





OFFICIAL OPENING

Juanan Gutiérrez Lazpita, President of Euromontana; João Sobrinho Teixeira, President of IPB and Hernâni Dias, President of the Municipality of Bragança, Célia Ramos, Portuguese Secretary of State of Spatial Planning and Nature Conservation welcome the participants for the X European Mountain Convention organised in Bragança, Portugal.



Session 1 : Climate change in European and global policies

How mountain people can adapt and mitigate climate change in mountain areas? Juanan Gutiérrez Lazpita, President of Euromontana



The President of Euromontana explained why the X European Mountain Convention was organised around the theme of adaptation and attenuation of climate change. The purpose of the conference is to gain a **better understanding of the impact of climate change in mountain areas**, as well as a **better vision of all the integrated attenuation and adaptation strategies** already adopted in the different mountain chains, by presenting national, regional and local strategies against climate change, so that mountain people can prepare themselves better for the anticipated changes. This conference

will also **explore the responses and actions by mountain stakeholders** to reduce the impact of climate change and to take advantage of opportunities. **Theme workshops will be held to share good practices and to discuss issues among the many stakeholders on hand** (farmers, researchers, environmentalists, representatives of SMEs, local and regional elected representatives, etc.). Finally, this Convention will help **develop the future strategy of Euromontana** to tackle the challenge of climate change.

COP21: THE SUCCESS OF THE PARIS AGREEMENT AND THE ECONOMIC AND FOOD SECURITY CHALLENGES, GÉRARD VIATTE, FORMER DIRECTOR OF AGRICULTURE IN OECD AND FORMER SPECIAL COUNSELLOR TO THE FAO (presentation available here)

Gérard Viatte presented **COP21** and why he considers the **Paris Agreement** which ensued as a success and as an example of an ambitious and successful international negotiation. He then presented the many challenges on the **economic** front, but also for the **management of natural resources**, with concurrently an environmental and a **food security** component. Finally, he presented the **preparation of COP22** by insisting on its importance for international negotiations, but also for national policies and private sector players.



According to him, the success of this holistic and differentiated agreement can be complete only if it has repercussions on the **national and regional policies** which must be **coherent** (to take account of all the economic,











social and environmental policies together), participatory (with public-private partners), and linked to a territorial dimension (of very strong importance for the mountain areas). They must moreover be supported by institutional frameworks so that policies can be implemented efficiently, based on solid evidence underpinned by multidisciplinary scientific research, and be innovative.

It is important to show how the mountain constitutes a key element in a certain number of identified problems (pasture management, agroforestry, management of natural resources, for instance) and Gérard Viatte recommends maintaining a cross-cutting rather than regionalised approach and encouraging the States to include specific elements, in their national agreements, on how the mountain can contribute to adaptation to climate change.

AMBITIOUS NATIONAL POLICIES FOR FIGHTING CLIMATE CHANGE, CÉLIA RAMOS, PORTUGUESE SECRETARY OF STATE OF SPATIAL PLANNING AND NATURE CONSERVATION



Célia Ramos explained the action of Portugal on adaptation to climate change. Her country has to sign the Paris Agreement in the coming days and an **adaptation strategy has been defined at national level** and implementing tools. This strategy is based on soil, risk and natural disaster management, as well as an increase in vegetation to adapt to such changes better.

As Portugal is particularly sensitive to **forest fires**, the adaptation strategy focuses also on improving fire management throughout better

management of fuels, forests and abandoned areas to prevent the desertification of rural and mountain regions.

RUMRA: AN INTERGROUP AT THE EUROPEAN PARLIAMENT TO PUT MOUNTAINS AT THE HEART OF THE EU AGENDA" MERCEDES BRESSO, MEMBER OF THE EUROPEAN PARLIAMENT AND PRESIDENT OF THE RUMRA (RURAL, MOUNTAIN AND REMOTE AREAS) INTERGROUP) (VIDEO AVAILABLE HERE)

Mercedes Bresso explained how the European parliament and, in particular, her RUMRA intergroup (Rural, Mountain and Remote Areas) can support mountain areas in general, and in particular so that they can adapt to climate change.

She presented how her **own initiative report on the EUSALP (macroalpine) strategy** (adopted in September 2016) proposes solutions on how mountain communities can adapt to climate change, by relying on the work of players in the field, particularly in the regions.



Furthermore, the RUMRA intergroup supports the idea of an **agenda for rural areas** presented to the European Commissioner Corina Crecu. To support this idea better, a joint parliamentary initiative report by and between the REGI and AGRI committees is to be drawn up in the beginning of 2017 and a brochure by the vice-presidents of the intergroup will be finalised in the coming month to table concrete ideas that could be included in this agenda for rural areas.











 $Towards \ an \ EU \ agenda \ for \ mountain \ areas, Iliana \ Iotova, \ Member \ of \ the \ European \ Parliament$

(VIDEO AVAILABLE HERE)

Iliana lotova explained how the European Parliament adopted her own initiative report on cohesion policy in mountain regions of the EU, as well as a specific strategy for mountainous areas in Europe.

The European Commission has already given some feedback to Mrs lotova to show its agreement on certain ideas, in particular as regards European territorial cooperation.























Session 2: Scientific approaches: evidence and scenarios of climate change in mountain areas

The moderator – Martin Price, University of the Highlands and Islands, UNESCO Chair for Sustainable Mountain Development – explained that, to better understand climate change in mountain areas requires solid research to provide evidence and data. To encourage this research, MRI (Mountain Research Initiative) published in April 2016 a Strategic Research Agenda, 'Mountains for Europe's Future', explaining for different themes, including climate change, how research in mountain areas could contribute.

FROM THE LAST 100 YEARS TO THE NEXT 100 YEARS: WHAT HAS CHANGED IN THE CLIMATE OF EUROPEAN MOUNTAINS? EVIDENCE AND SCENARIOS; WOLFGANG SCHÖNER, ASSOCIATE PROFESSOR, UNIVERSITY OF GRAZ (PRESENTATION AVAILABLE HERE)



Wolfgang Schöner presented the impacts of climate change in the Alps over the past century in terms of precipitation, snow coverage and temperatures. He explained that **mountains** are **more** sensitive to changes than other areas. He also presented model outputs of forecast changes in mountain areas for the coming century.

Over the last 30-40 years, temperatures in the Alps increased more rapidly than at the global level. However, some uncertainty remains regarding the future, due to the complex mechanisms causing the Alpine amplification of climate change. The most

obvious and relevant impact of climate change in the Alps is for the **cryosphere** (glaciers, snow, permafrost) and related changes of Alpine hydrology/water cycle.

Climate model simulations for the next 100 years generally show larger warming for the Alpine region in comparison to the global level. In the light of the Paris treaty, a doubling of the global warming is a preventive assumption. There is still a high uncertainty in scenarios for precipitation. However, an increase in the frequency and severity of extreme precipitation events is conclusive.

STILL PLANNING FOR CLIMATE CHANGE VULNERABILITY? EVIDENCE FROM NORWAY ON THE LACK OF SUCCESS IN ADAPTING TO CLIMATE CHANGE, AND SUGGESTIONS ON HOW TO MOVE FROM "ADJUSTMENTS" TO "TRANSFORMATION" IN CLIMATE CHANGE ADAPTATION. CARLO AALL, HEAD OF RESEARCH AT WESTERN NORWAY RESEARCH INSTITUTE, PROFESSOR II IN SUSTAINABLE DEVELOPMENT AT THE SOGN OF FJORDANE UNIVERSITY COLLEGE (PRESENTATION AVAILABLE HERE)

Carlo Aall explained that **radical measures** are necessary to change our society: the increase of CO_2 emissions obliges us to go further than adaptation and **to transform our societies** if we wish to achieve the objective of limiting the global temperature increase to 1.5°C. In addition, according to the Stockholm Environmental Institute, some climate changes in developing countries have significant indirect impacts on developed countries, which should further encourage us to transform our way of living.











The transformation process is difficult to predict but the result, a transformed society, could be fossil-free at least at the beginning and adapted to a different climate. New technologies than can capture CO_2 from the moment it is released could be developed in the future, these could enable us to use fossil fuels again in a cleaner way.

He concluded that rural areas generally have more resilient social structures and that in the future, mountain areas will certainly be an **attractive place** due to their low capital food intensity production and housing capacity.





















Session 3: Regional approaches: how are mountain ranges mobilised at political level?

The session presented how the different mountain ranges have developed political protocols, projects, observatories in and outside Europe to deal with climate change and more widely with sustainable development of mountain areas.

THE ALPINE CONVENTION: FROM A POLITICAL PROTOCOL TO THE IMPLEMENTATION OF PROJECTS, TAJA FERJANČIČ LAKOTA, PERMANENT SECRETARIAT OF THE ALPINE CONVENTION (PRESENTATION AVAILABLE HERE)



Taja Ferjancic Lakota explained how the Alpine Convention is organised. Implemented in 1995, the contracting parties of the Alpine Convention are the different States who have signed the treaty. They regularly signed different political protocols, including one on climate change, which are legally binding for the contracting parties. Working groups and platforms help to implement the actions decided.

In addition, every two years, the Alpine Convention prepares some **report on the state of the Alps** on different topics. The next one will be on the **greening of the economy**, subject of relevance for the adaptation to climate change.



Finally, the Alpine Convention is involved in the EUSALP strategy, on the axis on the **preservation and valorisation of natural resources**, **including water and cultural resources**, which focuses on soil preservation, mountain farming and sustainable water management.

CARPATHIAN REGION: FROM A STRATEGIC AGENDA ON ADAPTATION TO CLIMATE CHANGE TO PRACTICAL IMPROVEMENTS, PROF. SZALAI, CHAIRMAN OF THE WORKING GROUP ON ADAPTATION TO CLIMATE CHANGE, CARPATHIAN CONVENTION (PRESENTATION AVAILABLE HERE)



The Carpathian Convention has prepared a **strategic agenda on adaptation in the Carpathians**, they have done a planning of adaptation measures with the implementation of three main preparatory actions supported by the EU, namely **CarpatClim** on the climate of the Carpathian region to have some harmonised databased on climate; **CARPIVIA**: an integrated assessment of vulnerability of environmental resources and ecosystem-based adaptation measures and **CarpathCC** with an in-depth assessment of vulnerability of environmental resources and ecosystem-based adaptation measures.

Prof. Szalai explained the different adaptation measures encouraged for agriculture, wetlands, tourism, grasslands and forestry.











Finally, he recommended for the Carpathians to develop the green economy, to strengthen the cooperation with the neighbouring countries, to develop the need for adaptation at the local level and to strengthen the cooperation with other mountain areas.

ADAPTATION TO CLIMATE CHANGE IN THE PYRENEES, IDOIA ARAUZO, CLIMATE CHANGE OBSERVATORY OF THE PYRENEES (PRESENTATION AVAILABLE HERE)



In the Pyrenees, climate change is a priority since 2010. **The Pyrenees Climate Change Observatory has been created**, as a cross-border initiative, promoted by the national governments. It allows to develop some networking work with the scientific community, but also with policy-makers and administrations.

Their work focuses mainly on **climate** (development of a unique database of high quality climate series based on precipitation, temperature), **biodiversity** (monitoring of species and populations of

the vascular flora of the Pyrenees), **forests and natural hazards** (understanding the potential impacts of climate change on natural hazards) and **lakes and water**.

The Observatory communicates and disseminates the results, develops new publications, has done a geoportal gathering the data. It also works with other mountain ranges like the Alps and the Carpathians.

MOUNTAIN PARTNERSHIP: THE EXPERIENCE OF A NON-EUROPEAN MASSIF, MARTIN PRICE, STEERING MEMBER OF THE MOUNTAIN PARTNERSHIP (PRESENTATION AVAILABLE HERE)



The Sustainable Development Goals for 2017 call for revitalizing the **global partnerships for sustainable development** and the 2016 UNSG report on mountains recommends to promote regional mechanisms for transboundary cooperation. This is also what the Mountain Partnership, a network of governments established in 2002, has promoted in the last years.

Martin Price, who represented Euromontana at the Steering Group of the Mountain Partnership, presented how three mountain ranges, outside Europe (**Hindu Kush Himalaya – Andean Initiative and Africa**

Regional Mountain Initiative), have worked on climate change and more generally on sustainable development in mountains.

The Mountain Partnership recommends the development of **mountain policies** based on **integrated and precise data** which include only mountain areas without lowlands. The decision-making of these processes will have to be based on the mountain communities.

Finally, to further advocate for the role of mountain areas in climate change adaptation and mitigation, the Mountain Partnership will organise two side events in November 2016 during the COP22 in Morocco.











Session 4: Interlude

TERRITORIAL COHESION AND POLYCENTRISM: ITALIAN STRATEGY IN FAVOUR OF REMOTE AREAS: A PROMISING METHODOLOGY FOR THE DEVELOPMENT OF MOUNTAIN AREAS, SABRINA LUCATELLI, COORDINATOR OF THE TECHNICAL COMMITTEE FOR INNER AREAS, DEPARTMENT FOR COHESION POLICIES, ITALIAN PRESIDENCY OF THE COUNCIL OF MINISTERS (PRESENTATION AVAILABLE HERE)

Sabrina Lucatelli presented a strategy for the development of Italy's inner areas. Inner areas are areas that have an inadequate provision of essential services, are rich in natural assets and cultural resources, have a low population density, and often have an aging population and high risk of seismic activity. In Italy, inner areas account for almost 60% of the territory and contain 23% of the Italian population. 65% of mountain municipalities are classified as inner areas. The Inner Areas National Strategy puts actions behind the EU Cohesion Policy Territorial Objective and seeks to overcome the rural-urban dichotomy, empower territories and people to revitalize and promote well-being in marginalized areas, and recover currently under-valorized natural and cultural assets in so doing reducing depopulation and the costs associated with rural abandonment. The strategy brings together stakeholders at all levels and uses a participatory approach to local development.

The strategy recognizes that there are several pressures that are acting against success. These include the challenge of balancing the risk of destabilizing or even legitimizing local, conservative elites and disrupting the local order in irreparable ways; the lack of high level technical assistance and local administrative capacity, especially for designing projects; the pressure to provide a quick fix which puts the long-term strategy at risk of being hurried or discontinued; and the difficulty of using local result indicators in policy design and implementation in other areas.

The strategy has the potential to especially benefit mountain areas in Italy and, over the long term, may be able to produce good practices that can be applied in mountain areas across Europe.















Session 5: Designing the way forward for adaptation and mitigation of climate change

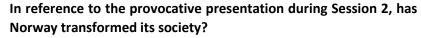
The moderator Thomas Egger, Director of SAB, the Swiss centre for mountain regions, led the discussion between four panelists, all policy makers and managing authorities, to gather their reactions on the afternoon's workshops and the support they could bring to initiatives working towards adaptation to climate change in mountain areas.

PANELISTS:

- FABRICE PANNEKOUCKE, AUVERGNE-RHONE-ALPES REGION (FRANCE)
- ROGER RYBERG, BUSKERUD COUNTY COUNCIL (NORWAY)
- ISABEL ELIZALDE, NAVARRE REGION (SPAIN)
- AMÉRICO PEREIRA, INTERMUNICIPAL COMMUNITY OF TERRAS DE TRÁS-OS-MONTES (PORTUGAL)

Is adaptation to climate change the priority for policy makers?

Adaptation to climate change needs to be a priority for policy makers, notwithstanding their political opinions, and the regions have an important role to play in the implementation of territorial programmes or action plans. However, the economy is also a major driver and should be involved in the adaptation process.





Two Norwegian regions depend entirely on the tourism industry so diverse solutions have been implemented to deal with climate change adaptation, such as snow storing, hydrogen power, etc. thus strongly involving the scientific world and the research community. Concerning the energy thematic, smart grids and green energy sources are the next step.

Research activities have mainly focused on mitigation up until now, what about adaptation?

More dialogue is needed between the politicians and the researchers to reach consistency between the policies being discussed and the reality of what could be done. Organizations such as Euromontana give an opportunity to those two distinct worlds to meet each other.

Is the economy undergoing transformation? Are some sectors beginning to move forward?

It is the role of the citizens to ask for transformation, but people need to be informed to support change and new policies. It is partly the role of institutions to pass on the information. Policy makers also need citizens to be aware of the issues to become involved.

In the case of tourism, tourists are attracted to particular landscapes which must be preserved for the activity to continue. In this case, the economy is a driver for the implementation of sustainable destinations.

Between markets (and market instruments such as labels, local products with added value, green economy branding, etc.) and public policies, which is the main driver?











The decision maker must be transversal, be able to take initiatives. It is possible to evolve towards a green economy without labelling it. It is not something you proclaim but you try and weave it into the market. If the consumer asks for it, the market will regulate itself. Companies should then try and find their niche.

Maladaptation? If we generalize adaptation measures, what are the risks for mountain areas? What special adaptation measures for mountain areas?

There is a special commission within the Auvergne-Rhône-Alpes region in France to deal with the specificities of mountain territories so there shouldn't be any generalizations made and less risks of maladaptation.

Politics are made from the urban perspective; they must now see the innovation and the future lying within rural areas. Maladaptation is part of the adaptation process, an obstacle to be overcome.



Why is climate change in the hands of the Ministry of the Environment when it is about people and about economy?

Climate change adaptation is a transversal theme, developed in each Ministry in specific plans and programmes. Ex: forestry, water treatment, etc.

Should there be a special financing scheme for climate change adaptation measures or greening over of all policies?

There should of course be integrated measures in every sector and it is already being done at the European scale through the different funds for through RDPs, LEADER, FEADER, Interreg, H2020, etc.

One wish for Euromontana?

Continue creating opportunities for discussions among stakeholders from different geographic origins, professional backgrounds and levels of involvement. Carry out the voice of mountain expertise. Create a brokerage and dissemination platform.

CONCLUSION:

The conclusions of the round table concerning adaptation to climate change in mountain areas were that climate change is a reality. But the effects may differ from one mountain range to another and even within the same mountain range. Therefore, a bottom-up approach is needed as well as a change not only in social behaviours but also of the economy. More dialogue between researchers and politicians is needed. A research agenda on climate change adaptation should be elaborated. Moreover, managing authorities should implement better communication for the general public on one hand and on the other, climate change adaptation should become a cross-sectoral priority if it isn't already.

As mountain areas are especially affected by climate change and need appropriate adaption measures, it is now up to Euromontana to push for a Mountain Agenda on climate change adaptation based on the final declaration of











Bragança. Euromontana should continue to provide a platform for the dialogue between public authorities, researchers, the civil society and all other relevant stakeholders on this very topic.













Official closure of the X European Mountain Convention

DECLARATION ON EUROMONTANA'S STRATEGY ON CLIMATE CHANGE ADAPTATION AND MITIGATION IN MOUNTAIN AREAS, JUANAN GUTIÉRREZ LAZPITA, PRESIDENT OF EUROMONTANA AND MARIE CLOTTEAU, DIRECTOR OF EUROMONTANA (DECLARATION AVAILABLE HERE)

The President and the Director of Euromontana presented the final Bragança declaration: "Face the challenge of climate change: adaptation for future generations" which takes into account the results of the two days of discussions of the X European Mountain Convention.

This declaration insists on the need and capacity of mountain people to adapt to climate change by presenting directions for agriculture and forestry, water and energy, biodiversity and protected areas, sustainable tourism, transport and Information and Communication Technologies (ITC) and finally for the management of natural risks.



It insists notably on the necessity to take into account territorial specificities and to recognize the key role played by mountain areas in climate regulation, calls upon the institutions to implement a European strategy specific to mountain areas, to implement efficient grant programmes and funding opportunities, to redirect research and innovation towards adaptation processes in mountain areas and, to encourage a virtuous circular economy.

It also calls upon to **mobilize actors at all levels**, specifically European political decision makers at the national, regional, and local levels, through a **participatory approach**, to encourage the **exchange of good practices in adaptation** and to **raise awareness among mountain actors**, especially among young people, of ways to mitigate climate change including through daily behaviour and activities.

Finally, we, Euromontana, commit to contribute with our activities to develop a clean, competitive, resilient and low carbon economy for live mountains in Europe through:

- The development of European projects on the theme of adaptation to climate change;
- The stimulation of **multidisciplinary scientific research** through the development of new research projects on the impacts of climate change in mountain areas, and effective communication between researchers and the many local stakeholders;
- The dissemination of options for adaptation to climate change and good practices in different European territories;
- Proposals to better integrate the mountain dimension in the national contributions of the countries following the Paris Agreement;
- **Lobbying** in the European institutions to encourage them to take into account the **specificities of mountains** in the development of policies and programmes;
- The possibility for our members to have a platform for dialogue and advice on adaptation to climate change in mountain areas and support for their local efforts;











 The adoption of daily behaviours to fight against climate change through exemplary good practices concerning the consumption of local products, use of adapted mobility, recycling, etc.

EUROPE, A WAY OF HELPING MOUNTAIN PEOPLE TO ADAPT TO CLIMATE CHANGE: HENRI MALOSSE, FORMER PRESIDENT OF THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, MEMBER OF THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, MEMBER OF THE SECTION OF ECONOMIC AFFAIRS

Henri Malosse brought the event to a close by highlighting the very precise, concrete, and meaningful conclusions of the final Declaration.

After stressing the values and meaning of the community in mountain regions, he made three concrete proposals for mountains and mountainous islands:

1. "On the financial front, we can support the idea of a "road map or Agenda for mountain regions" as recommended by the European Parliament's Mountain



Intergroup. 2017 will be the year of preparing new European programmes for the period beyond 2020. Reserving a substantial part of aid for mountain regions, organising global action, giving a bonus to cross-border actions of massifs between different countries, and focusing support on sustainable development, the local economy, facilities for young people, and access to digital technology could constitute priority lines of action.

- 2. On the legislating front, without waiting for the revision of the Treaties, the European Union could rely on Article **147** of the Lisbon Treaty which stipulates that *particular attention shall be paid to regions with very low population density and islands, cross-border and mountain regions.* European regulations such as those concerning **state aid or public contracts** could be adapted. And above all, experiments in terms of tax exemptions or adaptations of policies and regulations could be initiated.
- 3. Finally, this new ambition for European mountains can be meaningful only if it relies on a close partnership with the local elected representatives and local stakeholders of social and economic life: a new "governance" of some sort, close to the ground, but also very open on cooperation with other territories and regions of Europe. It is in this respect that Euromontana, which brings together local elected representatives and socio-economic officials from mountain regions in a European framework, is an example for us to follow! A new democratic fillip for Europe in a manner of speaking one that is sorely needed for that matter."

He then closed the convention by wishing Euromontana a happy twentieth anniversary and many happy returns.





































Session 4: Good Practices of adaptation and mitigation to make the best of climate change

Workshop: Agriculture and forestry

Moderator: Dominique Fayel, FNSEA

FIND HERE THE SUMMARY OF THE TWO INITIATIVES

Initiative 1: Climate change and the durability of vineyards in the Douro valley, Rui Soares, Real Companhia Velha

Initiative 2: Adapting Farming Practices to Climate Change (AP3C project), Vincent Cailliez (SIDAM)

MAIN LESSONS LEARNT FROM THE TWO INITIATIVES

Initiative 1

In the Douro Valley, the landscape has been heavily modified for centuries as farmers built terraces along the steep mountainous valleys to grow grapes for wine production. Today, the valley and its grapes are particularly susceptible to the increasing temperatures and reduced and unpredictable annual rainfall caused by climate change. Through a public-private collaboration funded privately and through national and European projects, the Real Companhia Velha completed a series of experiments to develop sustainable agricultural practices adapted to climate change. The project found that minimum tillage and mechanization, use of ground cover crops, growth of new grape varieties, and diverse water management schemes can help protect vineyards from climate change and contribute to effective adaptation. For example, ground cover crops increase biodiversity and reduce pesticide use. To create synergies between climate change mitigation and adaptation, research is critical as are patience and effective collaboration. Vineyards are a long-term investment and successful management depends on understanding how climate change will affect grape production over the long-term.

Initiative 2

The initiative found that large scale climate forecasting is unable to predict local level variations in climate caused by climate change. In Creuse, the AP3C project developed local indicators much more useful to farmers than global projections and found that climate change in the region is moving two times faster than global simulations predict. As a result, plants will grow earlier in the harvest season, the harvest season will shorten, production will be concentrated in springtime, thermal and heat stress will increase, and some plants may be able to grow further into the fall. Similar projects can be completed in other areas as long as there is the political and social will and effective collaboration between funders, farmers, governments, and researchers, but projects must be careful not to collect too many indicators. Results must be properly disseminated in ways that are useful and accessible to farmers.

















5 KEY MESSAGES OF THE DISCUSSION

Participants discussed in groups and have especially emphasized the below points:

- 1. Species and species diversity must be promoted and conserved both in agriculture and forestry. This includes the promotion of local varieties and the proper selection of varieties adapted to anticipated new climates and environments altered by climate change.
- 2. Water management is important for future water security in agriculture and forestry. Effective water storage is particularly important such as to ensure enough water for the irrigation of vineyards or feedstuffs for livestock.
- 3. There is a need for the collection and use of data on local level climatic variations and conditions that may differ from predictions made in large scale models. Local data is essential for the promotion of effective adaption to the local effects of climate change.
- 4. In both agriculture and forestry, intersectorial collaboration must be promoted, a range of actors (public and private sectors, research institutions, NGOs) must be mobilized, and the results of studies and research must be effectively and clearly disseminated. Local and traditional knowledge must be incorporated into research and policy.
- 5. Mountain forests must be conserved and preserved through proper management. This includes educating current and future generations of forest managers, for example about climate change, risks, and sustainability, and encouraging people to live in mountain areas so that there are people available to manage forests (applies to mountain agriculture as well).

ACTION FOR EUROMONTANA

Euromontana should provide an exchange platform for experiences and methods; facilitate scientific collaboration, support local decision makers, and promote the specificities of mountain forestry and agriculture at the EU level.

















Session 4: Good Practices of adaptation and mitigation to make the best of climate change

Workshop 2: Sustainable energy and water

Moderator: Danut Gitan, CEFIDEC

FIND HERE THE SUMMARY OF THE TWO INITIATIVES

Initiative 1: The use of green energy to process berries, Ioan AGAPI, FAM Dorna, Romania

Initiative 2: A new governance approach: how the community of Tolmin, Slovenia has developed an energy

policy to deal with climate change, Miro KRISTAN, Development Center of Soca Valley, Slovenia

MAIN LESSONS LEARNT FROM THE TWO INITIATIVES

Initiative 1

The project managed to develop a new brand for mountain products in Romania while ensuring the quality of the food and promoting green and sustainable energy production to process the products. Berry picking in these parts of Romania is a seasonal job often accomplished by low-income families. This project has managed to create a social enterprise by providing more secure employment, by structuring the berry supply chain in the region notably with the creation of the brand "Aroma Muntelui" (Mountain flavour) and by implementing a new source of renewable energy. Indeed, the processing unit is powered by a photovoltaic power plant.

This project has proven to be a training opportunity for the local people on the nutritional characteristics of forest products, harvesting and green processing. The publication and dissemination of recommendations and good practices is now underway.

Initiative 2

Five municipalities of North-West Slovenia came together to create a regional Low Carbon Strategy, following a bottom-up approach. This allowed a diverse set of stakeholders to participate in the development of the Low Carbon Strategy document that would be supported by stakeholders across sectors, energy being a very transversal thematic. The regional level is important because it allows the bottom-up approach mentioned beforehand with the involvement of locale stakeholders, but also because it provides tangible results in the transport sector for example, but also infrastructure, public lighting, etc.

The transferability of the project depends on the motivation of the stakeholders and their involvement, which is why the process is the important part of this project, not only the results. Little steps must be taken to progressively achieve a change in behaviours. Moreover, financing a project is always an issue but means exist to overcome it and this issue should not be seen as a barrier.













KEY MESSAGES OF THE DISCUSSION

Sustainable water management

- 1. Allocate profits of companies to a fund dedicated to mountain support.
- 2. Find a way to compensate ecosystem services, to compensate both the resources and the work of mountain people providing those services.
- 3. Find a balance between the protection of upstream watershed basins and energy production; some rivers must remain wild but the development of renewable energies must also continue to be promoted.

Renewable energies

- 1. Develop energy savings, including with small-scale projects at local level.
- 2. Encourage schemes to renovate buildings and improve energy efficiency.
- 3. Install charging stations for electric cars in mountainous regions (with clean energy sources!).
- 4. Improve research and investments in the field of energy storage.

ACTION FOR EUROMONTANA

Euromontana should facilitate the exchange of best practices between members of the network and promote these ideas at EU level.

















Session 4: Good Practices of adaptation and mitigation to make the best of climate change

Workshop: Biodiversity and protected areas

Moderator: Thierry Percie du Sert, ARPE

FIND HERE THE SUMMARY OF THE TWO INITIATIVES

Initiative 1: <u>Better to conserve than reintroduce. Lessons from species reintroductions in mountain ecosystems</u> <u>and the importance of performing feasibility assessments: the case of the Mountain Grey Partridge</u>, José María Fernández-García, HAZI

Initiative 2: Payments for Ecosystem Services in Natura 2000 sites in Lombardy, Bruna Comini, ERSAF

MAIN LESSONS LEARNT FROM THE TWO INITIATIVES

Initiative 1:

- Wild species restoration/reintroduction techniques are complex and difficult, and the results are uncertain. In terms of efficacy, the conservation of threatened population should be resolved before their decline becomes irreversible (danger of extinction).
- (Successful or failed) attempts to reintroduce species should be better documented and published.
- Preliminary feasibility studies (with clearly defined indicators) should always be carried out before embarking on a project to reintroduce species.
- Reintroduction projects are long and should be secured by policies and financial support for the long term (in the case of the Gallypyr projects, 3 years was too short a period).

Initiative 2:

- The experimentation with the payment system for ecosystem services in the 9 Natura 2000 sites in Lombardy made it possible to test a new model for regional management of natural resources.
- The success of the project encouraged the possibility of transferring this mode of management to other regions.
- A new programme for payment of ecosystem services on a larger scale is planned in most of the 260 Natura 2000 sites of Lombardy, thanks to a new LIFE project.
- The difficulty lies above all in raising awareness among the population about the importance of the services provided by the Natura 2000 sites and therefore the relevance of payments.
- The role of mediators to facilitate awareness raising among the population is a key to success, where communication and the dissemination of information are particularly important approaches.
- The assessment methodology must be deepened.

5 KEY MESSAGES OF THE DISCUSSION

Participants discussed in groups and have especially emphasized the below points:

Preservation of biodiversity in the face of climate change:
 Set up projects to preserve (or restore) the ecological corridors between the various biological reservoirs of mountain ranges, by promoting more particularly cross border synergies.













- 2. Promoting the mountain economy by relying on the local diversity:

 Develop the local consumption by capitalising on the local diversity:
 - Example of the use of local wood in the nature reserve of the Ariège Pyrenees region through the deployment of mobile sawmills;
 - Use of platforms of local agricultural products by the local public authorities (example of school canteens);

The use of local resources creates a direct link with the effects on climate change by **reducing travel** between producers / processors and consumers.

- 3. Promoting mediation between stakeholders:
 - Promote better awareness by the population and the public in general of favourable environmental effects generated by mountain farmers and foresters. Develop an appropriate communication to **recognise** such effects.
 - Bring "farmers" and "environmentalists" closer together to **promote dialogue** between the various stakeholders of biodiversity. Farmers could benefit from the contribution of naturalist experts and the latter could in turn gain better knowledge of the realities in the farming world.
- 4. Maintaining biodiversity needs funds:
 Climate change is gaining a foothold for the long term, so financial programmes that can be applied in the long term are needed. Most (current) short-term financing cannot sustain efficiently long-term actions geared to conserving biodiversity.
- Paying for ecosystem services (example of the Lombardy Region):
 The results of payments for such ecosystem services must be transparent so that payers are assured



















Session 4: Good Practices of adaptation and mitigation to make the best of climate change

Workshop: Tourism: from snow business to four seasons tourism

Moderator: Jon-Andreas Kolderup, Buskerud County Council and Vice-President of Euromontana

FIND HERE THE SUMMARY OF THE TWO INITIATIVES

Initiative 1: <u>A new alternative to winter tourism: Recovering alpine pastures through the promotion of quality</u> <u>food products</u>, Andreja Borec, University of Maribor

Initiative 2: Developing sustainable tourism destinations in Geilo, Pål Knutsson Medhus, Visit Geilo

MAIN LESSONS LEARNT FROM THE TWO INITIATIVES

Initiative 1

The Slovenian ski station of Rogla has had to diversify its activities to adapt to the decrease of snow and ski revenues. Recovering of alpine pastures during summer time to produce quality mountain products is one possible solution, combining tourism, natural conservation and rural development. The "Tastes of Rogla" label was created to promote those products and is now an essential component of the agritouristic activities in that region. The tourism sector has developed summer offers and guided tours to attract more tourists over that period.

Initiative 2

Geilo is an official sustainable destination, recognized as such with a Norwegian label. This is the result of a standardized process to integrate sustainability in local economy and identity. Indeed, thanks to the involvement of public and private stakeholders, sustainability has been integrated in all economic sectors of the community from the food business to the organization of events. This sustainable label has helped Geilo to boost its touristic strategy and promote local identity and values.











5 KEY MESSAGES OF THE DISCUSSION

- 1. The profile of tourists is not fixed. They are individuals, second home owners, skiers, hikers etc. The message is therefore to be more precise in the marketing approach and the different offers for the different kinds of tourists (adapted offers for the different target groups)
- 2. Transport is a vital deal. Sustainable transportation both to arrive at a destination as well as to operate within the destination is necessary. Developing electric cars and trains is necessary to encourage sustainable transport.
- 3. Labelling and certification came up as important, but they are not organized yet under a coherent framework such as the guiding principles for sustainable tourism of the UN World Tourism Organization. Tourist operators reports through a survey that it is valuable to have a visible tool for sustainability (60% of respondents) and that the importance of a visible certification will increase in the next 5 years (71% of respondents)
- 4. Local food products both in restaurants and shops are now part of the sustainable touristic offer, combining local development and diversification from winter activities.
- 5. Involvement of locals and promoting the local values and identity is part of sustainable tourism.

ACTION FOR EUROMONTANA

Work towards a standardized international certification for sustainable destinations.













Session 4: Good Practices of adaptation and mitigation to make the best of climate change

Workshop: Accessibility of mountain areas: developing sustainable transport and ICT services

Moderator: Audrey Sinclair, Scottish Council

FIND HERE THE SUMMARY OF THE TWO INITIATIVES

Initiative 1: <u>Micropol: encourage teleworking in rural area</u>, Jean-Dimas Malot, Nièvre Numerique
Initiative 2: <u>Move on Green: sustainable transport in rural and mountain areas</u>, Luis Munoz, Provincial
Government of Teruel

MAIN LESSONS LEARNT FROM THE TWO INITIATIVES

Initiative 1

The lack of high speed broadband is a key factor in preventing the growth of businesses in mountain areas. Isolation is also a barrier to young people deciding to stay or return to the mountain areas, with the knock on effect this has with falling school roles and loss of other facilities. This trend can be reversed by providing units such as Smart Work Centres (SWC) which have not only good broadband but provide an opportunity for cooperation and in-house business support, leading to increased productivity. The SWCs are especially effective when shared between public and private sectors.

Initiative 2

Living in mountain areas is very difficult without access to a car, especially since most of these areas have poor public transport. Mobility is required for travel not only from rural to urban areas, but also between different rural areas, especially for older people. Starting with the Good Practices and policy guidelines, the successful solutions will be those which match the circumstances of particular areas, and often innovative ideas have to be considered and applied.











5 KEY MESSAGES OF THE DISCUSSION

Participants discussed in groups and have especially emphasized the below points:

- 1. Empowering the most appropriate level of decision making to deliver innovative transport solutions for all. Transport on-demand, sharing vehicles are interesting solutions to developed at local and regional levels.
- 2. Not only reducing the number of empty vehicles, but trying to reduce the total number of journeys to avoid CO2 emissions: the use of ICT alternatives can bring new solutions (for instance develop telemedicine in order not to have to go to the doctor).
- 3. Supporting High Speed Broadband in all mountain areas with some minimum standards for everyone (domestic, public and commercial).
- 4. Providing digital tools and training to realise the full benefits of improved broadband (benefits such as telemedicine and collection of detailed data on climate change).
- 5. Providing facilities like the Smart Work Centres and opportunities for young people to live, study, work and succeed in mountain and rural areas.

ACTION FOR EUROMONTANA

Euromontana should promote the expansion of the use of electric cars (at the research and at the practitioner level).

It should also encourage communities to look for their own solutions to overcoming the accessibility problems of mountain areas, trying to think out of the box to find the most adequate solution adapted to their needs.















Session 4: Good Practices of adaptation and mitigation to make the best of climate change

Workshop: Innovation linked to the management of natural hazards

Moderator: Aashild Kjelsnes, Sogn of Fjordane

FIND HERE THE SUMMARY OF THE TWO INITIATIVES

Initiative 1: <u>Land-use planning and physical infrastructure: Planning for increased or decreased climate change vulnerability?</u>, Carlo Aall, Head of research at Western Norway Research Institute, Professor II in Sustainable Development at the Sogn og Fjordane University College

Initiative 2: FORRISK and PLURIFOR: Innovative risk management in Basque forests, Alejandro Cantero, HAZI

Main lessons learnt from the two initiatives

Initiative 1

While there has been an increase in heavy precipitation and the likelihood of natural hazard events in Norway in the last few decades, there has been a simultaneous decrease in land-use planning capacity in small and medium sized municipalities. This project sought to identify whether poor land-use planning, climate change, or a combination was responsible for natural hazard events. Of 10 events analysed, 8-9 could have been mitigated by better planning, suggesting that land-use planning must do a better job of incorporating climate change into decision making. In order to achieve this, national laws and regulations must better incorporate climate change into land-use plans and infrastructure development, local planning capacity and control must be increased, better data quality is required, political priorities must better incorporate climate change, and knowledge at all levels regarding climate change and risk must be increased.

Initiative 2

FORRISK brought together 12 public partners from Portugal, Spain, France, and the UK to examine the risks (pests and pathogens, forest fires, wind damage, increased temperatures) posed to forests by climate change. Activities included growing species beyond their natural range, comparing current forestry practices with other climate change adaptation techniques, and setting up a data collection system and database to monitor forest growth, health, and biological cycles. The project produced a risk analysis, modelling tools, and decision support tools for forest managers. Forests are at risk, but with proper collaboration between the public and private sector, funding, research, and management, these risks can be mitigated.











5 KEY MESSAGES OF THE DISCUSSION

Participants discussed in groups and have especially emphasized the below points:

- 1. Small municipalities often have small budgets and low capacity to deal with natural hazards, both in terms of mitigation, adaptation, and response. Funding, training, and human resources are needed especially in mountain areas.
- 2. Access to free common data across sectors and disciplines regarding risks and natural hazards would allow for better land-use planning and risk management.
- 3. Current and future generations must be educated about risks, natural hazards, and climate change mitigation and adaptation in mountain areas. This includes educating a new generation of risk managers and climate change experts and incorporating climate change into studies across disciplines.
- 4. Climate change must be incorporated into risk management analysis, preparation, and response at all levels
- 5. Risks and natural hazards and their relationship to climate change must be addressed at the EU level and resources must be directed specifically towards mountain areas where risks and natural hazards also pose a threat to lowland areas, for example by threatening water resources.

ACTION FOR EUROMONTANA

Euromontana should be a clear voice for incorporation of mountain areas into EU level policies and programs regarding climate change adaptation, education, and risk management. Euromontana should emphasize at the EU level that the risks and natural hazards linked to climate change in mountain areas also threaten lowland areas.









