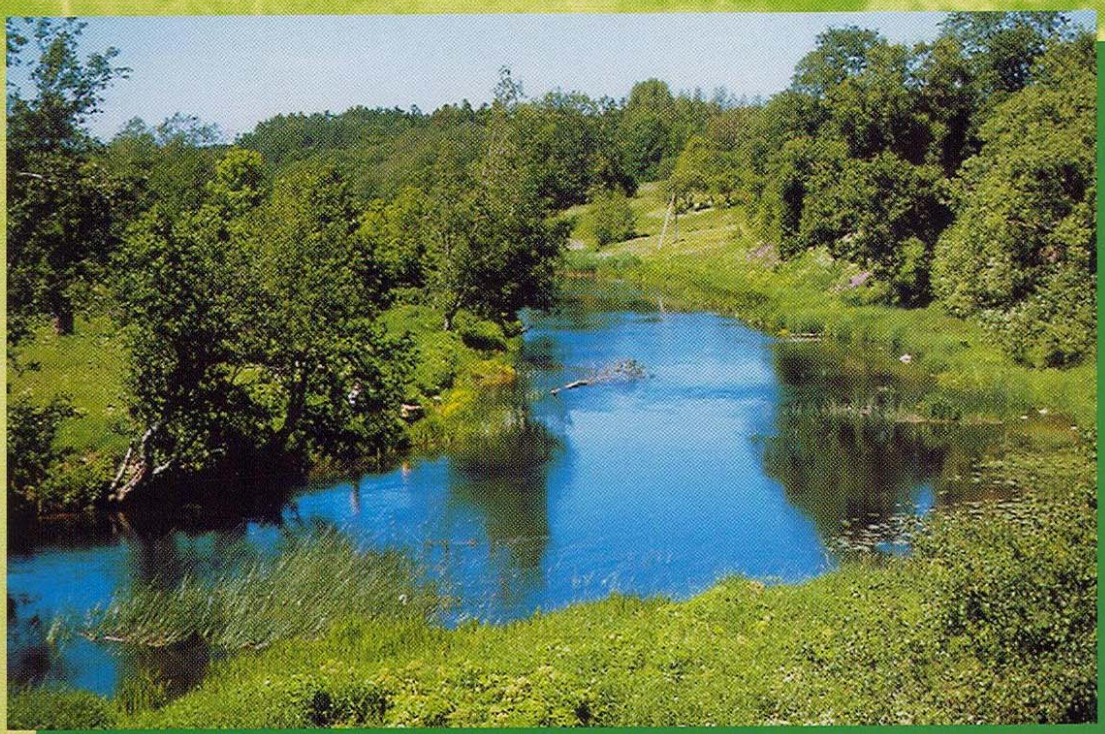
The Latvian Agricultural Advisory and Training Center

THE ABAVA RIVER VALLEY DEVELOPMENT PLAN



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The Abava River Valley Development Plan

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Preface and acknowledgements

Preface

Already at the start of the Eurograssland project it was clear that the protection and restoration of the valuable botanical grasslands in the Abava valley can only be sustainable when it goes hand in hand with economic development and perspectives for the rural inhabitants and the rural entrepreneurs. This Abava valley Development Plan is therefore an important result of the so-called Eurograssland project and it will give an impulse to an integrated approach on rural development in the valley. The plan will also be a useful document when applying for subsidies under the SAPARD programme and other EU or Dutch programmes.

Crucial for elaborating and implementing the projects proposed in the development plan is to set up a solid organisational structure. The priority given to the establishment of an "Abava Rural Development Centre" is, I think, a very good first step. It will help to mobilise the inhabitants of the Abava valley for regional development. I hope that the organisations in the Abava valley – like the Latvian Agricultural Advisory and Training Centre, the Tourism Information Centres and the municipalities – take the initiative to set up an adequate structure. I also hope that the people who will be involved in developing and implementing the rural development process will not hesitate, if necessary, to ask for support from the province of Overijssel or other Dutch partners. This needs not only include financial support, but also support in terms of knowledge and experience on integrated rural development.
This could lead to a fruitful co-operation between the Abava valley and the province of Overijssel and to exchange of knowledge on rural development based on an, as we call it, "area-oriented approach".

Anne de Boer
Province of Overijssel, co-ordinator Eurograssland project
May 2001

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Contents

1 Introduction

The Abava is the biggest right coast tributary to the Venta river and is one of Latvia's 12,400 rivers. The middle section of the Abava river forms a 30 km long and 0,5 – 2,5 km wide valley, which has the status of protected area for some decades. The Abava valley together with the valleys of the side-rivers Imula and Amula forms a unique natural, cultural and historical landscape. The Abava valley within its 8,000 hectares summarises Kurzeme's natural, cultural and historical heritage, including a diversity of biotic and abiotic natural phenomena, reflecting centuries of interaction between nature and human activity. And as the protected status originally focused on cultural and historical values, the botanical values of the valley's grasslands and forests are now as well being recognised as an important feature.

The situation in the Abava valley and the motivation for actions

Like in many other Central and Eastern European countries, agriculture has been finding itself in a difficult situation in the 1990s. As a result, rural areas have been abandoned and large areas of agricultural land were no longer used. This is not only a problem for farmers and rural societies, but also for nature conservation, because agricultural land use is an important condition for the conservation of species-rich grasslands. This phenomenon has been quite apparent in the Abava valley, where formerly valuable grassland are now rapidly overgrowing with bushes and trees. This is a major threat to farmers, biodiversity and the status of protected area. As nature conservation and rural economy are closely linked, the valley and the organisations involved were facing the complex problem to try to enhance rural development ànd nature conservation at the same time. This challenge calls for an integrated and stimulating approach to the valley, its farmers and the organisations involved. As national and European policies are now enabling such an approach, there is a strong need to act at short notice. For this reason, this *Abava valley development plan* has been elaborated.

Co-operation in the context of the *Eurograssland* project

Since 1990, Latvia is co-operating with the Dutch province of Overijssel. In 1997, this co-operation was extended to conservation of species-rich grasslands, which have become one of the most endangered habitats in Europe. In the European Nature Conservation Year 1995, eleven Dutch provinces signed a declaration on *The Netherlands for European Nature*. In this declaration, contribution to nature conservation in Central and Eastern European countries is a major theme. Cross-European co-operation on nature conservation is also an important target in the Pan-European Biological and Landscape Diversity Strategy and in the Dutch *Programme on International Nature Conservation*.

In 1995, the so-called *Eurograssland* project was started, and in 1997, Overijssel joined this project. Aims of the project are:

- to join knowledge and forces in order to protect valuable grasslands in Europe;
- both by enhancing a less intensive use in intensive regions and by preventing grasslands from being abandoned;
- to promote sustainable management by farmers;
- to promote active co-operation between farmers, conservationists and policy makers.

As nature conservation, farming and rural economy are closely related, the province of Overijssel wishes to fulfil these aims within the necessary context of rural development.

Up to now, the project has been producing (among others) a botanical and an agricultural survey of the Abava valley and has been generating ideas for future development.

Aims of this development plan

The two central aims of this development plan are:

1. To collect and describe all relevant information on the Abava river valley and to clearly define the several strengths and weaknesses.
2. To indicate possible development options for the valley, including the policy instruments to be applied and the organisational tasks to be taken care of.

The report starts with an overview of the national agri-environmental situation, including relevant national and European policies (chapter 2). Chapter 3 includes detailed information on the Abava river valley. In chapter 4 we describe possible development direction of the valley, followed (in chapter 5) by an overview of prioritary activities. In chapter 6, these activities are re-formulated as future projects for the development of the valley, including budgetary and organisational aspects.

2 Agri-environmental situation in Latvia

Before we describe the situation in the Abava valley in more detail, we will pay attention to the general agri-environmental situation in Latvia. Central issues are:
1. The development of agriculture and biodiversity (§ 2.1).
2. National and European agri-environmental policies relevant to the Abava valley (§ 2.2).

2.1 Agriculture, environment and biodiversity in Latvia

2.1.1 Agriculture

Of the 6.5 mln. hectares of Latvia, about 2.5 mln. ha (39%) is agricultural land and about 2.9 mln. ha (44%) is forest. Of the agricultural land, about 2/3 is arable land and 1/3 is grassland. The agricultural area has been decreasing steadily and the forest area has been increasing: in 1935, land use shares were 57% (agriculture) and 27% (forest) (*State of the Latvian Environment* 1997). Between 1990 and 1996, major changes have been taking place in Latvian agriculture (*State of the Latvian Environment* 1997; Pirksts & Rozenberga; Tisenkopfs 1998):

- due to land privatisation, the number of land owners has been increasing up to about 300,000. The number of 'serious' farms however is much smaller (estimated at about 17,000);
- cattle densities have been decreasing by more than half. As a result, the amounts of manure have been diminished and on sandy soils, even soil fertility is decreasing;
- fertiliser and pesticide use have been decreasing by over 90% resp. 80% to averages of 23 kg of NPK per ha and 0.22 kg of pesticides per ha;
- as a result, the cultivated area has been decreasing by about 40%. In 1996, 278,000 ha of agricultural land were uncultivated. On the cultivated area, also the yields per ha have (except for potatoes) been decreasing.

Since 1996, production levels have been stabilised or are even increasing again, as is the use of agricultural inputs like fertilisers. Also the cultivated area is increasing slowly again. In 1996, there were about 64,000 family farms, 92 state farms and 617 statutory companies. The average size of family farms is about 20 ha (Pirksts & Rozenberga). Most farms are mixed farms with livestock and arable production. The arable crops are for livestock feeding as well as for sale. At the moment, dairy farming is not very profitable. The average milk production per cow is about 3,000 kg per year, while it is estimated that the production should be about 5,000 kg per year to make a dairy farm profitable. A major problem is the protein content of the milk, and thus the grass quality. There are, however, good prospects for milk production in Latvia. There seem to be good export opportunities to the east (Russia) and to the EU. About 35 dairy factories now have been qualified to export milk to the EU.

2.1.2 Environmental issues in agriculture

The main environmental problems related to agriculture are caused by intensive land use systems in past decades, when high levels of fertiliser and pesticides were applied and waste water was discharged directly into rivers (*State of the Latvian Environment* 1997). Since

1990, the environmental impact of agriculture has been decreasing by the decrease of fertiliser and pesticide use and the decrease in livestock numbers. In 1996, only about 20% of the farms has a relatively intensive land use (*State of the Latvian Environment* 1997). Organic farming only takes place on a very small scale (about 200 farms), merely due to insufficient marketing of organic products and (as a consequence) a hardly higher price.

2.1.3 Biodiversity

Due to geographical factors and the low intensity of land use, many species and biotopes can still be found in Latvia: coastal wetlands, wet forests, large wild marshes, natural pastures and meadows. Because of neglect of hydrological systems since 1990, the numbers of water mammals like otter (nearly 5,0000 pairs) and beaver (26,000 pairs) have been increasing drastically. Latvia is also housing endangered animal species like black stork (*Ciconia nigra*), white-backed woodpecker (*Picoides leucotos*), common crane (*Grus-grus*), wolf (*Canis lupus*) and lynx (*Lynx lynx*). All these species are also found in the Abava valley forests. Farmland plays an important role in Latvian biodiversity. This is the case for specific birds like the white stork (*Ciconia ciconia*), corncrake (*Crex crex*) and lesser spotted eagle (*Aquila pomarina*). Grasslands are especially important to plant species: about 40% of the species listed in the Red Book of Latvia are found in meadows (*State of the Latvian Environment* 1997). Natural and semi-natural grasslands cover about 1% of Latvia's territory, but their area is rapidly decreasing due to abandonment of grasslands, i.e. lack of grazing and mowing, as well as to intensification of grassland management. For only few important grassland areas, management plans have been elaborated (Priednieks et al. 1995).

Forests

Latvia has considerable forest type diversity, including wet forests, which have been destroyed in most European countries. In 1998 the Latvian forest policy was accepted. The main objectives of that policy are

- economically: to ensure the viable development and profitability of forestry;
- ecologically: to preserve and manage the present level of biological diversity in forests.

Arable land

According to Latvia Soviet Encyclopaedia data, there are about 26,000-30,000 couples of corncranes (*Crex-crex*) on arable land. The number of common kestrels (*Falko tinnunculus*) and hen harriers (*Circus cyaneaus*) has been decreasing lately. Although current decrease of agricultural intensity benefits to biological diversity, some negative tendencies can be observed on arable land.

Grassland

Meadows are of particular importance, especially the semi-natural ones that have developed over a long period of management. About 40 % of protected plant species are found in these meadows. Important meadow areas lie in the Venta, Abava and Gauja river valleys. Diversity of species is being facilitated by traditional methods: pasturing and mowing, but it is being damaged by pasture cultivation and mineral fertilizers as well as management interruption which causes overgrowing.

Rivers

There are 12.4 thousand rivers of total length of 38 thousand km. Increase of crayfish populations indicates improvement of water quality in small rivers. According to Latvia's

CORINE biotope data base, 20.3% of the river sites are protected. Biological diversity of river ecosystems is exposed to danger due to polluted waste water and presence of agro-chemicals.

2.2 Policy context

2.2.1 Agricultural and rural development policies

Up to 2000, rural development policy in Latvia was merely a national policy. It aimed to promote sustainable farming and to 'professionalize' the skills and knowledge of viable farms and farmers. There are, for instance, premiums for young farmers (up to 35 years). Much attention is paid to agricultural education and advice. There are 26 district Latvian Agricultural Advisory and Education Support Centres (LAAESC, co-ordinated by a national centre), working closely together with farmers, and several special agricultural development projects, like the PHARE project on 'technical assistance'.

From 2000 on, extra budgets are available for agricultural development in the context of the EU Special Accession Programme for Agriculture and Rural Development (SAPARD; European Commission regulation no. 1268/1999). For Latvia, the total EU budget (for 2000-2006) is 162 mln. Euro. Including national budgets, the total envisaged budget is 372 mln. Euro. In 1999, Latvia has been sending its Rural Development Programme to Brussels for co-financing. It is expected that it will become into force in early 2001.
The objective of the Rural Development Programme is to create conditions for integrated, multifunctional and long-term rural development. More specific, the aims are to promote:

- competition abilities for products of Latvia, both in local market and foreign trade;
- technological modernization of agricultural enterprises;
- forms of non-agricultural entrepreneurial activities and new forms of employment (rural diversification);
- sustainable practices in agriculture, forestry and fishing.

2.2.2 Environmental policy

The National Environmental Action Program (1996) describes the development of several national programmes to minimise agricultural emissions to the environment. Up to 1998, the following has been established (see also Tisenkopfs 1998):

- a certification system for organic farms and a national trade label "Latvian Ecoproduct" have been introduced;
- support to the Agricultural Advisory Centres (LAAESCs) is more and more directed towards agri-environmental education. The LAAESCs also provide written information on environmental measures;
- the intended introduction of green credits on national and local levels has been delayed, but will take place in the near future (see also § 4.1)
- as part of the National Programme for Integration in the European Union, Latvia has been preparing the national implementation of the Nitrates Directive, including legal basis for the use of fertilisers and for organic farming, and the introduction of Codes of Good Agricultural Practice. In 1999, the Latvian Codes were published (Bušmanis & Jansons 1999).

Support schemes for organic farming and reduction of agricultural emissions are now also part of the Latvian agri-environmental programme under SAPARD, to be financed from 2001 on.

The Ministry of Environmental Protection and Regional Development (established in 1995) is the main executive body to work out and implement the government's policies in environment protection, regional development, tourism, construction and geology. The ministry also includes environmental consultation and monitoring centres. Most important legal facility is the *Latvia Republic Law on Environment Protection* (1991, amendments in 1997).

2.2.3 Conservation policies

To protect valuable areas and species, Latvia has been developing a number of laws and has been establishing a number of protected areas. The following legislation is relevant: Law on Protected Nature Territories (1993; amendments in 1997), Law on Hunting (1995), Law on Protected Belts (1997), Laws on Protection of Species and Habitats (2000) and the draft laws on Landscape protection and preservation (1997) and the Cabinet regulations on Territorial Planning (1999).

In 2000, about 7% of Latvia's territory was protected by law, possessing the status of protected area (table 1). Nature protection plans are being developed for these territories, envisaging management schemes to protect and improve biological diversity. The Abava valley has the status of Nature Park (included in the Regulations of Cabinet in 2000). Apart from the protected status from a conservation point of view, the Abava valley has been uniquely declared to be a Cultural and Historical Reserve by the Latvian Ministry of Culture (accepted by the Cabinet on 28 June 2000).

Table 1. Latvia's protected areas in 2000 according to the IUCN classiffication

type of protected area	IUCN category	number	area (ha)
Nature Reserves	I	4	24,525
National parks	II	3	158,927
Nature parks *	**± II**	**22**	**68,944**
Restricted Natural Areas	Ib	211	136,706
Protected Landscape Areas	V	6	152,018
Biosphere Reserves	IX	1	474,447
Total		247	1,015,567

* the Abava valley is designated as such

In accordance with the Convention on Biological Diversity, Latvia has been elaborating a Biodiversity Action Plan, followed by a Biological Diversity Programme. The national programme about biological diversity was accepted in the session of Cabinet in 16th of May 2000, which includes the chapters: *Nature protection*, *viable use of nature recourses, Instruments of environment policy* and *Prerequisites for Biologic Diversity Programme Implementation*. Important conservation features in the Abava valley are:

- rivers and lakes;
- forests;
- meadows and pastures;
- rock detritions and caves;
- ecosystems of inhabited localities;
- protection of species.

The Biological Diversity Programme includes the following relevant policy measures:

- to set up a network of regional nature protection institutions, involving administration of protected areas;
- to increase municipalities' responsibility for implementation of conservation measures and to strengthen municipalities' rights in solving nature protection issues.

Grassland conservation

The deterioration of valuable grasslands has been recognised as a serious threat to biodiversity. To preserve valuable landscapes and biotopes, Latvian government in 1995 proposed to (National Environmental Policy Plan for Latvia 1995; Priednieks et al. 1995):

- conclude management contracts with individual farmers to compensate for the loss of income due to conservation measures;
- introduce tax relief for farmers contributing to biodiversity;
- integrate principles of landscape ecology into territorial planning on the local level;
- develop and support education programmes for farmers on sustainable farming.

Over the last decade, serious handicaps for an adequate conservation policy have been (Priednieks et al. 1995):

- the lack of funds for extensive monitoring and elaboration of management plans;
- the lack of interest and understanding among local people for biodiversity issues. There is a strong need to involve them more intensively in planning and management activities.

As mentioned in the national programme on Latvian biological diversity, most of the semi-natural grasslands are overgrown or are rapidly overgrowing now. The present economical situation in Latvia facilitates the overgrowing of meadows. Dry grasslands (which have a low productivity) and very wet grasslands (which cannot be mown mechanically) are the first to be abandoned. In the protected areas overgrowing was accelerated because of misunderstanding of strict nature protection measures, which prohibited any managing activities.

To preserve natural and semi-natural grasslands and to reduce overgrowing of grasslands, Latvian authorities will take the follwing measures:

- involve the grassland owners in management and conservation, implementing EU pre-accession agri-environment schemes;
- inform the society on the grasslands' importance to biological diversity and on adequate conservation measures for its preservation;
- facilitate appropriate grassland management, especially in restricted nature territories;
- elaborate optimal management methods for different types of grasslands and develop indicators for good grassland management, allowing managers to check the condition of the grasslands.

Latvian agri-environment programme

Under the SAPARD programme, the following agri-environment measures are being implemented:

- organic farming;

- preservation of biological diversity and rural landscape;
- reduce nutrient emissions from agriculture.

Because of its valuable grasslands, part of the Abava valley has been designated as a pilot area for biodiversity measures. The designated areas are located in the Talsi region (281 ha, 17 ha to be covered in 2000) and in the Tukums region (Kandava and Matkule communities) (363 ha, 21 ha to be covered in 2000). Under the pilot project, individual farmers and land owners in the designated areas will be able to receive financial support for (adjusted or renewed) management of valuable grasslands, for landscape conservation and for conservation of specific biotopes. The grassland conservation measures under the Latvian agri-environment programme are summarised in table 2.

Table 2. Grassland conservation measures under the Latvian agri-environment scheme

No.	The titles of complexes of measures, measures (assignments, kinds of activities), projects, programs.	terms of performance		responsible organisation	possible costs
		start	end		
1.	Publishing the booklet "The values of biological diversity in meadows and necessary measures for their preservation"	2002.01	2003.12	VAD	4,000
2.	Installation of appropriate demonstrations of meadow management.	2003.01	Every year	Ministry of Agriculture (MA)	5,000
3.	Preservation of Pededze river meadows establishing protected territory and elaborating its plan of management.	2000.01	2000.12	VAD	200,000*
4.	Elaborate methodology of compensation accounting for management of meadows and pastures.	2000.01	2000.12	MA	4,900
5.	Development of state monitoring system on biological diversity of meadows.	2003.01	2003.12	VKMC	3,000
6.	State monitoring on biological diversity of meadows.	2004.01	Every year	VKMC	4,000
7.	Inventory of meadows.	2000.01	Every year	Ministry of Environment Protection and Regional Development (LMEPRD)	1,500*
8.	Elaboration and publishing of catalogue on indicator species types of meadows.	2000.01	2002.12	LMEPRD	65,000*
9.	Program elaboration for preservation of protected biotopes of meadows.	2000.01	2000.04	VAD	330
10.	Elaboration of biologically valuable meadows' network.	2002.01	2004.12	MA	600
11.	Elaborate principles for estimation of influence on environment to afforest meadows.	2003.01	2004.12	LMEPRD	1300

2.2.4 Plans of local municipalities

Regulations on municipality level on environment protection and regional development are stated in different plans and programmes of the Districts covering the Abava Valley (Tukums, Talsu and Kuldiga District). Usually they are regional spatial and development plans. District spatial planning is spatial planning for the whole territory of the district, in which national interests and interests of municipalities are mutually co-ordinated. Spatial planning defines the main problems and priorities, helps the local government to take the right decisions and maintains one's interests on national level.

Needs and opportunities will vary, both within and between districts. The role of district planning as the bridge between national policy guidance and area-based municipal planning, is therefore important. Guidance of district plans should set out regional objectives and give meaningful guidance to planning authorities of local municipalities on how to accommodate them. This should include guidance tailored to the circumstances of the region, on the integration of environmental, economic and social objectives.

Environmental and regional development objectives are stated in the "Kuldiga District Development Plan" (1997-1999), the "Kandava County Construction Regulations"(1996-97) the "Kandava Town Environment Assessment" and the 1998 programme "Supported Region Development programme for Kandava town with rural territory". In the Abava community a "Development Programme", "Abava community Construction Regulations", an "Abava community Master Plan" and a "Ģibuļi Community Master Plan" have been worked out.

Kandava county (Tukums District)
The Kandava county, formed only in 1996 after the joining of Kandava town with Kandava and Cēre communities, is a pioneer in regional development. In 1997, Matkule and Zemīte communities entered the county. Kandava district lies in the eastern part of Kurzeme, and borders to the Zante, Pūre, Jaunsāti, Irlava, Viesāti and Vāne communities in the Tukums District. It has borders with the Kabile community in the Kuldīga District, and borders with the Abava, Virbi, Strazde and Balgale communities in the Talsi District. The total area is 387 km^2, the administrative centre, Kandava, lies 97 km from Rīga and 100 km from Ventspils. The Abava river with its tributaries Vēdzele, Bebrupe, Imula and Amula, unites geographically all communities in the Kandava County. The Abava valley entails the historical part of Kandava town and part of Kandava and Matkule communities.

Abava community and Sabile Town (Talsi District)
The Abava community lies in the south–west part of the Talsi District. It is a suburb community which surrounds Sabile town, and borders with Stende town in the north. The community borders to the Kandava county in the Tukums District, to the Renda and Kabile communities in the Kuldīga District and to the Ģibuļi and Virbi communities in the Talsi District. The nearest towns are Kuldīga (40 km) and Talsi (24 km). The Abava community covers 160,5 km^2, the Sabile town area is 4,3 km^2.
In February 2000, Abava community council and Sabile town municipality decided to merge, forming a Sabile district with Sabile as its administrative centre, preserving territorial units of Abava community and Sabile town. Sabile's wineyard is mentioned in the Guinness Book of Records, being the world's most Northly situated wineyard.

Renda community (Kuldiga District)
The Renda community is situated in the eastern part of the Kuldiga District, being the western

part of the Abava protected area. It is an ancient historical centre, mentioned for the first time in 1230 in historical documents. Renda was the developed manufactory centre of the Courland Duchy in the 17th century. From Renda down the Abava river in medieval times local products were sent to the Western Europe. The nearest town is Kuldiga (24 km). The Renda community covers 263 km^2. Farmers in Renda community are the first pioneers in organic farming in Kurzeme Region. Recently, they started elaborating the idea of a 'green community'. The priorities for Renda municipality development are organic farming and tourism.

Municipal priorities

The rural development topics that are important to all municipalities mentioned before, are:

- organic farming;
- nature conservation;
- rural and green tourism;
- marketing of regional products.

3 The Abava valley: strengths and weaknesses

When the Dutch province of Overijssel was looking for co-operation on nature conservation and rural development in Latvia in 1997, the Ministry of Environmental Protection and Regional Development suggested to explore the opportunities for co-operation in the Abava river valley. The choice for the Abava river valley had several reasons:

- the valley still includes botanically rich grasslands, but their area is decreasing and rapid action was needed;
- the valley is a protected area, but a recent inventory and an adequate management plan were lacking;
- some small projects on promotion of 'ecotourism' were already being carried out;
- last but not least: there appeared to be support in the region for co-operation. All relevant parties were interested in co-operation and eager to start at short notice.

In this chapter, we describe the development of the river valley up to now. In the first paragraphs we describe agriculture and botanical, cultural and landscape features, including the development of the protected status. We conclude the chapter with strengths and weaknesses of the several territories within the Abava valley.

3.1 Agricultural developments

Since 1990, the number of farms has been declining and the uncultivated area has been increasing drastically. Many grasslands have been abandoned. The decline in agricultural activity is a direct threat to grassland conservation, because many grasslands are already turning into woods, with pine seedlings and shrubbery appearing rapidly. The most valuable grasslands are the least interesting for farmers to manage.

The 1998 agricultural survey
To get an actual picture of the agricultural situation and developments, the Latvian Agricultural Advisory and Training Center has been carrying out an agricultural inventory in November and December 1998. Local advisors have been interviewing 195 farmers, using an area of 3,890 ha (including woodland), on their farming practices and perspectives (Dzelzkaleja 1998). For the main facts and figures, see table 3.

In the Abava valley, two-third of the agricultural land is used as arable land and one-third (about 920 ha) as grassland. About half of the farmers uses the grassland for alternate mowing and grazing, about one quarter uses it for mowing only and another quarter just for grazing. According to the farmers, about 20% of the grasslands are no longer in agricultural use. As reasons for abandonment are mentioned:

- the grasslands are situated on steep slopes and are hard to manage;
- the grasslands are situated far from the farms;
- many grasslands are already overgrown; it is time-consuming to restore them;
- there are no economic incentives for using the grasslands (again): there is lack of cattle and arable farming is more profitable.

Of the grassland area still being used, only one-third of the farms involved is fertilising the grassland. The farms that do so, use on average a nitrogen level of 122 kg/ha and 18 tons of manure per ha. Grassland burning is still a common habit in the valley.

There is an obvious lack of cattle in the valley: although 86% of the farmers have dairy cows, the average number per farm is only two cows, the average number of dairy cows per hectare of grassland is only 0.3. The same applies to pigs: 62% of the farms has pigs, but on average only four per farm. Only one-fourth of the farms have other cattle such as sheep, goats and horses. The figures indicate that livestock farming in the Abava valley takes place mainly for family consumption and local markets rather than for national and international markets. Only few farmers intend to increase production. About 10% of the farmers is considering taking up rural tourism.

The education level of the Abava farmers is rather good: 16% has a higher education, more than half has a secondary or technical education. Nevertheless, only few farmers are involved in public organisations. There is more willingness to co-operate with neighbouring farmers (one-third of the farmers) or to participate in regional projects (60%), for example in the context of the Eurograssland project.

Table 3. Main results of the 1998 agricultural survey

number of investigated farms	195
acreage of these farms	3,890 ha
average acreage	20 ha
woodland	1,094 ha
arable land	1,877 ha
grassland	919 ha
- of which unused	20%
share of grassland farms fertilising the grassland	31%
average level of N-fertiliser on these farms	122 kg/ha
share of farms with dairy cattle	86%
share of farms with pigs	62%
share of farms with other cattle (sheep, goats, horses)	28%
average number of dairy cows per farms	2
average number of pigs per farm	4

Source: Dzelzkaleja (1998).

3.2 Botanical development

The 1970s inventory

Apart form the ‘urban’ parts, the valley is dominated by grasslands and forests. The ornithological importance of the grasslands is limited, although important species like heron, fish-eagle and crane are nesting in the valley. However, it is especially famous for its high botanical values. Floristic data have been collected for over 150 years, for the last time (at least extensively) in the late 1970s (Tabaka & Klavina 1981). Some additional inventories were carried out more recently, but for very specific goals. The inventory in the 1970s shows that the average amount of species in the several types of grasslands is about 150. The river valley as a whole (including forests) contained 826 species, including 51 of the 112 Latvian Red List ones.

The 1998 grassland survey

In the context of the Eurograssland project, the Latvian Fund for Nature (LFN) has been monitoring the grassland vegetation in the most important parts of the Abava valley. The field work has been carried out in the summer of 1998 (Kabucis & Jermacāne 1998). The monitoring included 750 ha of grassland. Of this acreage:

- 38% appeared to be very valuable;
- 47% appeared to be quite valuable;
- 15% appeared to be not very valuable.

In the monitored grasslands, a total of 335 vascular plant species has been detected, of which 30 protected species included in the Latvian Red Book (protected species of national importance). Every type of grassland contained 100-150 species, but some exceptionally rich grassland types even contained 245 species.

About half of the monitored grasslands was moderately to strongly overgrown and about 70% of the grasslands seemed to be abandoned for more than two years. These percentages are different from the results of the agricultural survey – perhaps the farmers are rather reluctant to consider their grasslands 'abandoned'.

The monitoring showed that overgrown grasslands can still be valuable – at least for some time. It also learned that management as such is not a guarantee for botanical value – several managed grasslands appeared to be rather poor in species.

On the basis of the monitoring results, the LFN report includes detailed vegetation maps, conservation priorities and recommendations for restoration and management of the most valuable grasslands in the Abava valley.

Table 4. Classification of plant species in the Abava valley according to protection categories*

Category	Amount of species	
	number	%
I	4	6
II	13	20
III	30	47
IV	12	19
Rare species	5	8

* N.B.: the data in this table differ from those used in the text, because the borders of the protected cultural and historical territories "Abava valley" and the borders of nature park "Abava valley" do not entirely overlap.

The data in the table are from inventory materials of I. Kabucis (Latvian Fund for Nature).

The selective continuation in 1999 and 2000

In 1999, the Latvian Fund for Nature started selective monitoring on four farms in the Abava valley, three of which are also agri-environmental demonstration farms in the context of the Eurograssland project. In 1999, monitoring plots were established on two farms with a rather constant grassland management. These plots will be monitored every second year in order to analyse vegetation development. In 2000, monitoring plots were established on two other farms where grassland will be managed again after 5 to 10 years of abandonment. As rapid changes are expected here, these plots will be monitored every year. As the selective monitoring has just been starting, only 'basic' results are available.

Next to the vegetation monitoring, former and actual land use are registered and soil samples

are taken and analysed at each plot.

3.3 Landscape and cultural qualities

Abava valley has great natural resources heritage, rich flora and fauna, diverse geological sites. It has vast, biologically diverse territories, such as forests, marshes, semi-natural meadows, natural pastures, rivers, ponds, rivulets and springs. Abava landscapes possess outstanding esthetical value, biological diversity, related to a history of civilization. Hard-wood tree forests are of special value, namely elm-tree, oak-tree and lime-tree growths. Unique oak-tree growths are found in Abava flood-lands and juniper-tree growths in steep bank slopes.

Deluvial deposits have originated due to slope washing at the foot of the slopes. Ravines are typical forms of erosion, they are found in this territory. Another characteristic trait of slopes are springs, including calcium carbonate water coming to surface. Aluvial soils of different components are widely found in the Abava and other river flood-lands. Because of organic substance richness and presence of carbonates, the soils are very fertile. Valley slopes are covered with sand deposits and pine forests are widely found, typically growing in podzol or turf podzol soils. The climate of Abava valley is moderate cool and humid. Microclimate differences have formed depending on slope positions and height above the Abava level.
Special cultural and landscape attractions in the Abava vicinity are:

- Cuzu sulphur water spring
- the outcrop and Devil's cave
- Imula dolomite rocks
- upper steep of Kalnmuiža
- rocky steep near Cimermaņi
- the Abava waterfall
- Vezi waterfall
- caves "Māra's chambers"
- Ivande waterfalls.

16 objects are protected by the state, including such popular spots as Devil's rock, Devil's cave, the Abava waterfall, Ivande‘s waterfalls and Māra's chambers. The state also protects more than 20 prominent trees.
Above that, there are eight castle mounds with settlements, nine ancient burial grounds, five ancient cult places, two medieval castles, historical centres of towns, numerous architectural monuments which are under state protection. The count of national importance monuments is 51, including art monuments (6 in Sabile church and 7 in Kandava church).
Ojārs Feldbergs, Abava community artist has worked out proposals for "Open-air art museum in Pedvāle", which envisages preservation and renovation of 3 manor buildings. The project finished in 1999.

3.4 The protected status

The Abava valley has had a protected status since 1957, but only in 1977 the valley has been officially categorised as a protected area. The protected status does affect spatial planning (building activities, for example, are restricted), but does not influence land use in the valley

directly. From 1992, the State Cultural Monument Protection supervision started to pay attention to the territory near Tukums – Kuldīga highway, paying special attention to Kandava, Sabile and Renda. In 1993, for example, several valuable nature elements near Kandava were proposed for conservation, like the floristically unique slopes of the Abava terraces in the south-west of Kandava (*Specially protected cultural territory-reserve "Abava Valley" etc.)*. In 1996 the concept of "Abava valley as a special territory related to history of civilization" was elaborated. From 1996 to 1997 the Abava valley was proclaimed to be an object of special status and inventarisations were started to establish the status of protection. However, this was left uncompleted because of lack of financial support. From February, 1996 Latvia Artist Union and Architect Union proposed to give the Abava valley the status of "Territory of special protection – reservation Abava valley". The scheme of "Nature Park Abava valley" was approved by the Cabinet in 1999.

3.5 Strenghts and weaknesses

As shown in the previous paragraphs, the Abava river valley - also known as "Kurzeme Switzerland", is a very valuable region where the balance between raising living standards and preserving natural and cultural resources is under pressure. In this paragraph, we describe – in a nutshell – the strenghts and opportunities of the valley on the one hand and the weaknesses and threats on the other. In Annex 1, the strengths and weaknesses are described in more detail for each municipality. Table 5 provides a summarising SWOT analysis of the Kurzeme (Courland) region.

Strenghts and opportunities
The following strengths can be defined:
- in a national context, the area is quite unique, offering substantial diversity in landscapes, cultural and historical heritage and flora and fauna;
- as a result, the valley has excellent potential for ('green') tourism. Most of the towns and villages offer reasonable to good tourism and sports facilities;
- the road infrastructure is rather good (along the Tukums-Kuldiga highway), as is the positioning towards Riga and other large towns;
- there is quite a good climate for entrepreneurship;
- the agricultural education level is rather good;
- there is interest among farmers to join new projects.

Weaknesses and threats
On the other hand, the following weaknesses and threats occur:
- rural economy has been declining. Many farms are not economically viable, the towns and villages include a rather large share of low-income and retired inhabitants;
- as a result, a substantial grassland area is no longer managed and is increasingly overgrown with bushes and trees, thus threathening biological diversity and characteristic landscape features;
- lack of finance for projects to enhance local and regional (rural) economies;
- lack of touristical infrastructure and co-operation;
- forests and waters are still subject to human pollution (illegal wood-cutting, disposal of garbage in waters and forests);
- lack of spatial planning and co-operation between the towns and villages in the valley;
- certain degree of 'passiveness' or 'inactiveness' of local inhabitants.

Table 5. Summarising SWOT analysis of the Kurzeme (Courland) region

Strenghts	**Weaknesses**
• Quite unique area in national context • Good geographical location -Western part of Latvia • Biodiversity, high value biotopes • density of waterways and lakes • attractive towns with sites • rich cultural/historical heritage • interesting natural settings (Abava Cascade, Sand Caves, etc.) • interesting ethnic and religious traditions (Gipsies, etc.) • untouched nature • good environmental quality (higher than Europe) • Characteristic features of Latvia' mosaic landscape	• Lack of awareness among farmers of the unique botanical values of their lands • Lack of cattle for grazing • Lack of adjusted machinery for mowing of slopes • Lack of financial incentives for maintaining and improving grassland use • Short summer and long seasons in between, changeable climate • Insufficient condition of roads, low traffic safety • Undeveloped infrastructure of tourism • Poor knowledge of foreign languages in rural areas • Unfavourable situation for competition (products), if comparing prices in Estonia and Lithuania; prices are not balanced with quality • Poor safety of individuals • Rising of crime • Lack of information and advertisements
Opportunities	**Threats**
• Farm conservation measures • Green and rural tourism (hiking, biking, canoeing, fishing, etc.) • production for specialised markets (organic farming, regional specialties) • Abava Valley as "the Green Iceland of Latvia" • Non urbanised, untouched rural landscapes	• Delay of privatisation and land reform • Lack of foreign and national investments • Destroyed traditional markets because of competition • Unstable political situation within the region • Policy of taxation do not promote any development • Lack of support from the state and municipalities

4 Possibilities for rural development in the Abava valley

How can we make use of the Abava valley opportunities and reduce the threats? In this chapter, we will describe some possibilities. Main topics are:
- farm conservation measures (§ 4.1);
- rural tourism (§ 4.2);
- production for specialised markets (organic farming, regional specialties) (§ 4.3).

4.1 Farm conservation measures

It is urgently needed to protect the remaining valuable grasslands and to improve botanical quality of promising (but already overgrown or – the other way round – intensified) grasslands. The only way to do so is to ensure that grassland management becomes interesting again. Main problems are:
- lack of awareness among farmers of the unique botanical values of their lands;
- lack of cattle for grazing;
- lack of adjusted machinery for mowing of slopes;
- lack of financial incentives for maintaining and improving grassland use and for maintaining the mosaic-like landscape.

Awareness raising
In the context of the Eurograssland project, some awareness-raising activities have been carried out: many farmers have been interviewed, a short leaflet for farmers has been produced and training courses on grassland conservation have been organised. Above that, four demonstration farms have been established where conservation measures were brought into practice in 1999 and 2000. Useful additional activities would be:
- education on nature and landscape values and how to present them to tourists;
- experience tours around Latvia and foreign countries;
- sustainable farming – to receive a green certificate.

Conservation payments
The conservation payments will be continued from 2001 onwards - but on a larger scale - now that parts of the Abava valley have been designated as a pilot area for biodiversity measures under the SAPARD programme of the EU. This means that farms in selected areas - the most valuable parts of the valley – can subscribe to management measures as described in the Latvian agri-environment programme under SAPARD (Priednieks & Drozdovska 2000). These measures include:
- maintenance of natural meadows (grass cutting and gathering of hay: 50 Ls/ha; bush cutting 300 Ls/ha);
- maintenance of meadows of national or international importance (identical payment);
- nature-friendly management of pastures and grasslands (grass cutting: 30 Ls/ha);
- nature-friendly management of abandoned fields (cutting: 30 Ls/ha).

In 2000, the most valuable grasslands have been selected on the basis of the inventory by the Latvian Fund for Nature (see § 3.2) and candidate farms have been selected to join the pilot conservation scheme. For a number of farms, individual agri-environment plans have been elaborated, a necessary condition to join the scheme. In 2001, about 20 farms in the valley

will have an agri-environment plan and will be able to join the scheme. The Latvian Fund for Nature will have an important role in the ecological monitoring of the pilot scheme.

Landscape conservation
Landscape and biodiversity (grassland) conservation go hand in hand, but the emphasis is now on biodiversity issues. The unique Abava landscape however, being of great touristical importance as well, needs additional attention. The Latvian agri-environment programme also enables farmers to apply for landscape payments, but these only refer to chracteristic landscape elements. Further research, additional landscape measures and additional budget sources (e.g. from tourist taxes) could contribute to a more sustainable maintenance and development of the mosaic-like Abava landscape.

Sufficient number of cattle
In previous project seminars, there appeared to be some doubt about the attractiveness of the conservation payments, especially in a situation of re-using abandoned land. One of the underlying problems is the lack of cattle. Grassland management by alternate mowing and grazing is more economically viable than mowing without 'input' of cattle, and the purchase of catlle is rather expensive. In the context of the Eurograssland project, sheep have been bought for one of the demonstration farms in order to resume grazing of one of the valley slopes, but the Latvian agri-environment scheme does of course not include such kinds of measures. A solution could be to establish a regional 'cattle contracting firm', which temporarily leases cattle (sheep, cows) to individual farms. This kind of solution has also been proposed in the Hungarian Eurograssland project. This regional contracting firm (e.g. as a legal foundation) could be sponsored by national and foreign financers.

Adjusted equipment
Some parcels of grassland are not easy to manage. This especially applies to some rather steep sloped grasslands in the valley. These cannot be mown with regular equipment and need to be mown (if they cannot be grazed) by hand or with special, light mowing equipment. The Latvian Agricultural Advisory and Training Centre has been carrying out a short inventory in the context of the Eurograssland project. It appears that light mowing equipment – as used in hilly and alpine areas - is relatively unknown in Latvia and is also relatively expensive. Also in this case, a solution can be to purchase and use this kind of mowing equipment collectively. Constraint is the still limited enthousiasm among farmers for the collective use of equipment. Above that, there is enough relatively cheap labour available in the villages. Instead of using machinery, management of abandoned grasslands can also increase local employment. Problem in this case is how to 'organise' this local labour.

Possibilities for other kinds of incentives
In order to increase the attractiveness of conservation measures, additional policy measures could help. Examples are:

- tax regimes that encourage 'green entrepreneurship', such as a higher tax exemption for farms that participate in conservation schemes and/or tax exemption for conservation payments. However, these measures only benefit farms that do pay taxes (which is probably not the case for many small farms). The National Environmental Policy Plan of 1995 already mentiones the introduction of 'green taxes';
- green credits: a lower interest rate for 'green' investments or even for all rented capital on farms that have joined conservation schemes. This type of measure has the potential of influencing many more farms. The national Rural Development Plan of 1999 also mentiones the introduction of 'green credits'. The question of green credits has not yet

been solved by national and local authorities, but it probably will be in the near future. At the moment the World's Bank is operating a project "Grits of environmental investments" in Latvia. LAATC takes part in the competition. The best project submitters can get credits from the Fund for Environmental Investments. In the context of the Eurograssland project, the Dutch Centre for Agriculture and Environment (CLM) has been exploring the opportunities for 'green credits' from the Netherlands to Latvia. Unfortunately, the actual possibilities seem to be limited (Verschuur 2000);
- balancing (at farm level) the amounts of botanically valuable grassland and agriculturally 'good' grassland in order to ensure reasonable production levels. This might require some (light form of) land consolidation.

4.2 Rural tourism

The Abava valley – being the 'Kurzeme Switzerland' – offers excellent opportunities for recreation and tourism. Adequate measures to maintain and increase biodiversity and landscape qualities – as the ones described in § 4.1 – can substantially contribute to the touristical importance of the region. Since its independence, Latvia has been working hard to enhance and develop facitities for Latvian inhabitants as well as foreign tourists. Several action programmes have been set up (among others a PHARE project) to improve knowledge, skills, marketing and the quality of facilities. Rural tourism is promoted by a national association called *Rural Traveller* (*Lauku celotajs*), founded in 1993, and by the Kurzeme Tourism Board and the Tourist Information Centres in all Kurzeme districts. Since 1994, *Rural Traveller* publishes the yearly catalogue *Rural Recreation*. Since 1998, it also provides an Internet service. The catalogue also includes some accomodations in the Abava valley.

In the Abava valley, rural tourism is still under-developed. However, there already are some successes like the the facilities around the Abava waterfalls and at Pedvāle manor (O. Feldbergs). At some spots, there already are possibilities for specific activities like horseback rides, boat trips, guided tours and excursions, renting of sports equipment, winter sports, fishing, farm visits and purchase of specific farm products.
Nevertheless, the Abava valley has potential for a considerable increase of touristical activities. We can distinguish the following promising types of tourism:
- recreational tourism (forests, relief, landscapes, fields);
- farm tourism;
- cultural tourism (culture events, activities based on history);
- 'knowledge' tourism (archeology, architecture, historical monuments, museums, natural history);
- business tourism (seminars, conferences);
- specialized and active tourism (nature tourism with educational paths, walking, cycling, boating, sports, fishing).

Some touristical activities will directly benefit farmers, others will benefit local and regional economy and thus contribute to rural economy in a more general sense. There are several ways in which farmers can directly contribute to and profit from rural tourism:
- by offering 'bed and breakfast' facilities on the farm;
- by offering meeting facilities (seminars etc.);
- by selling special (regional) farm products to tourists passing by;
- by offering rental facilities (sporting or fishing equipment, boats, bicycles);

- by offering culinar and/or sports facilities (e.g. barbecue);
- by providing better access to the countryside (to be remunerated by the selling of route maps, tourist taxes etc.).

A number of handicaps has to be overcome in order to enhance rural tourism in the Abava valley (most of which are – by the way – handicaps that apply to many Latvian regions):
- farmers must be motivated to start a new branche, starting with adequate information on the pros and cons;
- new entrepreneurial spirit has to be encouraged, as many entrepreneurs have left the countryside due to economic decline;
- touristical infrastructure has to be improved;
- touristical facilities have to be developed and improved;
- touristical skills have to be developed and improved;
- environmental problems, threatening countryside and water qualities, have to be solved;
- touristical co-operation, marketing and promotion should be improved.;
- municipal territorial planning has to be improved.

A number of these constraints are already focal points in existing touristical programmes and are being solved or reduced on national as well as regional levels. Although all efforts to increase the touristical quality of the region go together, we now concentrate on aspects that are especially relevant in the context of rural development.

Motivate and educate farmers and other 'rural entrepreneurs'
Many farmers still concentrate on 'traditional' agricultural production and are reluctant to start a new type of business and become 'rural entrepreneurs'. This is quite logical: the practical and psychological transition to a multifunctional countryside takes a long time. In order to start a new type of business it is necessary to be well-motivated and to possess some managing skills. There is a need for individuals who are able to establish a new branch of business. Unfortunately, many people with entrepreneurial skills have left the countryside. Consequently, enhancing new activities requires the return of such entrepreneurs to their native places or the motivation and training of local residents (mainly farmers). Nevertheless, there is quite a number of farmers who are interested in starting touristical activities or who have already been starting. In the context of the Eurograssland project, a series of training courses on 'rural entrepreneurship', concentrating on rural tourism, have been organised, involving the Latvian Agricultural Advisory and Training Centre and the Kuldiga Tourism Information Centre. Afterwards, about 15 to 20 farms appear to be interested. The interested group could be provided with additional, more specific information. Next to that, courses to involve a larger group of farmers seem to be useful. The provided information should include:
- how to set up rural tourism activities (legislation, tax policies);
- quality requirements and regulations for farmhouses;
- calculation and financial planning (investments and return on investments);
- elaboration of a business plan, availability of credits;
- how to be a good host;
- advertizing and other kinds of marketing.

Improvement of touristical infrastructure
The touristical infrastructure in the Abava valley can be considerably improved. Possible measures are:

- restoration of public footpaths (a number of former paths are overgrown with bushes);
- creation of new footpaths and walking routes through the countryside;
- creation of cycling routes and improvement of cycling infrastructure;
- creation of water routes with interesting places to go ashore;
- improvement of the number and quality of touristical signs;
- improvement of 'basic' facilities like litter bags, public toilets, panoramic platforms etc.;
- ensuring a sufficient number and staffing of information centres (e.g. the Kandava tourist centre has been closed for several years).

Ensuring good water and landscape qualities
A major problem in all communities is forest and water pollution due to improper behaviour. In spite of municipal regulations, forests and surface waters (also from the Abava river) are being polluted with human waste and with municipal and industrial effluent. Part of the forests also suffer from illegal wood-cutting. These activities are a threat to the touristical attractiveness. Possible solutions are:
- investments in environmental infrastructure and facilities;
- awareness-raising and training of inhabitants, starting with school education.

The waste problem is one of the seperate topics in the co-operation between Latvia and the province of Overijssel.
For the attractiveness of the landscape, the measures described in § 4.1 are essential: maintaining botanical richness and reducing overgrowth with bushes and trees. Also the economic viability of the countryside as a whole is an important feature to ensure touristical attractiveness.

Improving co-operation and marketing
As we already noticed in § 4.1, there is not a large tradition of co-operation in the Abava valley. This is also a drawback for touristical development and effective regional promotion. It is important to stimulate strong co-operation between touristic entrepreneurs and between entrepreneurs and local government. In this way, entrepreneurs can join forces, can learn from each other, can have better knowledge of territorial plans and construction regulations (if any) and can pick up marketing together.

Towards an "Abava Rural Development and Information Centre"?
To co-ordinate all activities in the Abava valley and to provide information as close to the valley as possible, a central "Abava Rural Development and Information Centre" (ARDIC) could be established. This centre will become the focal point for all rural development activities in the Abava valley, including activities described in the other paragraphs in this chapter. Next to project co-ordination and distributing information, the centre could be an 'intermediary party' in helping to develop ideas, in applying for subsidies etc. This Abava Centre could be developed in Kandava, Sabile or Renda.

4.3 Production for specialised markets

4.3.1 Organic farming

Latvia strongly promotes organic farming, which can contribute substantially to environmental objectives. In the Abava valley, the number of organic farms is still limited.

There is scope for increasing conversion to organic farming. Consumers' polling shows that many Latvians agree to pay 50-70% more for ecologically 'clean' products. However, there is no such supply and there is lack of state support for organising adequate supply structures.

In the context of the Latvian agri-environment programme under SAPARD, financial incentives are available for:

- existing organic farms (payment varying per crop);
- conversion to organic farming (higher payment, also varying per crop);
- certification (50% of the costs).

To enhance organic farming in the Abava valley, the following measures could be useful:

- information meetings;
- training courses on the consequences of conversion;
- excursions to demonstrtation farms. One well-known farm near Renda (lead by Mrs. Bergmane) is an organic farm and has been working hard to stimulate organic farming in the neighbourhood;
- elaboration of farm business plans for some interested farms.

4.3.2 Regional 'specialties'

Farmers can also take up or expand traditional or unconventional crops and produce. These might substantially improve their financial basis. Attention should be paid to the possible consequences for botanically valuable grasslands.
The following crops and products may be promising:

1. *Bee-keeping*. This is a traditionally well-known branch in the Abava valley. The main product is honey and also other bee-keeping products. Farms can also raise their productivity by using green fertilizers and certified plant seed growing. Green fertilizer plants, scorpion weeds, bee sweet clover and buchwheat provide good pasture for bees, increasing honey harvest. Clover growing for cattle food, fruit-trees and vast areas of natural meadows and pastures serve as good pasture also for bees. It is very typical in Latvia to sell honey on farmhouses. This could serve as an attraction to tourists as potential buyers.
2. There are favourable conditions for early-ripe and late-ripe *vegetable growing* in heated glass houses. This is already being done on one farm in the valley.
3. Decorative *tree and bush growing* as well as *perennial plant growing* is becoming more popular.
4. New *fish ponds* are being established.
5. Abava valley farmers have conditions for *fruit and berry growing*. This production can be sold not only to tourists but also to fruit and berry processing shops. Young fruit tree and berry plants can be obtained in "Pśres dārzi".
6. Growing of *grapes*. Sabile vineyard is famous, as it is included in the Guinness the Book of Records being the world's most Northern vineyard.
7. There is one *joinery* in Abava community.
8. *Water production*. Mineral water springs could serve as a basis for Abava valley entrepreneurs. There is a strong chance that farm "Kalnadrubazas" will start water production from its spring.
9. *Woodprocessing* in the Abava valley is mainly based on small farmer sawmills, which produce low-value products. Most sawmills specialise in trimmed saw-timber production, which is used as packing material for exported goods. It is common practice that small

sawmills produce only one type of product and sell it to one buyer or exporter. Some of them work with interruptions during seasonal fieldwork. Processing technologies lag behind European standards for about 20 years and 90% of the production is exported. Possible development option for small farmer sawmills could be the production of special products, which cannot be produced by large enterprises. There is a great demand in the local market for construction tools, materials for private housing, floor covers, windows and doors. Consequently, saw mill production could be expanded.

10. *Handicrafts*, such as weaving, needlework and producing artisan's ware (e.g. manufacturing woods and wooden firkins for bath-houses).

If we wish to enhance traditional products and regional specialties, some handicaps have to be overcome:

a. in many cases, there is only limited knowledge of the crops and products involved. Consequently, production skills can be improved by additional education (e.g. specialised courses) and hence create greater production profits;
b. there is a general lack of marketing knowledge and skills. There are many contract disagreements between farms and processors. Many processing enterprises work inefficiently. Farmers do not have any instruments to influence processors to pay in time for their delivered production. Thus farmers are left without petty cash and they are unable to make any investments or payments. Marketing can be professionalised both by training and by creating new or better marketing organisations (e.g. marketing co-operatives);
c. there is lack of (financial) management skills. These could be imporved by training on business planning, book-keeping, costs and revenues of new products etc.;
d. in line with point b: the opportunities for special "Abava products", actively associated with an environmentally 'clean' production in an attractive landscape, could be investigated.

5 Things to be done and parties to be involved

In this chapter we describe concrete actions to be taken. For each action or group of actions we also describe the organisation(s) to be involved, the possible 'project leader' and possible budget sources. Prioritisation and scheduling of proposed projects is included in chpater 6.

Theme 1: grassland conservation

Project 1: conservation contracts
From 2001 onwards, conservation contracts can be concluded in the Abava valley according to a biodiversity pilot project in the context of the Rural Development Plan under SAPARD. About 20 farms have already been showing interest and for a number of them, individual agri-environment plans have been elaborated. As only a limited number of contract hectares is available for the valley, a strict selection is needed in order to gain optimal effect. On the other hand, some farmers with valuable land will have to be motivated to join the pilot scheme. Several organisations involved and the municipality of Kandava are working hard to start the scheme as soon as possible.

Project 2: continuation of the botanical monitoring on demonstration farms
The Latvian Funf for Nature has been following the botanical development of the grasslands of the demonstration farms that have been selected in the context of the 'Eurograssland project'. As soon as these farms conclude contracts under the Latvian agri-environment schemes, a general monitoring protocol will be in force. Hoewever, the scheme monitoring is much more general than the detailed monitoring that has been carried out so far. It therefore seems useful to continue the monitoring on the four demonstration farms in order to obtain detailed information on the relation between botanical development and grassland use.

Project 3: landscape conservation
Although much attention is now being paid to biodiversity measures, the unique mosaic-like Abava valley landscape may not be forgotten. The Latvian agri-environment schemes enable farmers to obtain payment for the maintenance of specific landscape features. Besides, grassland conservation also contributes to landscape conservation. However, this might not be sufficient to maintain and sustainably develop the Abava valley landscape. It is therefore useful to devote a project to landscape conservation and development, including:

- a study into the necessity and character of additional landscape measures;
- the possibilities to include additional landscape measures into the agri-environment schemes and the possibilities of additional budget sources for landscape preservation (e.g. from tourist taxes – see also project 8).

Project 4: cattle and equipment
The attractivity and economic significance of conservation contracts can be increased by introducing additional cattle and/or adjusted management equipment. Both are relatively expensive, especially for individual farms. Instead of providing cattle and equipment individually, a 'green contracting firm', leasing cattle and equipment, could be promising. However, this requires a more co-operative approach among farmers and financial support to set up such a firm. It seems interesting to at least investigate the opportunities for these kind of solutions.

As additional cattle is concerned, one should of course ensure that there are sufficient markets for the milk and beef. An alternative approach to additional cattle could be the following: a substantial number of cattle (preferably local breeds) is purchased with foreign budgets and rented to farmers to graze lands that are abandoned or in threat of abandonment. The calves produced by this cattle are given to farmers (for free) in exchange for a conservation contract. In this way, farm development and conservation can go hand in hand.
For this projects, the Latvian Agricultural Advisory and Training Centre (LAATC) and the Latvian Fund for Nature (LFN) could take the lead. Budget sources could be:

- national ones;
- foreign ones (e.g. from the Eurograssland project);
- sponsors (e.g. WWF).

Project 5: awareness raising and education
In addition to the courses already organised, there still is lack of awareness (national and international importance of the biodiversity and landscape values) and of management knowledge. Development and organisation of specific courses and information materials is needed to strengthen conservation efforts (also see theme 7).
Also here the LAATC and LFN could be the main initiators, but there is also a task for municipalities and other governments to integrate nature conservation in primary and secondary education. In this context, also the Dutch Foundation "Heino-Sabile", a municipal co-operation between the Netherlands and Latvia, could play a role.
As education is part of the Rural Development Plan under SAPARD, budget sources could be mainly national and European.

Project 6: land consolidation
Conservation measures might be ecologically more effective and for farmers more easy to fit in, if there is a good balance between 'conservation land' and 'production land'. Modest land consolidation works (re-allocation of land) might contribute to this. As the privatisation of land has just been finished and land ownerschip is quite a sensitive subject, a strictly voluntary approach is needed to achieve a better balance between 'production' and 'conservation' land.

Theme 2: 'green' tax and credit facilities

Project 7: national green taxes
Introduction of green taxes has long been a policy intention in Latvia. To support conservation measures, two types of green taxes seem adequate:

- a larger tax exemption for farms joining agri-environment schemes;
- tax exemption for agri-environment payments.

National and local governments (ministries of Agriculture and of Environment, municipalities) could take the lead in lobbying for these kinds of green taxes. But also NGO's like the LFN can support this kind of plea.

Project 8: possibilities for municipal taxes
Tax measures not only apply to national government. Also municipal taxes offer possibilities to enhance 'green services'. For example:

- municipal tourist taxes could be (partly) used to remunerate farms providing 'green tourism services', especially for those kind of services that are not directly paid for by the tourists themselves (e.g. better accessibility of the countryside, routes through farmland

etc.);
- other municipal taxes could be used to stimulate environmentally-friendly behaviour for all inhabitants (also see theme 6, pollution control).

The Abava municipalities could take the lead in exploring and elaborating the 'green' possibbilities of their tax system.

Project 9: green credits

According to the Rural Development Plan, Latvia also wishes to introduce green credits. Perhaps some additional efforts are needed to accelerate the introduction and to attune the system to the needs of an area like the Abava valley. Apart from that, the long-term opportunities of foreign green credits (the short-term chances seem to be limited) could be explored. The ministries involved and the LAATC could take the lead here.
Interesting development is that the International Finance Corporation (associated with the World Bank) has been introducing an earmarked 'biodiversity' investment category. Together with the Avalon Foundation, the IFC has been developing plans for risk-carrying investments in 'green' projects. The plans includes a financial as well as an organisational (support) component: the IFC provides financial guarantees to local banks, if sufficient local capacity is available to implement the project involved. This might in the near future be a solution to 'green' investment problems.

Theme 3: rural tourism

Project 10: motivation and education

First priority is to interest and educate farmers and other 'rural entrepreneurs', introducing school courses and programmes, separate courses for interested farmers and for young residential (non-agricultural) entrepreneurs. The district Tourism Information Centres together with the municipalities and (in case farmers are concerned) the LAATC could take the lead here.
Budget sources could be:
- national and European ones (education and economic diversification are prominent elements in the Rural Development Plan under SAPARD);
- regular national or municipal education budgets;
- foreign budgets.

Project 11: enhancing farm facilities

It is important to support interested farmers in creating tourist facilities. This could be:
- 'administrative' support in the elaboration of plans and budgets;
- financial support for the facilities themselves. This could mainly apply to facilities that are not sufficiently 'profitable' from tourist payments only.

Especially when a group of farmers formulates a joint project, there might be financial resources available (among others from the Rural Development Plan). LAATC, Tourism Information Centres and municipalities could take the lead.

Project 12: development of walking, cycling and boating routes

The Kuldiga Centre for Tourism has been formulating concrete projects on:
- water tourism;
- walking tourism (including creation and restoration of footpaths);
- cycling tourism.

All projects include training courses (see project 11), development of routes and production of route guides and maps and development of sign infrastructure and other tourist infrastructure (see also project 13). All these projects can – to a certain extent – involve farmers: routes across farmland, possibilities for farm visits and sale of home-made products. Where this is the case, budgets may be available from the Rural Development Plan. Other budget sources are the 'regular' Latvian budgets for tourism development and foreign budgets (there already exists co-operation on tourism with the province of Overijssel). Also in this case, the Tourism Information Centres together with the municipalities and the LAATC may take the lead.

Project 13: development and improvement of tourist infrastructure
Tourist infrastructure (information centres, public accessability, sign infrastructure, waste facilities etc.) can be improved and extended substantially, preferably by elaboration of concrete co-operative plans. These plans could be (partly) submitted under the Rural Development Plan. Lead parties are the same as in project 12. Also the Ministry of Culture can play an important role here.

Project 14: enhancing co-operation and corporate marketing and promotion
Co-operation on rural tourism can substantially increase the chances to succeed ànd the chances to obtain co-financing for projects (as individual projects are seldomly accepted). Co-operation also facilitates the promotion and marketing of the Abava valley: forces can be joined to create and promote a 'corporate image' of the Abava valley and its products to (potential) tourists. Leading parties are (again) the district Tourism Information Centres and the Abava municipalities, but there is also a role for the Ministry of Culture and NGO's like the Latvian Fund for Nature (also in other countries, like Poland, conservation organisations are promoting tourism to benefit nature and landscape conservation).
As the Abava valley – at least the protected part – includes a rather small area, it might be wise to incorporate the Abava valley promotion in a broader promotion strategy for the whole Kurzeme (Courland) region. This internationally known region with its turbulent history might provide a more solid basis for the promotion of rural tourism.

Theme 4: organic farming

Project 15: improving and developing markets for organic products
If organic farming is to be an ecomically attractive perspective for the Abava valley farmers, markets for organic products should be further developed. This is an effort of national rather than regional importance, and is already taken care of by (e.g.) the Latvian Association for Organic Agriculture and the Ministry of Agriculture. Specific projects fit well into the measures for market development in the Rural Development Plan.

Project 16: enhancing conversion in the Abava valley
Now that conversion to organic farming is being financially supported under the Latvian agri-environment programme, there might be better chances for (further) conversion in the Abava valley. An information and promotion project could be started, including:

- general information to farmers;
- specific conversion courses;
- elaboration of individual 'organic farm business plans' (perhaps as an element of the conversion course).

Such a project might be financed under the Rural Development Plan, but could perhaps also attract foreign money (e.g. from the Netherlands). Leading parties should be the LAATC and

the Latvian Association for Organic Agriculture.

Theme 5: traditional and regional products

Project 17: education on production and marketing
For specific (traditional, regional or rare) products that seem to have market perspectives, training and education on are important conditions for success. The education should deal with both production and (local or regional) marketing, including on-farm selling. Main party is the LAATC, but in close co-operation with the Tourism Information Centres and the municipalities (with repect to local regulations). As economic diversification is one of the themes in the Rural Development Plan, joint projects could be best submitted under this plan.

Project 18: elaboration of an "Abava label"
Important for the marketing and quality control of regional specialties or 'regular' products from an attractive, well-known area, is the elaboration of a regional label. An example is Sweden, where together with the Worldwide Fund for Nature (WWF) a label has been introduced for products from cattle grazing at species-rich meadows. Also in the Abava valley, a project could be devoted to the development of such a label. This project should include:

- a market assessment. It is crucial to ensure sufficient local and export markets;
- elaboration of production criteria and of control systems in order to guarantee compliance to these criteria;
- training of farmers to be able to comply to the production criteria and to ensure the necessary book-keeping;
- development of a 'corporate image'.

If a regional label is not within reach at short notice, an alternative could be to add some regional criteria to the protocols for organic farming (see theme 4, projects 15 and 16). In this way, the Abava valley can still be promoted while the farmers receive a higher price on the market for organic products.
The Tourism Information Centres, LAATC and/or the municipalities could take the lead, but also LFN and 'marketeers' should be involved. Next to national and EU budgets, such a project could be co-financed from abroad (e.g. the Netherlands).

Theme 6: pollution prevention

Project 19: educating residents
In order to improve improper, polluting behaviour (household and industrial waste, illegal wood-cutting, uncontrolled fishing and hunting), an education programme has to be set up for Abava valley residents. This could start on schools, introducing environmental studies, and be expanded to larger groups of residents. The municipalities and the regional office of the Ministry of Environment should take the lead here. Also the Dutch foundation "Heino-Sabile" could be involved.

Project 20: improving waste facilities
A special project could be devoted to improve household waste collection and improve and develop wastewater treatment plants and Artesian wells.

Project 21: improving municipal policies
The Abava valley municipalities can improve their environmental policies by:
- improving the elaboration of and communication on environmental regulations;
- improving control and sanction mechanisms.

Theme 7: Information, education and communication: the Abava Rural Development and Information Centre

Project 22: comprehensive approach to information, education and promotion
Many of the projects described under previous themes include some form of information, education and/or promotion. It might be effective to combine these activities where possible and to:
- elaborate one or two comprehensive projects on 'capacity building';
- elaborate a solid organisational structure for these projects.

In doing so, it can be avoided to have a rather fragmented approach, both towards target groups and possible financers. LAATC, Tourism Information Centres and municipalities could take the lead in setting up an organisational structure and some comprehensive projects. The possible financers of this activities can be the same as the ones mentioned under the separate projects. But also the EU Phare Access programme, that is now open to Latvia, offers excellent opportuinities (especially to NGOs) to finance capacity building activities.

Project 23: establishing an "Abava Rural Development and Information Centre" (ARDIC)
The information, education and promotion activities could also be spatially focused in an "Abava Rural Development and Information Centre", to be situated somewhere in the centre of the protected area. Next to the information function, this centre could be the focal point for rural development projects, 'business centre' activities, training of local advisors etc. A good organisational and institutional embedding creates conditions for all the other projects to be implemented much more effectively. The aim is that in a few years time, there will be a full-grown organisational structure for rural development activities in the Abava valley (or, on a broader scale, in the Kurzeme region). Examples of such a structure can be found in other Baltic states (e.g. on the Lithuanian Rusne island and the Estonian Sarima island) and in Hungary (Bükk National Park, where another so-called Eurograssland project is situated). But also in the Dutch province of Overijssel has regional project bureaus, 'regional development officers' and ideas to create local centres on rural development. The institution of an Abava rural development centre should preferably be combined with organisational structures to be elabotared for the implementation of rural development (including agri-environment) measures under the Latvian Rural Development Plan and/or accompanying measures to the status of Nature Park, for which now a management plan is now being elaborated.
The establishment of such a centre requires special efforts and justifies a separate project. Leading parties could be the same as mentioned in project 22. Budgets could be available from national and foreign governments (including the Netherlands), from the EU accession funds (Phare Access, MATRA) and from private parties (e.g. sponsors).

6 Themes for further co-operation

In this chapter, we elaborate the proposed activities or projects in some more detail. First, in § 6.1, we arrange the themes and activities in order of importance to the Abava valley. In § 6.2, we include more detailed information (in tables) for each selected project or category of projects. In § 6.3, we describe a provisional approach towards project-exceeding activities.

6.1 Prioritisation of themes and projects

We have been selecting themes and projects from chapter 5 that - to our opinion - might be promising for further co-operation between Latvia and the province of Overijssel.

Prioritisation of themes:
1. Information, education and communication.
2. Education and grassland and landscape conservation.
3. Eco-tourism and rural tourism.
4. Traditional and regional products.
5. Pollution prevention.

Prioritisation of projects:
1. Project 23: establishing an "Abava Rural Development Centre".
2. Project 3 and 4 on nature and landscape conservation.
3. Projects 10-14 on rural tourism.
4. Project 16: enhancing conversion to organic farming.
5. Project 18: elaboration of an "Abava" product label.
6. Project 19-20: on pollution prevention.

6.2 Detailing the projects

In this paragraph, the selected projects (or categories of projects) will be elaborated in more detail on the following aspects:
- organisations to be involved;
- intended project leader(s);
- time scheduling (short term / long term);
- indicative budget needed;
- possible funding sources.

Project 23: establishing an *Abava Rural Development Centre*

Parties to involve	Main (leading) partners	Implementation period	Rough costs (€)	Possible funding sources
LAATC, Tourism Information Centres, local municipalities	LAATC, province of Overijssel	2001	100.000 – 200.000	Latvian and Duch governments, local municipalities, private parties, EU funds

Projects 3 and 4: landscape conservation and cattle and equipment for nature conservation

Parties to involve	Main (leading) partners	Implementa-tion period	Rough costs (€)	Possible funding sources
LAATC, LFN, Tourism Information Centres, local farmers, local municipalities	LAATC, province of Overijssel	2002	500.000	Latvian and Duch governments, SAPARD and other EU funds, local municipalities, private parties

Projects 11-14 on rural tourism

Parties to involve	Main (leading) partners	Implementa-tion period	Rough costs (€)	Possible funding sources
Province of overijssel, GOBT, Country Traveller, Kurzeme Tourism Association, Tourism information Centres	GOBT, Country Traveller, Kurzeme Tourism Association	2001-2002	100.000 – 300.000 for each project	Latvian and Duch governments, SAPARD and other EU funds, local municipalities, private parties

Project 16: enhancing conversion to organic farming

Parties to involve	Main (leading) partners	Implementa-tion period	Rough costs (€)	Possible funding sources
LAATC, local farmers, local municipalities Association for organic agriculture	LAATC, Latvian Association for organic agriculture	2002	200.000	Rural Development plan, Latvian and Duch governments, SAPARD and other EU funds, local municipalities, private parties

Project 18: elaboration of an "Abava" product label

Parties to involve	Main (leading) partners	Implementa-tion period	Rough costs (€)	Possible funding sources
LAATC, Kurzeme Tourism Association, local farmers, local municipalities	Kurzeme Tourism Association, LAATC, municipalities	2002	100.000 – 200.000	Rural Development plan, Latvian and Duch governments, SAPARD and other EU funds, local municipalities, private parties

Projects 19-20: pollution prevention

Parties to involve	Main (leading) partners	Implementa-tion period	Rough costs (€)	Possible funding sources
LAATC, Kurzeme Tourism Association, local farmers, local municipalities	Kurzeme Tourism Association, LAATC, municipalities	2002	100.000 – 500.000	Latvian and Duch governments, LFN, SAPARD and other EU funds, local municipalities, private parties

It seems quite useful to install a regional steering committee for the Abava valley, in which all parties involved participate. This committee could initiate and co-ordinate all activities and projects that are described in this development plan.

6.3 Approach to project-exceeding activities

The next themes can be deduced from many projects in chapter 5 and paragraph 6.2:
- exchange of experience and knowledge;
- regional development of new products;
- marketing.

Many of these activities have the character of 'capacity building' and can perhaps be combined in one extensive prokject on capacity building. Such a project could be financed from EU funds like MATRA and Phare Access (the latter has just been opened for Latvia).

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Annex 1. Detailed overview of strenghts and weaknesses of the municipalities in the Abava valley

1. Kandava district

STRENGHTS	WEAKNESSES
First to launch the territorial reform in Latvia	Absence of planning in the whole Tukums region
Increase of budget funds and other funds due to territorial reform	Kandava district projects are not connected with budgets
Pollution of the Abava river is completely stopped	Local municipality budgets don't correspond its functions
Biological purifying system was launched in Kandava	Absence of waste ground which would correspond to required standards
Re-built purifying systems in Zemìte community. Purifying system projects started	Pollution of forests and waters due to uncultural behaviour of inhabitants
Local municipality contribution to communications improvement in the united territory	Technical backwardness of communication systems network in a part of the area
Good network of highways	Poor communications network in Matkule community
Educational and sports facilities	High percentage of low income population
Social security pilot project for Kandava town with a rural territory	High percentage of retired people
Assists farmers to get small loans, organizes saving associations	Insufficient security of personal property, especially in the outskirts
Richness of natural resources, biological diversity and attractive landscape	Poorly developed tourism facilities
Sports, tourism and relaxation facilities, taking advantage of natural resources and cultural and historical heritage	Overgrown footpaths and look-out towers
Cultural life is being encouraged and improved in the whole district	Tourist centre "Plosti"is out of service
Territory and soil types suitable for agricultural development	A part of landowners are not permanent residents and do not manage their farms
Gravel and sand deposits	Absence of the community building regulations and generalplan
Forests cover 35% of the area	Lack of co-operation among tourism industry staff
Territorial reform	Territorial reform

2. Abava Community

STRENGHTS	WEAKNESSES
Well-developed highway network	Insufficient funds for community development
Rich and diverse natural resources with biological diversity	The principles of local municipality budget formation do not correspond to its functions
Sports and tourism facilities, taking the advantage of natural resources and cultural and historical heritage	The community Council is not situated in the centre of the territory
The territory and soil types are suitable for plant-growing and cattle-raising	Technical backwardness of communication network systems

Area is suitable for tourism development	A part of landowners do not reside permanently in the community
Closeness to enterprises, processing agricultural products	High percentage of retired people
Development prospects for servicing companies	Pollution of forests and waters due to uncultural behaviour of inhabitants
Traditions in bee-keeping	Low educational level of population
Skilled agricultural workers	Not developed enterprises
Underground springs and mineral water springs	Springs and mineral waters are not being used
Good prospects for biological farming	Non-observance of wood cutting and managing regulations
Waste is transported to Talsi waste ground	Lack of co-operation among tourism industry staff
	Inactiveness and passivity of local people

3. Sabile town

STRENGHTS	**WEAKNESSES**
Good sports and tourism facilities, taking advantage of natural resources and cultural and historical heritage	Only few possibilities for tourism development used
Social centre "Kalme" in work	Poor organization of public services and amenities
Town building regulations worked out	Low level of sanitary facilities
Good prospects for further town development	The Abava river pollution from individual estate owners
Local processing enterprise SIA ADK "Sabile"	Poor organization of sport and cultural life
A project launched for town cultural monument renovation	Low enterprenewial activity
A computer class in Sabile secondary school	Insufficient security of personal property
Good prospects of spring water use	Speed limit is not being controlled
Good prospects of future development after joining Abava community are to Sabile district	A dumping ground is located in the territory of the Abava river and valley
Further raise of budgets after joining	Low level of infrastructure
	High percentage of retired people
	Unplanned and irrational use of spring water
	Lack of well-educated people
	Lack of urban development plan
	Lack of administrative building for the district centre
	Unused and undone slope pastures and flood-land meadows
	Pollution from individual cattle-breeders (manure water wells, manure reservoirs) within town territory

4. Ģibuļi community

STRENGHTS	**WEAKNESSES**
Good prospects for tourism and relaxation, taking the advantage of natural resources and cultural heritage of Abava valley territory	Poorly developed infrastructure of the territory in the Abava valley
Development plan launched in the community	High percentage of retired population, sparsely

	inhabited
High percentage of forests	Uncontrolled costruction
Diversity of forest animals, bird nesting places	High percentage of beavers, doing harm to nature
Eterprenenrial activities in woodcutting and processing	Unused and undone Abava valley meadows and pastures, overgrowing with valueless bushes
	Untidiness of tourist attraction Mâras Kambari
	Pollution with waste
	Disregard of woodcutting regulations in Abava valley
	A big part of landowners do not reside permanently in the territory
	Inhabitants use Renda community and Sabile district infrastructure
	Passiveness and inactiveness of local inhabitants

5. Renda Community

STRENGHTS	**WEAKNESSES**
Natural resources with large biological diversity	Shortage of finance for community development
Tourism and relaxation facilities taking the advantage of natural resources and heritage relating to the history of civilization	Discrepancy between the government's established budget raising principles and function that the community performs
The territory and soils are suitable for agriculture	Technical backwardness of communications and engineer infrastructure
Facilities for tourist reception	High percentage of retired people
Well-developed entrepreneurial activities	Damaged and impassable roads due to woodcutting activities
Well-developed biological farming	Uncontrolled fishing and hunting
Skilled agricultural workers	Pollution of the Abava due to illegal cut in to Polock-Ventspils oil pipeline
Closeness of Processing enterprises	Overreproduction of beavers, doing harm to nature
Highway Rìga-Kuldìga	Lack of well-educated people
Richness of forest animals and bird nesting places	Disregard of woodcutting regulations in Abava valley
High percentage of forests	Pollution with waste
Planning launched on regional level	Absence of waste-ground in the region
Good prospects for tourism development based on existing structures	Absence of community development paln, building regulations and construction plan
Possibilty to increase entrepreneurial activities in the territory	Treatment plants do not correspond to European Union standards, the Ìvande and the Abava are polluted
	Lack of cooperation between tourist industry involved entrepreneurs
	Lack of well-educated entrepreneurs and local people for tourism industry

Annex 2. Detailed overview of conservation and tourism interests of consulted farms in the Abava valley

Kandava region

In the Kandava region, grassland biodiversity management takes place on the farm "Abavnieki". They mow grass and pasture horses to protect the valley. An agri-environment plan is prepared in 2000. In the mentioned farm, horses are used for riding. In the nearest future they plan to establish a boathouse for water tourism.

The farm "Grīvas" is a dairy farm, producing ecologically sound products, which is important for tourists. The farm is going to establish fishponds, places for bonfires, camping spots, and a car parking area for tourists. This place could be a starting point for water tourism along the river Abava. An agri-environment plan will be established in 2001. Concerning with this plan they will graze and mow all their valley grasslands accoring to conservation needs.

The farm "Basteji" will be involved in the agri-environment scheme in 2001. This farm is growing ornamental plants and provides other farmers with advice on planting trees and shrubs. In the future this farm is going to start on-farm presentation tours for tourists.

The farm "Plieņi" is going to establish fishponds for carp breeding. They will also organise rural tourism: a camping with bonfire places with a pictorial view to Sabile town. This farm will participate in the agri-environment scheme in 2001.

Individual enterprise "Iveta" is located in the Kandava region, near Kandava town, and they are breeding 20 sport horses. The owner of this enterprise is going to purchase land up to the Abava river and will participate in rural tourism ("Tourism along Abava river on horses").

The non-profit company "Lejas" and the farm "Kalnsētas" are building a skiing track with imitative snow in green winters. This place is opposite to the farm "Kalnadrubazas".

In the farm "Kalnadrubazas" a car parking place, an airway over Tojate river and fishponds are established. On the natural pasture decline there will be bottled water from the wells. There will be established paths for tourists to see valuable plants. An agri-environment plan has been made in 2000. In 2001 they plan to establish an album for herbaria. Tourists could get acquainted with valuable plant herbaria.

The farm "Mežstiņi" is working on establishment of tourist lodging on the banks of Abava river. The sauna and barn are built. They are digging a pond and making a bridge across decline's dell. They are planning to establish botanical paths and they are going to breed goats.

The farm "Ausmas" is direct manager of the most part of Abava Rumba. They have planned next year to build a camping, sports ground, sauna and re-establish overgrown ponds and build toilets with showers.

Renters of "Kurzemes Šveice" are managing the small island of Abava Rumba, which will be settled tables and chairs for tourists' short rest.

The farm "Pedvale" includes a Nature Park, guesthouse, cafe, art installations and exhibitions of artists each season.

The farm "Sventes dzirnavas" invites guests, which are planning to go across the river by cableway. They have a playground and swings for children.

The Farm "Priednieki" grazes Abava valley's northern decline.

The shared company "Sendzirnavas" has established a beautiful pond with a small island, there are also a sauna and guesthouse. The owner has conserved the old flourmill and he produces electricity.

Already for two years, Kandava agricultural college teach students from all Latvia in tourism and handicraft specialities: boys acquire blacksmiths' speciality, girls knitting, dressmaking, embroidery and crochet. In Kandava town there is a strong handicraftsmen association, which twice a year runs the exhibitions. The local government has started to work on payment for Abava valley conservation through SAPARD and they will introduce tax discounts.

Kandava region has developed the "Kandava region development plan" and at the moment they are working on its "Head plan". There have also developed infrastructure development plans for Matkule county:

1. Waste treatment plant reconstruction.
2. Reconstruction of the heating system and reconstruction plan for water pump.
3. Plan for asphalting centre of Matkule.
4. Reconstruction plan for Matkule pond.

The first three plans of infrastructure have already been realised. The building of tourist lodging "Imulas" (with sauna) in Abava county has now started.

Ģibuļu county

Part of the Abava valley in Ģibuļu county lies far from the county centre. The population mostly consists of retired people and landowners. Part of the houses is abandoned. At this moment, the situation is not likely to imporve. In the whole territory, woods are carelessly hewn.

Farm "Tropini 2" has a beautiful wooden house for tourists. The farm has a pond, sauna and empty cowshed and it keeps bees. The farm will join the agri-environment scheme in 2001.

The owner of the farm "Alkšņi" does not live on the farm. Their meadows are not used and the ponds are overgrown.

The farm "Veckalēji" is 200 years old and has outbuildings and a bathhouse. The surrounding wood is hewn. The owner has also bottomland meadows in the Abava valley. They have not been using them for at least 10 years, but they have cut the bushes. They think they could be joining the agri-environmental scheme in 2001.

The owner of the farm "Kalešu krogs" has started to manage his meadows and he has agreed to join the agri-environmental scheme. This farm has a mill, which is a historical monument.

The farm "Mazstepes" has a large area of bottomland meadows, therefore it is going to join the agri-environment scheme in 2001.

The farm "Saulgrieži" will join the agri-environmental scheme in 2001.

The farm "Liepiņi" has 8 ha of dry meadows and they do not know whether they will join the agri-environment scheme.

The farm "Ratnieki" has meadows and they would like to join the scheme in 2001.

"Kiegelu ceplis" has historical value and the local government is going to provide it with the status of historical place.

The Farm "Krūkļi" will join the agri-environment scheme in 2000. It is also developing water tourism activities on the banks of the river Abava.

Renda county

The non-profit company "Mazrenda" is a cattle-breeding company, they over-manure the nearest meadows with liquid manure.

The farm "Ceļmaļi" has joint the "Rural tourist" association. They receive guests, have a sauna and a boathouse on the bank of the river Abava. They will join the agri-environment scheme in 2001.

The farm "Krastkalni" is a dairy farm, grazing their meadows with cows, so they save botanically valuable plant using correct grazing. This farm is a demonstration farm, for which an agri-environment farm plan has been elaborated in 2000.

The farm "Pūteļi" is an organic farm producing vegetables.

The farm "Terpentīni" grows field vegetables, besides they have a joinery.

The farm "Latvieši" is a bee-keeping farm.

Joint company "Mitras" lies on a very beautiful spot with well-established surroundings. Its meadows are very valuable. In 2001 they will join the agri-environment scheme. They are going to build a boathouse and receive tourists. They could offer high quality wellspring's water.

The farm "Slāpūži" is ready to offer tourists hot meals. For tourists interested in fishing, they can offer ponds with fish.

The farm "Senči" is a horse-breeding farm with a small joinery. It will join the agri-environment scheme and establish a camping, car park and horse riding.

The farm "Indriksoni" will be receiving tourists in the future by offering lodging.

The farm "Vīgantes" produces biological black currants and potatoes, they only need to think about advertising.

The farm "Dzelzāmuri" could be a kind of museum, because the house owner years ago was a writer.

Conclusion

In the Kandava region there will be 5 farms which will be involved into nature conservation and organic farming in 2001. Rural diversification will be promoted by the decision of the Lending company and regional governments (tax discounts) in the Abava valley.

In Abava county there are 7 farms which are or will be involved into nature conservation and organic farming. Two farms have been preparing agri-environment plans in 2000 and 3 farms will in 2001. Abava county has partial discount on real estate tax.

In Ģibuļi county there are 8 farms which would like to join the agri-environment scheme in 2001-2002. Seven farms would like to receive tourists. There are tax discounts for real estate tax.

In Renda county 11 farms are or will be involved in nature conservation and organic farming. Agri-environment plans have been prepared for 1 farm in 2000; in 2001 four more farms will follow. Four farms are organic farms.

Annex 3. Map of the Abava valley protected area