque Terre and Val d'Orcia, Wachau and the Val de Loire. Of course, other planning instruments are present, but maybe their coherence with the UNESCO aims should be tested. Even where the UNESCO plans have been made, they have recently been reformulated or appear to need reformulation.
- This is a further problem: what it was promised would be done to get the inscription and what was really possible to do afterwards.

Taking all these differences into account, there is a very strong link between the cultural landscapes we propose as an example of good practices in our guidelines: they are all World Heritage sites.

Our intention is to present the case of our sites as an open laboratory of experiments in good practices, still in progress, useful for other protected and / or endangered sites.

1. GENERAL INTRODUCTION

1.1 CULTURAL LANDSCAPES: DEFINITIONS
(Michèle Prats)

1.1.1 THE UNESCO VIEW

The common factor of the ten VITOUR sites is that they are all on the World Heritage list, and all as "living cultural landscapes". The term "cultural landscape" embraces a diversity of manifestations of the interaction between humankind and its natural environment.
"They are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal. They should be selected on the basis both of their outstanding universal value and of their representativity in terms of a clearly defined geo-cultural region and also for their capacity to illustrate the essential and distinct cultural elements of such regions. Cultural landscapes often reflect specific techniques of sustainable land use, considering the characteristics and limits of the natural environment they are established in."[1]
According to the Operational Guidelines for the implementation of the World Heritage convention, there are three categories of Cultural landscapes:
- the clearly defined landscape designed and created intentionally by man (such as gardens and parks)
- the organically evolved landscape, with two sub-categories:
- a relict (or fossil) landscape;
- a continuing landscape is one which retains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress. At the same time it exhibits significant material evidence of its evolution over time (which is the case of VITOUR landscapes).
- the associative cultural landscape, with a strong link with intangible heritage

This new category, the Cultural landscape, was adopted by the World Heritage Committee in 1992, the very year of the first "Earth Summit" in Rio, in order to bring nature and culture closer together, with a new vision of sustainable development in the implementation of the World Heritage Convention, enhancing the evolving interaction between humankind and its natural environment.
After the widespread dissemination of Agenda 21, landscape diversity was recognised as a resource which should be maintained against economic, social, cultural and technological globalisation.
Other UNESCO conventions, which have been adopted since then, have also to be taken into account in the implementation of the World Heritage convention, and especially in the management of cultural landscapes: these are the Convention on Biological Diversity (CBD, 1992), the Treaty on Plant Genetic Resources for Food and Agriculture (2001), the Convention for the Safeguarding of the Intangible Cultural Heritage (2003) and on the Protection and Promotion of the Diversity of Cultural Expressions (2005).
In our cultural landscapes, vineyards are not always the only feature, nor even the main feature, of the ten UNESCO VITOUR sites. Four VITOUR vineyards have been listed by themselves: Tokaj, Alto Douro, Pico and Lavaux, the other landscapes being "mixed", in different proportions, with architecture, towns, nature, meadows or other kind of agriculture.
The World Heritage inscription brings the need for management respecting the "Outstanding Universal Value" (OUV) for which the site has been selected, as well as the authenticity and integrity of its "attributes". Each OUV is based on various criteria and attributes which differ according to the characteristics of the site.
The UNESCO criteria are often presented and resented as being "outsider" and "top down" criteria, especially since there is a process of permanent monitoring by UNESCO, UICN and ICOMOS, in order to ascertain that the OUV is respected. But we must bear in mind that candidacy is not compulsory, and though the listing proposal has been made by the State, the initiative and selection of the sites, as well as of their remarkable attributes are due to the authors of the application files, who are generally local people, local authorities, with the help of local experts, and more and more, nowadays, with the inhabitants' participation and their full implication. It is, with their association to the management, the best chance of success on the long term.

1.1.2 THE EUROPEAN LANDSCAPE CONVENTION

Besides the UNESCO corpus of conventions, the European Landscape Convention, adopted in Florence in October 2000 by the Council of Europe, recognises that landscape is an essential feature of human surroundings, that it contributes to the formation of local cultures and that it is a basic component of the European natural and cultural heritage, contributing to human wellbeing and consolidation of the European identity. It covers all types of landscapes, natural, rural, peri-urban and urban, outstanding as well as ordinary, that determine the quality of people's living environment.
The European Convention aims to encourage public authorities to adopt policies and measures at local, regional, national and international level for protecting, managing and planning landscapes throughout Europe. The convention has been signed by 30 European countries, not including Austria and Germany.

[1] World Heritage Paper 26 World Heritage Cultural Landscapes A Handbook for Conservation and Management

1.2 THE STRUCTURING ELEMENTS OF THE LANDSCAPE ACCORDING TO INHABITANTS, PUBLIC AND PRIVATE STAKE HOLDERS: A VIEW FROM INSIDE *(Giuliana Biagioli)*

Cultural landscapes are deeply anthropised, living territories. Their inclusion in UNESCO's Word Heritage sites does not deprive their inhabitants of the right to live their daily life according to their expectations in terms of economic development, social welfare and quality of life, all possibly at a higher level. On the other hand the commitments undertaken with UNESCO in terms of the preservation of a WH site can be in conflict with the needs of a changing population, economy or society. In fact, the cultural landscapes are the result of centuries of history, which makes them a unique and inestimable heritage, but the economic and social structures which have built them may not be present any more, so there is an urgent need to invent new initiatives to re-use the patrimony heritage in order to save it from being destroyed or from disappearing; and this is not an easy task.

Moreover, between the "external eye" of the international institutions and/or of the visitors and the "eyes" of the inhabitants there can be different views. The "natives" have an intimate relationship with their landscape which does not necessarily correspond, for instance, to the UNESCO criteria of inscription to the World Heritage List. Quite often the inhabitants expect some benefits for their territory from the inscription, which are often neither guaranteed nor implicit. In many cases the procedure for the inscription, at least for the majority of the cultural landscapes included in this analysis, was initiated at the highest levels of government – the national state – and then went down to the lower institutional levels. The inhabitants of the territory in question were therefore not really consulted, at least not decisively, and when the inscription on the World Heritage List was finally conceded by UNESCO, they simply expected a quasi-automatic economic return for their territory, which was followed by disappointment when they realised that there would be no such influx of money for everybody. The disappointment is even greater when the advantages and disadvantages of inclusion in the WH (both are always present) are not equally distributed among the inhabitants, with a part of the population gaining (money) and the other mainly losing (at least in terms of freedom, quality of life, social relations). Hence, not only could the gap between the views from outside and from inside the World Heritage site be very deep, but there could also be different and very divergent "views" from the inside as well.

Let us take two examples from a previous enquiry on two of the sites participating in the Vitour Landscape project, Cinque Terre and Tokaj, plus the Saint Emilion[2] site. Between 80 to 100 interviews were conducted for each site, half among ordinary inhabitants, half among winegrowers and institutional stakeholders.

In Cinque Terre, the majority of the inhabitants interviewed identified their intimate environment with "the natural surroundings, the food, the family environment, the sun, the sea, the mountain, and so on" , whilst one of the oldest people added "now it is not as true as it was", and it is worth considering this again, given the fact that another of those interviewed considered the proposed "beautiful viticultural landscape" to be an external, aesthetic announcement to visitors, but, in fact, it remained a superficial message which avoided the real problems. "You should not present the place as a postcard enriched by the UNESCO label". With a simple and standardised presentation to visitors, there is a risk of "slipping on Cinque Terre".

Of course, the sun, the sea and the smell of the food cannot be introduced as criteria for inclusion in the WH Cultural Landscapes. It is interesting, however, that this kind of evaluation belonging to the inhabitant's "intimate" landscape appears also in other cases; unfortunately this is not complete for all our sites.

But there are much more important problems:

While the UNESCO label and its criteria were more or less accepted in Cinque Terre by the all of the inhabitants interviewed, the situation was quite different in Tokaj. Here the inscription as a winegrowing site was not accepted by the non-winegrowing interests and a division between wine producers and other inhabitants clearly emerged in the different representations of the landscape and the effects of its inclusion in the WH as a historical winegrowing landscape. The inhabitants interviewed who do not take part in winegrowing represent their landscape as being much richer in natural resources and history: forests and, above all, rivers as community links, instead of winegrowing.

In Tokaj, more than in Cinque Terre and Saint Emilion, not only do the opinions of the ordinary inhabitants on the landscape differ, but they are the opposite of the "official" ones (the criteria of UNESCO was identified by the majority of those interviewed as being in the interest of the great wine producers and the cause of an increase in social differences).

The big problem, common to any protected area, and emerging in our project, certainly for the two Italian sites at least, is that there are, at the same time, social categories immediately or potentially gaining from the protection provided by the WH, with others losing. The first group could also be part of an external area, with only some benefits also for the local inhabitants (as in the case of Tokaj), but in all cases, there are local residents gaining from the protection (tourist operators, wine producers and sellers, etc.) and for whom the protection of the territory is in itself an added value for their business. On the other hand, a part of the population which, in the case of the absence of a policy of social redistribution of the "cultural landscape earnings", will just suffer from the transformation of their territory into "another place" sometimes resembling an anonymous postcard.

[2] Paysages d'exception, paysages au quotidien. Une analyse comparative des sites viticoles européens du Patrimoine mondial, coord. S. Briffaud- A. Brochot, 2010

1.3 THE CONSTITUTING ELEMENTS OF THE WINE GROWING CULTURAL LANDSCAPES ACCORDING TO THE VITOUR LANDSCAPE PROJECT: THE CONSTRUCTION OF A "GLOCAL" VIEW *(Giuliana Biagioli)*

This is the aim in the last part of our project: the transfer of local practices from one site to another.
The protected areas, as with any other area in the world, are affected by the globalisation phenomenon. In this sense, although it is not the inscription itself which transfers the effects of global factors to the local sphere, it does, however, amplify their impact on the inscribed territories. In fact, the inscription shines a beacon on each site, which can now be seen everywhere in the world, and reveals a new heritage to all eyes on the planet.
The inscription brings added value, not only symbolic, but also economic as a result of the arrival of immediate economic benefits (the growth increase in the tourism sector is an example). On the other hand, an inscription predominantly depends on the "authenticity" and "uniqueness" of a local area and it is for this reason, as stated above, that "landscape diversity was recognised as a resource which should be guarded and maintained against economic, social, cultural, and technological globalisation".
Authenticity and diversity are required by tourists, as well as by the consumers of local products. Cultural landscapes are local, unique places - otherwise they would not be WH - but, at the same time, they become part of World Heritage, their territories must adapt themselves to new global expectations which must coexist with and be integrated into their local identity.
Therefore, the policies relating to world heritage sites well illustrates the consubstantiality of the process of construction of an identity of the local space with the phenomenon of globalisation.

- The inscription, in fact, qualifies the local space relative to the global; it amplifies the uniqueness of a small area in relation to the rest of the world.
- At the same time, these territories receive, and are influenced by, global views prepared by non-local institutions and players during discussions and debates on such topics as general sustainable development, climate change, GMO, food safety, and so on, all of which have a worldwide origin and importance.[3] These issues must, however, be applied, on a local scale, more incisively and accurately in the WH sites than in other territories, as they are supposed to be an example of excellence. A "glocal" view, therefore, is a necessity.

[3] Paysages d'exception, paysages au quotidien, p. 19.

2. THE PHYSICAL ELEMENTS OF THE LANDSCAPES

(Michael Schimek)

2.1 THE "SPLENDOUR" OF THE SITES

The existence of winegrowing was not the only reason for all of the ten VITOUR LANDSCAPE World Heritage cultural landscapes represented in the project being listed on the UNESCO World Heritage list.

In any case, the general aesthetic appeal and, sometimes, also the historic significance of the landscape were part of the justification of the inscription of these sites:

- In Val d'Orcia/Montalcino (IT), the main reason for the listing was the creation of an idealised Renaissance landscape following the colonisation of the rural surroundings by the Republic of Siena.
- In the river valleys of the Upper Middle Rhine Valley (DE) and the Wachau (AT), several aspects gave the main reasons for the nomination of the site as World Heritage. Crucial was the valleys' long tradition of settlement since the Stone Age, their role as Roman frontier and in later centuries as the heart of important trade and traffic relations. Most significant though for the areas' inscriptions was their new rise in the 19th century, as spiritual heart of national unification or as idealised rural landscapes as seen by the academy painters (after whom the first tourists followed).
- In the Val de Loire (FR), winegrowing was established parallel to a vibrant trade culture along the river which gave the region wealth over the centuries and made it one of the core zones of cultural development in Western Europe, as is still illustrated by impressive city ensembles and the famous Renaissance castles.
- At Tokaj (HU) winegrowing was established between rivers in a landscape with very special climatic circumstances, which was the reason for a very long tradition of producing specialised types of wine (Tokaji Aszú).
- In Cinque Terre (IT), Lavaux (CH), and Alto Douro (PT), winegrowing goes hand in hand with spectacular coastal sceneries and tiny villages built on the steep terraced slopes, or near the riverbank.
- At Fertö-Neusiedler See (HU/AT) and Pico Island in the Azores (PT), winegrowing follows along landscapes that are unique in terms of the very specialised habitats that can be witnessed (such as the lake and the salt pans in Austria, or the location between the sea and the volcano in Portugal, which caused the construction of a unique stone wall system to protect the vines).

So, generally speaking, in all landscapes involved in the programme, the point to be considered is always the relationship between winegrowing, relief, water, settlement structures and infrastructural elements.

In addition, these elements are shaped by climate, soil, natural risks, and, especially during recent decades, by the need of doing business on traditional structures in an economically successful way, which were, therefore, to a different extent in each site, at least altered, or even totally changed in some cases.

Nevertheless, all the sites involved are still extensively sought after by tourists. This is why the question whether the landscape is perceived as being aesthetic, and worth visiting, also has to be taken into account, apart from any other substantial question. Sometimes, this matter is especially controversial, since the view of the inhabitants living at the site – who are also those in charge of keeping up the substance of the landscape, especially in a large cultural landscape – does not always match the view of tourists travelling to a site of their choice.

2.2 RISKS, PROBLEMS AND CONFLICTS

Depending on the specific set of core physical elements of the landscape, these elements can be more or less at risk. Some of the main risks could be:

- Relief: Risk of soil erosion, collapse of supporting buildings (such as stone walls), flooding from tributaries and rivers,…
- Rivers and coastal zones: Flooding, erosion and hydrogeological stability, …
- Demographic and economic change: Keeping up landscape elements dependent on human care in areas suffering from depopulation and aging, or, on the other end of the scale, land use conflicts in areas with urban or tourist pressure and an increase in population (all over the year, or during tourism season).

Some typical conflicts resulting from these risks which are present in a number of the regions represented in VITOUR LANDSCAPE are:

Picture 1 - Old-style and new-style terraces at Oelsberg (DE)

Picture 2 - LEADER+ project Oelsberg wine hill (DE)

Picture 3 - Redesigned terraces at Bopparder Hamm (DE)

Picture 4 - Redesigned terraces near Rüdesheim (DE)

2.2.1 ALTERATION OF TRADITIONALLY SHAPED WINE HILLS

Usually, this means re-shaping wine hills in a way which is friendlier to mechanised methods of taking care of the vines and harvesting. These range from building small roads in between the terraces to slight or even major changes in vine planting and slope structuring patterns. Very often, these major changes seem to be the only chance of keeping up winegrowing in certain areas, even at the cost of the total loss of typical landscape elements. Sometimes, these alterations themselves cause other problems so far not known in the traditional structures, such as soil erosion.

One example where the landscape was changed in a quite thorough way in order to mechanise winegrowing is the Upper Middle Rhine Valley.

At some places, like the Oelsberg hill vineyard near Oberwesel, an entire hill vineyard was recultivated using the old terraces and by installing a monorack railway, in this case with the support of European funds (LEADER+). The visual difference between the old-style vineyards and the recently realigned hill vineyards (in the foreground of the picture) is obvious.

On the other hand, those hill vineyards which yield the highest economic return for winegrowers in the Upper Middle Rhine Valley nowadays, like Bopparder Hamm or the hill vineyards around Rüdesheim on the Hesse bank of the Rhine, have been totally changed for economic reasons. The increase in mechanisation opportunities at the same time as the loss of landscape elements is equally obvious.

A slightly more subtle, though still clear alteration is taking place in Alto Douro.

Picture 5 - Abandoned terraces in Alto Douro (PT)

Picture 6 - Currently predominant terrace type in Alto Douro (PT)

Picture 7 - Recently redesigned terraces in Alto Douro (PT)

Picture 8 - Dry stone wall art in Alto Douro (PT)

Picture 9 - Flood protection wall at Hundsheim (AT)

Picture 10 - Standard type of flood protection wall in Spitz (AT)

In former times, terraces in Alto Douro looked similar to the old-style terraces in the Upper Middle Rhine Valley. Most of them were already given up during the 19th century due to the loss of vines because of the philloxera infestation. In case that wine was re-planted, the hills were changed into a more orderly structure with higher terrace walls and planting areas with a number of rows of vines on a slope.
Recently, mechanization has led to new types of wine terraces. They basically feature green slopes with small terraces carrying only one row of vines. At some important points, though, especially in Alto Douro, where small roads are necessary, dry stone terraces are still built, some of them very high and technically skillful. Thus, the landscape is made ready for mechanisation and at the same time there are no major changes from a visual point of view. In addition, traditional dry stone terraces are still used, unlike in the Upper Middle Rhine Valley.

2.2.2 RELATIONSHIP BETWEEN WATER AND LAND

Wherever the co-existence of water and settlement is a key element of the cultural landscape, some risks and conflicts may arise.
In the Wachau, for example, the major flooding in 2002 led the inhabitants, as well as the federal state and federal politicians to build a flood protection system to keep water and mud out of settlement areas.
After an initial phase of discussion and being presented with the Municipality of Mautern plans for the flood protection wall for the village of Hundsheim, the mayors of the other municipalities met with federal authorities and delegates of ICOMOS Austria to discuss common guidelines for the remaining flood protection systems to be built. Although the Hundsheim walls could only be changed a little, all other protection systems are going to look similar to the one in Spitz. So far, four such systems have been completed.
In other river valleys, accessibility and maintaining important views and relations is an important issue. Especially in recent decades, the increased amount of areas used for traffic purposes has cut off villages and cities from the banks of the rivers. At the same time, giving up traditional ways of land use, such as horse and cattle grazing, caused these areas to be recovered by the alluvial forests. In many cases, this is not a negative development from an ecological point of view, but it sometimes reduces the legibility of the cultural landscape and the connection of local people and tourists to the river landscape, as in Val de Loire.
In the Upper Middle Rhine Valley, projects were started to redesign the embankment zones of the cities along the river, such as St Goar, in such a way that they can again be used for recreational purposes and be more easily accessible from the historic town centres. All along the Rhine, special places were designated as "Rhine bank visitor zones" and have been equipped with special installations informing visitors about the relationship between the river and the landscape and about the World Heritage landscape.

The cultural landscapes located at the seaside or at lakes also have to deal with problems resulting from this situation. One typical conflict is the relationship between access to the lakeshores or to the sea and the high ecological or aesthetical values these areas often have, for example the reed belt in Lake Neusiedl or the heavily populated and frequently used lakeshore zones along Lake Geneva.
Another is the question of public or private access to coastlines and whether certain uses (such as high-class restaurants or private estates) justify exemptions from the usual rules.

Picture 11 - Landscape frames (DE) – current situation

Picture 12 - Landscape frames (DE) – planned situation

2.2.3 CONSERVATION VS. EXPLOITATION, IN BOTH DEPOPULATING AND GROWING REGIONS

In some cases, the prime importance of the conservation defended by the institutions responsible for monitoring World Heritage leads to difficult situations for the management of continuing cultural landscapes, because sometimes limiting development opportunities for World Heritage cultural landscapes indirectly leads to an accelerated loss of what is important for the outstanding universal value (OUV) of the site.
In this case, intelligent solutions for the economic prosperity of the local people are as important as conservation strategies, since these prosperity measures might make a better contribution to conservation goals than traditional conservation strategies, by enabling the local people to stay in the area and maintain it themselves. This might well hold true not only for monument protection, but also for nature protection issues.
On the other hand, in cultural landscapes with a growing population, winegrowing areas could come under pressure from other types of utilisation, such as for housing or industrial estates, especially if these winegrowing areas are not located on steep hills but in the flatlands. In this case, it might be valuable to create instruments that help politicians to decide on the framework for one or the other kind of use.

Picture 13 - Historic river landscape at the Loire (FR)

Picture 14 - Cutting free access points to the river (FR)

2.3 SELECTED GOOD POLICY PRACTICES

Among the good policy practices presented by the partners, not many dealt directly with the topic of this chapter. Nevertheless, a lot of them have something to do with one of the risks and conflicts presented before. They brought solutions to many of the questions raised, by providing regional management with policies using different types of instruments, from voluntary participation to strict regulation.
The following Good Policy Practices seem particularly interesting, since they seem to tackle the related problems in a very precise and basically also sustainable way.

2.3.1 CODEX WACHAU (AT)

The big wine scandal of 1985 – some ruthless winegrowers had mixed their wine with antifreeze to make it sweeter and thus more fashionable on the German wine market – marked a turning point in Austrian wine culture. Since then, successful winegrowers have put quality first, before quantity, and have tried to make sure that they find a high-class quality-loving audience for their products.
In the Wachau, this initiative started even earlier. In 1983, some of the top winegrowers in the region met and discussed ways to keep up traditional winegrowing on steep, narrow dry stone terraces, hardly allowing for any kind of mechanisation. They came to the point that there was no use trying to head for the big markets and selling their wine at a low price, as they were unable to compete with the large estates from other winegrowing areas in Austria and abroad. Until today, the average size of a wine estate in the Wachau is slightly over 1 ha, and only a few estates control more than 10 ha of winegrowing land. Rather they should try to create a high-quality niche product which would thus reach a high retail price and be highly valued by wine lovers, who themselves would become advocates of the winegrowing region. This would allow the winegrowers to continue producing wine the traditional way, keeping up the terraced landscape by their own means and income rather than relying on grants and subsidies.
In order to achieve this goal, they founded an association called "Vinea Wachau Nobilis Districtus", which gave its members very strict rules for producing their wines, much stricter than in the Austrian Winegrowing Law. Most of all, Vinea Wachau vintners may only own land within the borders of the Wachau winegrowing region and sell their wines only bottled. To make their wines recognisable among other wines, they gave them three categories which became trademarks of their own: Steinfeder, Federspiel, and Smaragd. Thus, wine lovers all over the world buying one of these wines can be sure that this wine was produced only from grapes from the Wachau, most of them from the dry stone terraces, without any added sugar, influence of oak or other alterations of taste.
In 2006, Vinea Wachau once more specified its own rules by endorsing the so-called "Codex Wachau". It consists of six principles, which can be summed up as follows:
The Vinea Wachau winegrowers must ensure that their wines come exclusively from the Wachau winegrowing region and are bottled there as well. They work without any additives and do not make use of artificial concentration, aromatisation or fractionation. Thus, they produce nature and nothing else. The Vinea winegrowers renounce many of the possibilities that can be undertaken in the contemporary wine business for the production of their Steinfeder®, Federspiel® and Smaragd® wines. The grapes are harvested by hand and late in the season, reaching high physiological ripeness potential.
All winegrowers who want to be members of Vinea Wachau and use the protected brands Steinfeder, Federspiel and Smaragd have to sign this codex. Almost all of the professional winegrowers of the region have done so. Some of them have even sold property outside the Wachau in order to comply with the rules of Vinea Wachau. Although there is also a disciplinary code for not keeping to the association's rules, only a few penalties have had to be imposed on the winegrowers so far, since they know that keeping to the rules is of key importance for the credibility of Vinea Wachau brands and thus their own economic prosperity.
Another key factor to the success of Vinea Wachau is that the association always was led by the top winegrowers of the region. The current board unites estates which together have collected more than 1,000 listings of 90 points and more at international tastings such as the Parker test or similar, according to www.90pluswines.com. In addition to that, seven out of ten board members are younger than 40 years.
The positive results of the strategy are evident: More than 200 winegrowers are members of Vinea Wachau, of which more than 100 participate in the annual Wine Spring tasting festival. Although a significant part of the winegrowing area of the Wachau is still located on medievally-structured dry stone terraces without any chance of mechanisation of winegrowing, the total winegrowing area in the Wachau has stayed constant at about 1,400 ha during the last 40 years. Obviously, creating an economic and quality-management environment which allows winegrowers to produce at a feasible price is at least equally efficient in order to keep up a World Heritage winegrowing landscape as conservation programmes or grants to farmers are.
The Codex Wachau has recently been observed and taken up by the German Middle Rhine winegrowers, who passed their "Middle Rhine Charter" in 2010 and presented their signature wine trade marks in August 2012. More than half of the remaining Middle Rhine winegrowers has already joined the initiative.

Picture 15 -The Loibenberg (AT) has stayed constant in winegrowing area since the 1970ies

Picture 16 - The current board of Vinea Wachau (AT)

2.3.2 RE-ESTABLISHING CULTIVATED WINEGROWING LAND ON PICO (PT)

When Pico Island on the Azores was listed as World Heritage cultural landscape in 2004, only 75 ha of the core and buffer zone of the site were used for winegrowing purposes. Although produced in flat areas between the sea and the volcano, production had to deal with an incredible number of about one-metre-high dry stone walls made of basalt, the so-called currais. Their purpose was to save the vines growing on the ground, sometimes one single vine per dry stone compartment, from the salty sea winds. The hardship of producing wine in such a structure caused more and more of the winegrowing area to be abandoned and quickly overgrown with weeds and bushes.

This is why, along with the inscription of Pico, the Regional Government of the Azores passed a programme granting winegrowers generous financial support (only from Portuguese sources) when re-establishing winegrowing in the World Heritage area.

Winegrowers who sign a contract for 10 years can receive a maximum of EUR 3,500 per ha per year for keeping up winegrowing on their land. In addition, winegrowers who sign a contract for 15 years can receive a maximum of EUR 20,000 per ha for re-establishing winegrowing on abandoned land if they use traditional grape varieties and stick to the old way of winegrowing, typical of Pico Island. There is no minimum size limit for the eligible plots of land.

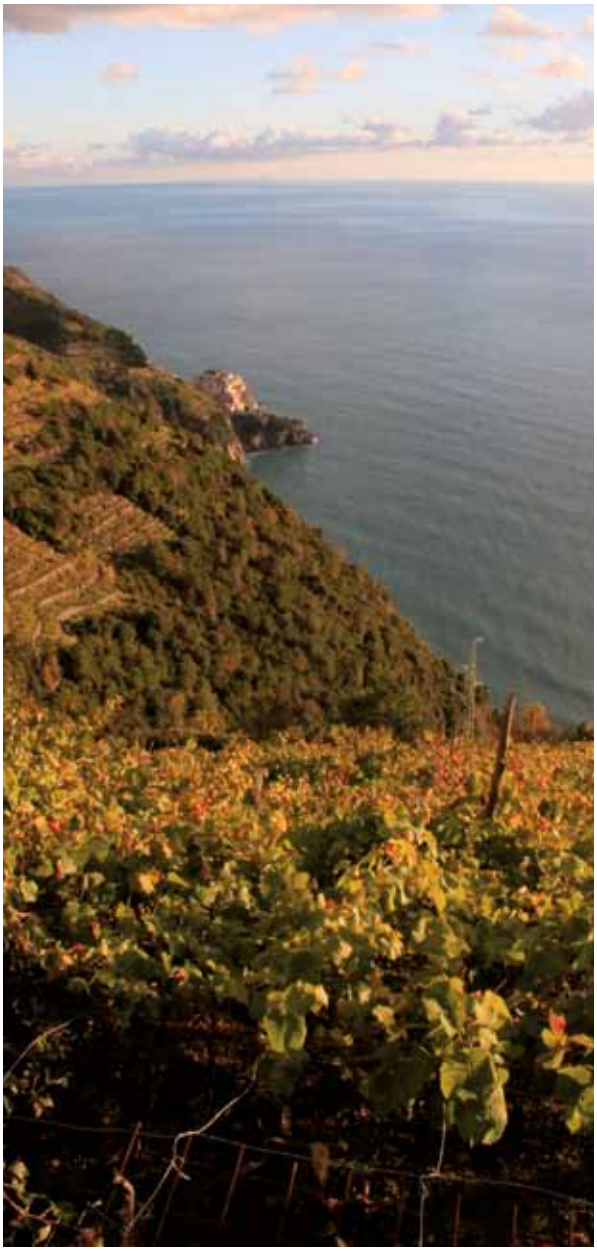
Controls are carried out jointly by the environmental and agricultural authorities. In addition, winegrowers have to report on their harvest to the World Heritage authority, located at the Regional Authority for the Environment.

The programme was passed in 2004 and scheduled for 10 years, until 2014. The point whether the programme should be continued after 2014 is still under discussion, since the authorities are of the opinion that winegrowers should now start to learn to earn a price for their wine which allows them to continue with their work without constant subsidies from the state.

After 5 years only, the total active winegrowing area within the World Heritage boundaries had grown from 75 ha to 99 ha, due to the new grant schemes passed by the Regional Government.

Picture 17 - Pico vineyard landscape (PT)

Picture 18 - Some of the "currais" on Pico (PT)



Picture 19 - Cinque Terre winegrowing landscape (IT)

2.3.3 RESTORING ABANDONED TERRACES AND REPLANTING VINES IN CINQUE TERRE (IT)

The area used for winegrowing in Cinque Terre declined from 1,200 ha (the maximum surface reached in the 20th century) to less than 100 ha in the 1970s. So far, it has mainly been the local communities and private businesses which have played a fundamental role in maintaining the landscape. This is why in the past the issues of biodiversity were not seen as being as important as winegrowing, which typically has little variety.

Since this strategy was increasingly seen to fail, there was a demand for more public actions for the landscape to survive and for the protection and maintenance of the terraced landscape. This is why the landscape was inscribed in the World Heritage List in 1997 and why Cinque Terre National Park was established in 1999.

In recent years, the national park has been planning and managing the territory through the Park Plan and its innovative tools, such as pilot projects to recover abandoned land or to re-establish endangered or lost grape varieties. The aim was, and still is, to obtain integration between traditional knowledge and modern ecological knowledge, using for example GIS systems as a tool, and promoting agriculture as an added value.

All the actions are made through collaboration between the Italian Ministry of the Environment, the Ministry of Culture, Corpo Forestale dello Stato, and private associations, with the aim of supporting those still remaining, generally speaking older winegrowers, and to encourage young people to start new winegrowing enterprises. Among the results are the "Guidelines for interventions on rural buildings and dry stone walls". At the same time, financial support schemes and training schemes were developed. Positive results can already be seen: Young people are coming back to the area and starting commercial activities there. In addition, the abandonment of the winegrowing landscape may at least be slowed down and in many cases even stopped and inverted.

Picture 20 - Different usages contest with each other in Val de Loire (FR)

2.3.4 CHARACTERIZING WINEGROWING TERROIRS AS THE BASIS FOR SPATIAL PLANNING INSTRUMENTS IN VAL DE LOIRE (FR)

"Cellule Terroirs Viticoles" (CTV) is an association supported by "InterLoire" (Interprofessional Committee of the Loire Wine) and the "Institut Français de la Vigne et du Vin" (French Institute for Vines and Wine, IFV).
CTV's main activity consists in studying and charting winegrowing terroir units and transferring the results of this scientific research to consultants, cooperative structures, trade unions, or winegrowers. During the last ten years, with the support of the Region Pays de la Loire, they implemented a GIS tool for wine terroir characterisation. Until 2007, this action was financed by the regions, the state and InterLoire. Today, they are directly paid by wine syndicates asking for terroir surveys. These syndicates receive subsidies from InterLoire, the Regions, and the State in order to pay for these surveys.
The GIS tool enables to:

- Spatialising the potential and the various constraints of a vineyard at the plot scale using a detailed geo-pedological map and taking the mesoclimate into account;
- Adapting practices (grape variety, rootstock, soil management, etc.) to the winegrowing potential, as described in the consultative maps;
- Objectively promoting and communicating subjects such as vineyard diversity and potential;
- Protecting and managing the winegrowing capital of a vineyard in the face of urbanisation, the need for renewal, etc.

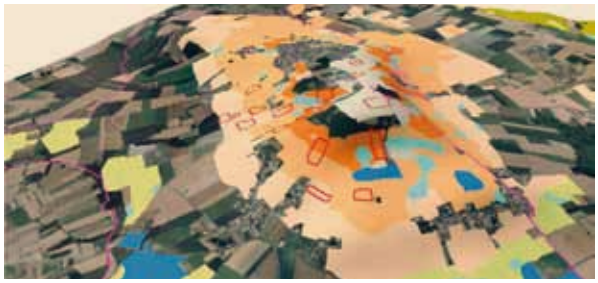
The tool helps winegrowers to take clear management and oenological decisions about the future of their winegrowing plots. On the other hand, they help to decide if winegrowing plots should be kept up as winegrowing areas or if they can be re-allocated for other uses, such as housing or industrial purposes. The maps produced by this tool are therefore also used for further spatial planning considerations.

2.3.5 A PLANNING TOOL: THE PROTECTED AGRICULTURAL ZONES IN VAL DE LOIRE (FR)

According to the French rural code, such a zone is an area protected by decree of the prefect of the region. Its purpose is to protect winegrowing zones which are of public interest either due to the quality of the production allowed on the plot or because of its geographic situation. Any change in land use which might make a lasting change to the agronomic, biological or economic potential of a ZAP has to be presented to the Chamber of Agricultural and to the Departmental Committee for Agricultural Orientation. If their decision is negative, the land use modification can only be authorised by order of the prefect.
ZAPs are becoming part of municipal land use plans. One major reason for creating such zones is to prevent urban pressure from taking away important winegrowing areas around the larger cities. Of course, the decree for a ZAP has to be based on valid data, such as that provided by the GIS tool developed by CTV, for example.
The tool was first used at Montlouis-sur-Loire in 2007 and was requested by the local wine syndicate. Up to 2010, 5 municipalities with a total of 26,000 inhabitants had adopted the ZAP as an instrument to protect their important winegrowing areas. Every plan created was based on a participatory planning approach. More municipalities in the Val de Loire are about to adopt the instrument into their own municipal development plans. Its use is also promoted in the draft for the UNESCO management plan which is in the process of being approved by the site's 164 local authorities.

Picture 21A - Geo-pedological and mesoclimate studies to identify the vinegrowing potentials and constraints, at the plot scale

Picture 21B - Digital terroir atlas



Picture 21C - An example for a GIS rendering: The terroirs of Savennières (FR)

3. ECOLOGICAL SYSTEM
(Francesco Marchese)

3.1 THE ROLE AND THE SOCIAL AND ECONOMIC VALUE OF RURAL LANDSCAPES

Rural landscapes, especially when universally recognised as cultural landscapes, can be considered an effective tangible example of the added values of the hidden rules that govern the ecological systems and, in most cases, as a result of maintaining biodiversity. Thus, one should speak of an ecology deeply influenced by agricultural activities and conditions.
In these cases, human actions down through the centuries, combined with natural events and driving forces, have created unique landscapes with specific features and their own identities that can also, however, be presented at a more general level.
In areas characterised by steep slopes, as in the case of Cinque Terre (IT), Wachau (AT), Lavaux (CH), Douro (PT) and the Upper Middle Rhine Valley (DE) it is evident that the "combined work of nature and man" to find enough space to cultivate land was the key to opening up new landscapes scenarios. Here, the dry stone walls were built exclusively from rocks carefully positioned one on top of the other and filled with crushed stone and earth, without using any binding material. The good quality of the stones and above all the masterly art of the positioning of the rocks, guarantee hydrogeological stability also assured by the stairs cutting the terraces, a key part of the micro-hydraulic system, as their function is also to collect rainwater from the small ditches at the base of each terrace.
The terraced areas have actually contributed to the geomorphologic aspect of these sites, as well as their microclimate, and they condition the use and access of the local communities: the paths for example are built on the edges of the walls or along them. The environmental systems thus created are well structured: they can be easily identified and the ecological relations among the different components inside them are fully functional.
Open landscapes, such as Val d'Orcia/Montalcino (IT), Tokaj (HU), Fertö-Neusiedler See (HU/AT), Val de Loire (FR), are probably closer to the ideal images of landscapes as perceived by outsiders and inhabitants. Most of them also present natural areas (forests, watercourses and banks, moors) as well as rural areas. In these cases, the constituent elements are the core of a network with a high level of biodiversity in terms of species and there are even some ecological niches. Areas on the borders, the ecotones, take on great importance in the organisation and connection structures of these rural spaces because they guarantee the transitional conditions from one ecosystem to another. The extreme main features of sites like Pico (PT) have a strong influence on the complete functionality of the territorial system and, for the local communities, they provide possibilities of finding new forms of sustainable use. They were able to turn unproductive stone into their sustenance by planting vines, starting in many cases by exchanging sea salt for fertile soil from another island and protecting the plants from the wind and the sea breezes by building a huge and structured mesh of walls, where the plots ("currais") are prominent.
The primary ecological role played by these landscapes is strengthened by the presence, in many cases, of natural protected areas that overlay the rural spaces. Nature dynamics, modified but not negatively affected by human activities, are protected by actions aimed at preserve the acknowledged values. They give long-term assurance of the fragile balance of the functionality of the components and, in particular, of the spatial relations: energy, material and species among ecosystem flows and exchanges.
These systems of ecosystems comprise man and farm activities: thanks to a simple expression derived from landscape ecology it is probably effectively possible to identify the implied value of rural landscapes, given by the relationships between physical, built and lived environments.
Apart from the ecological dimension, it is also easy to understand the reason for the recently re-awarded meaning of rural landscapes, capable of a new attraction used by modern economics based on visitors valuing local products, as well as tangible and intangible identities.

3.2 RISKS, PROBLEMS AND CONFLICTS

The stability of these systems is very fragile, and contested. The potential risks and problems can derive from both internal and external causes and factors.
Climate change, fires, growth of monoculture, pollution, soil consumption: these are just a few of the threats to the conservation of the values of cultural landscapes.
These are accompanied, at this particular time in history, by problems arising from a lack of economic resources capable of supporting effective management policies and by difficulties in planning and programming, due to the rapid rate of change of socio-economic scenarios.
The examples offered by the Vitour Landscape network permit the identification of some previous critical cases that could be typical of what is going on in different areas with similar features.

3.2.1 TOURISM PRESSURE AND ABANDONMENT OF AGRICULTURAL ACTIVITIES

It is well known that these landscapes are a great tourist attraction. The annual number of visitors to UNESCO sites is increasing, and nowadays, in some cases, it gets up to hundreds of thousands, or even millions per year. In Cinque Terre, for example, every year visitors from all over the world come to experience the everyday life of the inhabitants of the small villages overlooking the sea and to walk along the hiking paths, winding along the coast and up and down the terraces. After the World Heritage List inscription, together with Porto Venere and the islands Palmaria, Tino and Tinetto (1997) and the later creation of the National Park (1999), interest in these places, for many years far from tourist routes, increased. This was due to the impact of the Heritage list, and to the continuous actions for promotion and enhancement and the visibility given by some expert guides, especially in the American market. Within a short time, accommodation and a series of services for tourists were created in the territory, aiming especially at fostering collective mobility, and were promoted by the National Park. The isolation and lack of accessibility to Cinque Terre by car gave a reason for using trains and boats, thanks to the Cinque Terre Card, which provides several services, such as access to ecological buses as well as to the coastal path. However, in some periods and on some festive dates, the inflow of people is very intense and particularly focused on the more easily accessible sections of coastal path No. 2 and in the centre of the villages.
These situations should be appropriately managed. While the local economic system has found new opportunities and has increased, the carrying capacity of these special environments should be analysed and evaluated, so that their integrity is not compromised.

Picture 22 - Many tourists crowd the villages of Cinque Terre (IT) and the footpaths connecting them

The degenerative effects of excessive emphasis on the tourism sector on landscape contribute to accelerating the process of abandonment of agricultural activities.
The easier and faster income from activities that can be carried out in the historical centre are not comparable to the hard work and to the long return time of investment in the agricultural sector. Besides, in some sites, such as the Liguria Region, there are worsening factors that give rise to risks of the abandonment of the terraces, such as land fragmentation and the almost total absence of forms of agricultural mechanisation because of the extremely difficult geomorphological conditions. It is often the case that areas affected by old, recent and current landslides have an influence on the evolving landscape building process.
The cleaning action of surface water affects the fragile stability conditions of the slopes no longer able to withstand rain which is more and more irregular in intensity and duration. How will we change the unwritten rules that allowed the survival of these landscapes over the centuries?

Picture 23 - Less hikers trek the higher paths (IT)

The challenge for the players involved in the management of these territories is to find a balance between the possibilities offered to the local community by tourism and the costs of developing agriculture, which must be supported not only by public action but mainly by the daily activities of the inhabitant, the only way to ensure continuity with the sustainable local project begun by the people centuries ago.

3.2.2 MONOCULTURE

Agricultural practices characterise the cultural landscapes and at the same time, as mentioned above, can also lead to their loss of value. Pressure towards forms of agricultural land use aiming at mono-cultural production is a further acceleration of the degenerative processes.
"Icon" landscapes, such as some parts of Tuscany and France, are strongly linked to the cultivation of vines, and the intensive use of land for mono-productions should be an element that are taken into account by the management policies of these territories.
Landscape mosaics with high heterogeneity are necessary to maintain high levels of biodiversity that would otherwise be at risk. It is true that the vineyards and other crops have a very different ecosystem significance depending on the local conditions. Steep slopes, when cultivated or affected by natural vegetation, with their various exposures, play a microclimatic role and, in relation to other ecosystem components and factors, can create an ideal environment for some species.
The aesthetic value and the multifunctional nature of landscape represent strength that can overcome the visions of the intensive exploitation of agricultural areas by virtue of the re-allocation of functions, so as to preserve the identity that has become established and is part of history.
Also, in recent years, a new type of awareness has emerged, according to new requests from the market and opportunities for public funding. Agriculture is becoming much more a multifunctional producer of positive environmental externalities as farmers begin to understand the importance of organic farming and direct selling of their products as well as providing hospitality to visitors. All these ongoing dynamics could help to avoid risks of landscape trivialisation or desertification.

Picture 24 - Abandonment and resulting landslides are mainly located in the less accessible areas (IT)

Picture 25 - The monocultural "wall" of the vineyards of Lavaux (CH): natural dynamics and settlement rules decrease the risk of landscape trivialization

3.3 SELECTED GOOD POLICY PRACTICES

Problems and risks occurring in Cultural landscapes, as was said before, are tied to each other and it is unthinkable to adopt strategies and actions for their management that take no account of the systemic vision of the landscape itself. In the framework of the experiences presented by partners of the Vitour Landscape network this integration emerges strongly.
The following are some examples that could be useful for summarising some aspects presented in the previous paragraphs: the values mentioned there as well as risks that should be avoided can be recognised.

3.3.1 COMPARISON OF SEVERAL LOESS SOIL CULTIVATION METHODS IN TOKAJ TO PREVENT EROSION

The effects of climate change in Tokaj, as in other areas, are clearly evident: seasons change without transition; weather conditions are getting more extreme and unpredictable; acid value changes are significant; sugar build-up occurs faster in warm temperatures and this affects harvest time and winegrowers have to react. Erosion, especially on the loess based soil vineyards (Hétszölö), is one of the worst consequences of the processes caused by these factors.
In the winegrowing area, the average height of the slope ranges exposed to the south-east, north and west-north-west from the Tokaj hill is 514 metres above sea level. More than 80% of the surface is endangered by soil erosion, with a degree of annual erosion that can reach 1 to 3 centimetres. Specific studies were undertaken to find the best soil cultivation method against erosion, with the capacity and ability to improve the soil structure, especially for compaction and reduction of nutrient losses; to obtain better habitat conditions for living organisms in the soil; to increase biological activity; to preserve the organic matter content of the soil; to preserve its moisture content; to prove the best solution regarding the yield and the grape quality.
The study was carried out by the Tokaj-Hétszölö Winery, which owns the plantation in the Hétszölö Vineyard, together with research organisations:
- Corvinus University of Budapest, Faculty of Horticultural Science, Department of Viticulture
- University of Pécs Research Institute for Viticulture and Oenology.

Three soil cultivation methods were compared:
- Mulching with straw
- Bare cover crop
- Mechanical cultivation

The study was carried out on cordon de Royat vines (with 1x1.8 m row and vine spacing) and the varieties investigated were: 'Furmint' clone T.85 and 'Hárslevelü' clone K.9. Every treatment was located on five rows, with four applications per treatment. The yield, the sugar content, the titratable acidity, the pH of the juice and the ratio of noble rot were measured in the case of both cultivars. The experiment was set up in the Hétszölö Vineyard in 2007, and the measurements were taken in 2008. The straw mulch proved to be the best solution with regard to yield and grape quality, although no significant differences were observed in the sugar and nitrate acidity content of the must, the ratio of noble rot berries was higher on the straw mulched plots.

Straw mulch can conserve the moisture content of the soil and it seems to contribute to the conformation of a suitable microclimate for Botrytis infection.

The least yield and rot ratio was observed in the case of barely covered vines and the vegetative growth of the grape was less intensive in these vines.

In 2007, the weather was extremely dry (from May to August only 195 mm precipitation was recorded) and the straw mulch proved to be the best solution in all aspects. The soil cultivation method considered can reduce the damage caused by erosion and can also create better conditions for the growth of good quality grapes. From the point of view of erosion prevention, soil cultivation is very important, especially when the plantation is located on steep slopes and the soil is not so compact, as in the case of loess soil.

3.3.2 RECONNECTING OLD DANUBE BRANCHES TO THE MAIN RIVER (WACHAU)

After straightening the bed of the Danube around 1870, old side branches of the Danube became more and more disconnected from the main river. Because of this, the typical fish of the freely flowing Danube lost their breeding grounds. Since 2003, the Wachau region, together with the European Union, Federal and State authorities, the private angling association and local environmental NGOs, have invested more than EUR 5m in reconnecting old branches of the Danube to the main river.

More precisely, in the case of the project near Rossatz and Rührsdorf villages, 80 private landowners signed a permit to use their land for ecological purposes without financial compensation. Single projects along the Danube became part of a larger group of nature protection projects, to be financed by LIFE Nature. Today, the new branches are working as expected way, both hydrologically and ecologically; more than forty different types of fish were monitored, many of them included on the FFH directive Red List; the new artificial banks held. The new elements are also used by locals for recreation. The project has already served as a role model for similar projects in the National Park east of Vienna. A lot of support came from the local people because they see nature protection as an important value. In 2008, the project won the "milestone award" given by the Governor of Lower Austria.

3.3.3 MIDDLE RHINE CHERRIES – SUSTAINABLE LAND USE BY FRUIT GROWING AND THE MAINTENANCE OF BIODIVERSITY (UPPER MIDDLE RHINE VALLEY)

Fruit growing had great economic and ecological importance in the past. Since the 13th century, the area under cherry cultivation has been expanding. Commercialisation started in the 18th century, but the main boom in cherry growing began after the 2nd World War because of demand from the canning industry. Since 1960, cultivation has been decreasing. Increased fruit imports from southern Europe, falling trade prices and rising labour prices as well as the requirement of a greater amount and unified appearance of fruits were the main reasons. The consequences were a reduction in biodiversity to serve the market as required and intensive cultivation on larger parcels on the top of the hills. The smaller parcels and those on steep slopes were neglected. Current cherry growing is mainly for private consumption. Scrub encroachment on neglected parcels causes a loss of biodiversity, although in uncultivated areas many old cherry varieties can still be found.

A feasibility study was carried out to elaborate the potential of cherry growing on the basis of a collection of varieties and a survey of their characteristics. A database with nearly 140 varieties of stone fruits has been developed and several actions for the cultivation of varieties and propagation in nurseries have been undertaken so far. A regional brand, "Middle Rhine Cherries", is going to be created and guidelines for cherry growing and further new uses will be draw up. Specially organised events like the "Day of the Middle Rhine Cherry" have not only awoken the interest of the players but there is also widespread public interest.

From the beginning of the project, citizens were very interested and all players became involved very early in order to avoid trouble in processing the project. The scientific basis has been essential for the acceptance and for the financial background of the project but there were difficulties in finding business usages for all varieties of cherries. The attempt is to find economic usages able to show that not only one kind of fruit but rather the entire variety is going to be merchandised in different ways (according to taste, location, time of year etc…) Furthermore, the fact that the variety of cherries is unique in Germany is an argument for cultivation and merchandising even if it is sometimes difficult to re-inspire former cherry growers.

4. THE AGRARIAN/RURAL ORGANISATION OF SPACE, PRODUCTION AND PRODUCTIVITY: ITS CHARACTERS

(Giuliana Biagioli, Roberto Vezzosi)

"The German language uses the same word for the art of "construction" and the art of "cultivation"; the German word for "agriculture" (Ackerbau) does not signify "cultivation", but "construction"; the "settler" is a "builder" (Bauer). When the unsuspecting Germanic tribes watched bridges, streets and walls being constructed under the shadow of the Roman eagles, and, with seemingly identical lack of effort, the virgin riverbanks of the Rhine and Moselle being transformed into vineyards, they assigned a single word to describe all the work going on before their eyes. Yes, people should construct their fields as they build their cities. In this way, the cities contained houses inhabited by a number of separate families, one living on the floor above the other, just as in fields, the fertile strata can be seen to be nourishing one stratum of people above another."(Carlo Cattaneo," Agriculture and morality, in The acts of society towards the encouragement of arts and crafts, Milan 1845).

The layout of soils, crops and agricultural watering systems in the fields, together with farm buildings and their spatial and functional relationships, are expressions of a singular "material culture", which is what determines the uniqueness of the place. For this reason, agriculture is recognised as an essential factor that, more than any other, makes a significant contribution to the construction of the landscape. The organisation of space in agriculture is the result of a functional evolution, which must respond with maximum efficiency to the given conditions (climate, soil characteristics, the presence of water, etc.) and in relation to the specific needs of agricultural productivity.

If we look at rural areas, we can see that they have long been characterised by slow and gradual change, which has kept alive the strata of different ages. From the mid-twentieth century onwards, however, the processes of change – both social and technological – have accelerated. First progressive abandonment, followed by the mechanisation and specialisation of agriculture, which have led to major changes in the methods of production and layout of the soil. The traditional agricultural landscape has changed, as has, to an even greater extent, the landscape of vineyards.

One of the primary difficulties encountered when examining European winegrowing areas, as can be clearly seen from those included in the Vitour Landscape project, is the huge variety of landscapes, characterised by distinct cultural order and divergent spatial organisation, together with marked economic and social differentiation.

A primary example of such divergence is the management of steep terrain, which must be terraced to create small artificial plains in which to plant any kind of crop. Many of the sites included in this project, like many others in Europe, are examples of this system, employed in particular for the planting of vineyards. In fact, terraced vineyards are a characteristic of most of the cultural landscapes that form part of the world heritage sites that have singular reference to this discussion: the Upper Middle Rhine valley, the Wachau, the Upper Douro valley, Cinque Terre, Lavaux, as well as a part of the traditional Tokaj production zone. These are attractive landscapes, but the result of agricultural and socio-economic systems now largely extinct, as is the case with Cinque Terre, or residual, as with the Rhine valley, or, in other sites, considered unmanageable.

We have more integrated vine-growing and wine-making systems, where it is possible for a man or woman to be both winemaker and citizen, as in Lavaux, where small family-run properties completely dominate (700 ha of vineyards are divided among 1,840 owners and 660 co-owners), all with cutting-edge technology, applied in particular to environmental protection. At the other end of the scale, we find farm organisations that are controlled by huge, capital-oriented wineries and run by salaried employees.

The situation is particularly complex in the vast area of the Loire Valley. Here the vine is by no means the only crop. The area devoted to agriculture in the UNESCO site is almost 178,000 ha, a considerable amount of which is dedicated to cereal and oilseed crops and cattle rearing. About 65,000 hectares are dedicated to vine growing (8% vignoble français: Val de Loire is the 3rd largest vine-growing region in France) with 4,000 growers, 60 wine traders and 16 wine cooperatives.

Sixty percent of the region's wine sales are accounted for by 15 specialised négociant companies and 24 cooperative wine merchants; the remaining 40% is sold directly from the winery. The average size of a wine estate is approximately 15 ha; anything less is considered insufficient for making a living. In "professional" estates, i.e. those with a minimum size of 1 to 3 hectares, 50% of the work is carried out by salaried employees. In May 2012, the Chamber of Agriculture issued a "typology of vineyards and socio-types in the Val de Loire, with the identification of five profiles: direct sellers to professionals, representing 20% of the area's estates; growers selling directly to private individuals accounting for 17% of the estates. These are independent wine producers, who are aided by family members and expert employees and have a strong presence in local social and political networks. They are termed "vigneron artisan", exercising the double role of vine-grower and winemaker. The fourth and fifth profiles refer to companies, whose production and activity is diverse. The first of these categories is made up of the "vendeurs au négoce," representing 23% of the area's producers, often with a mixed farming system and aided by family members and just a few employees. The latter profile consists of the "coopérateurs" (cooperative) system, which represents 18% of the producers. They generally enjoy an assured outlet for their produce, by selling the entire crop (grapes, must) to the cooperative winery, which vinifies and markets the wine. The organisation of labour revolves around the family nucleus, with professional help. Profitability is amongst the highest levels in the sector, as administrative and commercial costs are reduced. These growers generally practise diversified agriculture or are engaged in a second activity. It would be interesting to explore the theme of agricultural diversification in this high quality wine-producing area, it being an agricultural system that may be regarded, historically, as the most respectful of local landscape and biodiversity, and also less subject to the risks of monoculture.

In the Wachau and the Upper Middle Rhine Valley the small, directly run winery dominates, as in Lavaux, albeit with less fractional ownership.

The cultivated area in the Wachau amounts to 25,000 ha, of which 1,400 ha are vineyards. Land ownership and estates are on average much smaller than in the Val de Loire. The vines grow on terraces supported by dry stone walls. Around 250 families share ownership of 440 hectares of vineyards, an average of less than 2 ha and by no means enough to support a family. Conservation of the cultural landscape is aided also by the strength of the cooperative movement in the production and marketing of wine. The largest cooperative, Domäne Wachau, founded 70 years ago, controls about a third of the vine growing area and is able to create top quality wines. In fact, the typical weakness inherent to production from small parcels of vines - the difficulty of producing and marketing just a few grapes - becomes a strength where small producers become producers of speciality grapes, which may be marketed under a territorial brand, with quality guaranteed by the winemaking professionalism of the cooperative. The presence of the cooperative winery is, therefore, very important for small producers in the region included in the UNESCO site, who would not have the strength to survive alone , nor, consequently, be allowed to contribute to the survival of the historical landscape; the role of the association "Vinea Wachau Nobilis Districtus " is also important, giving its members very strict rules for wine production, much stricter than in the Austrian vine growing area (see Chapter 2).

These are two examples of places where, to varying degrees, from lowest to highest, there is still a relationship between private interests and those of citizens in the maintenance and development of a cultural landscape. This relationship weakens when properties get larger, to the point where financial and international capital interests hold sway.

In the Douro Valley, for example, from the 1960s on, it is multinational "luxury" companies that monopolise the production and sale of wine. Here the agricultural area utilised is about 250,000 ha, of which 48,000 ha is under vines, with 9,000 companies, of which, however, we observe a progressive reduction (between 1989 and 1997 by about 13%). This reduction applies mostly to smaller companies, with less than 5 ha. The largest number of companies (and growing) in the Douro Valley has areas ranging from 5 to 20 ha, comprising 61% of the total, while those between 20 and 50 ha come to 31%. The demographic structure of the region follows the same pattern, but in addition to a general reduction however, there is also the worry of an aging population. Around 39% of manufacturers are over-65, while only 8% of farmers are under the age of 40.

Another peculiar feature of the region is the presence of freight, which is also linked to the extreme land fragmentation that often makes cellar aging economically unviable. Small producers then sell grapes or wine to shippers, many of whom have their own vineyards, or to cooperatives. It is important to note in this context the importance of the cooperative model, which has allowed many small producers to maintain their activity. Small vineyards are almost exclusively characterised by the use of family labour and are the "traditional" model of the Douro wine system. These are the ones that keep the richness of the landscape in the area, thanks to their complete role in the vine-growing process and their work in maintaining traditional production systems. The larger vineyards, on the other hand, are almost exclusively characterised by the use of hired labour and represent the more dynamic model of the Douro Valley wine production system. It is they who bear the huge investments required for the purchase of new land, for the major effort needed to restructure the traditional vineyards, for the exploitation of other local agricultural products (oil, apples, cherries, livestock, etc.) and for the same diversification

of the activities of the estate towards multifunctionality, mainly through the introduction of tourism. At almost the opposite end of the scale, because of the scarcity of financial investments, we have winemaking systems that play a residual role and subordinate to, for example, the development of tourism (as in Cinque Terre) and others where the totally unique climate and natural or physical features assume greater importance (as in Pico).

In Montalcino however, the image of wine is strong enough to dominate the economic and social life and the overall image of the area (it is no coincidence that the area governed by the DOCG appellation coincides exactly with that of the municipality). The success of Brunello in recent years has led to a significant increase in the area under vines, which has gradually filled the areas once devoted to olive trees and arable crops. Vine cultivation accounts for 70% of the cultivated area, referring to plots of land extending over more than five contiguous hectares of land; including those that exceed 20 ha, making up about a quarter of the total. The largest number of farms are those with a surface area of between 20 ha and 50 or more ha (68 companies). A survey carried out in 2000 identified 75 estates with 50 or more ha, covering a total area of 17,963.14 ha.

In a town of about 5,200 inhabitants, direct farming employs 2,000 people (certainly not all residents) and, taking wine-related activities into consideration, a total of about 2500 people are active in the sector, demonstrating the focal point that Brunello has assumed over the years. Seventy-five percent of the estates are directly owned and family-run, although land rental and salaried labour is on the increase. The producer is also bottler and seller, in the absence of industrial scale production, and over 60% of the wine produced in the municipality is the product of just 10 estates. Thus it appears that the town of Montalcino is a reality that is atypical when compared to other Tuscan and Italian areas, because the entire winemaking process is carried out within the confines of the estate. It seems like the town of Montalcino is an atypical reality compared to other Tuscan and Italian areas because the process of winemaking is entirely carried out within the boundaries of one single estate. The lack of association between companies and the self-reliance of wineries also reduces the possibility of promoting common policies and actions to promote the area as a whole.

The case studies, therefore, illustrate the primary value of the Vitour Landscape project in understanding the differences between different European cultural landscapes, and in particular those where the vineyard is still an essential part of the economy and society. From these differences derive the priorities and actions to be taken for the protection and enhancement of the landscape by each partner, together with the relative solutions and the choice of instruments to be used, which necessarily vary according to the needs of each individual case.

However, there is a common question that we all must ask, and that is whether it is possible to ensure that the needs of agricultural production do not erase the signs that tell a human story, a story that is always unique and always on the move. On the other hand, an assurance of sustainable development of the European wine landscape and the refusal to allow its crystallisation into a still image, can be an effective strategy for the protection of its cultural value.

Picture 26 - Vineyards in Pico Island (PT)

4.1 RISKS AND PROBLEMS

The landscape is the product of the incessant work of man. In particular, the rural landscape bears witness to the historical relationship between nature and work, where the many marks left on the ground are representative of the balance between these two dynamics. In relatively recent times, however, new external factors have been added that determine the design of the landscape; these are not the product of local conditions and have had an increasing impact on the transformation of rural areas. What have emerged are factors that increase the pressure on the agricultural systems or elements that may bring about a crisis situation.

First of all we must consider the danger of an aging and declining rural population, for both economic and social reasons. These factors directly affect corporate investments and could call into question both the different production systems and the maintenance of the agricultural landscape.

The diffusion and internationalisation of wine markets, the dispersal of places for living and places of work, the development of territorial infrastructures (highways, power lines, plants for the production of energy and waste disposal, etc.), the attraction of the countryside in the mind of the urban population and for the same reason tourism, with its new quantitative and geographical dimensions and... All these factors create contradictory phenomena.

On the one hand, we have a decrease in the rural population; on the other, an increase in the population moving out of the cities, searching for different and better environmental conditions and drawing the countryside away from its traditional agricultural use. In a country area bereft of agriculture, care of the soil is interrupted and minor infrastructural patterns disappear - the ditches and hedges, which are reduced to stereotypes, where once they had strong symbolic value.

The house is no longer the place of work and models for the construction of the family and the choices of belonging (to a place, a community) become pluralised. Changes in lifestyle and the introduction of more urban models into social relationships, with more and more individual factors coming into play, carry with them the risk of undermining the methods for the creation and use of agricultural land, its cultural heritage and landscape.

Tourism also is an industry that makes use of the attraction factor of the land, but at the same time has an impact that tends, if not considered in the long term, to reduce the quality of life of the local population, by urging mobility flows or the increase in prices and developing activities, that are not always compatible.

The more marginal areas - hills and mountains - are seeing progressive abandonment, whereas in other areas that are accessible from the major cities, new populations are arriving (the Rhine Valley and the Loire Valley), who choose them either as weekend retreats or full-time homes, escaping from the big city and urban deprivation.

In places where the agricultural system is marked by widespread settlement, governed by relationships, established over time, between the different components - rural villages, barns, gardens, cultivated land, woodland – the recent building additions too often threaten to overwhelm the historical nuclei and lead to a breakdown in the old spatial balance.

Where agricultural areas and surfaces are easier, intensive agricultural methods have taken the place of old farming practices. In the most fertile areas, where profitability from the vine is higher, winegrowing has progressively diminished the grazing meadows and mixed crop areas, which have been gradually replaced by vineyards, thereby reducing the diversity of the landscape (Montalcino), where elements that guaranteed the balance of ecosystems and biodiversity used to coexist.

The lowlands have more and more often seen the rise of industry, commerce and new infrastructures and are subject to a growing demand for the localisation of large equipment, and technological systems (e.g. renewable energy) in agricultural areas, which further diminishes agricultural use.

At risk of gradual extinction are the terraces, dry stone walls, embankments, hedges and other agricultural features that for centuries helped to contain erosion, the effects of which, owing to abandonment or the mechanisation of agriculture, have become more severe and destructive (as in the case of the recent floods in Cinque Terre).

Intensive agriculture can produce problems of pollution, hydro-geological instability, water scarcity, loss of fertility and deterioration in the structure of the soil. It should however be remembered that the presence of humans and agricultural practices have important environmental value: on land abandoned by agriculture, different forms of vegetation take root, not always in the form of native or traditional species and abandonment results in the reduction of biological diversity.

4.2 SELECTED GOOD POLICY PRACTICES

4.2.1 GPP FOR TRADITIONAL CULTIVATIONS:

4.2.1.1 LEGAMBIENTE WORK CAMPS AT CINQUE TERRE THIS PRACTICE CAN BE ASSOCIATED ALSO TO A GPP ON MULTIFUNCTIONALITY.

Legambiente is an Italian environmental NGO. We promote sustainable development, environmental education programmes, the use of renewable energy, involving more than 3,000 people each year, participating in our volunteer work camps. A work camp is a brief experience in which we offer participants the opportunity to implement a project to restore, protect and enhance the environment and local culture. The volunteers from Italy and from all over the world do ten-day shifts coordinated by Legambiente leaders, working five hours a day. Free time is used to visit and discover the area. The work camps were organised in accordance with the Park Authority and the Municipality of Riomaggiore through a convention. The first aim was to recover abandoned paths, most of them, except those on the coastal area, no longer being maintained by the locals. In particular, paths connecting villages to the hills have been considered. The second objective was to recover abandoned terraces. The third was to enhance biodiversity and multifunctionality in agriculture. The last and consequent one was to ensure a more balance return from the territory, both from the participants and from the tourists, through dialogue between different generations and cultures. The results were:

- a re-opening of paths, (see photos)
- the recovering of terraces, where, to increase biodiversity, steps were taken to protect the presence, in such a small area, of 20 varieties of local vines.
- the installation of electric fences to prevent incursions of wild boars on the restored and cultivated lands. This action was useful also to protect the dry walls, the main element of the Cinque Terre landscape

Finally, a wider range of agricultural products complementary to the vines and the wine was introduced, with the plantation of lemon trees and terraces dedicated to the cultivation of basil used for the well-known pesto, to encourage the local economic stakeholders to earn an income from other local Mediterranean products.

Picture 27 - Legambiente Work camp in Cinque Terre (IT)

Picture 28 - Vineyards and olive groves around Sant'Antimo Abbey in val d'Orcia

Picture 29 - Vineyards down on the hill of Montalcino

4.2.2 SUSTAINABLE USE AND ENHANCEMENT OF THE HERITAGE

4.2.2.1 THE LANDSCAPE IN REGIONAL POLICIES AND IN LOCAL KNOWLEDGE AND GOVERNANCE PROCESSES: THE CASE OF MONTALCINO.

In recent decades, the demand for Brunello wine has constantly increased, leading to a 100-fold growth in winemaking businesses from 1980. This economic boom has also caused a shift from traditional production methods to new cultivation methods. Landscape is a quality factor that has an important influence on appreciation of wine. For this reason, experimentation of new processes of knowledge and active guardianship of territory as a measure of economic policy (taken to attract tourism, to help in creating the image of local products and to promote the development of various economic activities complementary to winemaking).

The main planning tools in Tuscany are the Territorial and Landscape Plan (Pit, NUT2) and the Regional Development Plan (Prs, NUT2). These two plans are closely linked, thanks to a strategic choice made by the Tuscan Region that connects territorial planning tools with socio-economic development plans.

The quality objectives for the landscape identified at regional level for the transformation in the agricultural areas are involved with the maintenance of the activities in the countryside. Richness of a landscape is linked to the presence and maintenance of the agricultural sector. Agriculture, if well done, is a creative activity, able to defend the territory; it also guarantees hydrogeological guardianship and biodiversity. Simplification of the layout of the fields, the elimination of agricultural drainage networks and also the absolute prevalence of vine monoculture should be avoided. In addition, new lifestyles gave rise to new approaches to and new collective imagination of the countryside, which might endanger the iconic value of the most typical landscapes and give rise to a uniform, "fake Tuscan" landscape. "The Region, the provinces and the municipalities participate in the creation and integrated management of the regional GIS, which is the main source of information enabling planning and assessment at all levels". In the Structural Plan of Montalcino (tool for spatial planning at municipal level), the GIS has been used to collect and highlight the information and relationships between land forms, the agricultural mosaic, the urban system and the geo-morphological risk. Some of the information layers produced can support assessment of agricultural characteristics of individual areas, like the map of annual solar radiation, the slope exposure map. Soil type maps can also be produced (soil composition, rock types) as well as maps of soil use. The GIS makes it possible to identify the key and recurring features of different landscapes and to highlight the different characters of each one. The information and its visual representation are fundamental for policy actions targeting improvement of the wine landscapes. For management of the territory, application of the GIS can enable the authorities to assess changes in types of crops. Perception of the negative externalities of farming practices is still limited (soil erosion, pollution, standardisation, etc.). This tool makes it possible to promote environmentally friendly farming practices, for the hydrogeological and environmental protection of the territory and to ensure the conservation of environmental resources and the active protection of the landscape features. The GIS also makes it possible to track the historical evolution of farming practices and agricultural landscapes.

In addition, at Montalcino, during the creation phase of the Structural plan, drawing on technical expert knowledge was accompanied by engagement and participation of the local community and the stakeholders.

During the development of the data sets, to bring to light the most pressing issues;

In the goal-setting phase;

In the definition of the technical tools, exclusively with the representatives of the farming sector, which highlighted their role as "counterparts".

The work of constructing structural plans allowed the establishment of Guidelines and standards for the improvement of a wine landscape:

- preservation of olive belts next to roads and settlements;
- planting bushes to improve ecological connection;
- avoid building along the ridge roads
- taking care of trees inside historical settlements.

Planting a vineyard can bring risks, so it is submitted to a valuation by precise and definite standards, but it can also be a new opportunity to improve environmental performance. Thus, the structural plan actively takes care of the characteristics of the landscape.

The landscape is a key component in the identity and "good name" of many territories and is often the subject of local tensions and conflicts. Local stakeholder groups represent diverging interests: on the one hand there are those who wish to preserve heritage and memory, on the other, farmers mainly target productivity. Although the role of the landscape as a key economic resource is formally recognised, this often does not translate into practice. Awareness of the role of farmers in producing "public assets" is still scarcely understood, even by the farmers themselves.

The ability for spatial planning tools to act directly on agricultural practices is limited. For instance, their nature is largely of "moral suasion" with regard to crop types and to the farmers' choice of production methods in general. This is why it is necessary to experiment a new approach for more effective cooperation between all stakeholders, starting with the creation of knowledge bases as a tool for the management of territorial changes.

4.2.3 GPP AIMED AT RE-ESTABLISHING DIVERSITY IN CULTIVATION, SUSTAINABLE WINEGROWING AND ENHANCING BIODIVERSITY

4.2.3.1 BIODIVERSITY IN WINE-PRODUCING COUNTRY: THE EXAMPLE OF THE SAUMUR CHAMPIGNY AOC

The "biodiversity and landscape" project, based on the hypothesis that "increasing biodiversity has a regulatory effect on pest populations" and coordinated by a winegrowers' union, raises many questions, some of them ecological, others sociological and agronomical. Currently, winegrowing has the reputation of being an intensive crop that consumes large quantities of pesticides and is therefore of little interest for biodiversity. However, since the 1990s, winegrowing practices and objectives have evolved to become more environmentally conscious. These environmental approaches, implemented at farm scale, are now well known and can be considered "classic" in 2010.

Approaches at a regional or landscape scale, wider than the classical farm-scale framework, have in particular been developed in order to better integrate relationships between winegrowing and biodiversity and the two-way benefits that could be strengthened to help control vine insect pests or to stop declines in common farmland biodiversity. In the Loire Valley, a growing number of winegrowers are taking an interest in these approaches. The Saumur-Champigny controlled origin appellation, in partnership with research teams and other agricultural organisations, launched a major project on this topic more than five years ago. This habitat creation project aims to encourage biodiversity throughout the appellation zone and is of particular interest as it was initiated by the winegrowers themselves and deals with all aspects of sustainability (economic, environmental and social interests). This example may help to define those actions that could contribute to preserving vineyards while farming sustainably and managing and conserving natural habitats and biodiversity. Preliminary results confirm the importance of taking an interest in uncropped areas or interstices within the vineyard, to understand the contribution winegrowers can make to preserving biodiversity. This adds more weight to the argument for landscape-scale approaches when studying the management of the sustainability of winegrowing. The core element of this "case-study" is its being the first "agroecological" habitat creation project to be planned and implemented over an entire wine appellation area. Another originality of the project is that it was initiated by the winegrowers themselves. Through their union, they organised themselves, sought out partnerships and completed requests for funding. The fact that the project was conceived by a union has influenced the definition of its content. Finally, this project is also remarkable for the relationships it has established with scientists and the type of research they develop. As the project has progressed, the Angers and Bordeaux research teams have helped the winegrowers to construct their project, to design pest monitoring tools, to produce their habitat creation strategy.

4.2.3.2 GROUND COVER PLANTING ISSUES ON WINE QUALITY AND BIODIVERSITY AND INTEGRATED PRODUCTION - VITISWISS CERTIFICATE AND VINATURA LABEL IN LAVAUX.

Two GPP are presented here, both related either to sustainable winegrowing or to t enhancement of the biodiversity. The first is related to ground cover planting issues to improve the quality of soil for winegrowing while avoiding erosion. Erosion is no longer an issue in Lavaux. It has been fought with transverse terracing, water settlement (streaming system) and ground cover planting. Cover crops can damage the wine quality because the plant did not get enough water or nitrogen. Studies were carried out by the Swiss research station, Agroscope (which is supported by the Federal Office of Agriculture), to discover what types of ground cover plants do not compete with the plant, with wine quality therefore being maintained. Five species were cultivated and observed. The first one was "Pérennes" grass, which does not need to be sown and grows naturally. The second and the third ones were 2 species of "à ressemis" grass (Bromus tectorum and Hordeum murinum) and the last ones were 2 species of "à ressemis" leguminous plants (Trifolium subeterraneum and Trifolium repens).The study showed that the 2 species of "à ressemis" grass could help in maintaining the quality of the wine because they minimised competition between the plant and the grass with regard to water. Therefore the plant was able to absorb the quantity needed. On the other hand, the 2 species of leguminous plants were good alternatives for nitrogen supply (same minimisation of competition between the plant and the grass with regard to nitrogen). Indeed, the 4 "à ressemis" species improved the vine's vigour and the production capacity of the plant. Nevertheless, further studies have to be undertaken before these species are used by the winegrowers (on the sowing and production method for these cover plants).

The second GPP is related to biodiversity and integrated wine production through two instruments: the Vitiswiss certificate and the Vinatura label. The Vitiswiss certificate (grapes) and the Vinatural label (wine) tend to represent ecological and integrated production. The winegrowers are encouraged to reduce their use of insecticides, acaricides, herbicides etc. Switzerland is a pioneer in integrated production. The approach is volunteer-based and initiated by the profession. Since 1993, the project has been supported by the federal government. First of all, local organisations had to be federated: six regional organisations cover the territory and are federated in the VitiSwiss group. The one for the Canton of Vaud (therefore Lavaux) is called Vitiplus. The Vitiswiss certificate has some requirements (drawn up by a technical commission). The Vinatura label can be obtained only if the winemaker already has the grape certificate. This label enhances the winegrowing and oenological aspects of the wine. The requirements tend to reduce the use of insecticides, herbicides, acaricides, nitrogen etc. Winemakers that are interested in this certification have to go on training sessions. Vitiswiss defends and promotes the branch and encourages the integration of young people into the profession. Until now, more than 70% of the farms in the canton had obtained the Vitiswiss certificate. On the other hand, only 3% of the wine produced in the canton is Vinatura certified. The Vinatura label still has to improve its impact. The mentality of the consumers also has to evolve. They are too often attracted by low prices, regardless of quality.

5. SETTLEMENT DEVELOPMENT AND ARCHITECTURE

(Sara Scheer, Filinto Girão)

The cognition of cultural landscape World Heritage sites is significantly defined by the visual quality of the cultural and natural landscape. Among others the constructed environment, namely settlement and architecture, is a striking element of those cultural landscapes and therefore accounts for their high cultural value.
Settlement development and architecture both document the zeitgeist (spirit of time) of an historical epoch with its societal values, social and economical circumstances, the attitude towards life and are thus visible witnesses of historical developments and changes over time. Accordingly, they strongly characterise the image of a region and contribute to the uniqueness and the identity of a cultural landscape.
This particular identity establishing quality becomes more and more important in a globalising world, where standardisation is increasing in every field and in settlement development and building culture also. That is why today, due to globalisation, cultural landscapes are in danger of losing traditional settlement structures and building culture. Hence the need to tackle these problems actively and to respond appropriately to changes in land and building use requirements becomes more and more important, in order to maintain and to sustainably develop the historic townscapes as well as the visual quality of the cultural landscape, especially in World Heritage sites.
This means that we are obliged both to respect the building culture tradition of the region and to develop the cultural landscape. To bring tradition and modernity in accordance with landscape, a special sensitivity and also a lot of creativity in architecture and urban planning is required. All the more because today we are building the World Heritage of tomorrow.
The standards set by the inscription as UNESCO World Heritage cultural landscapes must be understood as guidelines for all our planning activities, knowing that preservation and development are not contradictory. In particular, the development of "living cultural landscapes" is an explicit part of recognition as a World Heritage site. It is especially important, on the one hand, to maintain the existing settlement structures and building traditions and preserve them for future generations and, on the other hand, where new constructions and adaptations take place, to allow some settlement expansion and implementation of modern architecture. For where nothing new is created, any further development will inevitably come to a standstill and the history of the cultural landscape will no longer be legible.
The following subchapters deal with the challenges and opportunities of settlement development and architecture in cultural landscapes in detail. They are a result of the one and a half years of good practice exchanges between the ViTour Landscape project partners, gained especially in the 4th technical two-day seminar on "architecture and settlement" that took place in Boppard (DE) in September 2010.
It must be pointed out that in these guidelines no principally applicable solution is presented on the subject of settlement development and architecture. Rather, they describe general rules on how to deal with the relationship between landscape and constructed environment.
Responsible handling of the cultural landscape with its distinctive townscapes and unique building cultures developed over centuries is indispensable, especially for cultural landscapes recognised as World Heritage by UNESCO. In every region, and for each project, adapted solutions have to be worked out individually, in conjunction with public bodies, owners, architects, town planners and spatial planners.

5.1 SETTLEMENT DEVELOPMENT AND CULTURAL LANDSCAPES: RISKS AND PROBLEMS

Most cultural landscapes have a long settlement history that is documented by different testimonies of different time periods, such as land use, religious grounds or building activities. Building activities for different purposes by our ancestors are documented in the structure of settlements, particularly the settlement development of our cultural landscapes: defensive and/or religious buildings oftentimes together with market squares and halls constitute the centre, adjacent to grand buildings for representative purposes. They were surrounded by residential buildings that were sometimes combined with agricultural use. On some sites, agricultural buildings and dwellings were built outside the villages. The residential and agricultural buildings were purpose oriented to the highest degree in size and position. Where it was

possible, new residential zones were built at the fringe of these so called old quarters of the settlement when needed. The designing of these building activities depends on the cultural landscape itself, with its specific tradition in building culture (see chapter 5.2).
In order to retain these traditional settlement structures and arrangements of every cultural landscape, to develop them in compatibility with the protection of the landscape scenery, respectful spatial planning is necessary, most especially within World Heritage sites. This does not mean changes are not unwelcome, because change is a characteristic of vivid cultural landscapes. But all changes should be questioned in order to prevent various aberrations in settlement development such as abandonment or urban sprawl or to respond to it adequately. But it is not just a question of not damaging the valuable capital of our landscape scenery. Respectful and sensitive spatial and urban planning must also take into consideration the ongoing change of the cultural landscapes and make efforts to push the positive ones.

5.1.1 ABANDONMENT OF HISTORIC CENTRES

In many cases, settlements in rural cultural landscapes have to face the overall problem of abandonment due to the decrease in population and the lack of employment in rural areas. This leads to depopulation of the settlements. The old quarters of settlements, where the image-defining buildings and places are located, are particularly affected by abandonment.
Reasons for this abandonment of historic centres are oftentimes the present size and allocation of the building, which does not meet the changing demands of today's uses and household sizes. Another point is the condition of the building. Feared renovation costs and a lack of imagination about the rebuilding qualities deter possible investors from buying old houses.
This is aggravated both by the location of buildings in rural areas with a lack of infrastructure in the settlement and the surrounding area and the potentially long distances to points of reference, such as jobs, cultural institutions or recreational facilities.
To strengthen the dwindling settlements and in particular the village centres, an expansion of development areas should be avoided. To prevent increasing land and landscape consumption by new construction areas, settlement development should be focused on internal development. Measures to strengthen and enhance town and village centres may be the conversion of buildings, technical and financial incentives, the reorganisation or mere restoration of public spaces or different planning tools. These measures should be adequately framed by a creative planning process. The set of options for conversion of now void and functionless buildings is wide. The conversion of former agricultural buildings into private buildings (housing, private business etc.) or communally used buildings (village hall, museum, multigenerational houses, club houses etc.) and vice versa is conceivable. But, at least the characteristics of the former function, as well as the main features of the building should remain visible.

Picture 30 - Residential building of Family Müller in Oberwesel (Upper Middle Rhine Valley, DE) before renovation

Picture 31 -Residential building of Family Müller in Oberwesel (Upper Middle Rhine Valley, DE) after renovation

Picture 32 - Martin Gropius Building in Koblenz before conversion

Picture 33 - Same building after conversion.
Now 18 modern lofts offer modern living in old walls

To avoid the abandonment of villages and the need of conversion, public incentive measures could help to encourage people to stay in their hometown or even in their parents' homes. As well as urban renovation of public spaces and buildings, the retention of infrastructures (shopping facilities, kindergartens, leisure facilities etc.) or good public transportation could suffice. Financial incentives such as cheap credit or rural development funds hold more appeal for potential investors to buy and renovate old buildings in the centre of villages. These financial incentives should be bound to cultural building guidelines or other existing tools for responsible planning. Tools for responsible planning can be guidelines to settlement development and building culture, architect's competitions or preparation of general principles for spatial planning. These tools should be prepared in planning workshops with civic participation to guarantee the incorporation of the thoughts, needs and wishes of citizens.

5.1.2 SETTLEMENT EXPANSION: URBAN PRESSURE, URBAN SPRAWL VERSUS DEVELOPING AREAS

On the one hand, traditional settlements, and especially centres, in cultural landscapes frequently suffer from depopulation and abandonment; on the other hand, new residential, commercial or industrial areas are allocated at their edges.
Finally, this can lead to the extinction of the heart of settlements (see above) and at the same time to some (uncontrolled) developments at their fringes, aggravated by senseless increasing land consumption.
A reason for settlement expansion is urban pressure due to population growth or economic development. In cultural landscapes this is mostly the case where there are big cities nearby. These suburban areas are attractive for people wanting to have an urban lifestyle in a less compacted environment or businesses needing land and immediate proximity to urban infrastructures.
But urban pressure can also take place in completely rural areas. This is the case where people seek the recreational value of rural cultural landscapes. There, even agricultural buildings are converted into buildings used for second homes, like in Cinque Terre (IT), but in that very case the use of rural buildings for residential purposes is combined with the obligation to care for the surrounding vineyards. In such cases gentrification can also occur (socio-economic restructuring of inhabitants, segregation, way of life and cultural changes).
Settlement expansion itself can be controlled or uncontrolled. Uncontrolled settlement expansion, the urban sprawl, should be avoided at all costs. Cultural landscapes, especially those recognised by UNESCO, should have regulations for settlement expansion in order to avoid landscape consumption and not to disturb the landscape scenery.
Where settlement expansion is under control, zoning plans and land use plans often exist, are applied and are being followed. Those tools should try to minimise the negative impact of settlement expansion on the landscape scenery and at best define where and how big the extension areas will be and also regulate the new building parameters.
Before allowing settlement expansion, general research on the compatibility of settlement expansion with the landscape is recommended. Thanks to the preceding process, possibilities as well as limits are elaborated for installing further planning tools (see the good practices of Wachau in settlement development).

5.1.3 IDEAS OF PROJECT PARTNERS

Montalcino (IT) has a common building regulation that tries to combine preservation, maintenance and development of characteristic Tuscan landscapes and settlements.
Lavaux (CH), Val de Loire (FR) and Cinque Terre (IT) face the problem of urban pressure that may lead to urban sprawl and high prices for land and real estate. The three of them handle this problem in different ways: restrictive laws (CH), introduction of land use plans based on the Geographical Information System (FR) and regulations for real estate transactions (IT).
The Upper Middle Rhine Valley (DE) dealt with the reorganisation of public spaces for the City of St. Goar via an architect's competition.
For harmonising settlement development with landscape scenery, Wachau (AU), together with the municipalities and other public bodies, drew up a guideline for settlement expansions.

5.2 ARCHITECTURE AND CULTURAL LANDSCAPES: RISKS AND PROBLEMS

Architecture is a cultural performance. Therefore, building culture is an important component of a cultural landscape. Building culture contributes to each region's identity, defining structures that distinguish it from other regions.
To avoid a loss of regional identity due to a loss of regional building culture, there is a multitude of aspects to be considered, especially within a World Heritage site. On a larger scale, concerning the refurbishment and restoration of old buildings or the construction of new additions to existing constructions in the older parts of towns and villages or even the construction of new houses at the fringe of a settlement. On a smaller scale, the building itself, there are important issues to bear in mind, concerning its architectural components and decorative elements.

The achievement of responsible spatial planning must be to bring the shape, colour, building materials and components into harmony with nature and settlement. The following aspects are important for resolving the most frequent problems in the matter of regional building culture.

5.2.1 INTEGRATION OF NEW CONSTRUCTIONS INTO OLD SETTLEMENTS OR BUILDING STRUCTURES

New and old architecture need not be contradictory. Today's architecture is necessarily in contrast to the pre-existing, centuries old designs. The decisive factor is that modern additions do not claim to be the better architecture. The maxim for rehabilitation, renovation and addition work on existing constructions should be to respect the work of past generations. This means that new constructions or additions should not be too dominant by "overmodelling" the old structures or even imitating them. Old and new constructions or additions should stand equally and respectfully side by side, inside, when it is valuable, as well as outside. As a result of this the history of the building or settlement is directly visible.
Modern buildings should reflect contemporary design principles, and not deny their period of existence. Nevertheless, new constructions or additions should deal with the existing building situation and react accordingly. The architectural design of new constructions can, on the one hand, be oriented towards the surrounding area with regard to the colours, materials and shape or, on the other hand, a completely contemporary architectural language can be used, finding its expressions also in shape, material and partly in colour. In the latter case anyway, the building tradition (height, colour, etc.) should be respected.

Picture 34 - New building in Koblenz (Upper Middle Rhine Valley, DE): modern architecture integrated in landscape

Picture 35 - Integration of modern architecture in historical surroundings (Koblenz, Upper Middle Rhine Valley, DE)

5.2.2 DIFFERENT FEATURES OF CONSTRUCTIONS

The building materials in the historic buildings in cultural landscapes originate mostly from the surrounding landscape: stone and wood in its typical landscape forms, colours and structures. This guarantees a certain unity in the townscape thanks to its natural colour-harmony, which also means that the settlement fits into the landscape. Within this tight manoeuvring margin there is an extreme diversity of possibilities, due to the natural variety in the colour of the materials, due to their irregular surfaces and their natural aging process. This is generating exceptional liveliness in buildings and settlements. Conversely, materials imitating natural materials and those with enriched colours should be avoided. Neither fits inwith the landscape scenery and they do not allow a graceful aging process, which makes the materials and therefore the buildings look old quite quickly. The landscape already provides a wealth of colour sensations to our eyes. In order to achieve a harmonious cultural landscape, it is necessary that the colour scheme of settlements corresponds to the materiality of the landscape. Structures of similar, equally sized and equally colourful elements create harmony with landscape elements. This does not mean that settlements have to be invisible in the landscape. This means they can form exciting contrasts within the landscape and accentuate single elements. In general, the sensory quality of the whole settlement must take precedence over the intrusiveness of a single building. Wilful differentiations through colours not adapted to the surrounding areas disturb the harmony of ensembles and townscapes. To avoid visual pollution and concurrently allow colours, it is necessary to respect the environmental colours and to use colours of similar brightness but different shades. This is the difference between tawdriness and colourfulness. Generally speaking, natural materials and pigments, especially when they come from the very site or nearby, are more suitable to traditional architecture, since they are in harmony with the surroundings.

Picture 36 - Unadapted colours disturb the harmony of the street near Koblenz (Upper Middle Rhine Valley, DE)

Picture 37 - In terms of colour less is oftentimes more (computer animation)

The overall impression of a building and its surroundings is not determined only by its structure, building material and colour. There are a lot of other elements, smaller and bigger ones, which contribute to the visual harmony of the whole.

Such as doors and windows. These are structuring elements of a façade and therefore have a high visual value for the whole building. Openings differ in appearance (material, position, shape, colour and accompanying elements such as glazing, bars, rolling shutters) depending on the function and time of existence. Wherever possible, old doors and windows should be retained. Wherever they have to be replaced, plain shapes and colours should be used so as not to compete or conflict with the style elements of the old house. Wherever doors and windows are no longer needed, the structure at least should remain visible.

Roofs are very conspicuous elements of buildings as well as of the whole settlement thanks to their size and visibility. They structure the settlements and the streets of houses with their shape and alignment and are themselves structured by dormers, terraces or balconies and other superstructures, according to regional characteristics and historical epochs. They are, so to speak, the fifth facade. Roof space conversions or extensions should take these specific characteristics into consideration. Roofs are traditionally covered with natural material from the surrounding environment. New materials for roofing should at least adopt the colour of the traditionally used material. New developments in roofing, such as solar energy panels, with their different material characteristics, should respond carefully to the symmetry and shape of the roof in order not to disturb the structuring character of the roofs. Wherever possible, panels should be arranged over the entire surface or on top of superstructures in order to obtain the effect of the roof surface as a unit. Wherever this is not possible panels should be arranged based on the structure of the roof. In general solar panels should mainly be used on areas relatively hidden from the streets and outside historic buildings.

Another important design element of buildings is their surroundings, with terraces, garages, paths and stairs, fences, yards, courts and plants. They should all reflect the regional identity in material, form, shape, colour, size and position.

5.2.3 IDEAS FROM PROJECT PARTNERS

To handle these challenges in World Heritage cultural landscapes, Fertö-Neusiedler See (AU), Val de Loire (FR), Lavaux (CH) and the Upper Middle Rhine Valley (DE) have prepared tools such as guidelines or plans for architectural interventions. Cinque Terre (IT) and Montalcino in Val d'Orcia (IT) dealt with this topic especially for rural buildings.

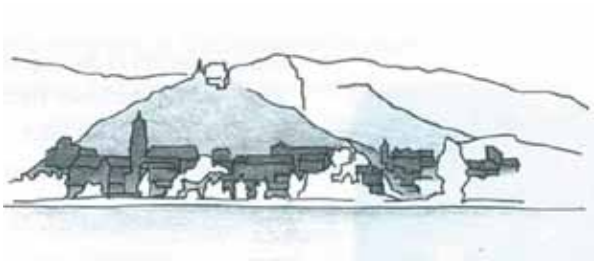
The Douro Valley (PT) and the Upper Middle Rhine Valley (DE) have established architectural prizes for contemporary architecture, taking heritage values into account (the Douro Valley) and for excellent transformation of existing structures within the centre of villages (the Upper Middle Rhine Valley).

5.3 GOOD POLICY PRACTICES FROM VITOUR LANDSCAPE PARTNER REGIONS

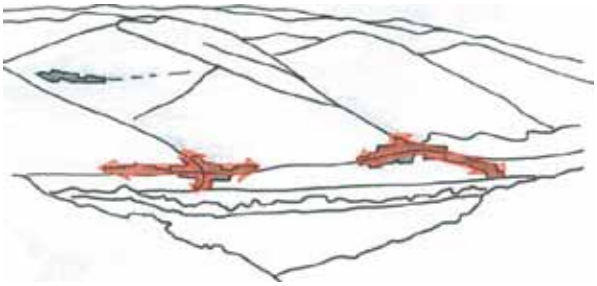
5.3.1 WACHAU (AU): RULES FOR MAINTAINING COMPATIBILITY WITH LANDSCAPE PROTECTION GOALS WHEN ALLOWING ALTERATIONS TO BUILDING LAND IN ZONING PLANS

Zoning planning is, by constitutional law, an exclusive right of the Austrian municipalities. The upper levels of administration (federal states) may only control this if the plans are in alignment with federal state programmes and objectives, but they are not allowed to give directives on how to plan the land. Following a case of bad planning quality, the question of how to deal with bringing zoning planning into alignment with the federal state goals for landscape protection was jointly discussed by all municipalities in the Wachau World Heritage region. The result of this discussion was self-imposed rules accepted by all communities that support

the controlling officers at federal state level in finding transparent and comparable arguments for allowing or objecting to settlement area amendments in all 13 World Heritage community zoning plans. The main tool developed is a checklist based on the findings of the study produced throughout the discussion process. This checklist has been in use by the authorities since 2005 and had been used approximately seven times by 2010 inside the World Heritage area as well as a few times outside, as a general tool.



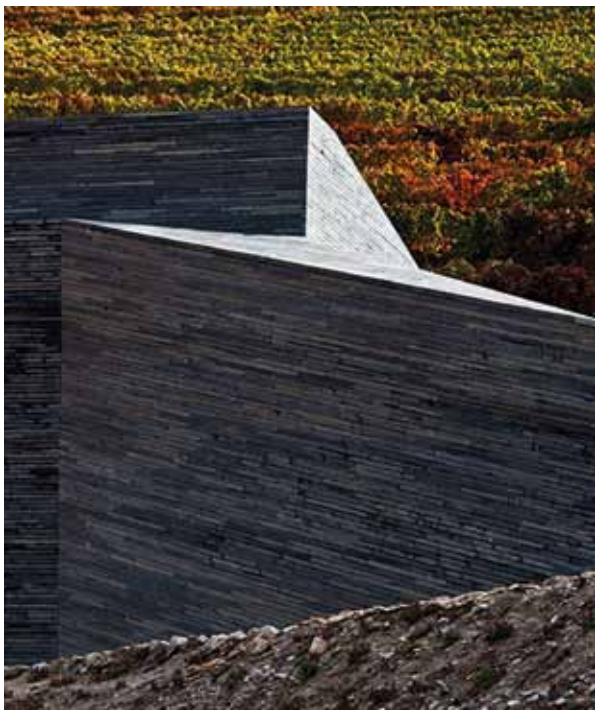
Picture 38 - Drawing scheme of shape of typical Wachau village (AT)



Picture 39 - Typical directions of settlement expansion in Wachau (AT)

5.3.2 DOURO VALLEY (PT): DOURO ARCHITECTURAL PRIZE

In many places, it is very important to find new roles for many old buildings, as well as to renovate them and give them imaginative forms of reuse. The Douro Architecture Prize was established in 2006, during the celebration of 250 years of the Douro Demarcated Wine Region, and is to be awarded every two years. Its subject is contemporary architecture, recently built in the Region, and aims to recognise outstanding examples built, effectively contributing to improving the constructive panorama of the Alto Douro region, so as to make architecture one of the most important components of excellence in the Douro cultural landscape. The objectives of the prize are to distinguish architecture work done since 2001 (when the Douro was inscribed in the UNESCO World Heritage list) as well as to improve contemporary architectural languages regarding heritage values, good integration of modern materials, the recovery of traditional forms of construction, renewal of public spaces, encouraging private owners to renovate their degraded façades and buildings. Finally, the aim is to promote, through qualified architecture, the Alto Douro as a tourist region and a cultural landscape that knows how to care for its heritage values.



Picture 40 - Natural material and modern shape are in harmony with landscape. Quinta do Vallado in Douro Valley (PT)

Picture 41 - Modern style chapel in Douro Valley (PT)

Some quality contemporary architecture has already won prizes in this contest. Some general recommendations:

It is necessary to

- adopt appropriate ways of understanding heritage to orientate architectural practices for more accurate means of intervention.
- build with the highest possible quality, thus legitimately aspiring, even in present times, to build the heritage of the future.
- take advantage of all previous experiences and make good use of them.
- work inside the area;
- work in multidisciplinary teams.

Picture 42 - Additional building of former slate mine in Kaub (Upper Middle Rhine Valley, DE)

5.3.3 THE UPPER MIDDLE RHINE VALLEY: GUIDELINES FOR BUILDING CULTURE AND FAÇADE COLOURS

In 2009, the "Upper Middle Rhine Valley World Heritage Building Culture Initiative " published the "Building Culture Guidelines ". The purpose of the 80-page comprehensive pamphlet is to inform inhabitants, property owners and also architects and craftsmen on the subject, "adapted building on world heritage sites".
By means of numerous photos, positive, as well as negative examples are shown to promote greater awareness of regional-typical constructions in the Middle Rhine Valley.
In addition, concrete subjects are discussed: proportions, façade elements, materials, roofs and gardens. Best practice examples of new buildings and extensions will arouse interest in modern architecture in a historical context.
The project partners are the Ministry of Finance and Building, the Upper Middle Rhine Valley Administration Union, the conservation of monuments and historic buildings authority and the chamber of architects.
At the beginning of 2011, a continuation of the guide was published on the subject of façade colours in the Upper Middle Rhine Valley World Heritage site. This guide is supported by the colour industry and the painters' guild and is accompanied by a façade competition.

Picture 43 - Combination of old an new constructions in Bacharach (Upper Middle Rhine Valley, DE)

5.3.4 CINQUE TERRE: CONSERVATION OF THE RURAL BUILT HERITAGE THROUGH SOUND REHABILITATION AND REUSE OF RURAL BUILDINGS AND STRUCTURES

This good practice describes the preparation of a guide for the rehabilitation of the rural buildings in the Cinque Terre National Park. This form of heritage is one of the most threatened in the Cinque Terre National Park, due to various factors, i.e. the abandonment of agricultural activities, the transformation into second homes for leisure purposes and the loss of building skills. The park administration is pursuing a policy primarily aimed at safeguarding the terraced landscape, whose fragile balance has been compromised mainly by man's abandonment, and this project is part of the framework of the activities promoted by the park administration itself. The guide, based on preliminary research on the rural built heritage of the park, proposes technical solutions for appropriate repair and adaptation to modern needs. The guidelines were published at the end of 2006 and it is expected that they will become part of the park regulations. Coupled with the preparation of the guidelines, a pilot project for the integrated rehabilitation of a rural settlement in the mid-hills above Riomaggiore has been developed, aimed at testing the validity and applicability of the guidelines as well as at providing the park with accommodation facilities for the participants in the courses and workshops given by the University of Landscape and other related initiatives management by park administration.

6. ACCESSIBILITY AND MOBILITY

(Jeanne Corthay, Emmanuel Estoppey)

6.1 INTRODUCTION

Mobility and accessibility are essential conditions for a healthy economy, prosperity, and help in stimulating development. Geography and land morphology are key factors related to site mobility and accessibility. Transport facilities in Val d'Orcia cannot be looked at like those in Neusiedler See, where the landscape consists of a lake and flat land. The sites related to streams or rivers must look at a connection between the two banks to ensure balanced economic development. With regard to mobility and problems linked to accessibility in World Heritage winegrowing areas, several cases of mobility can be cited. Despite their geomorphic differences, all sites involved in the ViTour program are cultural landscapes that directly depend on human activity. In these regions, mobility issues concern agricultural and winegrowing activities, inhabitants and tourists.

6.1.1 WINEGROWING ACTIVITIES

Mobility here is a condition for efficiency and means practical accessibility to vineyards (and to other agricultural areas, where vineyards are not a monoculture). In order to keep the activity as profitable as possible, mobility and accessibility should enable winegrowers to use new technology and to adjust production according to the standards of the profession. The Lavaux vineyard, for instance, improved the infrastructures, making the vineyards more accessible by creating a network of paths through the vines to provide easy access to most of the plots, while a monorail funicular system can reach the highest and most remote plots, giving the opportunity to continue to farm in places that could have suffered from abandonment. However, Cinque Terre, which uses the same type of system in some parts of the site, still faces difficulties in working on the terraces as the system is not widespread enough and, most of all, the monorails were introduced when the majority of the winegrowers had already abandoned the activity and the terraces. These difficulties are closely linked to the lack of accessibility, from previous times to now, and provoke an increasing situation of abandonment. In the Douro region, the slopes have been re-terraced, in particular to allow mechanisation; nevertheless, work in vineyards is still restrictive and tiring, especially because of the difficulty of moving through the vines.

6.1.2 INHABITANTS

The primary objective of mobility is to meet the needs of travelling and moving. It is crucial that local residents can move easily during their daily activities. It is also either a matter of economy or of quality of life. Maintaining the current population (neither less nor more inhabitants) plays an important role in the development of the landscape and of its infrastructures. Society needs to be mobile in order to prosper. The Upper Middle Rhine Valley is therefore exemplary. Major work has been done among the stakeholders, the population and the UNESCO organisation in order to plan a bridge as efficient as possible in its social use, but also cleverly inserted into the landscape and respecting the values of the inscription. Another example can also be cited with Neusiedler See: they developed a bus on call system to improve sustainable mobility, mainly for the inhabitants. This concept, which is of great help to the people, especially those who don't have their own transport or can't drive (the young and the old), can be considered part of sustainable mobility, since it aims to reduce the environmental impact, while meeting the objectives and economic and social constraints.

6.1.3 TOURISM

Two different kinds of mobility have to be considered regarding tourism: access to the site and circulation in situ. Both views require different approaches.

6.1.3.1 ACCESS TO THE SITE

With the development of tourism, the World Heritage sites have aroused undeniable interest and are often confronted with a large increase in the number of visitors. Therefore, there must be reflection, inwards and outwards, in conjunction with issues of mobility in situ, in order to obtain relevant cohesion between the various transport facilities.
First, the different means of access outside the site should be taken into account.

	Airport	International train station	Motorway	National highways	Water access (River, lake, sea)
Cinque Terre	Pisa and Genoa, a bit more than 100km	La Spezia Genoa (100 km)	2 (about 20 km away)	2 in the sites	La Spezia Genoa
Douro	Porto (100 km)	Porto (100 km)	1	3 in the sites 2 (along the site)	Porto
Lavaux	Geneva (60km)	Lausanne (10km)	1 (2km)	1	Lausanne
Upper Middle Rhine Valley	Hahn (60 km) Frankfurt (80 km)	Koblenz (30 km) Mainz (60 km)	1 (along the site)	1 on each bank	Koblenz Mainz
Montalcino	Pisa (200 km) Florence (120 km) Rome (240 km)	Siena (40 km)	---	2	----
Neusiedler See	30 km	Vienna (50 km)	1 (10 km)	2	----
Pico	10 km	None	None	1	São Miguel, Terceira, Faial
Tokaj	Budapest (250 km) Kosice (125 km) Debrecen (115 km)	Budapest (250 km)	The nearest is 30 km away	2 in the site	----
Loire Valley	Tours Nantes (100 km) Paris Orly (220 km)	Paris (130 km)	4 (3 across the site and one along it)	+5	----
Wachau	Vienna (80 km)	St-Pölten (20 km)	2 (along the site)	2 along the Danube + others	Krems, Melk and Dürnstein

Chart of distances and accessbility

In Val d'Orcia, for example, a survey has been implemented in order to facilitate public transport from and to the airport. Cinque Terre suggests in its advertising that the site should be discovered on foot and by train. The visitor is then prompted, by special fees and means, to use "gentle mobility".
In the case of external communications, the Swiss example is also interesting since signs were put on national highways to announce arrival in the land of Lavaux. These signs have been prepared on the basis of the tourist image of the site.

Picture 44 - Sign on the motorway, Lavaux (CH)

Another factor to consider is whether access to the site is easy or not. Among the sites most difficult to access, the island of Pico can be mentioned. In fact, it requires logistical efforts to get there, since visitors must often take several different flights and sometimes also make a boat trip. Sites with poor accessibility must develop good communications to provide clear information about how to reach the region. Furthermore, the area should be able to work with the government and other partners to ensure the widest possible access through airlines.

6.1.3.2 TOURIST MOBILITY IN SITU

A visit to a World Heritage site will not only be a discovery of the landscape but it should also be done in such a way that visitors can enjoy direct experiences within their surroundings. The sites should pay particular attention to the transmission of their values. Therefore, visitors could become "visit-actors", seeing, understanding and discovering. Mobility, as such, must be thought of from this very perspective. In Tokaj, a wine bus and a gastronomic bus offer excursions to discover the landscape, but also to experience it through wine and food. In the Wachau, it is proposed that the site be explored by public transportation and cycling, thanks to a single ticket that allows travelling on the entire network. Cinque Terre also uses this concept and transforms its constraints concerning accessibility into assets, since it is advisable to explore the area on foot and by train. This proposal is a success as there are over 2 million visitors each year.

6.2 RISKS

Current trends in the development of European transportation indicate that the mobility system moves away from any concept of integration and sustainability. The new road and rail infrastructures require heavy work and have a substantial and direct impact on the environment. This is why it is crucial to consider the development of mobility and the improvement of accessibility not only by settling infrastructures but also by controlling this mobility so that it can be developed in line with the quality of the site, and its carrying capacity. From this perspective, the main problems are:

6.2.1 INFRASTRUCTURES FOR THE DEVELOPMENT OF WINEGROWING

Although all World Heritage winegrowing sites have not necessarily been inscribed on the UNESCO list for their winegrowing activities, each ViTour region shows a strong desire to preserve and safeguard the wine business, which takes part in the maintenance of the site. Maintaining the latter also often depends on mobility in the vineyards. Accessibility and mobility are treated differently, whether the winegrowing plots are steep or flat, or when, like in Pico, the vineyards grow between a volcano and the ocean.
The work carried out in the vineyards fundamentally changes if the ground is steep or flat. In fact, it is much more difficult and tiring to work on steep land. For these particular vineyards, their peculiarity, which was the cause of their outstanding universal value, is a direct handicap for exploitation. Some winemakers in the Upper Middle Rhine Valley must face such steep slopes that their work is slowed down and requires additional effort, as well as in Pico, where they have to maintain the "currais", or in Cinque Terre, where they have to crawl under the plants, traditionally dressed, through tunnels.
More generally, the transportation of agricultural devices and tractors to the vineyards can also be problematic. Although the development of trails inside a steep vineyard is more complicated, the issue is observed everywhere. In order to work in good conditions, the tenants must be able to move easily with their machines between the vineyards and the place of production. However, the roads that could be built should not modify the landscape too much. Besides, due to the amount of visitors during the harvest season, these roads may often be overcrowded.
Though, mobility is crucial both in the production process (route between vine and place of production) and in the export process, on Pico Island, exportation is a difficult matter, since the site is in the middle of the ocean. The wine is shipped by boat and plane.
All these complications in mobility and accessibility

Picture 45 - The style of the Douro vineyards, with tarmac walls and roads, Douro (PT)

related to winemaking activities generate substantial costs and, in areas lacking accessibility, often cause a decrease in profitability. Moreover, the producer may buy a lifting device, as in Germany, or choose to install a monorail system, as in Lavaux or Cinque Terre, but all these infrastructures have a cost. Regarding the transportation of vehicles to the vineyards, Quinta das Carvalhas, an estate in the Douro Valley, built dry stone walls, at a high cost, mainly in order to facilitate mechanisation. Exporting from Pico also generates extraordinary costs that affect the price of the wine. The abandonment of plots in Cinque Terre, for example, is closely linked to the high production costs and the growth of economic sectors more profitable than winegrowing. However, the reduced accessibility also had an impact on the decrease in the number of hectares of vineyards (from 1200 in the 1970s to 100 nowadays).

6.2.2 ROAD TRAFFIC AND INFRASTRUCTURES

Road traffic is a big challenge for all the sites included in the ViTour Landscape programme. Either because the flow of cars is too important, or, on the contrary, because the population is decreasing due to a lack of accessibility that therefore causes problems for the local economy. In addition, road traffic can also be problematic if the infrastructure is not suitable to the traffic volume.
Roads and infrastructures are strongly linked with the quality of life of the inhabitants and can have impacts on the economic stability of a region. In Germany, the site is well provided for as it has two federal highways and one motorway. But there is no bridge between Koblenz and Mainz, which are separated by more than 100 km. Therefore, the connection between the two riverbanks is limited and complicated. This lack of communication can have a direct impact on all the

regional economic centres. Val d'Orcia suffered from a rural exodus in the 1950s, especially because access to the valley was difficult. In the Wachau, the number of residents is now increasing in areas near Vienna and St. Pölten, but is decreasing in the remote areas of the site, where accessibility is problematic, for example when there is no motorway nearby.
In the case of tourism, the flow of vehicles is often increasing and must be channelled and controlled, particularly because it does not always fit with the infrastructures and the landscape. One challenge therefore is not to increase the number of roads or car parks, but rather to reduce the number of vehicles within the site, without any reduction of the number of visitors. In order to solve this contradiction, there has to be some global thinking.
An alternative solution has been proposed in the Val de Loire: to turn the former national roads along the river built on the levees into dedicated tourist trails (bicycle, horse, pedestrian circuits): The anciet levees are panoramic viewpoints to discover and appreciate the outstanding landscape. The "Loire à vélo", a tourism initiative supported by the Centre and Pays de la Loire regions is an increasing success. Some sections linked to the main circuit have been implemented to discover the wines areas of the Val de Loire.
In Lavaux, there is a real threat related to an excessive amount of cars travelling through the vineyards. The solution may be found through global reflection, including the surrounding area outside the site.

The issues linked to mixed traffic must also be considered. In fact, they can cause real conflicts of interest between the different users. It is crucial to combine the interests of people and their mobility needs of with those of the tourists, who do not travel the same way. In addition, the same road can also be used for tractors and other machines, which can only move slowly and disturb the flow.

6.2.3 PUBLIC TRANSPORT AND ITS ATTRACTIVENESS

Public transportation access is often complicated in remote rural areas and therefore the use of cars is encouraged. In Val d'Orcia, for example, it is almost impossible to reach the five villages of the region without a car, because the railway is no longer operating. The number of tourists in the region has been increasing since the beginning of the century, and they very often use cars. The nearest train station is Buonconvento, about 12 km from the village of Montalcino. In Neusiedler See, there is some public transport, but the lack of information and coordination makes it unattractive. These two examples show that the system of public transport should be able to ensure easy access to different strategic points correctly distributed. The frequency should allow for quick and easy travel. It is only if all these criteria are met that the car could potentially be abandoned.

6.3 GOOD POLICY PRACTICES

A seminar on the topic of mobility and accessibility allowed the ViTour Landscape partners to share their experiences. However, these issues were also discussed during other ViTour Landscape meetings, proving once again their importance in the management of a site.
During the seminar, the ViTour partners discussed the process of reflection that could be adopted for the correct integration of infrastructures in order to diminish their negative impact, with particular attention paid to landscape. They agreed that various elements have to be considered while developing public transportation infrastructures, such as:
Environment: Special attention should be paid to the environment where there is a need for action: Is it steep? Flat? What kind of vegetation, flora and fauna? What kind of activities exist nearby? Is there a risk of conflict with these? Is there any potentially bad visual impact on the landscape?
Needs of the inhabitants: The actual needs of the inhabitants should be precisely determined and suitable infrastructures should be available. This development must naturally be confronted with the values of the landscape to be protected.

Preserving the tranquillity of the inhabitants and of the tourist spots: The relationship between the development of infrastructures should be done in accordance with the life of the inhabitants; otherwise it could cause conflicts that are difficult to resolve. It would be inappropriate, for instance, to build a noisy railway near houses just to increase the capacity of transportation for visitors.
Reduced mobility: Infrastructures should be considered for the disabled with reduced mobility. Most of the time, simple solutions can be found and implemented, especially if this issue was taken into account from the beginning of the development.
Mixed traffic: The infrastructures should be developed on the basis of the variety of users. There can indeed be problems if the same route is used by pedestrians, bicycles, scooters, electric bikes, cars, lorries and motorbikes. The use of the route must also be taken into consideration. For example,a wide road may not be necessary , if it is only used by a few people. On the contrary, it quickly becomes unpleasant for thousands of people per hour to move on too narrow a path.

Flow rate: the users have to be differentiated: an inhabitant whose aim is to go to work does not take the same way or go at the same speed as the occasional visitor who is curious about the scenery or is trying to find the way. Similarly, tractors or other machines may come into conflict with cars that travel at a higher speed.
Car parks: The impact car parks may have on the landscape must be considered. Is it better to develop several different places for car parks or just one, in order to gather all vehicles and connect them with public transport? Mixed car parks or separated between visitors and residents? Inside or outside the site? What is the best way to integrate these infrastructures into the landscape? Surrounded by vegetation? Planted? Underground?
Signposts: A network of signposts that is well planned and implemented can have a direct influence on traffic flow and can properly channel the different users directly to the right place at the right time. It is a fundamental aspect of the reflection that must be taken into consideration by the site management.
Capacity of the site: It should be possible to determine the carrying capacity of every heritage site. It can help to act either on the behaviour of visitors or to adapt the available space, the time of visit or the quality of infrastructures and equipment.
Dedicated tourism circuits: It could be useful to separate the visitors' routes from those of the inhabitants, either by reserving dedicated tracks, or roads for alternative uses, or by signposting, or even by specific tolls. Many such experiments have been done in heritage cities and "Grand Sites" in France.
Good practices coping with the subject of mobility and accessibility have been presented by our partners. Here is a selection.

6.3.1 BUS ON CALL

The Neusiedler See region is located in the east of Austria, near the Hungarian border. Public transport is often a problem because it is inconvenient. The lake there is an environmentally sensitive area and therefore requires careful traffic management. In April 2006, the taxi-bus system became operational. This new infrastructure was set up by three municipalities in the site: Purbach, Breitenbrunn and Mörbisch. The buses provide a "door to door" on-call service and the passengers discuss the route with the driver. The buses are easily accessible, thanks to their low floor. Tickets are cheap (€1.5 one way) and the system is simple. The buses use biodiesel and are equipped with a filter for particulates. Three buses are operating and the volume of passengers can reach 120 people per day. This system helps to reduce traffic. It is well accepted within the local community and increases the mobility of the young, elderly and disabled. The current aim of the municipality is to create a night service and for the weekend, but financial subsidies are required.

Picture 46 - Bus on call, Neusiedler See (AT)

6.3.2 IMPROVEMENT OF PATHS IN THE LAVAUX VINEYARDS AND MONORAILS

A network of new paths created in a land improvement process was already designed in the 1950s in order to improve accessibility to the vineyards. This network of roads is closed to ordinary traffic but allows the winegrowers to reach the plots more easily with modern production tools. This led to a major reorganisation of the plots, which also helped to optimise mobility in the vineyard. The paths support three main types of work:
- Rural engineering (roadworks for collecting surface water, drainage, etc.)
- Work on soil protection and consolidation of the rocks
- Redesigning the plots.

Picture 47 - The roads, facilitating the activity of the winegrowers, Lavaux (CH)

The purpose of these paths is to facilitate the exploitation of the area. The reorganisation of the plots aims to reduce the fragmentation of the land by merging the plots belonging to the same owner, in order to facilitate the activity. This operation, combined with the work linked to rural engineering, requires the establishment of a syndicate involving all owners of a given

area. A process like that may be voluntary, decided by the owners, or compulsory, imposed by a public authority. In any case, it has to be carried out carefully and to take environmental criteria into account. One of the examples that can illustrate this approach is the walls along the paths. In the early 1960s, concrete walls were built for financial reasons. However, they had a negative impact on flora and fauna. Nowadays, stone walls are built. The stones are stabilised with very little cement. This improvement allows flora and fauna to live again on and inside the stone walls. Paths have a dual function - to ensure access to the plots and to contribute to collecting surface water. They are never flat but rather adopt the shape of the land. Hard surfaces can collect water without being furrowed. This process is nevertheless expensive and impossible to carry out without subsidies. For example, in Riex, an estimate of more than 15 million Swiss francs for 52 hectares was established. The average cost for owners reaches 7.50 Swiss francs per m². The maximum cost is 16.50 Swiss francs per m².

6.3.3 ACCESSIBILITY AND TRANSPORT SYSTEM IN RURAL AND TOURISM AREAS

The Cinque Terre had been isolated for centuries, because the villages were accessible only by footpaths or by sea, without real harbours. In the 1960s, a road was built along the top of Cinque Terre. In 1964, it reached the first village coming from La Spezia, Riomaggiore. The inscription of Cinque Terre as part of World Heritage (1997) and its recognition as a National Park (1999) made the number of tourists increase greatly and the site was threatened by the large number of visitors and the risks from the use of private vehicles. Therefore the Cinque Terre National Park, the railway company, and the tourism service cooperatives struggled to preserve the integrity of the villages and the countryside. The aim of the policies was to reduce the use of private motorcars, to increase collective mobility, to reduce pressure on the coastal zones, and to reinforce the network of hiking pathways, especially in the upper part of the hills. In the meantime, the national railway service had closed the five train stations existing in the villages. Thanks to an agreement, they were rented to the National Park and run by the cooperatives acting within the park (ticketing service etc). A part of the buildings in the stations has been transformed into tourist information points. A network of buses has been created to allow visitors and inhabitants to move around in the area, while, a "Cinqueterre card" has been created, which is a single service ticket for public transportation in the site and giving access to the paying coastal path. The revenue from this card is used for recuperation of the territory, to help the mobility to be developed through public services and to promote local products.

Picture 48 - The Cinque Terre card and the train, Cinque Terre (IT)

6.3.4 SIGNPOSTING FOR SUSTAINABLE TRAFFIC MANAGEMENT

Lavaux set up a signposting system using the current transport network and the car parks, in order to better channel and distribute the traffic inside the site. The reduced capacity of some places and roads had to be considered. The project is intended to show motorists the way to a special car park and to encourage them to use public transport afterwards. Five regional points were defined according to relevant criteria such as their role in the World Heritage Site, their capacity to welcome visitors and their car park infrastructures. The whole region was taken into consideration (not only the protected area but also the suburbs) in order to use the existing infrastructures.

7. GOVERNANCE AND VINEYARD CULTURAL LANDSCAPES

(Myriam Laidet)

Picture 49 - The Allegory of Good and of Bad Government – Scenes from the frescos by Ambrogio Lorenzetti between 1337 and 1340 at the Palazzo Publico in Siena, Italy

What is the appropriate governance for a vineyard cultural landscape? The Val d'Orcia, which was inscribed on the World Heritage List in 2004, provides an exceptional testimonial in this respect. This agricultural hinterland of Siena – redrawn and redeveloped during the 14th and 15th centuries when it was integrated into the City-State's territory – allies the aesthetic qualities of a landscape with innovative agrarian systems. The allegory illustrates the effects of Bad government (famine, pillaging, violence, and poverty) and those of Good government (prosperity for the city, well-being, and harmony with nature). The paintings of the Sienese School that celebrated this landscape have come to exemplify the Renaissance, and they have had a profound influence on the way the landscape is regarded in Europe.

Several centuries later, the UNESCO sites of the Vitour network all share this same commitment in relation to the international community: that of guaranteeing the long-term sustainability of their cultural landscape, whose alteration would be perceived as a "loss for humankind's memory". The issue is not one of managing fossilised areas and transforming them into "open-air museums," but one of providing a framework for their evolving progress and ensuring they continue to thrive while simultaneously respecting the heritage qualities that justify their addition to the World Heritage List.
What does it mean to guarantee the good governance of a vineyard cultural landscape today? Which institutions and tools can be called upon? Following two years of reflection and a pooling of best practices, the network of Vitour sites can provide a number of answers.

7.1 ONE OBSERVATION: THE MOBILISATION OF INHABITANTS IN ORDER TO PROTECT OVERLY-FRAGILE LANDSCAPES

This reflection begins with an observation that is common to all the sites: the dawning awareness of inhabitants about the dangers of these heritage landscapes disappearing and the need to protect them by asking to be recognised by UNESCO.

7.1.1 LANDSCAPES HIGHLY THREATENED OVER TIME

The Vitour Landscape project sites have their powerful landscape identityand the fact that this identity is

endangered in common. They have all been exposed to violent threats, including the construction of a dam (Wachau), urban sprawl (Val de Loire), abandonment of agricultural lands (Fertö-Neusiedlersee, Pico Island, Cinque Terre), and excessive pressure from tourism (Cinque Terre). These outstanding wine-growing areas are fragile and vulnerable to the uncertainties of wine markets and, above all, to climate changes that cause disease, global warming, drought and, ultimately, changes in the nature of the distinctive landscape features in these territories.

Picture 50 - In 1983, 24 winegrowers from the Wachau vineyards mobilised to protect their vineyard landscapes. There are over 200 of them today

7.1.2 LANDSCAPES PRESERVED THANKS TO THE MOBILISATION OF THE INHABITANTS

The fact that these landscapes are being taken into account is above all as a result of the strong mobilisation on the part of the inhabitants (Val d'Orcia, Lavaux) and of the winegrowers (Wachau, Alto Douro, Pico Island). This has led to investments by regional and/or European public funds to complete environmental restoration work (under Natura 2000) that sometimes involves landscapes (Landscape Directive regarding Val d'Orcia). But these public measures to protect heritage resources (natural, cultural and landscape) are not always clearly understood and they come up against contemporary economic practices.
This dilemma between protection and adaptation to development is crucial for these vineyard landscapes, whose conservation is directly linked to their economic profitability. The investment made by winegrowing professionals such as the vintners' association, Vinea Wachau Nobilis Districtus, or by winegrowing unions (Val d'Orcia, Lavaux, Val de Loire, Alto Douro) are a reminder of their determining role in preserving the landscape identity of these sites.

7.1.3 THE UNESCO INSCRIPTION, A COMMITMENT TO LONG-TERM SUSTAINABILITY

This collective effort over a period of several decades has been consecrated by the UNESCO inscription and the recognition of "Outstanding Universal Value"; it is devoted to the intrinsic vineyard landscape itself (Tokaj, Alto Douro, Pico Island and Lavaux) or to a larger heritage area as a whole. This recognition commits the Public Authority with respect to UNESCO to ensuring the sustainability of this cultural landscape in order to transmit it to future generations in its authenticity and its integrity. This commitment arises from the World Heritage Convention of 1972, ratified by 186 signatory States. It is one of "sustainable development" founded on taking into account the heritage resources of the landscapes that bear the World Heritage Emblem.
With the UNESCO inscription, the principle of protecting and enhancing these fragile landscapes no longer needs to be demanded or defended. The central issue has become one of implementation.

7.2 MANAGEMENT OF A VINEYARD CULTURAL LANDSCAPE AND THE UNESCO INSCRIPTION

What are the management tools required by the UNESCO inscription? How do the Vitour sites implement them? What are their action priorities?

7.2.1 THE MEANING AND SCOPE OF THE UNESCO INSCRIPTION

The commitment of public authorities in relation to the World Heritage Committee is, above all, a moral one. The monitoring exercised by the supranational authority, the World Heritage Centre, is principally limited to an evaluation of the state of conservation of the Property every six years and the threat of removal should the Property have deteriorated to the extent that it has lost the characteristics that gave it its international recognition.
Anyway, the State Party, which is responsible for its national World Heritage sites, has the obligation to make a brief annual report on their state of conservation. In addition, the listed sites must submit to UNESCO every project which could have an important impact on the Outstanding Universal Value (OUV), and inform the State. In this case, a process of discussion is opened, between the parties involved (UNESCO and its advisory bodies ICOMOS and/or IUCN, the State Party, and

the local authorities) in order to find a good solution: this process is called "active monitoring".
Whenever UNESCO is informed of a project or something that has been carried out which seems to endanger the value of the site, either by the State, or by any other means (NGO, individual, visitors), they first ask the State to make a report, and if they find that the risk is serious, the site may be inscribed on the list of "heritage in danger", which is the first step towards delisting, and ICOMOS and/or IUCN for natural or mixed sites) is asked to make an assessment.
The provisions have also been reinforced since 2005, and it has become mandatory to produce a "statement of outstanding universal value" and a management plan that includes:

- The description of the Property and a statement explaining its outstanding universal value (OUV);
- The risks and threats likely to impact its OUV;
- The status of the Property's protection and local planning tools as well as the players involved;
- A Property protection and sustainable development project;
- An action implementation plan;
- The local and national forecasting, decision-making, and monitoring mechanisms.

The State, either federal or centralised depending on the country, is responsible in the eyes of UNESCO although it shares this responsibility with the Local Authorities with regard to territorial management. This is the reason the UNESCO Management Plan must be approved by the competent local, regional and national public authorities, as well as by UNESCO's World Heritage Committee. To date, only 4 of the 10 Vitour sites have an approved Management Plan: the Lavaux Vineyard Terraces (Switzerland), the transborder lakeshore site of Fertö/Neusiedlersee (Austria), the Pico Island site in the Azores (Portugal), and the Upper Middle Rhine Valley site (Germany).
The Val de Loire Management Plan is currently being validated in the 197 municipalities involved in the UNESCO inscription; it will come into effect before the end of 2012. The issue of the management plan became a priority because management assessments of European UNESCO sites are being launched in 2013.

Picture 51 - The Lavaux terraces (SW) Inscribed in 2007

Picture 52 - Pico Island (PT) Inscribed in 2004

Picture 53 – Fertö– Neusiedler See (AT) inscribed in 2001

Picture 54 - Upper Middle Rhine Valley (GE) Inscribed in 2002

7.2.2 TWO INTERVENTION PRINCIPLES

In addition to the legal characteristics of the Management Plan, two UNESCO management principles should be borne in mind:

A. The appropriation, by all the private and public stakeholders, as well as by the inhabitants, of the cultural values of the Property, which assumes:

- gaining greater knowledge about the elements that constitute this Outstanding Universal Value through research initiatives (the history of the establishment of these landscapes, agronomic approaches, etc.);

• mediation among all publics, inhabitants, visitors and young publics alike, arising from a multifaceted policy that is at once educational (teaching kits), editorial (production of guidebooks) and events (exhibitions, world heritage days).

B. Regulation of the evolution of this landscape in the light of the site's Outstanding Universal Value:
This is a matter of handling the question of integrating any new architectural and landscape planning projects, along with any adaptations in agricultural practices, from the standpoint of the cultural landscape and heritage as well as in the light of contemporary expectations. The evaluation of project compatibility with the OUV assumes the implementation of:
• an advisory board composed of experts working with the economic decision-makers and territorial management authorities.
• Pilot projects to test new forms of governance.
These two cultural landscape management principles require, above all, a project engineering structure that is dedicated to the site and in charge of organising on-site coordination and events, as well as of implementing UNESCO inscription recommendations. This role as site manager is a complementary one to that of being Government representatives who exercise, on behalf of the public responsibility accepted with respect to UNESCO, the role of monitoring and verifying the outcomes of the actions implemented.

7.2.3 A CULTURAL LANDSCAPE'S ADDED VALUE – AN ADVANTAGE FOR THE FUTURE OF WINEGROWING

The fact that a site's landscape management is being taken into account has become a key economic argument when planning for the future of these winegrowing territories and, in particular, with regard to appropriating the cultural values and the control over the evolutionary progress of these areas:

A. These vineyard landscapes are the expression of centuries old wine civilisations that are original, unique and, above all, that cannot be relocated because they are specific to a geographic location and to a history, as well as to the spirit of the genius loci of the place and its reinterpretation over the course of generations. The reaffirmation of these singularities serves as a response to the internationalisation of production and to the standardisation of certain types of consumption. Clarifying the complexities of a vineyard landscape for a broad public has become a vital advantage when selling the fruits of that landscape.

B. Control over the evolutionary progress of these landscapes is also fundamental. It is a question of simultaneously ensuring the sustainability of the 'production facility' that grapevines represent, of safeguarding it from urban sprawl or 'scattering', from agricultural abandonment and, above all, promoting environmentally-friendly cultivation practices as the guarantee of quality production. The ecological management of land, the architectural quality of buildings, and taking the landscape qualities of the terroirs into account have all become economic arguments used to defend a European winegrowing sector that is increasingly confronted by fierce competition from the winegrowing industry in the New World.

Picture 55 - La Coulee de Serrant: one of the famous expressions of the cultural landscape of Val de Loire

Picture 56 - the Val de Loire cultural landscape : a fusion between nature and culture, heritage river fronts and large vineyards areas over the hills of the river

This added value, conferred by taking into account cultural landscapes, requires networking among all the public and private decision-makers, as well as the involvement of the inhabitants and stakeholders. The Management Plan provides overall guidelines that couple commercial interests – and those of winegrowers in particular (merchants and producers) – with the objectives of safeguarding the cultural, environmental and landscape values of a territory, all goals defended by the inhabitants.
The proper management of a cultural landscape cannot be achieved without the support of everyone, including the inhabitants and decision-makers in any given territory, standing behind the same sustainable cultural project. The quality of this management inevitably leads to aesthetic landscapes. These principles, which were tried and tested during the Renaissance, are the same ones now being recommended by the European Landscape Convention.

7.3 GOVERNANCE AND MANAGEMENT PRIORITIES FOR VITOUR SITES

7.3.1 FORMS OF GOVERNANCE

The forms of governance implemented at the sites reflect the considerable institutional diversity in Europe, as well as the diversity of the economic stakes in the winegrowing sector. All the Vitour sites have dedicated management dispositions that can be divided into two main types:

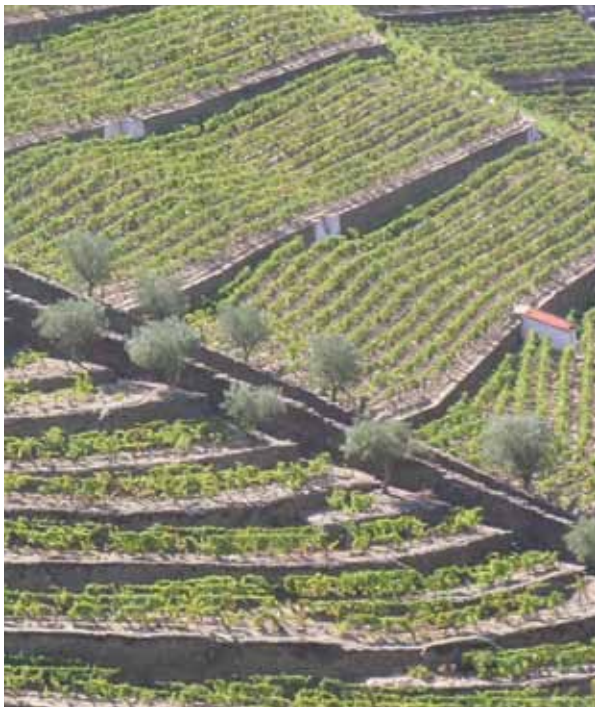
- the "institutional" disposition, taken on by the national and/or regional Public Authority (France, Italy, Switzerland, Portugal) where the balance between the centralised and decentralised government authorities is specific to each country. The way these systems operate and their actions are financed within the framework of public, national and territorial policies.
- a "local community" disposition, taken on by special interest groups who benefit from the support of regional public authorities (Germany, Austria, and Hungary). The initiatives launched under these dispositions are largely financed by the own contributions of the members.

All these structures as a whole play coordination, awareness raising, project structuring and expertise roles, but they do not all take into account the interests of economic stakeholders in the same way, and especially those of professionals in the winegrowing and tourism sectors. In the case of a Local community disposition, these latter are directly involved in landscape management in their decision-making capacity as members of steering committees, whereas they are only consulted in the case of an institutional disposition where the State's role is more coercive because it carries a collective development strategy over the medium and long term.

Is the appropriate management for a landscape an approach primarily built as and when decision-makers express their volition or is it, above all, one of implementing guidelines for a long-term territorial project? Each site offers an answer that is a compromise between these two approaches. Such a compromise is also prompted by the actual scale of intervention: managing the 987 ha at the Pico Island site (Azores Archipelago) is inevitably very different from managing the 24,600 ha at the Alto Douro site.

Finally, the major wine production regions (Val d'Orcia-Montalcino, Upper Douro, Tokaj, Val de Loire) do not have the same priorities as sites where wine production has a greater emblematic heritage value than a determinant economic value (Pico Island, Cinque Terre Park). In the first instance, landscape management will have to settle conflicts arising from the profitability of the winegrowing sector versus the requirements of heritage landscape conservation, whereas the key issue for the other sites will be to search for alternative agricultural resources to counter the abandonment of land use and of vineyards.

Picture 57 - Landscape architecture in the Alto Douro: optimising wine production



Picture 58 - Landscape architecture in the Alto Douro: a constant search for equilibrium between preserving a heritage landscape

These forms of governance, which differ depending on the economic stakes involved in wine production and in the institutional and administrative cultures, agree on one observation: the need to take into account the landscape heritage so it becomes the unifying thread that determines the economic future of such territories.

Picture 59 - Renewed cultivation of the abandoned vineyards at Kaub (Fortified castle of Gutenfels)

Picture 60 - A heritage landscape restoration project that is underway in the Upper Middle Rhine Valley

Picture 61 - The reintroduction of wild horses along the lakeshores of Fertö Neusiedlersee (Austria)

7.3.2 THE GOOD PRACTICES THAT ADD VALUE TO THE LANDSCAPE

What are the good practices that add value to the landscape? The analysis of the compilation of good practices drawn up as part of the Vitour Landscape project provides the following answers:

7.3.2.1 AGRICULTURAL TRANSFORMATIONS THAT RESPECT THE OUTSTANDING UNIVERSAL VALUE OF THE SITE

We note major vineyard landscape restoration work (the restoration of the vineyard terraces in the Upper Middle Rhine Valley) and, more broadly, agricultural (the restoration of the alluvial fields and the development of cattle grazing in the Val de Loire and in Fertö-Neusiedlersee) or the establishment of diversified cultivation to maintain the landscape by reintroducing cherry cultivation (Upper Middle Rhine Valley, Fertö-Neusiedlersee) or aromatic herbs (Cinque Terre). These transformations are accompanied by agro-environmental measures to conserve, if not enrich, the biodiversity of these areas. These agricultural transformations often occur within the framework of a public land policy (observatory, pre-emptions, public landholding).

Picture 62 - The protection of biodiversity through the Vitiswiss and Vinatura certifications awarded in Lavaux (Switzerland)

7.3.2.2 REGULATING ARCHITECTURAL AND LANDSCAPE EVOLUTIONS

Improvement in architectural and landscape quality is the second orientation common to all the sites; it lies on public incentives and regulatory policies as well as on project approaches (planning competitions for public riparian areas, river banks and adjacent belvederes (Wachau, Val de Loire, Upper Middle Rhine Valley), as well as architectural and landscape guidebooks (Rhine Valley, Val d'Orcia, Cinque Terre). Emphasis is often placed on the participation of the inhabitants who are consulted in local planning choices. In Switzerland, for every project, local democracy by way of referendum is the common rule, but it is less usual in other parts of Europe.

7.3.2.3 MEDIATION WITH A TOURISM VOCATION

We note a reinforcement of the mediation tools and the dedicated signposting strategies involving the inhabitants, who have become the ambassadors of their territory with respect to visitors. This local involvement plays a part in the renewal of the tourism offer: projects that link the exploration of the winegrowing heritage (vineyard landscapes, the constructed heritage, and know-how), the quality of accommodation and restaurants, and the networking efforts of professionals in tourism, winegrowing and the managers of cultural properties (châteaux, abbeys, museums, etc.).

Picture 63 - As of 2005, the Interprofession des vins de Loire has been organising a weekend each year to explore vineyard landscapes. The routes are defined and coordinated by the vintners and welcome over 5,000 people, both inhabitants and visitors. Certain circuits are signposted and can be used all year round

Picture 64

7.4 RECOMMENDATIONS FOR GOVERNANCE ADAPTED TO THE MANAGEMENT OF A VINEYARD CULTURAL LANDSCAPE

This summary of the initiative underway at the Vitour Landscape project sites concludes with a number of recommendations concerning the governance of a vineyard cultural landscape. We feel that such an initiative can only ensure the sustainability of the landscape's quality on condition it takes into account, cumulatively, the four following points:

- Knowledge and protection of the structuring elements of the landscape, and in particular of the geomorphological and anthropological characteristics that shaped the representations of the landscape recognised by the UNESCO inscription.
- The appropriation of these characteristics by the inhabitants and decision-makers to extend the understanding of what accounts for the site's landscape and its heritage quality from the individual to the entire community, and to establish a common public culture.
- A sustainable development strategy for the territory that defines the compatibility conditions for new projects to integrate them into the structuring elements that compose the heritage landscape.
- The implementation of projects that involve the inhabitants, because they are the 'end-users' of the landscape and the main players in its maintenance and its transmission to the coming generations.

This form of governance can only come from public action led by an institutional or European Community disposition that emphasises the solidarity underlying the common values of the landscape's aesthetics.

In the Val de Loire, management of the 6,000 ha of historical vineyard landscapes comes within the framework of a partnership associating the site manager, the Mission Val de Loire, with the Interprofession des vins de Loire: Interloire, to undertake research (correlations, or a lack thereof, between the heritage landscapes and the most highly prized wines) and knowledge pooling initiatives (colloquia, seminars, and workshops), along with oenotourism and protective initiatives (Protected Agricultural Zones).

The site's UNESCO Management Plan will consolidate these principles by generalising their application to the entire territory, in the name of a collective cultural project to shape the future of these areas. The aesthetics of these landscapes are those set out in the "Charte internationale de Fontevraud", which was implemented in 2003. It is gradually rallying the national and international vineyards that share the same preoccupations in order to safeguard this centuries old legacy of our heritage landscapes.

8. CONCLUSIONS
(Roberto Vezzosi)

8.1 THE ROLE OF KNOWLEDGE

An effective policy for the preservation and enhancement of vineyard landscapes in the UNESCO sites implies a strict correlation between the objectives of pursuit of and a good knowledge of the circumstances to work on. Only detailed knowledge of the territory can ensure the effectiveness of actions for its preservation and enhancement.
The central theme for the definition of territorial and landscape policies is the challenge to the complexity derived from the plurality and fragmentation of the players involved and it is directly related to the process of production and the transmission of knowledge.
In a new model of governance that implies the contribution both of the players involved and of the inhabitants, knowledge must play an important role as an instrument of confrontation and agreement; in order to achieve this aim, it has to be easily transmitted.
First of all, it is necessary to improve general sensitivity on the themes related to the landscape, in the widest meaning of the word, acknowledging its values as ecosystemic, identity-making, affective, symbolic and cultural, as well as economic and functional. A careful analysis of the conditions in which agricultural activity occurs brings out then all the features that form the frail elements of a landscape acknowledged as being of outstanding value. The real challenge is to set up innovative methods and instruments through which inhabitants and local players can contribute to a shared creation of knowledge based on their sensitivity and competence.
The complexity of rural phenomena calls for new talents for analysis and management, decision and planning, to be performed both by planners and administrators who should learn how to listen and then talk to everyone. Besides sharing, knowledge must be updated and updatable; it should find a new impulse in the use of new instruments – like the spatial analysis of the territorial data – that enable integration of technical and administrative management, and also the simulation of effects caused by the transformation of the territory. The GIS (Geographic Information System) is the most effective system for this kind of analysis, allowing constant updating and a regulated return of data; thus it is an instrument of primary importance for the management of territorial transformations and the control of its effects.

8.2 THE DEFINITION OF TERRITORIAL POLICIES SHOULD BE ACHIEVED THROUGH CONSULTATIONS AND THE ACTIVE PARTICIPATION OF ALL THE SUBJECTS INVOLVED

The main feature of the instruments for management of the rural landscape has an argumentative rather than a prescriptive role, typical of a moral suasion, trying to influence and generate long-sought actions without resorting to the rigour of rules and regulations. It is manifest that the territorial authorities can only affect the regulations and the arrangement of cultivation to preserve the landscape to a limited extent. A successful programme guideline should require the active participation of farmers who constantly transform the territory with practical acts often out of the need to control costs and to improve the quality of production. Therefore, it is necessary to create an arena of debate that should benefit from the participation of commercial farms and the contribution of experts. This arena should involve and listen to local expertise as well as to the inhabitants whose interests, in some circumstances, may be in contrast with those of the commercial farmers and who, regardless of all economic motives, value landscape as the environment of their life. At this point the two players previously mentioned, Insider and Outsider, should be recalled; the difference in their points of view may create disputes about territorial management – identity (functional to social organisation) on one side, leisure on the other.
The content of all policies and strategies related to the landscape should be discussed in depth among the main interested parties, along with a more formal participatory process, yet open and extended as much as possible.
Once shared goals and strategies for landscape management are set out, it is advisable to gather a shared repertoire of good company practice instead of creating rules and prescriptions. Each player interested in the process should draw from this repertoire according to his/her own experience and needs.
Finally, good management - as well as in-depth knowledge - requires collaborative relationships among territorial

authorities and the distribution of associated expertise. It is strongly advisable to formulate coherent policies at the various levels of territorial management; the aim is to adapt the behaviour of the most active subjects in relation to the landscape transformations even through incentive actions.

8.3 HOW TO GIVE A NEW IMPULSE TO THE LOCAL INNOVATIVE AND DEEP-ROOTED ENTREPRENEURIAL ACTIVITY

It is manifest that the profound socio-economic differences among VITOUR partner territories make it more difficult, if not impossible, to set out incentives valid for such different environments. Yet the choice of spreading the expertise at a local level can be announced as a measure to achieve economic development as well as social and cultural growth.
The small and medium agricultural enterprise - or any enterprise at its service, even if associated – can strengthen the roots of the economic development produced by the success of wine and increase the quality of the territory to attract new investments.
In view of the above, there is a strong interest in substantially stimulating two kinds of players: those who already work in the sector and are about to offer some high quality products and market them at a retail level; and those who do not work in the field but can contribute to increasing the links in the agricultural production chain, grafting on new expertise and players who pay attention to the quality of the territory and the landscape involving young and innovative enterprises.
Typical complementary productions (livestock farming, fruit and vegetable production, yield from the woods and food and wine activities in general) as well as other linked activities consisting of advanced services (expertise, environmental services, training course centres, handicrafts) extend the production basis of the different places and bind enterprises closer to the territory they belong to. Moreover, the increase of enterprises in the production chain encourages the assertion of competitive agricultural and high quality production. The rise of the two previously mentioned entrepreneurial figures introduces a new way of looking at the winegrowing and producing profession and is capable of binding new productions to the territory according to the terroir concept. This new approach can also be achieved by establishing clubs, cooperatives, unions or associations able to intercept new forms of investment and financing according to the intended direction of landscape and environmental sustainability.

8.4 HOW TO IMPLEMENT POLICIES FOR THE MANAGEMENT OF THE ENVIRONMENT

Assuming a complex notion of environmental quality that extends beyond a mere delimitation of natural areas and is more perceptive to diffused improvement in the conditions of biodiversity and ecologic connectivity, then agricultural enterprises face complex scenarios which require lasting and effective answers. The connections between wine growing and the protection of the territory are manifest indeed. Particularly in the anthropic territories, it is necessary to intervene to avoid further imbalances in the complex man-society-environment relationship and, most of all, to act within a general policy of the territory that ascribes to winegrowing a role to complement the management both of the forests and fauna and protection from hydrological risks and pollution.
Should life and production become integrated, then it is possible to set common goals for the renewal of the environment. Local authorities, enterprises, farmers and inhabitants should be given responsibility for making choices for planning and investment but also in the quality of planning and, most of all, in implementing and the daily management of the landscape resources and their maintenance. They should not confine their responsibility to the mere defence of the landscape qualities of excellence; instead they should mobilise investments and ideas to retrain and redress precise fields and elements with features of deterioration and social, biological and landscape impoverishment.
Not only does the reintroduction of the rule of sustainability of agricultural land align itself with the aims for the preservation of the values of UNESCO Heritage, it also coincides with farmers' actual interests. The awareness of erosive risks, for example, is certainly part of farmers' practical culture and the problem of fertile substances being washed off hill farmland is particularly critical; if erosion is not brought to a halt before reaching the non-tillable beds (i.e. rocky or sterile) the agronomic-environmental structures could suffer irreversible damage.
The recent transformations in winegrowing production activities tend to reduce ecological connectivity through the increase in dimension of the areas under vines and the reduction of inter-cultivation vegetation.
The areas more suitable for winegrowing are often affected by the presence of complex agricultural and agro-forest mosaics and diffuse elements of biodiversity (hedges, rows or isolated trees); often, they come under the EU definition of agricultural areas of high natural value and represent

the key elements in the regional ecological system as buffer areas in comparison with natural areas and subsidiary habitats. Moreover, apart from the obligations related to the quality of the product and productivity in general, winegrowing and production should consider all aspects related to consumer health and impacts on the environment, both on a local and territorial scale. The use of certain products for the protection of plants and the management of agricultural land – likewise waste and effluent disposal - are subject to increasing restrictions connected to the environment and to consumer health.

When using techniques compatible with the historical landscape and the preservation of the quality of the basic environmental resources (water, soils, ecosystem), the production of healthy, safe, local and high quality products can be considered in itself to be a measure for the development policy of the sector.

The environmental analysis, at the basis of sustainability, justifies a transversal and often interdisciplinary approach that integrates both the negative and the positive externalities.

By applying this concept of sustainability to winegrowing, not only must the economic factor of agricultural property be considered but also all the induced financial aspects (externalities) connected to indirect factors (tourism, fire fighting and hydrogeological risks, territorial layout) and, finally, the negative consequences (water pollution and flows, etc.). Such considerations should support the creation of European, national and regional public funds without which certain winegrowing sectors - those operating in less remunerative contexts- could disappear. The protection of the environment - a technical, regulatory and social issue – is progressively integrated into the majority of technical and oenological developments in high-quality winegrowing enterprises. In the final analysis, a successful landscape policy is notable for a wisely weighted mixture of strategies for prevention, protection and cooperation.

Even in this case, progressive understanding of complex biological phenomena and the professionalisation of the sector should be considered as elements that will contribute, in the future, to the development of sustainable winegrowing and production, the latter being increasingly necessary considering that wine is closely connected to cultural ambitions that increasingly complement environmental restrictions.

8.5 HOW TO INTERPRET THE MULTIFUNCTIONAL ROLE OF AGRICULTURE IN DIFFERENT LANDSCAPES

Even when evaluating the potential that can be assigned to the multifunctionality of winegrowing, we should also consider the profound differences that distinguish winegrowing itself from the different economic force it has among VITOUR partners.

The subject of multifunctionality certainly crosses the topic of risks and problems that should be dealt with thoroughly in every single context.

It is a matter of verifying the opportunities and frailties in different rural contexts, or rather the existence of frail resources that are either underestimated (opportunities) or at risk on account of certain strains (environmental, economic, social, infrastructural, etc.). On the production chain that connects winegrowing, culture, environment, nutrition, rural hospitality, local products and handicrafts, there are still some areas where tourism is the main economic motive while in others it is difficult to create a network of activities and services. Environmental and cultural resources can attract tourists but they are not adequate; in order to benefit from these attractions it is necessary to offer a series of services defined as instrumental factors.

Among these factors, the most important are accessibility and the presence of accommodation facilities; the first is intended both as providing a transportation system and road signs that enable people to reach their destination. The latter is connected to different elements offering food and tastings, strictly linked with the production of wine and the system networks of the various players working in the territory.

In any case, it is essential to:

- Promote coordination among the various players: the tourism product in UNESCO winegrowing and production areas is a complex factor and it should include close integration with other sectors; on this point the territorial authority has a relevant role as coordinator on an adequate scale both for promotion and training and for cooperation between private enterprises;
- Promote the participation of the residents who, especially in contexts of low settlement density, should benefit from the services offered to the tourists and greater economic and social vitality in the territory, instead of being at a disadvantage;
- Organise some basic services (e.g. the management of waste disposal, road systems and local transportation, information services, networks in general);
- Define a mobility set-up that deals with travel needs and to guarantee the health and safety of the residents and, at the same time, is capable of maintaining a balance between the development demands of the access system and the preservation of the environmental and landscape resources.

Finally, as stated in the previous paragraph, it is important to consider environmental maintenance, the management and protection of winegrowing landscapes, an essential constituent of the cultural heritage that contributes to assigning a multicultural role to winegrowing and production. This new role can be the starting point for more interesting ideas to establish a positive relationship between ecology and territory. In any case, environmental maintenance and management are connected to the creation or presence of infrastructures that guarantee continuity and the active participation of farmers, the main player on the landscape.

BIBLIOGRAPHY

PREFACE AND INTRODUCTION

AUDRERIE Dominique, SOUCHIER Raphaël, VILAR Luc, Le patrimoine mondial, Paris : P.U.F., 1998.

BERLAN-DARQUÉ M., LUGINBÜHL Y., TERRASSON D. (sous la dir. de), Paysages : de la connaissance à l'action, Paris : Quæ, 2008

BATISSE, Michel, et BOLLA, Gérard, L'invention du « patrimoine mondial », Les Cahiers d'Histoire, Paris : AAFU (Association des anciens fonctionnaires de l'Unesco), 2003 (Cahier n° 2).

BLAKE Janet, « On defining the Cultural Heritage », The International and Comparative Law Quarterly, vol. 49, n° 1, 2000, p. 61-85.

BIAGIOLI, Giuliana, I paesaggi UNESCO tra eccezionalità e quotidianità. Gli effetti economici dell'iscrizione nella WHL in termine di aumento del turismo e di plus-valore simbolico, in «Siti. Trimestrale di attualità e politica culturale», a. IV, n, 3, 2008, pp. 28- 33.

BIAGIOLI, Giuliana Le Parc national de Cinque terre, in Valeurs universelles, valeurs locales: pour qui, pour quoi un site est-il grand?, Paris: ICOMOS France- Ministère de l'Ecologie, Ministère de l'Ecologie, de l'Energie, du développement durable et de la mer, pp. 151- 157

BRIFFAUD Serge, « Le paysage comme patrimoine. Réflexion sur l'histoire récente d'une patrimonialisation des apparences », dans Le regard de l'Histoire, Emergence et évolution de la notion de patrimoine au cours du XXème siècle, Actes des Entretiens du patrimoine, Paris :Fayard, 2003, p. 243-252.

BROCHOT Aline, CROS Zsuzsa, LUGINBUHL Yves, Analyse comparative de la construction sociale et territoriale du patrimoine dans les vignobles de Champagne et de Tokaj (Hongrie), Strates/ Ministère de la Culture-Mission du Patrimoine Ethnologique, 1997,111 p. + annexes.

GAMBINO Roberto, Conservare innovare. Paesaggio, ambiente, territorio, Torino : Utet Libreria, 1997.
«Cultural Landscapes : the challenges of Conservation », World Heritage Papers 7, Paris :Unesco, World Heritage Centre, 2003.

GRAVARI-BARBAS Marie (dir.), Habiter le patrimoine: Enjeux, approches, vécu, Rennes :Presses Universitaires de Rennes, 2005, 618 p.

JOKILEHTO Jukka et al., « What is OUV ? Defining the Outstanding Universal Value of Cultural World Heritage Properties », Monuments and Sites, n°XVI, 2008 (ICOMOS). Les paysages culturels viticoles, ICOMOS, 2004

MERODE Eléonore De, SMEETS Rieks and WESTRICK Carol (edited by), « Linking Universal and Local Values: Managing a Sustainable Future for World Heritage », World Heritage Paper 13, Paris : Unesco, World Heritage Centre, 2004

Paysages de vignes et de vins. Patrimoine-Enjeu-valorisation, Colloque international, Abbaye Royale de Fontevraud, 2,3, et 4 Juillet 2003, InterLoire, Pôle Technique, 2003

BRIFFAUD, Serge, BROCHOT, Aline, Paysages d'exception, paysages au quotidien. Une analyse comparative de sites viticoles européens du Patrimoine Mondial, 2010, http://paysage-developpement-durable.fr

World Heritage 2002. Shared Legacy, Common Responsibility An International Congress organized by UNESCO's World Heritage Centre and Regional Bureau for Science in Europe (ROSTE) with the support of the Italian Government on the occasion of the 30th anniversary of the World Heritage Convention, Cini Foundation, Island of San Giorgio Maggiore, Venice, Italy,14–16 November 2002. , UNESCO World Heritage Centre, Paris 2003

CHAPTER 03 "ECOLOGICAL SYSTEM"

Besio M. (2002), Il vino del mare; il piano del paesaggio tra i tempi della tradizione e i tempi della conoscenza, Marsilio, Venezia ISBN 8831779818

Ingegnoli V., Pignatti S. (1996), L'ecologia del paesaggio in Italia, Città Studi Edizioni, Torino ISBN 8825101104

Magnaghi A. (a cura di, 2007) Scenari strategici. Visioni identitarie per il progetto di territorio, Firenze, Alinea ISBN 978-88-6055-1

McHarg I. (2007), Progettare con la natura, Franco Muzzio Editore, Padova ISBN 978-88-7413-152-5
McHarg I. (1969), Design with nature, Doubleplay & Company, Inc. Garden City, New York

Marchese F., Marchese S. (2005), "Valorizzazione del patrimonio agricolo e trasformazione degli agroecosistemi" in Urbanistica Informazioni n°200 marzo-aprile, pp. 29-31

Todaro V. (2010), Reti ecologiche e governo del territorio, Franco Angeli, Milano ISBN 9788856825008

CHAPTER 04 THE AGRARIAN/RURAL ORGANISATION OF SPACE, PRODUCTION AND PRODUCTIVITY: ITS CHARACTERS

Azzari M., Rombai L. (1991), "I quadri paesaggistici delle regioni collinari" in Greppi C., a cura di, I paesaggi delle colline, Marsilio, Venezia.
Baldeschi P. (2010), "Introduzione", in F. Lucchesi a cura di, "La carta del Chianti" , Passigli, Firenze.
Carta M. (2011), "Lara presentazione nel progetto di territorio", Firenze University Press, Firenze.
Lucchesi F. (2010), "Il quadro conoscitivo", in F. Lucchesi a cura di, "La carta del Chianti" , Passigli, Firenze.
Sereni E., (1961), "Storia del paesaggio agrario italiano", Laterza, Roma-Bari.
Secchi B. (1988), "Siena", Casabella 545.
Tosco C. (2007), "Il paesaggio come storia", Mulino, Bologna.

CHAPTER 05 "SETTLEMENT DEVELOPMENT AND ARCHITECTURE"

Initiative Baukultur für das Welterbe Oberes Mittelrheintal (Hrsg.) (ohne Jahr): Leitfaden Baukultur. Anregungen, Tipps und Ideen für das Bauen im Welterbe Oberes Mittelrheintal. Koblenz (D)

Initiative Baukultur für das Welterbe Oberes Mittelrheintal (Hrsg.) (ohne Jahr): Leitfaden Farbkultur. Analysen und Anregungen für das farbliche Gestalten im Welterbe Oberes Mittelrheintal. Koblenz (D)

VITOUR LANDSCAPE PROJECT PARTNERS

PARCO NAZIONALE DELLE CINQUE TERRE
Italy (Lead Partner)
www.parconazionale5terre.it

VEREIN WELTERBE FERTÖ-NEUSIEDLER SEE
Austria (Partner No. 2)
www.welterbe.org

SYNDICAT MIXTE INTERREGIONAL " MISSION VAL DE LOIRE"
France (Partner No. 3)
www.valdeloire.org · www.paysagesduvaldeloire.fr

ARBEITSKREIS WACHAU REGIONALENTWICKLUNG
Austria (Partner No. 4)
www.arbeitskreis-wachau.at · www.wachau-dunkelsteinerwald.at · www.vinea-wachau.at

ZWECKVERBAND WELTERBE OBERES MITTELRHEINTAL
Germany (Partner No. 6)
www.welterbe-oberes-mittelrheintal.de · www.welterbe-mittelrhein.de

COMUNE DI MONTALCINO
Italy (Partner No. 7)
www.montalcinonet.com · www.parcodellavaldorcia.com

COMISSÃO DE COORDENAÇÃO E DESENVOLVIMENTO REGIONAL DO NORTE
Portugal (Partner No. 8)
www.ccdr-n.pt · www.ccdr-n.pt/emd

COMMISSION INTERCOMMUNALE DE LAVAUX
Switzerland (Partner No. 10)
www.lavaux-unesco.ch

TOKAJ HEGYALJA, TAKTAKÖZ, HERNÁD VÖLGYE IDEGENFORGALMI ÉS KULTURÁLIS EGYESÜLETE
Hungary (Partner No. 11)
www.tokaj-turizmus.hu

AZORINA - SOCIEDADE DE GESTÃO AMBIENTAL E CONSERVAÇÃO DA NATUREZA, S.A.
Portugal (Partner No. 12)
parquesnaturais.azores.gov.pt

www.vitour.org · http://db.vitour.org · http://my.vitour.org

Biographical notes on the authors

Emmanuel Estoppey
Site Manager of Lavaux, World Heritage Site since 2007 and member of the Committee for the Association of the UNESCO Swiss World Heritage Sites.

Filinto Girão
Architect graduated by the School of Architecture of University of Porto, SAUP (1995), had a scholarship of Gulbenkian Foundation in 1986/88. Master in Methodologies for Intervention on Architectonic Heritage by the SAUP (2007). Is working since 1996 for the North of Portugal Regional Coordination and Development Commission (CCDR-N), having developed functions related with territorial management as well as with cultural heritage. Since 2008 is on the Douro Mission Team.

Francesco Marchese
graduated in Environmental Sciences, in his professionals and research activities deals with planning and environment management; he cooperates with the National Park of Cinque Terre, with the faculty of Architecture of Genoa and with IRTA Leonardo Institute of Pisa University. He was engaged in european projects and national and international researches regarding landscape management and representation, with a special focus for UNESCO cultural landscapes.

Giuliana Biagioli
Professor of Economic History, University of Pisa. President of the Leonardo-Institute of Research on Environment and Territory. Academic curriculum: Scuola Normale Superiore of Pisa; London School of Economics. Main fields of interest: history of agriculture, history of the cultural landscapes, demographic history, social history. Her researches have been based particularly on non-edit sources, with a multi-disciplinary approach. She promoted and has participated in many projects dealing with rural societies and historical landscapes in continental Europe from the XVIIIth to the XXth century.

Jeanne Corthay
She has been working for 2 years for the World Heritage Site of Lavaux and was strongly implicated in the ViTour Landscape Project.

Michael Schimek
Born 1972 in Vienna, Austria. Studies of spatial planning and landscape architecture at Technical University Vienna, Austria, and Swedish Agricultural University in Alnarp, Sweden. Site manager of World Heritage cultural landscape Wachau since 2002. Own consultancy since 2010. Lecturing on regional management at Brandenburg Technical University in Cottbus, Germany, at AINova in Svaty Jur, Slovak Republic, and by appointment of the European Commission in Romania and Bulgaria.

Michèle Prats
Born in 1939 in Paris. (English and Russian MA, Oriental Languages National Institute (Russian), National school of Administration in Paris - ENA, National Institute of Oenology of Bordeaux). She has been a high civil servant in various Ministries (Culture, Transport, Urbanism and Environment). General Inspector of Equipment (CGPC 1995-2005) in charge of heritage, landscape and environment, and the author of many reports on the subject. She has also been the PR Director of Bordeaux châteaux: Cos d'Estournel, Petit Villages and Marbuzet (1987-1991). Vice-President of ICOMOS France, since 2005, and President of "Forêts d'Exception", a scientific council of ONF.

Myriam Laidet
Sustainable project manager of "Mission Val de Loire-Patrimoine mondial" until 2002. Geographer and urban landscape planner, she coordinated the implementation of the UNESCO Management Plan for the Imperial Capital of Huê (Vietnam) prior to devoting herself to drawing up and coordinating the Management Plan for the Val de Loire UNESCO site. She launched the European Network of World Heritage Vineyards in 2005. She is developing international research partnerships about the management of river cultural landscapes, including cultural vineyards landscapes.

Roberto Vezzosi
Architect and urban planner, since 2002, is an active member of the National Institute of Urban Planning (INU and for many years he'is planning and consulting for the public government. After having been part of the project team of the PTC of the Province of Prato (2003), coordinated the study of important structural plans and zoning regulations - including Poggio a Caiano, Montepulciano, Asciano, Vernio, Montalcino, Siena Torrita, Nonantola (MO), Ponte Buggianese and Monsummano Terme and Vicchio in Mugello. During the experiments carried out in the context of great landscape value and particularly suited to viticulture, has explored different aspects of the management and transformation of rural areas. Expert consultant for the Municipality of Montalcino as part of the European project VITOUR Landscape - Interreg IVC, was also involved as an expert planner in 2006/07 on behalf of the Project Manager City of Prato, the District Community Programme (Interreg IIIC) and subproject PICTURE (Promoting Innovative Clusters Through Urban Regeneration), for the study and evaluation of policies, plans and methods of some European cases (Birmingham, Leeds, Manchester, Sheffield, Huddersfield, Bradford, Barcelona) with strong de-industrialization.

Sara Scheer
Born 1985 in the Upper Middle Rhine Valley, studied Geography at University of Mainz and is working since 2010 for the Administration Union Upper Middle Rhine Valley.

Credits

Edited by:
Giuliana Biagioli, Michèle Prats and Joachim Bender

Technical coordination of the edition:
Filinto Girão, Vitor Devesa, Stefan Moritz

ViTour Landscape Project Management:
Vittorio Alessandro (President of National Park Cinque Terre), Patrizio Scarpellini (Director of National Park Cinque Terre), Giuliana Biagioli (Knowledge Manager and leader of Expert team), Michéle Prats & Joachim Bender (Expert team), Stefan Moritz (Senior Project Manager), Marco Foschini (Senior Financial Manager), Francesco Marchese (Junior Project Manager), Silvia Paolillo (Communication Supervisor), Daniele Moggia (webmaster), Michael Wagner (web-editor).

Graphic Design:
Expactive – Tiago Ribeiro, Porto (P)
Formid'graphic, M. Colin Montet (CH)

Translations:
Graça Spratley & C^{a}, Lda., Porto (P)

Printed in Italy, Oct./Nov. 2012

Many thanks to all executives and collaborators of all 12 partner organisations, as well as to all consultants and experts involved, which all contributed to the success of our common work since the ideation and planning of the project in 2007-2008!

In the same way we want to thank very much the INTERREG IVC Managing Authority, Region Nord-Pas-de-Calais (F), and the Joint Technical Secretariat, and in particular our project officers Mrs. Kelly Zielniewski and Mr. Mahesh Bhardwaj, that supported the ViTour Landscape project, its partners and the project management team so generously!

Photo credits:
Covers, preface, introduction and conclusions:
Christoph Sonderegger, Sébastien Staub, József A. Tóth, Laurent Massillon, Mission Val de Loire, Legambiente Liguria, Régis Colombo/diapo.ch, Richard Giefing, vision-air.ch, montreuxriviera.com, Weissenkirchen, Gamerith, Romantischer Rhein, Thomas Merz, Hans-Peter Siffert, Rüdesheim Tourist AG, Parco Nazionale Cinque Terre, Massimo Bindi

Chapter 02: Michael Schimek, Bierbaum.Aichele. landschaftsarchitekten/PGM-Architekten.Innenarchitekten, Jean-Pierre Houel "The Loire between Amboise and Lussault, Musée des Beaux-arts de Tours" provided by Mission Val de Loire, Günter Kargl, Petr Blaha, Fernando Oliveira, Anna-Marie Lun

Chapter 03: Cinque Terre National Park, Davide Marciasini, Francesco Marchese

Chapter 04: Massimo Bindi, Francesco Ripaccioli, Lucrezia Messina, Parco delle Cinque Terre

Chapter 05: Hubertus Jäckel, Architects Heidger, Architects Johannes Götz and Guido Lohmann, Torsten Raab, Michael Jordan, Büro stadtland, Architect Francisco Vieira de Campos, Filinto Girão / Douro Mission / CCDR-N, Rothkegel

Chapter 06: Christoph Sonderegger, Cinque Terre National Park, Francesco Marchese

Chapter 07: The Allegory of Good and of Bad Government – Scenes from the frescos by Ambrogio Lorenzetti between 1337 and 1340 at the Palazzo Publico in Siena, Italy. Copyright Municipality of Siena

Richard Giefing, Nationalpark Neusiedlersee-Seewinkel, Foto Pico, Régis Colombo/diapo.ch, Romantischer Rhein , DLR, Laurent Massillon / Mission Val de Loire, Vinea Wachau, Myriam Laidet, Interloire

The European Guidelines for Wine Cultural Landscape Preservation and Enhancement are also available for download in Italian, French and German on the ViTour Landscape web page on www.vitour.org.

ViTour
European World Heritage vineyards
www.vitour.org

INTERREG IVC
INNOVATION & ENVIRONMENT
REGIONS OF EUROPE SHARING SOLUTIONS

European Union