MOVING
MOuntain Valorisation through INterconnectedness and Green growth

D1.9. 58 PRACTICE ABSTRACTS

UCO

M48

Authors: Cristina Rentería Garita and María Mar Delgado-Serrano (UCO)

Based on contributions from regional partners:

Valentina Bartalesi (CNR), Sandra Karner, Melanie Troppe (IFZ), Jakub Husák, Lukáš Zagata (CZU), Marie Noëlle Ottavi, Jean Michel Sorba (INRAE), A. Galmot (CCVD), Triliva, S., Vavvos, A., Pigounakis, K. (UOC), Gusztáv Nemes, Ferenc Papp (Rural Bt), Angelo Belliggiano, Sara Bispini, Mauro Conti, Corrado Ievoli (UNIMOL), Cristina Micheloni, Ekaterina Kleshcheva, Gianni Trioli (Vinidea), Colabianchi, M.; Allali, T.; Felici, F; Moretti, M. (UNIPI), Catarina Esgalhado, Teresa Pinto Correia (UEVORA), Cătălina Rogozan, Mark Redman, Alina Alexa (HCC), Tamara Zivadinovic, Dragana Tar (MENA), Diana Surová (CZU), Raquel Moreno, Tristan Roullier, Antonio Zafra (ADEGUA), Verena Arndt (UCO), Carmen Forrer, Isabel Jaisli (ZHAW), Dominique Barjolle, Isabella Maglietti Smith (ORIGIN), Murat Yercan, Hakan Adanacıoğlu, Duygu Tosun, Filiz Kınıklı (EGE), Chloe Thompson, Liz Dinnie, Kirsty Blackstock, Rachel Creaney (HUTTON), Merita Kuli, Nehat Ramadani (CNVP), Carla Lostrangio (AEIDL).

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D1.9. 58 Practice Abstracts

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Authors	Cristina Rentería Garita (University of Cordoba), María Mar Delgado-Serrano
Work Package Leader	WP1 - AEIDL
Project Coordinator	University of Cordoba

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Executive summary

The MOVING (MOuntain Valorisation through INterconnectedness and Green Growth) main objective is to build capacities and co-develop relevant policy frameworks across Europe for the establishment of new, upgraded or upscaled value chains that contribute to the resilience and sustainability of mountain areas, using a bottom-up participatory process that involves value chain actors, stakeholders, and policymakers.

MOVING key objectives include:

- Establishing a European-wide Community of Practice (CoP) on Mountain Value Chains (VCs) through regional Multi-actor Platforms (MaPs).
- Creating a conceptual and analytical framework to assess the diversity and impact of mountain VCs.
- Developing visual tools, such as maps and indicators, to raise awareness of the challenges and opportunities in mountain regions.
- Mapping 400 VCs across the EU and conducting in-depth assessments in 23 reference regions to evaluate their sustainability and resilience.
- Conducting participatory benchmarking of mountain VC clusters to identify factors affecting their sustainability.
- Performing foresight exercises to anticipate long-term trends and co-create strategies for mountain areas.
- Developing a policy roadmap and 'Quick Start' policy design to guide future interventions that enhance connectivity, sustainability, and resilience in mountain regions.

The current document, D1.9. 58 Practice Abstracts provides detailed information on the 23 mountain regions analysed in the project. For each region, two practice abstracts are presented: one highlighting the strengths of the main value chain and the other focusing on foresight analysis. Additionally, other practice abstracts cover the conceptual and analytical tools used throughout the project.

All practice abstracts have been written in both English and the native language of each of the 23 mountain regions. They follow the template provided by EIP-AGRI and are crafted in laypeople's language, making them accessible to diverse audiences, especially practitioners.

Introduction

MOVING Practice Abstracts (PAs) are designed to communicate relevant project information in an easily accessible format for practitioners. The current deliverable provides key findings and conceptual outcomes derived from the project alongside practical recommendations to enable practitioners to make effective use of these results.

The document presents PAs focusing on:

- **MOVING in my Mountain Region**: A summary of each region, its contribution to sustainability and resilience, and its challenges and opportunities.
- **Foresight Analysis/Cross-regional and EU Foresight Analysis**: A prospective analysis of each region and the correlations among them.
- **Data Imaging and DSS tools for Mountain Areas**: A decision support system based on Story Maps.
- **Community of Practice on Mountain Areas**: A platform that brings together interested stakeholders at different territorial levels to exchange ideas, share experiences, and engage in co-learning and co-creating knowledge.
- **Comparative Assessment of Value Chains**: Highlights common challenges and opportunities in the 23 reference regions.
- **Repertoire of Strategic Options**: An assessment of policy incoherence and gaps to determine how existing policies can be mobilised in an integrated policy mix.
- **Conceptual Framework for Mountain Areas**: A co-learning process based on participatory theory building.
- **Mountains Policy Roadmap**: A compilation of essential guidelines to provide the policy instruments needed to promote sustainable and resilient development paths for European mountain regions.

Of the originally proposed *58 Practice Abstracts*, the document includes 56 in total. This is due to the fact that the initially planned 5 Cross-regional Foresight Analyses were developed based on the 4 Foresight Archetypes rather than a geographical approach. Additionally, the Bulgarian "Stara Planina" foresight was ultimately not conducted, as explained in detail in Periodic Technical Report Part B (2022-2023) since HCC partner lacked human resources and reached lower level of engagement with the Bulgarian MaP.

All MOVING PAs will be available on the EIP-AGRI database and published on the MOVING website, specifically in the Library section at https://www.moving-h2020.eu/library/ and on the Reference Regions pages at https://www.moving-h2020.eu/reference-regions/ in English and regional native languages, to ease the access for regions. PAs will also be communicated and disseminated through various MOVING channels, including social media, newsletters, blogs, and podcasts.

The following chart displays the content, the number of PAs included, and the responsible partner leading it.

Table 1. Content D.1.9

NUMBER	PRACTICE ABSTRACT	RESPONSIBLE
23	MOVING in my Mountain Region	Reference region partner
22	Foresight Analysis	Reference region partner
5	4 Foresight Analysis based on Archetypes + EU Foresight Analysis	ORIGIN
1	Data Imaging and DSS Tools for Mountain Areas	CNR
1	CoP on Mountain Areas	AEIDL
1	Comparative Assessment of Value Chains	UCO
1	Repertoire of Strategic Options	ORIGIN
1	Conceptual Framework for Mountain Areas	UNIPI
1	Mountains Policy Roadmap	HCC

MOVING in my Mountain Region

Practice Abstract

1 to 23

1. Cooperation and Knowledge - Enablers of Resilience in the Region of Weiz

MOVING in my Mountain Region
Austria
Authors
Sandra Karner, Melanie Troppe **(IFZ)**
More info
https://www.moving-h2020.eu/reference_regions/austrian-alps-austria/

In the region of Weiz alpine sheep farming has a long tradition. The farms are mainly small scale, extensive farms. Sheep farmers formed a cooperative to increase their economic resilience and to gain fair prices. The development of the cooperative was carried out in coordination with the broader regional development. Fodder is highly important for the farming. With climate change this resource will be particularly affected. Exchange between farmers, with experts and tailored consulting can help farmers to adapt management practices. One example of such an exchange would be about grazing and pasture innovations. Within MOVING different stakeholders were brought together. They exchanged about vulnerabilities, climate change impacts and social aspects. Points of views were challenged by the exchange. Also, a vision for the future of alpine sheep farming in the region was formed. In this vision policy is assisting the alpine farming by building supportive frameworks on all institutional levels. Examples could be awareness raising measures and fair remuneration of ecosystem services. Young people in the region see for the future a higher variety of products and services and more cooperation. They also realize the need for innovations in farm management, processing and products. Better cooperation with other sectors like the health sector was also seen as a promising pathway. It is considered useful that farmers and regional authorities and policy institutions plan future developments jointly respectively in coordination with each other. This process could be fostered through targeted support for such joint activities.

Native language

Kooperation Und Wissen – Wege Zur Resilienz in Weiz

In der Region hat die alpine Schafhaltung eine lange Tradition. Bei den Bauernhöfen handelt es sich hauptsächlich um kleine, extensive Betriebe. Die Schafhalter/innen haben sich zu einer Kooperative zusammengeschlossen, um ihre wirtschaftliche Widerstandsfähigkeit zu erhöhen. Außerdem erhalten die Landwirt/innen so faire Preise. Die Entwicklung der Kooperative erfolgte in Abstimmung mit anderen Regionalentwicklungsaktivitäten. Futtermittel sind für die landwirtschaftlichen Betriebe sehr wichtig, aber **der** Klimawandel wird sich auf diese Ressource auswirken. Der Austausch mit Expert/innen und maßgeschneiderte Beratung kann den Landwirt/innen helfen, ihre Bewirtschaftungsmethoden anzupassen. Ein Beispiel für einen solchen Austausch sind Innovationen im Bereich des Weidemanagements. Im Rahmen von MOVING wurden verschiedene Interessengruppen zusammengebracht. Sie tauschten sich über mögliche Schwachstellen in der Wertschöpfungskette, Auswirkungen des Klimawandels und über soziale Aspekte aus. Vorgefertigte Ansichten konnten durch diesen Austausch in Frage gestellt werden. Es wurde eine Vision für die Zukunft der alpinen Schafhaltung in der Region entwickelt. In dieser Vision unterstützt die Politik die Almwirtschaft durch günstige Rahmenbedingungen wie beispielsweise durch bewusstseinsbildende Maßnahmen oder faires Entgelt für Ökosystemleistungen. Jugendliche in der Region sehen zukünftig ein breiteres Spektrum an Produkten und Services und eine stärkere Zusammenarbeit. Sie erkennen auch die Notwendigkeit von Innovationen in der Organisation, der Verarbeitung und den Produktangeboten. Eine stärkere Zusammenarbeit mit anderen Sektoren wie dem Gesundheitssektor wurde ebenfalls als vielversprechender Weg gesehen. Es wird als sinnvoll erachtet, dass Landwirt/innen gemeinsam mit der regionalen Politik und Behörden zukunftsfähige Entwicklungen planen. Dieser Prozess könnte durch eine gezielte Unterstützung solch gemeinsamer Aktivitäten vorangetrieben werden.

2. Lessons learnt from MOVING case study work in Bulgaria

Foresight Analysis
Bulgaria
Author
Mark Redman **(HCC)**
More info
https://www.moving-h2020.eu/reference_regions/stara-planina-bulgaria/

The MOVING case study work in Bulgaria focussed on maintaining the supply of public goods (farmland biodiversity) from High Nature Value (HNV) grasslands in the Western Stara Planina. In line with the project's research methodology, the maintenance of HNV grasslands with EU-funded agri-environment payments was conceptualised as a value chain in which the product concerned (farmland biodiversity) is **PRODUCED** via the intrinsic biodiversity of the region; PROCESSED via the traditional farming practices that a number of specific wildlife habitats (and associated species) depend upon for their continued existence; **DISTRIBUTED** and **MARKETED** via two area-based payment schemes in the Bulgarian Rural Development Programme (RDP) that compensate farmers for maintaining traditional management methods on their farmland, and; finally **CONSUMED** by wider society via the transfer of public funds collected from the contribution of EU taxpayers to the EU budget (notably the European Agricultural Fund for Rural Development).

This approach was interesting as an academic exercise and substantial information was collected to develop the case study; however it was not attractive and engaging for local stakeholders. Consequently, it was difficult to sustain their interest and engagement in subsequent project activities. It would have been better to consult more effectively with local stakeholders before selection of the case study and to have chosen a more 'typical' value chain. Nonetheless, the case study did provide many important insights, including the great importance of non-governmental organisations for promoting sustainable and resilient mountain area development in south-east Europe.

Native language

Научени уроци от работата по казуса MOVING в България

Работата по казуса MOVING в България се фокусира върху поддържането на предлагането на публични блага (биоразнообразие на земеделските земи) от пасища с висока природна стойност (ВПС) в Западна Стара планина. В съответствие с изследователската методология на проекта, поддържането на пасища с висока природна стойност с агроекологични плащания, финансирани от ЕС, беше концептуализирано като верига на стойността, в която съответният продукт (биоразнообразие на земеделските земи) се ПРОИЗВЕЖДА чрез присъщото биоразнообразие на региона; ПРЕРАБОТВА се чрез традиционните земеделски практики, от които зависи по-нататъшното съществуване на редица специфични местообитания на дивата природа (и свързаните с тях видове); РАЗПРОСТРАНЯВАНИ и ТЪРГУВАНИ чрез две схеми за плащане на площ по българската Програма за развитие на селските райони (ПРСР), които компенсират земеделските стопани за поддържането на традиционни методи на управление на техните земеделски земи, и накрая ПОТРЕБЛЕНИ от обществото като цяло чрез прехвърляне на публични средства, събрани от вноските на данъкоплатците в ЕС.

Този подход беше интересен като академично упражнение и беше събрана значителна информация за разработване на проучването на случая, но той не беше привлекателен и ангажиращ за местните заинтересовани страни. Вследствие на това беше трудно да се поддържа техният интерес и ангажираност в последващите дейности по проекта. Би било по-добре да се проведат по-ефективни консултации с местните заинтересовани страни преди избора на казуса и да се избере по-„типична" верига на стойността. Въпреки това проучването на казуса даде много важни сведения, включително за голямото значение на неправителствените организации в Югоизточна Европа.

3. Beef Production Value Chain in Sumava Mountains

MOVING in my Mountain Region
Czechia
Authors
Jakub Husák, Lukáš Zagata **(CZU)**
More info
https://www.moving-h2020.eu/reference_regions/sumava-cesky-les-czechia/

The Sumava Mountains are known for their untouched nature and unique biological communities. Therefore, specific conditions also apply to agricultural production. One of the most widespread value chains within Sumava Mountains is beef production, which was investigated within MOVING project. The main threats for development of agriculture in Sumava Mountains are threats that are associated with global climate change and other social and economic risks.

At this moment, farmers and processors have adequate resources to build adaptive strategies for environmental threats. On the other hand, the region and farmers are significantly impacted by institutional arrangement and financial resources provided from EU and the State. Economic performance of farms that are providing ecosystem services in National Park and significantly contribute to landscape management would be significantly affected by potential reduction of the financial subsidies that are provided at this moment. Such situation would require building a new economic strategy.

The results of the MOVING project show that building new strategy to achieve goals formulated as “High nature value agriculture” should be done using participatory bottom-up approach. It is necessary to involve local stakeholders to formulation of policies for future development of the region. Generally, important shift from cooperation to cocreation of policies.

Native language

Produkce hovězího masa v podmínkách horských oblastí Šumavy

Šumava je známá svou nedotčenou přírodou a jedinečnými biologickými společenstvy. Proto zde platí specifické podmínky i pro zemědělskou výrobu. Jedním z nejrozšířenějších hodnotových řetězců na Šumavě je produkce hovězího masa, která byla zkoumána v rámci projektu MOVING. Hlavními hrozbami pro rozvoj zemědělství na Šumavě jsou hrozby, které souvisejí s globální změnou klimatu a dalšími sociálními a ekonomickými riziky.

V současné době mají zemědělci a zpracovatelé dostatečné zdroje pro vytváření adaptačních strategií na environmentální hrozby. Na druhou stranu jsou region a zemědělci významně ovlivňováni institucionálním uspořádáním a finančními zdroji poskytovanými ze strany EU a státu. Ekonomická výkonnost zemědělských podniků, které poskytují ekosystémové služby v národním parku a významně se podílejí na péči o krajinu, by byla negativně ovlivněna případným snížením finančních dotací, které jsou v současné době poskytovány. Taková situace by vyžadovala vytvoření nové hospodářské strategie.

Výsledky projektu MOVING ukazují, že budování nové strategie k dosažení cílů formulovaných jako "Zemědělství s vysokou přírodní hodnotou" by mělo probíhat s využitím participativního přístupu zdola nahoru. Je nutné zapojit místní zainteresované strany do formulování politik pro budoucí rozvoj regionu. Obecně je důležitý posun od spolupráce ke spoluvytváření politik.

4. Faced With the Impact of Climate Change on Chestnut Groves, are Producers of Corsican Chestnut Flour the New Guardians of the Common Resource?

MOVING in my Mountain Region
France (Corsica)
Author
Marie Noëlle Ottavi **(INRAE)**
More info
https://www.moving-h2020.eu/reference_regions/corsica-france/

The accession of Corsican chestnut flour to PDO status in 2010 underlines almost 30 years of the value chain structuration. Based on the exploitation of chestnut resources, the professionalisation of Corsican chestnut-farming has made it possible to enhance the value of the resource, which at the time was suffering from abandonment and predation by other CVs, due to changes in long-standing co-existence practices that ensured the sustainability of the agro-pastoral ecosystem in mountain areas. The PDO specifications therefore attempt to define areas and practices capable of protecting both the resource and the product.
However, a study of the vulnerabilities and resilience of the value chain has shown that new challenges are threatening the resource and the socio-technical organisation of the VC. Since the early 2000s, with by example the arrival of the Cynips (a chestnut pest) in 2010, the impacts of climate change have forced the VC to close in on the aspects of control, setting aside development, innovation and coexistence practices. The foresight exercise has largely highlighted the need to revive these latter dimensions in order to create the conditions for resilient CV sustainability, but it has also shown that to ensure this sustainability, the question of modes of coexistence between CVs based on the same resource (chestnut groves) needs to be addressed. The construction of stakeholder collectives enabling the design of ways of assembling VCs on the one hand, and the promotion or creation of new derived VCs on the other, seem to be the 2 minimum conditions for ensuring the sustainable resilience of the VC and its resource.

Native language

Face à l'impact du changement climatique sur la châtaigneraie, les producteurs de farine de châtaigne corse sont-ils les nouveaux gardiens de la ressource commune?

L'accession de la farine de châtaigne corse au statut d'AOP en 2010 souligne près de 30 ans de structuration de la chaine de valeur. Basée sur l'exploitation des ressources châtaigneraies, la professionnalisation de la castanéiculture corse a permis de valoriser la ressource, qui souffrait alors d'abandon et de prédation par d'autres CV, du fait de l'évolution de pratiques anciennes de coexistence qui assuraient la pérennité de l'écosystème agro-pastoral en zone de montagne. Le cahier des charges de l'AOP tente donc de définir des zones et des pratiques capables de protéger à la fois la ressource et le produit. Cependant, l'étude des vulnérabilités et de la résilience de la filière a montré que de nouveaux défis menacent la ressource et l'organisation sociotechnique de la CV. Depuis le début des années 2000, avec par exemple l'arrivée du Cynips (ravageur du châtaignier) en 2010, les impacts du changement climatique ont contraint la CV à se refermer sur les aspects de contrôle, mettant de côté les pratiques de développement, d'innovation et de coexistence. L'exercice de prospective a largement mis en évidence la nécessité de relancer ces dernières dimensions afin de créer les conditions d'une durabilité résiliente de la CV, mais il a également montré que pour assurer cette durabilité, la question des modes de coexistence entre CVs basées sur une même ressource (les châtaigneraies) doit être abordée. La construction de collectifs d'acteurs permettant de concevoir des modes d'assemblage des CVs d'une part, et la promotion ou la création de nouvelles CVs dérivées d'autre part, semblent être les 2 conditions minimales pour assurer la résilience durable de la CV et de sa ressource.

5. MOVING: Towards a Sustainable Future for the Sheep Sector in the Drôme Valley

MOVING in my Mountain Region
France (Drôme Valley)
Author
A.Galmot **(CCVD)**
More info
https://www.moving-h2020.eu/reference_regions/drome-valley-france/

The MOVING program has helped to identify ways of strengthening the lamb and sheep meat sector in the Drôme valley. Using a collaborative approach, MOVING helped to envision the harmonious integration of this sector into the region's mountainous landscape, highlighting its significant agricultural, economic and ecological benefits.
The program helped identify and understand the many challenges facing the industry: coexistence with other mountain activities, increasing predation, the impact of climate change and foreign competition threatening its long-term viability. By collaborating with local stakeholders, MOVING has contributed to imagining a desirable future for the sector by circumventing or overcoming these obstacles.
In addition, the MOVING program has facilitated the linking of stakeholders in the value chain, emphasizing that the value chain preserves biodiversity, promotes sustainable agricultural practices and supports farmers' incomes as well as the sustainability of mountain areas in the Drôme valley.

Native language

MOVING: Vers un avenir durable pour la filière ovine dans la vallée de la Drôme

Le programme MOVING a contribué à identifier des moyens de renforcer le secteur de l'agneau et de la viande ovine dans la vallée de la Drôme. En utilisant une approche collaborative, MOVING a aidé à envisager l'intégration harmonieuse de ce secteur dans le paysage montagneux de la région, mettant en évidence ses avantages agricoles, économiques et écologiques significatifs.
Le programme a permis d'identifier et de comprendre les nombreux défis auxquels l'industrie est confrontée: la coexistence avec d'autres activités montagnardes, l'augmentation de la prédation, l'impact du changement climatique et la concurrence étrangère menaçant sa viabilité à long terme. En collaborant avec les parties prenantes locales, MOVING a contribué à imaginer un avenir souhaitable pour le secteur en contournant ou en surmontant ces obstacles.
De plus, le programme MOVING a facilité le rapprochement des acteurs de la chaîne de valeur, soulignant que la chaîne de valeur préserve la biodiversité, promeut des pratiques agricoles durables et soutient les revenus des agriculteurs ainsi que la durabilité des zones de montagne dans la vallée de la Drôme.

6. Carob Flour in Crete's Mountain Landscapes

MOVING in my Mountain Region
Greece
Authors
Triliva, S., Vavvos, A., Pigounakis, K. **(UOC)**
More info
https://www.moving-h2020.eu/reference_regions/crete-greece/

The MOVING project in Crete demonstrated that the cultivation of carob trees is important for practitioners and citizens, as it is connected to the cyclic economy of the agro-silvo pastoral way of life that has been part the mountainous landscapes of the island. Carob in the form of flour was a staple food in times of famine due to its nutritional quality. Nevertheless, carob flour's association with famine and its poorer economic competitiveness with major commodities such as olives rendered it a forgotten tree, crop, and food product.

Our research showed that the recent focus on health food and nutraceuticals has created a resurgence in the use of carob flour and a burgeoning research interest in its importance in preserving biodiversity and its use in the bakery, confectionery and biofuel industries. Traditional practices such as accommodating grazing of livestock in olive and carob groves, using mill and food industry waste for compost and animal feed, and collective communal harvesting and transport efforts create opportunities for farmers. Moreover, traditional food production methods are more readily used to conserve biodiversity, promote sustainable agricultural practices, and bolster farmers' incomes and mountainous areas sustainability.

Native language

ΑΝΆΛΥΣΗ ΤΟΥ ΧΑΡΟΥΠΆΛΕΥΡΟΥ ΣΕ ΟΡΕΙΝΈΣ ΠΕΡΙΟΧΈΣ ΤΗΣ ΚΡΉΤΗΣ

Το πρόγραμμα MOVING στην Κρήτη έδειξε ότι η καλλιέργεια χαρουπιών είναι σημαντική για τους επαγγελματίες και τους πολίτες, καθώς συνδέεται με την κυκλική οικονομία του αγροτο-δασο-λιβαδικού τρόπου ζωής που αποτελεί μέρος των ορεινών περιοχών του νησιού. Το χαρουπάλευρο αποτελούσε βασικό τρόφιμο σε περιόδους πείνας λόγω της διατροφικής του αξίας. Ωστόσο, η σύνδεση του χαρουπάλευρου με την πείνα και η χαμηλότερη οικονομική του ανταγωνιστικότητα σε σχέση με άλλα προϊόντα, όπως οι ελιές, το κατέστησαν μια ξεχασμένη καλλιέργεια. Η έρευνά μας έδειξε ότι η πρόσφατη εστίαση στην υγιεινή διατροφή και τα διατροφικά προϊόντα έχει δημιουργήσει μια αναζωπύρωση της χρήσης του χαρουπάλευρου και ένα αυξανόμενο ενδιαφέρον για τη σημασία του στη διατήρηση της βιοποικιλότητας και τη χρήση του στις βιομηχανίες αρτοποιίας, ζαχαροπλαστικής και βιοκαυσίμων. Παραδοσιακές πρακτικές, όπως η βοσκή των ζώων σε ελαιώνες και χαρουπώνες, η χρήση των αποβλήτων των ελαιοτριβείων και της βιομηχανίας τροφίμων για κομπόστ και ζωοτροφές, καθώς και οι συλλογικές προσπάθειες συλλογής και μεταφοράς δημιουργούν ευκαιρίες για τους γεωργούς. Επιπλέον, φαίνεται πως αυτές οι παραδοσιακές μέθοδοι παραγωγής τροφίμων χρησιμοποιούνται ευκολότερα για την προώθηση βιώσιμων γεωργικών πρακτικών και την ενίσχυση των εισοδημάτων των γεωργών.

7. Sustainable Knowledge Economy - Cold Mountain Shelter in the Transdanubian mountain reference landscape

MOVING in my Mountain Region
Hungary
Author
Gustav Nemés, Ferenc Papp **(Rural Bt)**
More info
https://www.moving-h2020.eu/reference_regions/transdanubian-mountains-hungary/

Cold Mountain Shelter is a growing community of young, educated environmentally conscious lifestyle migrants. They live mostly off grid, with sustainable solutions for energy and water management, producing food through permaculture, forest agriculture, contour farming, extensive animal husbandry, etc. Nevertheless, their main 'products' are in knowledge economy as they are developing a complex, organic, lived-knowledge-based on sustainable livelihoods. They organise courses, events, exhibitions in permaculture, orcharding, sustainable water/energy management, construction and community building. Through a nation-wide association of lifestyle migrants (All-goes-together Association) they participate in creating an online platform to share environmental- and community friendly technology (both innovative and traditional) organising a yearly festival and helping to develop local and regional nods of environmentally conscious communities. Their activities are relevant for land use, saving and creating environmental and community values, and it is an excellent example of how a conscious and powerful community can create and spread knowledge about resilience and sustainability. They innovate, combine traditional knowledge with technology, creating completely new frameworks and patterns, showing an alternative, and real-life solutions for some of the most important problems of our times, representing an important socio-economic trend, spreading fast in developed countries.

Native language

A Fenntartható Tudásgazdaság - A Dunántúli-középhegységben található Hideghegyi Menedék értéklánc elemzése

A Hideghegyi Menedék fiatal, művelt, környezettudatos életmódot folytató életmódvándorok közössége. Off-grid életet élnek, fenntartható energia- és vízgazdálkodási megoldásokkal, élelmük nagy részét környezetkímélő gazdálkodási módokon keresztül (permakultúra, erdőkert, gyümölcsészet, szintvonalas gazdálkodás, extenzív állattartás stb) maguk termelik. Ugyanakkor fő termékeiket a tudásalapú gazdaságban találjuk, a fenntartható élettel kapcsolatos, komplex, organikus, megélt tudásbázis felépítésén dolgoznak. Tanfolyamokat, rendezvényeket, táborokat szerveznek a permakultúra, a gyümölcsészet, a fenntartható víz- és energiagazdálkodás, az építőipar és a közösségépítés területén. Országos szervezetükön keresztül (Mindenegyüttmegy Egyesület) részt vesznek egy online platform létrehozásában a környezet- és közösségbarát technológiák (innovatív és hagyományos) megosztására, a Gyüttment fesztivált szervezik és segítenek a környezettudatos közösségek helyi és regionális csomópontjainak kialakításában. Tevékenységük releváns a fenntartható földhasználat, a környezeti és közösségi értékek megőrzésének szempontjából, és kiváló példa arra, hogy egy tudatos és erős közösség hogyan hozhat létre és terjeszthet megélt tudást a fenntartható élettel kapcsolatban. Újítanak, a hagyományos tudást ötvözik modern technológiával, új mintákat hoznak létre, alternatívát és valós életszerű megoldásokat mutatva korunk égető problémáira, a fejlett országokban gyorsan terjedő társadalmi-gazdasági trendeket képviselve.

8. The Moving Project Experience in The Central-Southern Apennine Region

MOVING in my Mountain Region
Italy (Central Apennines)
Authors
Angelo Belliggiano, Sara Bispini, Mauro Conti, Corrado Ievoli **(UNIMOL)**
More info
https://www.moving-h2020.eu/reference_regions/central-apennines-italy/

The MOVING project allowed the reconstruction of the pasta filata cheese value chain, historically rooted in the central-southern Apennine area, through the analysis of the production practices of the socio-ecological system, whose resilience would seem to depend on them.
Like many other mountain areas, the central-southern Apennines are facing several challenges, including depopulation and changes in lifestyle and climate. Without proactive and shared interventions by economic operators and local communities, these threats could lead to a decline of the dairy supply chain, as a consequence of concentration of production, intensification of processing, and reduction of quality standards. To face these challenges and increase the resilience of the area, it is essential to bridge the gap between science and society. The MOVING research group therefore involved local communities directly by carrying out a living lab with them, aimed at matching needs and aspirations with scientific expertise. This exercise revealed a tendency to assemble different value chains, combining dairy with tourism and/or meat production. Public policy interventions aimed mainly at livestock farming and protecting natural resources are regarded as crucial. The role of technology in adapting to climatic and economic stresses is also key, not just to enhance the resilience of socio-ecological systems, but also to safeguard high production quality.

Native language

L'esperienza del Progetto MOVING nella regione dell'Appennino centro-meridionale

Il progetto MOVING ha consentito la ricostruzione della catena del valore del formaggio a pasta filata, storicamente radicata nell'area dell'Appennino centro-meridionale, mediante l'analisi delle pratiche produttive del sistema socio-ecologico, la cui resilienza sembrerebbe dipendere proprio dalle stesse.
Come molte altre aree montane, anche l'Appenino centro-meridionale sta affrontando diverse sfide, tra le quali lo spopolamento, i cambiamenti nello stile di vita e del clima. Senza interventi proattivi e condivisi da parte degli operatori economici e delle comunità locali, tali minacce potrebbero provocare un declino della filiera lattiero-casearia, in conseguenza di fenomeni di concentrazione produttiva, di intensificazione dei processi, di riduzione degli standard qualitativi. Per affrontare tali sfide e aumentare la resilienza dell'area è indispensabile colmare il divario tra scienza e società. Il gruppo di ricerca MOVING ha pertanto coinvolto direttamente le comunità locali realizzando con le stesse un living lab, finalizzato ad incrociare fabbisogni e aspirazioni con le competenze scientifiche esperte. Da tale esercizio è emersa una tendenza all'assemblaggio di catene del valore diverse, che accostano quella lattiero-casearia con quella turistica e /o della produzione di carne. Vengono ritenuti fondamentali interventi di politica pubblica rivolti soprattutto all'allevamento e alla tutela delle risorse naturali. Cruciale è inoltre il ruolo della tecnologia ai fini dell'adattamento agli stress climatici ed economici, non solo per aumentare la resilienza dei sistemi socio-ecologici, ma anche per mantenere elevata la qualità delle produzioni.

9. A Mature Example of Integration and Collaboration, still with Room for Improvement

MOVING in my Mountain Region
Italy (Eastern Alps)
Authors
Cristina Micheloni, Ekaterina Kleshcheva, Gianni Trioli **(Vinidea)**
More info
https://www.moving-h2020.eu/reference_regions/eastern-alps-italy/

Trento, Eastern Alps, is one of the EU mountain areas where policies for the integration of economic activities are into place since decades. The key role of agriculture in the preservation of landscape and rural vitality is acknowledged.
MOVING allowed to summarize and assess the state of art of the integrated local policies from the point of view of the wine value chain (VC) and from the direct experiences of farmers, wine producers and other actors of the value chain and of the correlated activities. The study highlighted how the VC is pivotal for the continuation of agriculture activity in the area, for its relatively high profitability also for grape producers, the potential for cooperation and collaboration, the creation of space for innovation (so recalling the interest of young professionals) and has a high potential for integration with tourism and other economic activities. On the other hand, viticulture may also cause environmental negative impacts and is sensitive to climate change.
The consulted actors identified the essential elements of the future resilient development of the area:

- policies integration is essential for fairness, inclusivity, resilience and sustainability;
- family farming and small-scale animal husbandry is the cornerstone of sustainable mountain agriculture;
- ecological farming practices must be supported with funds but also with knowledge;
- a balance of power when negotiating the use of public goods (i.e. water) should be granted.

Native language

Un esempio maturo di integrazione e collaborazione, con margini di miglioramento

A Trento, nelle Alpi Orientali, da decenni l'integrazione delle politiche è realtà. L'agricoltura ha un ruolo riconosciuto nella preservazione del paesaggio e della vitalità rurale. Nel complesso, Trento è un esempio maturo di integrazione di politiche.
MOVING ha reso possibile una sintesi dello stato dell'arte delle politiche locali integrate dal punto di vista della filiera del vino e dalle esperienze dirette di agricoltori e altri attori. Si è evidenziato come la viticoltura sia fondamentale per mantenere l'attività agricola in zona, grazie a una redditività relativamente elevata anche per i produttori di uva, per l'opportunità di collaborazione e spazi per l'innovazione (d'interesse per giovani professionisti) e ha un alto potenziale di integrazione con il turismo. Ma essa può anche causare impatti ambientali negativi ed è sensibile ai cambiamenti climatici.
Gli attori consultati hanno individuato elementi essenziali del futuro sviluppo resiliente dell'area:

- l'integrazione delle politiche per raggiungere equità, inclusività, resilienza e sostenibilità;
- l'agricoltura familiare e l'allevamento di animali su piccola scala sono la pietra miliare dell'agricoltura di montagna sostenibile ed è essenziale per garantire terreni fertili per la viticoltura;
- le pratiche agricole ecologica devono essere sostenute con fondi ma anche con la conoscenza;
- dovrebbe essere garantito un equilibrio di poteri nella negoziazione dell'uso dei beni pubblici (ad esempio l'acqua).

10. Chestnut Flour – A Tuscan Heritage and a Local Pride

MOVING in my Mountain Region
Italy (Northern Apennines)
Authors
Moretti Michele, Tarek Allali **(UNIPI)**
More info
https://www.moving-h2020.eu/reference_regions/northern-apennines-italy/

The chestnut flour industry in the Northern Apennines is a vital heritage for local communities, influencing economic, environmental, and social aspects.
Historically integral to the Tuscany Apennines since the 11th century, despite competing with more profitable sectors like marble extraction and seaside tourism, the chestnut flour sector economically supports small-scale farmers, provides jobs, and combats rural depopulation. Environmentally, chestnut cultivation prevents soil erosion, boosts biodiversity, and aids in carbon sequestration and water retention. Socially, it strengthens community ties and preserves cultural heritage. Climate change and depopulation affect chestnut flour production both directly and indirectly by decreasing chestnut yields and increasing chestnut groves abandonment, respectively. Stakeholders agreed on a scenario characterised by a well-balanced coexistence of new inhabitants and wild nature to preserve the natural environment and promote sustainable living. This includes political and institutional support in building up a framework to sustain firms that choose to invest in the area, to incentivise sustainable resource management promoting community responsibility and environmental stewardship (e.g., the “Custodi della Montagna” initiative, civic use rights of collective-owned goods), to promote the collaboration with regional parks, to support small scaling agroecological farming practices, trainings for farmers, and to promote the institution of local technical committee for addressing the specific challenges and needs of rural communities.

Native language

Farina di castagne - un patrimonio toscano e un orgoglio locale

L'industria della farina di castagne negli Appennini Settentrionali è un patrimonio vitale per le comunità locali, influenzando aspetti economici, ambientali e sociali. Storicamente integrata agli Appennini Toscani sin dall'XI secolo, nonostante la competizione con settori più redditizi come l'estrazione del marmo e il turismo balneare, l'industria della farina di castagne sostiene economicamente i piccoli agricoltori, crea posti di lavoro e combatte lo spopolamento rurale. Dal punto di vista ambientale, la coltivazione dei castagni previene l'erosione del suolo, aumenta la biodiversità e contribuisce alla sequestrazione del carbonio e alla ritenzione idrica. Socialmente, rafforza i legami comunitari e preserva il patrimonio culturale. Il cambiamento climatico e lo spopolamento influenzano la produzione di farina di castagne sia direttamente che indirettamente, riducendo le rese dei castagni e aumentando l'abbandono dei castagneti. Gli stakeholder hanno concordato su uno scenario caratterizzato da una convivenza equilibrata tra nuovi abitanti e natura selvaggia, per preservare l'ambiente naturale e promuovere uno stile di vita sostenibile. Questo include il supporto politico e istituzionale per creare un quadro che sostenga le imprese che scelgono di investire nell'area, che incentivi la gestione sostenibile delle risorse promuovendo la responsabilità comunitaria e la cura ambientale (ad esempio, l'iniziativa "Custodi della Montagna", i diritti di uso civico dei beni collettivi), che promuova la collaborazione con i parchi regionali, che supporti le pratiche agroecologiche su piccola scala, che fornisca formazione agli agricoltori e che promuova l'istituzione di comitati tecnici locali per affrontare le sfide e le esigenze specifiche delle comunità montane.

11. The Legacy of the Moving Project in Maleshevski Region

MOVING in my Mountain Region
North Macedonia
Authors
Merita Kuli, Nehat Ramadani **(CNVP)**
More info
https://www.moving-h2020.eu/reference_regions/maleshevski-mountains-north-macedonia/

Through the MOVING Project, CNVP North Macedonia explored potentials and challenges for rural tourism development in the Maleshevski Region amid rapid climate change and socio-economic turbulences. The region's rural tourism offer is based on gastronomy and active tourism, known as the southern Balkans' natural spa. Challenges include local governments' limited capacity to invest in climate change mitigation and respond to its rapid negative effects, such as forest devastation by pests and wildfires, landscape changes affecting dairy and honey production, and youth migration leading to depopulation. Despite these challenges, the Maleshevski Region's rural Tourism value chain aims to promote its unique offerings by creating a certified Maleshevski brand and destination management approach while supporting municipalities in lobbying for strategic sector support from the national government. An informal working group (MAP) was formed, including small producers of local traditional food and beverages, private accommodation owners, innovative nature-based tourism offerers, Local Economic Development representatives, and Tourism Sector members through a facilitated process. This group benefited from MOVING's structured framework for regional potential analysis, valorisation, and foresight activities as capacity-building efforts. MAP members also participated in study visits to Hungary and Romania to exchange experiences with rural tourism counterparts. It was an excellent opportunity for them to get acquainted with the MOVING project, directly participate in joint activities with diverse value chains, and learn about the benefits of certified rural tourism and EU policy frameworks.

Native language

Што останува по спроведувањето на проектот мувинг во малешевскиот регион

Преку проектот МУВИНГ, ЦНВП – Северна Македонија ги истражуваше потенцијалите и предизвиците за развој на руралниот туризам во Малешевскиот Регион, во ерата на забрзано влијание на климатските промени и социо-економските турбуленции. Туристичката понуда на Малешевскиот регион е базирана на гастрономија и активен туризам. Регионот изобилува со шумски предели и е познат како Балкански спа центар на отворено. Клучен предизвик е недостигот на капацитет на локалните власти да инвестираат во превенција и одговор на негативните ефекти од климатските промени и депопулацијата поради миграции, особено на младите. Видливи се ефектите од климатските промени: инсекти ги уништуваат шумите, пожарите се резултат на високите температури и човечкиот фактор, а пасиштата исчезнуваат, што влијае на производството на млечни продукти и пчеларството. Недоволната поддршка од Владата и недоволното инвестирање во руралниот туризам ја намалува атрактивноста на регионот во споредба со соседните држави. Сепак, претставниците на вредносниот синџир на руралниот туризам во Малешевијата остануваат посветени на промоцијата и укажаа на потребата од воспоставување сертифициран Малешевски бренд и дестинациски менаџмент. Во рамки на проектот, беше формирана работна група со претставници на мали бизниси, производители на традиционална храна и пијалоци, хотелиери, иновативни бизниси, и претставници на општините Берово и Пехчево. Работната група учествуваше на студиски посети во Унгарија и Романија, каде разменуваа искуства и се запознаа со бенефитите од сертифицираниот рурален туризам и ЕУ регулативите

12. “The Serra Divides More Than It Unites” – A Threatened Landscape In Need Of A Territorial Approach

MOVING in my Mountain Region
Portugal (Cordilheira Central)
Authors
Catarina Esgalhado, Teresa Pinto Correia **(UEvora)**
More info
https://www.moving-h2020.eu/reference_regions/cordilheira-central-portugal/

Grazing in altitude pastures links the value chain of Serra da Estrela PDO cheese to the mountain landscape, but the production area extends well beyond the mountain area, to include lowland pastures. The most common narrative by regional and national territorial authorities describe this PDO cheese as a vital territorial asset with increasing market value. Each cheese-producing municipality hosts its own cheese fair, and independently decides how to support the value chain. Recent cooperative projects have aimed to valorise the product, yet little attention is given to the fleeting connection between the cheese and territory that names it.

Socio-economic changes in the last decades have reconfigured the cheese value chain from a family-based operation, where men shepherded and women made cheese, to larger factories that buy milk from multiple milk producers. Previously grazed commons are now managed primarily for forestry. With a declining population, there are less shepherds and sheep, shepherds are scatered, and the mountain is losing its stewards.

A cohesive territorial approach is needed to preserve and revitalize altitude pastures and thus its characteristic landscape, integrating development, pastoralism, conservation and fire risk management objectives. This entails a landscape-based strategy for the mountain territory as a whole, rather than by sector policies and by each municipality separately. Deciding on priority areas of intervention at the landscape level and establishing a network of paths and services would facilitate movement for people and livestock within the mountain, reducing land abandonment and encroaching. This unified territorial strategy is essential for the sustainable future of Serra da Estrela.

Native language

“A serra divide mais do que une” - Uma paisagem ameaçada que beneficiaria de uma abordagem territorial

O pastoreio em pastagens de altitude liga a cadeia de valor do queijo Serra da Estrela DOP à montanha, mas a área de produção inclui também áreas de pastagens em planície. Autoridades locais tendem a descrever este queijo como um ativo territorial vital. Cada município produtor de queijo organiza a sua própria feira de queijo e apoia a cadeia de valor de forma autónoma. Projectos recentes de cooperação visam a valorização do produto, mas pouca atenção é dada à ligação enfraquecida entre o queijo e o território que lhe dá nome.

Mudanças socioeconómicas das últimas décadas reconfiguraram a cadeia de valor do queijo, que deixou de ser uma operação de base familiar, em que os homens pastoreavam e as mulheres faziam queijo. Agora há queijarias mais industriais e que compram leite a diversos produtores. Baldios antes ocupados por pastagens são agora maioritariamente geridos para fins florestais. Com o declínio da população, há menos pastores e ovelhas, os pastores estão dispersos e a montanha está a perder os seus guardiães.

É necessária uma abordagem territorial coesa para preservar e revitalizar a pastagem de altitude e, consequentemente, a sua paisagem caraterística, integrando objectivos de desenvolvimento, pastorícia, conservação e gestão do risco de incêndio. Isto implica uma estratégia baseada na paisagem que considera o território de montanha como um todo, em vez de políticas sectoriais e de cada município separadamente. A definição de áreas prioritárias de intervenção ao nível da paisagem e a criação de uma rede de caminhos e serviços facilitariam a deslocação das pessoas e do gado no interior da montanha, reduzindo o abandono e a invasão de terras. Esta estratégia territorial unificada é essencial para o futuro sustentável da Serra da Estrela.

13. The Future of Quality Wine Production and a Demographic Challenge

MOVING in my Mountain Region
Portugal (Maciço Noroeste)
Authors
Cristina Micheloni, Ekaterina Kleshcheva, Gianni Trioli **(Vinidea)**
More info
https://www.moving-h2020.eu/reference_regions/macico-noroeste-portugal/

In Alto Douro human history is intertwined with viticulture for 2000 years. UNESCO acknowledged such a strict correlation in 2001, declaring it "World Heritage of Humanity" for Cultural, Evolutive and Living Landscape. Traditionally grape production took place in small scale family farms that usually processed their grapes into wine in cooperative cellars. More recently, due to family farming low profitability, small properties gave way to large companies from the lower part of the valley. As a consequence, relevant parts of the value chain (VC) and related added value exit the area and do not benefit local communities. The socio-economic situation and the reduced availability of infrastructures and services for families, leads to population decrease and ageing. The "desertification" effect causes also problems to the wine VC as labor forces should be found in commuters or in migrants. The loss of residents hampers the development of a promising touristic sector.
The actors identified some key aspects for a resilient future of local communities:

- the need for integration of policies among sectors and geographic scale to reach inclusivity, resilience and sustainability.
- material and immaterial infrastructures are needed to allow young families to remain.
- a balance of power in using common goods should be assured.
- investments in knowledge, on many aspects, are essential.

Native language

O futuro da produção de vinho de qualidade e um desafio demográfico

No Alto Douro a história humana se entrelaça com a viticultura desde 2000 anos. A UNESCO reconheceu esta correlação em 2001, declarando-a "Património Mundial da Humanidade" para a Paisagem Cultural, Evolutiva e Viva. Tradicionalmente, a produção de uvas ocorria em pequenas explorações familiares que transformavam as suas uvas em vinho em caves cooperativas. Recentemente, pela baixa rentabilidade da agricultura familiar, as pequenas propriedades deram lugar às grandes empresas da parte baixa do vale. Como consequência, partes relevantes da cadeia de valor e o valor acrescentado saem da área e não beneficiam as comunidades locais. A situação socioeconómica e a reduzida disponibilidade de infra-estruturas e serviços levam à diminuição e envelhecimento da população. O efeito "desertificação" causa problemas à cadeia de valor do vinho, onde a força de trabalho deve ser constituída por trabalhadores pendulares ou migrantes. A perda de residentes dificulta também o desenvolvimento de um sector turístico promissor.
Os atores identificaram alguns aspectos-chave para um futuro resiliente das comunidades locais:

- a necessidade de integração de políticas entre sectores e escala geográfica, a fim de alcançar a inclusão, a resiliência e a sustentabilidade;
- são necessárias infra-estruturas materiais e imateriais para permitir a permanência das famílias;
- deve ser assegurado um equilíbrio de poder na utilização dos bens comuns;

são essenciais investimentos no conhecimento.

14. MOVING Legacy in Southern Romanian Carpathians

MOVING in my Mountain Region
Romania
Authors
Cătălina Rogozan, Alina Alexa **(HCC)**
More info
https://www.moving-h2020.eu/reference_regions/southern-romanian-carpathian-mountains-romania/

Within MOVING project, we studied the role of the certified ecotourism value chain for the resilience and sustainability of Southern Romanian Carpathians. The project provided the framework for studying the main issues in the area, as well as for identifying solutions.
The key problems in the region are the abandonment of agricultural land which results in a changing natural mountain landscape and the uncontrolled and chaotic building development. The depopulation in the area is contributing to the abandonment of the agricultural land and of the traditional practices that are creating the mosaic landscape and the loss of local traditions and customs.
Within MOVING, we succeeded in creating a common platform where stakeholders could interact and collaborate. Furthermore, the project offered the local stakeholders the opportunity to learn from a diverse category of best practices (including by hosting and participating in cross-country visit) and the opportunity to actively engage in policy development (at local, regional, national or European levels).
Furthermore, we disseminated the results of the project and discussed with more than 130 local young people, managing to raise awareness regarding the importance of mountain areas. The subjects of mountain areas and sustainable value chains were more in-depth approached during the Summer School, in which 10 local youth participated and engaged in discussions and field visits.
Moreover, within MOVING we informed local small agricultural producers on the benefits of the OQT 'mountain product' in 15 communes aiming to highlight the added value that the OQT is bringing and to facilitate the integration of the certified products in the touristic value chain.

Native language

Moștenirea proiectului MOVING în Carpații Meridionali

În cadrul proiectului MOVING am studiat rolul ecoturismului certificat pentru reziliența și sustenabilitatea Carpaților Meridionali. Proiectul a oferit cadrul pentru studierea principalelor probleme din zonă, precum și pentru identificarea de soluții.
Principalele probleme din regiune sunt abandonarea terenurilor agricole, care are ca rezultat schimbarea peisajului montan, precum și dezvoltarea necontrolată și haotică a construcțiilor. Depopularea contribuie la abandonarea terenurilor agricole și a practicilor tradiționale care creează peisajul și la pierderea tradițiilor și obiceiurilor locale.
În cadrul proiectului MOVING am reușit să creăm o platformă comună în care părțile interesate să interacționeze și să colaboreze. În plus, proiectul a oferit părților interesate posibilitatea de a învăța dintr-o categorie diversă de bune practici (inclusiv prin găzduirea și participarea la vizite de lucru) și oportunitatea de a se implica activ în elaborarea de politici (la nivel local, regional, național sau european).
Totodată, am diseminat rezultatele proiectului și am discutat cu peste 130 de tineri (cu vârste cuprinse între 20 și 25 de ani), reușind să sensibilizăm tinerii cu privire la importanța zonelor montane. Zonele montane și lanțurile valorice durabile au fost abordate mai în profunzime în cadrul Școlii de Vară, la care au participat 10 tineri care s-au implicat în discuții și vizite pe teren.
De asemenea, în cadrul proiectului MOVING, am informat micii producători agricoli locali din 15 comune cu privire la beneficiile MCF „produs montan", cu scopul de a evidenția valoarea adăugată și de a facilita integrarea produselor certificate în activitățile turistice.

15. From Family Traditions to Collaboration for Quality Governance of Pester Plateau Products

MOVING in my Mountain Region
Serbia
Authors
Tamara Zivadinovic, Dragana Tar **(MENA)**
More info
https://www.moving-h2020.eu/reference_regions/dinaric-mountains-serbia/

The Pester plateau and Sjenica, are well known for its natural beauty, high quality products and harsh climate. As part of Dinaric mountains, it is the largest and the highest karst field in the Balkans, marked by natural pastures, protected and endangered species. The Sjenica lamb was selected as a pilot value chain for the research in Serbia.
The Sjenica lamb production is embedded into the lives of multi-generational families living in the region. The high quality of meat and milk is rooted in transhumance pastoralist practices, taking the best of natural environmental conditions and nomadic/free range livestock systems, grazing on natural pastures. Sjenica lamb, Sjenica sheep cheese and Sjenica stelja (dried sheep meat) are PDO protected, but not fully valorised.
The local communities and production system proved to be resilient. The extensive nature of production, not dependent on externalities, enables sustainable agriculture in tune with natural dynamics. Activation of external solidarity mechanisms, adaptation of agricultural practices to reduce pressures of pasture use and water deficiency and push for the valorisation of the PDOs are the important part of it.
The research results showed that Sjenica region and Sjenica lamb VC need specific holistic solutions to be created and supported by the policy frameworks. The key points of the future strategy are: Sjenica lamb (PDO) and the interconnected products, need to be valorised through certification managed by producer organisations; Improved living conditions and co-creation of policies with and for young people are crucial for stopping the demographic decline of the region. All this needs to be accompanied with reaching the sustainability of natural resources for future.

Native language

Od porodične tradicije ka saradnji za upravljanje kvalitetom proizvoda sa peštera

Pešterska visoravan i Sjenica su poznati po svojim prirodnim lepotama, visokokvalitetnim proizvodima i oštroj klimi. Kao deo Dinarskih planina plato predstavlja najveće i najviše kraško polje na Balkanu, sa prirodnim pašnjacima, zaštićenim i ugroženim vrstama. Sjeničko jagnje je odabrano kao pilot lanac vrednosti za istraživanje u Srbiji.
Proizvodnja Sjeničke jagnjetine utkana je u živote višegeneracijskih porodica koje žive u regionu. Visok kvalitet mesa i mleka je ukorenjen u transhumanoj stočarskoj praksi, koja uzima najbolje iz prirodnih uslova životne sredine i nomadskog/slobodnog uzgoja stoke i ispaše na prirodnim pašnjacima. Sjenička jagnjetina, Sjenički ovčiji sir i Sjenička stelja zaštićeni su ZOP, ali nisu valorizovani.
Lokalne zajednice i proizvodni sistem pokazali su se otpornim. Ekstenzivna priroda proizvodnje, koja ne zavisi od eksternih faktora, omogućava održivu poljoprivredu koja je u skladu sa prirodnom dinamikom. Aktiviranje spoljnih mehanizama solidarnosti, prilagođavanje poljoprivrednih praksi da bi se smanjili pritisci korišćenja pašnjaka i nedostatka vode i podsticanje valorizacije ZOP su važan deo toga.
Rezultati istraživanja su pokazali da su regionu Sjenice i VC Sjenička jagnjetina potrebna specifična holistička rešenja koja će biti kreirana i podržana okvirnim politikama. Ključne tačke buduće strategije su: potrebno je valorizovati sjeničku jagnjetinu (PDO) i međusobno povezane proizvode kroz sertifikaciju kojom upravljaju proizvođačke organizacije; Poboljšani uslovi života i zajedničko kreiranje politika sa mladima i za mlade su ključni za zaustavljanje demografskog pada u regionu. Sve ovo treba da bude praćeno postizanjem održivosti prirodnih resursa za budućnost.

16. Honey value chain in Slovak mountains

MOVING in my Mountain Region
Slovakia
Author
Diana Surová **(CZU)**
More info
https://www.moving-h2020.eu/reference_regions/slovak-carpathian-mountains-slovakia/

The Moving project in Slovakia focused on the value chain of honey in mountains. The project's working discussion activities included dozens of stakeholders directly or indirectly involved in honey production. A detailed description of the value chain and its contribution to territories was elaborated. The main problems were identified, and multiple measures were proposed to ensure the sustainability of this value chain. The honey value chain in Slovakia's mountain regions is mainly ensured by small and medium-sized beekeepers who maintain local traditions and skills in beekeeping and produce high-quality, demanded honey. Product is sold directly to customers from the beekeeper, representing a short supply chain. Mountain communities receive in this way an additional income and mountain locations gain attractiveness for recreation and tourism. Beekeeping also brings continuous environmental education and awareness of the connection between the quality of the environment, health of bees and people. It is a "way of life" connected to nature and benefits mental health.

The project meetings created opportunities for face-to-face discussions between various actors. They brought together experts on the given topic, local beekeepers, and actors of national governing bodies in a rich conversation about the current and future development of beekeeping. Indeed, the climatic, environmental, and social conditions for beekeeping today are significantly more challenging compared to the past. To preserve this tradition, investments in new knowledge, practices, and cooperation between beekeepers and other actors and value chains in the region are needed to ensure the resilience of bee colonies and the sustainability of the value chain.

Native language

Hodnotový reťazec medu v slovenských horských oblastiach

Projekt Moving na Slovensku sa zameral na hodnotový reťazec medu v horských oblastiach. Pracovné diskusné aktivity projektu zahŕňali desiatky aktérov zo zainteresovaných strán, priamo či nepriamo zapojených do produkcie medu. Bol vypracovaný podrobný popis hodnotového reťazca medu a jeho prínosu pre horské oblasti. Boli identifikované hlavné problémy ovplyvňujúce reťazec a boli navrhnuté opatrenia na zabezpečenie udržateľnosti produkcie medu v budúcnosti. Hodnotový reťazec medu v horských oblastiach Slovenska zabezpečujú najmä malí a strední včelári, ktorí udržiavajú miestne tradície a zručnosti vo včelárstve a produkujú kvalitný a žiadaný med. Produkt sa predáva priamo od včelára zákazníkom, čo predstavuje krátky dodávateľský reťazec. Horské komunity tak majú dodatočný príjem a zvyšuje sa atraktivita horských lokalít pre rekreáciu a turizmus. Praktizovanie včelárstva prináša aj neustále environmentálne vzdelávanie a uvedomelosť o súvislostiach medzi kvalitou prostredia, zdravím včiel a ľudí. Znamená istý „spôsob života“ spätý s prírodou a tým je prospešné pre duševné zdravie. Projektové stretnutia umožnili osobné diskusie medzi rôznymi aktérmi hodnotového reťazca. Diskusie o súčasnom a budúcom vývoji včelárstva v horských oblastiach spojili odborníkov na danú tému, miestnych včelárov, ale aj aktérov z národných riadiacich orgánov. Klimatické, environmentálne a sociálne podmienky pre chov včiel sú dnes v porovnaní s minulosťou výrazne ťažšie. Na zachovanie tradície včelárstva sú potrebné investície do nových poznatkov, postupov a spolupráce medzi včelármi a ďalšími aktérmi a hodnotovými reťazcami v regióne, aby sa zabezpečila odolnosť včelstiev a trvalá udržateľnosť hodnotového reťazca.

17. The Mountain Olive Oil Value Chain in MOVING, Sustaining People, Nature, Economy and Heritage in the Andalusian Betic System, but in Need of Being Sustained

MOVING in my Mountain Region
Spain (Betic System)
Authors
Raquel Moreno, Tristan Roullier, Antonio Zafra **(ADEGUA)**
More info
https://www.moving-h2020.eu/reference_regions/betic-systems-spain/

Olive growing has a long history in Andalusia and especially in Sierras Subbéticas, Córdoba, Spain. The mountain olive oil production in this mountain area is a strong economic, social, cultural and environmental asset. Producing, processing and marketing this olive oil involves farmers, cooperatives, private mills, distributors and the population at large. All these interactions included in a high-quality mountain olive oil value chain. Thus, this culture is working as a strong social bond as it preserves identity and traditional knowledge and ensures social cohesion and collective decision making. At the same time, it needs innovation coming from scientific knowledge and support from policies taking into account its differentiated reality, such as the MOVING project proposes.

The Subbéticas mountain olive oil value chain provides unique ecosystem services as well as community value, all the while producing an exceptional olive oil, essential for its economy, but the very region is facing challenges that need to be addressed to keep it sustainable and resilient. A differentiated treatment from policies addressing mountains and their value, adaptation measures to face climate change, a fair price on the market to cover for the high production costs of a high-quality mountain food or the social recognition for the environmental services provided are among the proposed solutions. Action to tackle depopulation and support the aging population is also essential, because only resilient communities make sustainable territories.

Native language

La cadena de valor del olivar de montaña en moving, sosteniendo personas, naturaleza, economía y patrimonio en Andalucía, pero con necesidad de ser sostenida

El cultivo del Olivar tiene una larga historia en Andalucía y específicamente en las Sierras Subbéticas de Córdoba. La producción de aceite de oliva de montaña en esta zona de sierra es un importante recurso económico, social y medioambiental. Producir, transformar y comercializar este aceite involucra a agricultores, cooperativas, almazaras privadas, distribuidores y a la población en general, todas estas interacciones incluidas en una cadena de valor de aceite de oliva de montaña de alta calidad. Así, este cultivo tiene una importante función de vínculo social al preservar la identidad, el conocimiento tradicional y asegurar una cohesión social y la toma de decisiones de manera colectiva. Del mismo modo, necesita innovación basada en conocimiento científico y apoyo por parte de políticas que tengan en cuenta su realidad diferencial como propone el proyecto MOVING.

La cadena de valor del aceite de oliva de las Sierras Subbéticas provee servicios eco-sistémicos únicos así como valor comunitario, al tiempo que produce un aceite excepcional, esencial para su economía, pero la propia región se enfrenta a retos que necesitan respuesta para su sostenibilidad y resiliencia. Un trato diferenciado de las políticas que abordan las montañas y su valor, medidas de adaptación para hacer frente al cambio climático, un precio justo en el mercado para cubrir los altos costes de producción de un alimento de montaña de alta calidad o el reconocimiento social por los servicios ambientales prestados son algunas de las soluciones propuestas. Acciones para mitigar el despoblamiento y apoyar a la población envejecida son también esenciales, porque solo comunidades resilientes hacen territorios sostenibles.

18. Iberico Ham: The Unique Taste of Sierra Morena

Topic
Authors
María del Mar Delgado Serrano, Verena Arndt **(UCO)**
More info
https://www.moving-h2020.eu/reference_regions/sierra-morena-spain/

Dehesa, an agrosilvopastoral ecosystem, is where the Iberico pigs are reared. These pigs are extensively fed on acorns and pasture, giving the ham its unique flavour. This pig-rearing system, developed over centuries, has fostered a harmonious relationship between conserving the Mediterranean forest and utilizing its natural resources through cultural practices deeply rooted in the territory.

Los Pedroches PDO Iberico Ham established clear rules for sustainable production. Environmental sustainability is ensured by the low stock density (1 pig/ha), economic sustainability by the product's premium price and social sustainability by job opportunities, the family business approach, and traditional practices.

Yet, Iberico ham profitability led non-PDO firms to increase grazing intensity, affecting this landscape's sustainability. Besides the overexploitation of resources, Dehesas face other problems, such as climate change, tree diseases, vegetation regeneration issues, and a lack of generational renewal. Moreover, Iberico ham production is attracting the interest of big companies from other sectors. These firms have more skills and resources to implement innovative approaches in managing and processing ham than family ones and threaten the maintenance of traditional businesses. Finally, the sector struggles to differentiate itself in the market and compete with other industrialised products, which blurs its specific characteristics linked to sustainable production.

The mountain's resilience and future sustainability require policies such as clear labelling of production methods, payments for Dehesa ecosystem services, and communication campaigns to encourage consumers to pay fair prices to producers.

Native language

Jamón ibérico, el sabor único de la dehesa de Sierra Morena

La Dehesa es un ecosistema agrosilvopastoral donde se cría el cerdo ibérico en libertad alimentándose de bellotas y pastos durante la montanera, lo que da al jamón su sabor único. El sistema, desarrollado a lo largo de siglos, fomenta una relación armoniosa entre la conservación de este bosque mediterráneo y la utilización de sus recursos mediante prácticas culturales profundamente arraigadas en el territorio.

La DOP Jamón Ibérico Los Pedroches establece normas claras para la producción sostenible.

La sostenibilidad medioambiental está garantizada por la baja densidad de carga (1 cerdo/ha), la sostenibilidad económica por el precio del producto y la sostenibilidad social por el empleo, las empresas familiares y las prácticas tradicionales.

En contraste, la rentabilidad del producto lleva a las empresas no DOP a aumentar la carga ganadera, afectando a la sostenibilidad de la Dehesa, que además se enfrenta a problemas, como el cambio climático, la regeneración y las enfermedades de los árboles o el relevo generacional. Además, la producción de jamón ibérico está atrayendo el interés de grandes empresas de otros sectores con más recursos y conocimiento para aplicar enfoques innovadores en la gestión y transformación de los jamones, amenazando el mantenimiento de las empresas familiares tradicionales.

Por último, el sector tiene dificultades para que el consumidor diferencie el jamón ibérico 100% bellota de otros productos industrializados, no producidos de forma sostenible.

La resiliencia y sostenibilidad de Sierra Morena requieren políticas como un etiquetado claro del jamón ibérico, pagos por los servicios ecosistémicos de la dehesa y campañas de comunicación para que los consumidores paguen precios justos a los productores.

19. Young Mountain Wine Value Chain in Spanish Pyrenees: Challenges and Potential

MOVING in my Mountain Region
Spain (Spanish Pyrenees)
Author
Ekaterina Kleshcheva **(Vinidea)**
More info: https://www.moving-h2020.eu/reference_regions/spanish-pyrenees-spain/

Mountain wine production value chain in Huesca, a province in Spanish Pyrenees, is a relatively young value chain with strong historical background. The main actors of the VC are small and medium wineries, a dynamic association of farmers "Vignerons de Huesca" plays an important role in the value chain development.
Four years of MOVING project offered the possibility to summarize and assess the state of art of the integrated local policies from the point of view of the wine value chain and from the direct experiences of farmers, wine producers and other actors of the value chain and of the correlated activities (i.e. tourism). Another important achievement was the possibility to put on the same table a very wide range of local actors, including farmers, advisors, researchers and policy makers in order to reflect together on the most relevant challenges and solutions.
The study highlighted that wine production has an important potential for the economic and social sustainability of the region: up to 50% of activities of the value chain take place in the area and up to 70% of value generated by wine production stays in the territory and the local community. It also has a high potential for integration with tourism and other economic activities. On the other hand, for further development it needs to overcome the high level of vulnerability caused by abandonment, emigration and climate change, to which viticulture is very sensitive. Well-targeted policies, focused on attracting of young professionals to the wine sector and infrastructure development in mountain rural areas, together with producers' synergy in terms of territorial marketing can allow the value chain to move forward for the benefit of the region and local community.

Native language

Nueva cadena de valor del vino de montaña en los Pirineos españoles: Retos y potencial

La cadena de valor de la producción de vino de montaña en Huesca, una provincia de los Pirineos españoles, es una cadena de valor relativamente joven con un fuerte trasfondo histórico. Los principales actores de la CV son pequeñas y medianas bodegas, una dinámica asociación de agricultores «Vignerons de Huesca» desempeña un papel importante en el desarrollo de la cadena de valor.
Cuatro años de proyecto MOVING ofrecieron la posibilidad de resumir y evaluar el estado del arte de las políticas locales integradas desde el punto de vista de la cadena de valor del vino y de las experiencias directas de los agricultores, productores de vino y otros actores de la cadena de valor y de las actividades correlacionadas (es decir, el turismo).
El estudio destacó que la producción de vino tiene un importante potencial para la sostenibilidad económica y social de la región: hasta el 50% de las actividades de la cadena de valor tienen lugar en la zona y hasta el 70% del valor generado por la producción de vino se queda en el territorio y la comunidad local. También tiene un alto potencial de integración con el turismo y otras actividades económicas. Por otro lado, para seguir desarrollándose necesita superar el alto nivel de vulnerabilidad causado por el abandono, la emigración y el cambio climático, a lo cual la viticultura es muy sensible. Unas políticas bien orientadas, centradas en la atracción de jóvenes profesionales al sector vitivinícola y el desarrollo de infraestructuras en las zonas rurales de montaña, junto con la sinergia de los productores en términos de marketing territorial, pueden permitir que la cadena de valor avance en beneficio de la región y la comunidad local.

20. MOVING in the Swiss Alps

MOVING in my Mountain Region
Switzerland (Swiss Alps)
Authors
Carmen Forrer, Isabel Jaisli **(ZHAW)**
More info:
https://www.moving-h2020.eu/reference_regions/swiss-alps-switzerland/

Agriculture has a long tradition in the Grison Alps and plays a major role in forming the typical landscape.
Within MOVING, we elaborated the mountain grain value chain and its importance to diversify the region's traditional animal agriculture with sustainable plant products. The cooperative *Gran Alpin* plays an important role by managing the mountain grain production in the Grison Alps. It was formed in the 1980s and counts over 100 farmers as member today. The value chain focuses on the production and distribution of premium organic cereal products such as pasta or beer, which are popular with both private customers and retailers. Success factors have been the cooperative's drive, partnerships with local processors and retailers, as well as premium pricing through organic and regional branding.
However, there are several obstacles that we have been able to identify achieving sustainable development of the region. Our research has shown that infrastructure in the farming and processing stage, availability of site-appropriate seeds, the current focus of agricultural policy towards livestock production, and the lack of skilled labour in the region are the main factors holding back grain production on farms. Therefore, we recommend investing in education, training, and advisory services as well as in infrastructure improvement and financial support for innovative mountain-specific practices.

Native language

MOVING in den Schweizer Alpen

Die Landwirtschaft hat in Graubünden eine lange Tradition und spielt eine wichtige Rolle in der für die Region typische Landschaftsgestaltung.
Im Rahmen von MOVING untersuchten wir die Berggetreide-Wertschöpfungskette und ihre Bedeutung für die Diversifizierung der traditionellen Tierproduktion mit nachhaltig produzierten pflanzlichen Produkten. Die Genossenschaft Gran Alpin übernimmt das Management der Berggetreideproduktion und deren Produkte in Graubünden. Sie wurde in den 1980er Jahren gegründet und zählt heute über 100 Mitglieder. Die Genossenschaft konzentriert sich auf die Produktion und den Vertrieb von hochwertigen Bio-Getreideprodukten wie Teigwaren oder Bier, die sowohl bei Privatkunden als auch im Handel beliebt sind. Erfolgsfaktoren sind die Dynamik der Genossenschaft, Partnerschaften mit der lokalen Verarbeitung und dem Einzelhandel sowie Premium-Preise durch Bio- und Regionalmarken.
Es gibt jedoch mehrere Herausforderungen, die wir für eine nachhaltige Entwicklung der Region und der Wertschöpfungskette ausmachen konnten: Die Infrastruktur, besonders in der Landwirtschafts- und Verarbeitungsphase sind unzureichend und es fehlen standortangepasste Getreidesorten. Zudem stellen die derzeitige Ausrichtung der Agrarpolitik auf Tierproduktion und der Fachkräftemangel in der Region weitere Faktoren dar, die den Ausbau der Wertschöpfungskette hindern. Wir empfehlen, in Bildung, Ausbildung und Beratung sowie in die Verbesserung der Infrastruktur und die finanzielle Unterstützung innovativer bergspezifischer Praktiken zu investieren.

21. Tête de Moine PDO - Swiss Jura

MOVING in my Mountain Region
Switzerland (Swiss Jura)
Author
Isabella Maglietti Smith **(ORIGIN)**
More info
https://www.moving-h2020.eu/reference_regions/swiss-jura-switzerland/

The Tête de Moine AOP, faces an uncertain future due to climate change and a changing farmer population.
The MOVING research project has identified key threats and potential solutions to safeguard this cultural heritage.
Reduced summer rainfall and more extreme weather events brought on by climate change could significantly impact the quality and quantity of grass, a vital ingredient for producing the high-quality milk needed for Tête de Moine. Additionally, an aging farmer population and a declining interest in dairy farming pose challenges to the future workforce.
The MOVING project has supported the local stakeholders to define joint objectives that respond to these threats, that are as follows:

- Developing drought-resistant forage varieties could ensure a steady supply of grass for the cows. Improved water management practices, such as storing water during wet seasons for use during dry periods.
- Attracting younger generations to dairy farming.
- Highlighting the prestige and value associated with Tête de Moine production, contributing to make dairy farming a more attractive career path.
- Positioning Tête de Moine as a luxury product, contributing to increase the demand and profitability, further incentivizing young farmers to join the industry.

By developing strategic options that contribute to these objectives, the Tête de Moine value chain can adapt to the changing cheese market and the climate change, ensuring the continued production of this beloved cheese and preserving this unique piece of Swiss culinary heritage.

Native language

MOVING dans ma Région: Tête de Moine AOP - Jura Suisse

L'AOP Tête de Moine est confrontée à un avenir incertain en raison du changement climatique et de l'évolution de la population agricole.
Le projet de recherche MOVING a permis d'identifier les principales menaces et les solutions potentielles pour sauvegarder ce patrimoine culturel.
La diminution des précipitations et l'augmentation des phénomènes météorologiques extrêmes liés au changement climatique pourraient avoir un impact significatif sur la qualité et la quantité de l'herbe, essentiel pour produire le lait de haute qualité nécessaire à la Tête de Moine. En outre, le vieillissement de la population agricole et le déclin de l'intérêt pour l'élevage laitier posent des défis à la future main-d'œuvre.
Le projet MOVING a aidé les acteurs locaux à définir des objectifs communs pour répondre à ces menaces:

- Le développement de variétés de fourrage résistantes à la sécheresse pourrait assurer un approvisionnement régulier en herbe pour les vaches. Améliorer les pratiques de gestion de l'eau, par exemple en stockant l'eau pendant les saisons humides pour l'utiliser pendant les périodes sèches.
- Attirer les jeunes générations vers l'élevage laitier.
- Mettre en évidence le prestige et la valeur de la production de Tête de Moine, afin de rendre l'élevage laitier plus attractif.
- Positionner la Tête de Moine comme un produit de luxe, ce qui contribue à augmenter la demande et la rentabilité et incite les jeunes agriculteurs à rejoindre le secteur.

Les options stratégiques développées pour la chaîne de valeur de la Tête de Moine permettent d'atteindre les objectifs et de s'adapter au marché du fromage et au changement climatique. Elles garantissent la continuité de la production et la préservation du patrimoine culinaire suisse..

22. Climate Change Threatens Tomato Production in Beydaglari

MOVING in my Mountain Region
Turkey
Authors
Murat Yercan, Hakan Adanacıoğlu, Duygu Tosun, Filiz Kınıklı **(EGE)**
More info
https://www.moving-h2020.eu/reference_regions/beydaglari-turkey/

The Beydaglari is the western extension of the Taurus Mountains, stretching parallel to the bay in a north-south direction in the west of the Antalya Bay. In recent years, the production of highland greenhouse vegetables in the region has increased. The region is an important production centre in terms of greenhouse production and makes a significant contribution to the regional and national economy. Greenhouse farming provides a wide range of employment opportunities at all stages of the value chain. Reverse migration has begun with the development of greenhouse tomato cultivation in the region.

The main problem in the region is greenhouse production, which is not increasing in line with natural resources. As greenhouse farming provides higher income than other production activities, farmers tend to expand their greenhouse areas. This expansion poses a threat to the future, particularly in terms of water potential. Irrigation water in the region is largely supplied from groundwater resources. There is a notable decrease in rainfall due to the climate change. This leads to drought in the region and depletion of groundwater. The drought will become more severe every day unless global, national and regional measures are taken to reduce the factors causing climate change. The MOVING project is helping to attract the attention of public authorities and raise awareness to climate change in particularly drought effect and improve policies that reflect the views of all actors in the value chain.

Native language

Beydağlarinda iklim değişikliği domates üretimini tehdit ediyor

Antalya Körfezi'nin batısında kuzey-güney doğrultusunda körfeze paralel uzanan Beydağları Toros Dağları'nın batı uzantısıdır. Son yıllarda bölgede yayla seracılığı üretimi artış göstermiştir. Bölge, sera üretimi açısından önemli bir üretim merkezi olup bölge ve ülke ekonomisine önemli katkı sağlamaktadır. Seracılık, değer zincirinin tüm aşamalarında çok çeşitli istihdam olanakları sağlamaktadır. Bölgede sera domates yetiştiriciliğinin gelişmesiyle birlikte tersine göç başlamıştır.

Bölgedeki temel sorun, doğal kaynaklara uyumlu olarak artmayan sera üretimidir. Seracılık diğer üretim faaliyetlerine göre daha yüksek gelir sağladığı için çiftçiler sera alanlarını genişletme eğilimindedir. Bu genişleme, özellikle su potansiyeli açısından gelecek için tehdit oluşturmaktadır. Bölgedeki sulama suyu büyük ölçüde yeraltı su kaynaklarından sağlanmaktadır. İklim değişikliğine bağlı olarak yağışlarda kayda değer bir azalma söz konusudur. Bu durum bölgede kuraklığa ve yeraltı sularının azalmasına yol açmaktadır. İklim değişikliğine neden olan faktörleri azaltmak için küresel, ulusal ve bölgesel önlemler alınmadığı takdirde kuraklık her geçen gün daha da şiddetlenecektir. MOVING projesi, kamu yetkililerinin dikkatini çekmeye ve iklim değişikliğinin özellikle kuraklığa etkisi konusunda farkındalık yaratmaya ve değer zincirindeki tüm aktörlerin görüşlerini yansıtan politikalar geliştirmeye yardımcı olmaktadır.

23. Speyside Malt Whisky: Distilling Heritage from Mountain Landscapes for the World

MOVING in my Mountain Region (UK-Scotland)
Authors Rachel Creaney, Kirsty Blackstock, Liz Dinnie. Chloe Thompson **(HUTTON)**
More info https://www.moving-h2020.eu/reference_regions/highlands-and-islands-uk-scotland/

The Malt Whisky value chain (VC) in the Upper Speyside region, sits partially in the Cairngorms National Park. Natural, sociocultural and economic assets are used in the production, processing, distribution and consumption of Scotch whisky. 29 active distilleries contribute to overall Scotch exports of £5.6 bn (2023) and to tourism via 14 distillery visitor centres. Processing in mountain distilleries provides economic value. It harnesses local common pool resources (water, landscape), and sense of place was integral to marketing, largely located outside the region. Distillery tourism recaptures some economic value at consumption stage.

Research participants want whisky production and tourism development that are environmentally sustainable and socially responsible, whilst still globally connected. Relatively secure, well paid manufacturing jobs help sustain permanent populations in the region. Distilleries are increasing their renewable energy use, supporting circular economy approaches and investing in habitat restoration. The region lacks affordable housing, and the industry is not widely recognised as a career option, creating a lack of skilled workers. Climate change projections mean potential water scarcity and restrictions, leading to economic losses. Many distilleries are owned by multi-national corporations, potentially disconnecting the VC from local governance. Using the global reach of whisky brands to promote local food and drink and more local research and innovation, including apprenticeships were sought. Investment in affordable housing and local facilities can stabilise the working population, whilst implementation of policies should take a flexible place-based, decentralised approach.

Foresight Analysis

Practice Abstract

24 to 50

24. The Future of Alpine Pasture Farming in Weiz

Foresight Analysis
Austria
Authors
Sandra Karner, Melanie Troppe **(IFZ)**
More info
https://www.moving-h2020.eu/reference_regions/austrian-alps-austria/

Alpine pasture farming faces considerable challenges due to climate change. Local stakeholders in Weiz collaborated to envision the future. They identified strong ties between farming, tourism, and regional development. Market development will be crucial for alpine sheep and pasture farming. Climate change increases extreme weather events and affects fodder production, which is key to farm profitability. Stakeholders agreed on a scenario of cooperative efforts to mitigate moderate climate impacts. This includes political support in building up frameworks to sustain small-scale alpine farming. Some of the recommendations refer to regional development including sustainable tourism and infrastructure development. Other recommendations are on national and EU level. Financial support is needed for sustainable farming practices and ecosystem services. Farmers require proper access to knowledge and exchange with peers and experts about adaptation. Raising awareness among consumers and politicians is essential. This includes education about sustainable food production and the role of alpine farming for preserving traditional landscapes. Educational programs should include these topics in school curricula. Strengthening direct sales and cooperative business models is also vital. These measures aim to ensure a resilient future for alpine pasture farming. Environmental sustainability and economic viability must be integrated. This will need efforts on all governance levels especially with increased pressure due to climate change.

Native language

Die Zukunft der Almwirtschaft in Weiz

Die Almwirtschaft steht aufgrund des Klimawandels vor großen Herausforderungen. Lokale Akteur/innen in Weiz haben zusammengearbeitet, um sich ein Bild von der Zukunft zu machen. Sie haben festgestellt, dass Landwirtschaft, Tourismus und Regionalentwicklung eng miteinander verknüpft sind. Die Marktentwicklung ist für die alpine Schaf- und Weidewirtschaft entscheidend. Extremwetterereignisse werden zunehmen. Darüber hinaus wirkt sich der Klimawandel auf die Futtermittelproduktion aus, die für die Wirtschaftlichkeit der Betriebe entscheidend ist. Die Akteur/innen einigten sich auf ein Szenario für kooperative Bemühungen zur Abschwächung moderater Klimaauswirkungen. Dazu gehört auch die Unterstützung seitens der Politik für förderliche Rahmenbedingungen zur Erhaltung der kleinbäuerlichen Almwirtschaft. Einige der Empfehlungen beziehen sich auf die Regionalentwicklung, einschließlich einer nachhaltigen Tourismus- und Infrastrukturstrategie. Andere Empfehlungen beziehen sich auf die nationale und die EU-Ebene.

Finanzielle Unterstützung ist für nachhaltige landwirtschaftliche Praktiken und Ökosystemleistungen erforderlich. Die Landwirt/innen brauchen Zugang zu Wissen und einen Austausch untereinander sowie mit Expert/innen über Anpassungsmaßnahmen. Die Sensibilisierung von Konsument/innen und Politiker/innen ist unerlässlich. Dazu gehört auch die Aufklärung über nachhaltige Lebensmittelproduktion und die Rolle bei der Bewahrung traditioneller Landschaftsbilder am Beispiel der alpinen Landwirtschaft. Bildungsprogramme sollten diese Themen in die Lehrpläne der Schulen aufnehmen. Die Stärkung von Direktvermarktung und kooperativen Geschäftsmodellen ist ebenfalls von entscheidender Bedeutung. All diese Maßnahmen zielen darauf ab, der Almwirtschaft eine stabile Zukunft zu sichern. Ökologische Nachhaltigkeit und wirtschaftliche Lebensfähigkeit müssen miteinander verbunden werden. Dies erfordert Anstrengungen auf allen Ebenen insbesondere angesichts des zunehmenden Drucks durch den Klimawandel.

25. High Nature Value Agriculture in Sumava Mountains

Foresight Analysis
Czechia
Authors
Jakub Husák, Lukáš Zagata **(CZU)**
More info
https://www.moving-h2020.eu/reference_regions/sumava-cesky-les-czechia/

Within the MOVING project, the participatory foresight exercise on beef production in Sumava mountains was done. As key variables for future development were identified available pastureland, fodder, capacity for local processing of meat, consumers' preferences, subsidy schemes, stable institutional framework, qualified employees and traditional meaning of agriculture in Sumava mountains. At this basis four scenarios for future development of the region were formulated and one of them was chosen by local stakeholders as the most preferred.

The most preferred scenario is "High nature value agriculture". This scenario consists of ensuing important elements: major role of non-production function of agriculture, use of the land as public goods, less important tourism industry, emphasise on natural resource conservation within National Park, resilient ecosystems, cooperation among farmers, National Park and tourists, importance of food quality and support of local food production.

For achieving the regional strategy based on preferred scenario four crucial changes are needed: support of horizontal and vertical cooperation among local actors; extensification of tourism; diversification of production and its local valorisation and empowerment and support of adaptability of farmers.

Native language

Zemědělství s Vysokou Přírodní Hodnotou

V rámci projektu MOVING byla provedena participativní prognóza produkce hovězího masa a rozvoje regionu Šumavy. Jako klíčové proměnné pro budoucí rozvoj byly identifikovány dostupné pastviny, krmivo, kapacita pro místní zpracování masa, preference spotřebitelů, dotační programy, stabilní institucionální rámec, kvalifikovaní zaměstnanci a zachování tradičního význam zemědělství na Šumavě. Na tomto základě byly formulovány čtyři scénáře budoucího rozvoje regionu a jeden z nich byl místními zúčastněnými stranami vybrán jako nejpreferovanější.

Nejpreferovanějším scénářem je "Zemědělství s vysokou přírodní hodnotou". Tento scénář se skládá z následujících důležitých prvků: hlavní role mimoprodukční funkce zemědělství, využití půdy jako veřejného statku, méně důležitý cestovní ruch, důraz na zachování přírodních zdrojů v národním parku, odolné ekosystémy, spolupráce mezi zemědělci, národním parkem a turisty, význam kvality potravin a podpora místní produkce potravin.

Pro dosažení regionální strategie založené na preferovaném scénáři jsou nutné čtyři zásadní změny: podpora horizontální a vertikální spolupráce mezi místními aktéry; extenzifikace cestovního ruchu; diverzifikace produkce a její místní zhodnocení a posílení a podpora adaptability zemědělců.

26. The conditions for maintaining the Corsican chestnut grove and the production of AOP flour in the face of its new uses and bioclimatic issues.

Foresight Analysis
France (Corsica)
Authors
Marie-Noëlle Ottavi, Jean Michel Sorba **(INRAE)**
More info
https://www.moving-h2020.eu/reference_regions/corsica-france/

The "farina castagnina" Value Chain, in PDO since 2010, is the result of the revival of an activity at the heart of the old food system of Corsica. The chestnut grove covers an area of 35,000 ha and has around fifty varieties. The valorization of flour gave an institutional and commercial existence to chestnut farming. In 2019, there were 69 castaneiculturists, 3 millers and 55 processors on the island (combining production, dryer, oven and mill). Before the arrival of the cynips desease, the production of AOP flour varied from 110 to 200 tonnes for a declared area of 700 ha. The VC takes advantage of a demanding and remunerative market that retains the features of a mountain domestic activity (direct sales, interpersonal networks, fairs, local stores, e-commerce). In addition, the chestnut grove is a resource for 4 other PDOs (Lonzu, Prisuttu, Coppa, Mele di Corsica) and for other productive and non-productive activities (timber, education, tourism, development, etc.). However, the strong mobilization of the ecosystem is not enough to deal with old and new vulnerabilities (abandonment, aging trees, diseases and climate change). The challenges are to maintain or even increase the orchards in the project area (renovation, planting), to consolidate the production of PDO flour, to identify the strategies and conditions (technical and organizational) for the coexistence of the different uses of trees and orchards. It is expected that a device combining the production of knowledge, and the establishment of management rules will be set up in the MRL, bringing together VC operators, local elected officials, associations and institutions involved (Regional Natural Park of Corsica, regions and consulars).

Native language

Les conditions de maintien de la châtaigneraie corse et de la production de farine AOP face à ses nouveaux usages et aux enjeux bioclimatiques.

La Chaine de Valeur (CV) « AOP farina castagnina » constitue le cœur de l'ancien système alimentaire de la Corse. La châtaigneraie couvre 35 000 ha et compte une cinquantaine de variétés. La mobilisation des communautés villageoises et la certification de la farine en AOP ont donné une existence institutionnelle, professionnelle et marchande à la castanéiculture (69 castanéiculteurs, 3 meuniers et 55 transformateurs associant production, tri, séchage et mouture). La CV tire parti d'un marché demandeur et rémunérateur caractéristique d'une activité domestique montagnarde (vente directe, réseaux interpersonnels, foires, magasins locaux). La châtaigneraie constitue un milieu-ressource pour 4 autres AOP (Lonzu, Prisuttu, Coppa, Mele di Corsica) et pour d'autres activités productives et de services (bois, éducation, tourisme, aménagement...). Avant l'arrivée du cynips en 2011, la production de farines AOP variait de 110 à 200 tonnes pour une surface déclarée de 700 ha. Sa forte utilisation accroît l'abandon, le vieillissement des arbres, les maladies et changement climatique. Le maintien de la châtaigneraie en Corse suppose de concevoir une nouvelle approche comprenant une stratégie de renouvellement des vergers anciens (rénovation, régénération, plantation), la consolidation de la production de farine et la conception d'une organisation rendant possible la coexistence des différents usages des vergers. Il est attendu du projet Moving, la mise en place d'un dispositif dans le territoire de montagne de référence (Mountain Reference Landscape) combinant la production de connaissances et la mise en place de règles de gestion associant les producteurs, les élus, les associations et les institutions parties prenantes.

27. Ensuring the Sustainability of the Drôme Sheep Sector: Strategies and Actions for a Resilient Future

Foresight Analysis
France (Drôme Valley)
Authors
A. Galmot **(CCVD)**
More info
https://www.moving-h2020.eu/reference_regions/drome-valley-france/

The lamb and sheepmeat sector fits harmoniously into the mountainous landscape of the Drôme thanks to its extensive model, bringing significant agricultural, economic and ecological benefits to the region. However, the sector faces a number of challenges: coexistence with other mountain activities, increasing predation, the impact of climate change and foreign competition, all of which threaten its long-term viability.

To ensure the sector's adaptability and resilience over time, stakeholders have committed to imagining a desirable future that avoids or overcomes these new challenges. The collective construction of this vision has led to the development of a number of courses of action, in particular to enhance the attractiveness and working conditions of breeders and shepherds, improve the added value of the sector's products, optimize the management of pastoral areas while preserving their multifunctionality, experiment with new practices and equipment to cope with climatic hazards, and undertake a comprehensive education and awareness-raising campaign around pastoralism. These actions could enable the sheep sector to develop sustainably, generating economic, social and environmental benefits for both farmers and mountain regions as a whole.

Native language

Assurer la durabilité de la filière ovine de la Drôme: stratégies et actions pour un avenir résilient

La filière de l'agneau et de la viande ovine s'intègre harmonieusement dans le paysage montagneux de la Drôme grâce à son modèle extensif, apportant des bénéfices agricoles, économiques et écologiques significatifs à la région. Cependant, cette filière fait face à de nombreux défis : la coexistence avec d'autres activités de montagne, la prédation croissante, l'impact du changement climatique et la concurrence étrangère, qui menacent sa viabilité à long terme.

Pour assurer l'adaptabilité et la résilience de cette filière dans le temps, les parties prenantes se sont engagées à imaginer un avenir souhaitable en contournant ou en surmontant ces nouveaux défis. La construction collective de cette prospective a permis d'élaborer des pistes d'action, notamment pour renforcer l'attractivité et les conditions de travail des éleveurs et des bergers, améliorer la valeur ajoutée des produits de la filière, optimiser la gestion des espaces pastoraux tout en préservant leur multifonctionnalité, expérimenter de nouvelles pratiques et équipements pour faire face aux aléas climatiques, et entreprendre un travail global d'éducation et de sensibilisation autour du pastoralisme. Ces actions pourraient permettre à la filière ovine de se développer durablement, en générant des bénéfices économiques, sociaux et environnementaux tant pour les éleveurs que pour les territoires de montagne dans leur ensemble.

28. Local Nature, Culture and Cuisine Towards Seeking Sustainable Development in Mountainous Crete

Foresight Analysis
Greece
Authors
Triliva, S., Vavvos, A., Pigounakis, K. **(UOC)**
More info
https://www.moving-h2020.eu/reference_regions/crete-greece/

The mountainous areas of Crete are facing abandonment and land degradation, population ageing, desertification and urbanization, dependence of agricultural subsidies and lack of basic services. These problems hindered the stakeholders to imagine a sustainable future for mountainous villages. Stakeholders understood the vulnerability of mountainous regions as an outcome of the prominent “sun and beach tourism strategy” that has resulted in the over-development of coastal areas.

Imagining a longer-term future brought to the forefront ways to navigate the current demographic, infrastructure, and general disenfranchisement faced by the mountainous regions’ inhabitants. The collective construction of future scenarios allowed for plans to deal with these obstacles including applying environmentally friendly agricultural practices and aiding young farmers and families to settle in the regions. The stakeholders negotiated and imagined ways in which respect and protection for mountainous communities, valuing their natural and cultural heritage, and fostering sustainable food systems and culinary traditions can open new paths for mountain people to sustain their livelihoods and traditional ways of life.

Native language

Τοπική φύση, πολιτισμός και κουζίνα προς την κατεύθυνση της βιώσιμης ανάπτυξης στην ορεινή Κρήτη

Οι ορεινές περιοχές της Κρήτης αντιμετωπίζουν εγκατάλειψη και υποβάθμιση της γης, γήρανση του πληθυσμού, ερημοποίηση και αστικοποίηση, εξάρτηση από τις γεωργικές επιδοτήσεις και έλλειψη βασικών υπηρεσιών. Τα προβλήματα αυτά εμπόδισαν τους εμπλεκόμενους φορείς να φανταστούν ένα βιώσιμο μέλλον για τα ορεινά χωριά. Οι ενδιαφερόμενοι κατανόησαν την ευπάθεια των ορεινών περιοχών ως αποτέλεσμα της εξέχουσας στρατηγικής του "τουρισμού του ήλιου και της παραλίας" που οδήγησε στην υπερανάπτυξη των παράκτιων περιοχών. Ο οραματισμός ενός μακροπρόθεσμου μέλλοντος έφερε στο προσκήνιο τρόπους για την αντιμετώπιση της τρέχουσας δημογραφικής κατάστασης, των προβλημάτων υποδομών και των αδικιών που αντιμετωπίζουν οι κάτοικοι των ορεινών περιοχών. Η συλλογική κατασκευή μελλοντικών σεναρίων επέτρεψε την κατάρτιση σχεδίων για την αντιμετώπιση αυτών των εμποδίων, συμπεριλαμβανομένης της εφαρμογής φιλικών προς το περιβάλλον γεωργικών πρακτικών και της ενίσχυσης νέων γεωργών και οικογενειών για να εγκατασταθούν στις ορεινές περιοχές. Οι ενδιαφερόμενοι πραγματεύτηκαν και φαντάστηκαν τρόπους με τους οποίους ο σεβασμός και η προστασία των ορεινών κοινοτήτων, η εκτίμηση της φυσικής και πολιτιστικής κληρονομιάς τους και η προώθηση βιώσιμων συστημάτων διατροφής και γαστρονομικών παραδόσεων μπορούν να ανοίξουν νέους δρόμους για τους κατοίκους των ορεινών περιοχών ώστε να διατηρήσουν τα μέσα διαβίωσής τους και τον παραδοσιακό τρόπο ζωής τους.

29. Sustainable Knowledge Economy – Catalysing the Ecological Paradigm Shift

Foresight Analysis
Hungary
Authors
Gusztáv Nemes, Ferenc Papp **(Rural Bt)**
More info
https://www.moving-h2020.eu/reference_regions/transdanubian-mountains-hungary/

Our research delves into the Sustainable Knowledge Economy (SKE), focusing on how knowledge about sustainable living can be commodified and exchanged to promote ecological and social outcomes. The SKE enhances resilience and sustainability by promoting sustainable practices, integrating traditional and innovative knowledge, strengthening local economies, and fostering community engagement. Addressing regulatory, political, economic, social, and natural barriers is crucial for optimizing these contributions. Supporting the institutionalization of alternative knowledge systems and fostering a harmonized relationship between SKE and AKIS are crucial steps forward. Increase funding and support for SKE development, raising public awareness about SKE benefits and fostering collaboration among policymakers, researchers, and practitioners would be essential. By implementing these recommendations, the SKE can contribute to an ecological paradigm shift, promoting a sustainable future:

- Enhance Funding and Support: Increase funding for the development and dissemination of sustainability knowledge and integrate SKE into existing knowledge systems.
- Promote Policy Integration: Develop policies that align with sustainable development goals and support the institutionalization of SKE.
- Foster Public Awareness: Launch campaigns to raise awareness about the benefits of SKE and encourage consumer participation.
- Strengthen Collaboration: Facilitate collaboration between policymakers, researchers, and practitioners to create a robust framework for SKE.
- Adapt to Local Contexts: Tailor policies to the specific needs and characteristics of local territories to maximize their effectiveness.

Native language

A fenntartható tudásgazdaság az alternatív élelmiszerrendszerekben – Az új ökológiai paradigma előmozdítása

Kutatásunk a Fenntartható Tudásgazdaság (FTG) kérdéskörét járja körül. Vizsgáljuk a fenntartható életmóddal kapcsolatos tudás árucikké válásának és cseréjének társadalomra és az új ökológiai paradgima előmozdítására gyakrolt hatásait. Az FTG fenntartható gyakorlatokkal, a hagyományos és innovatív tudás integrálásával, helyi gazdaságok fejlesztésével és a közösségi szerepvállalásra ösztöntzéssel növeli az ellenálló képességet és a fenntarthatóságot. E hatások optimalizálásához foglalkoznunk kell a szabályozási, politikai, gazdasági, társadalmi és természeti akadályokkal.
A következő ajánlások megvalósításával az FTG jelentősen hozzájárulhat az ökológiai paradigmaváltáshoz, támogatva a fenntartható jövőt:

- A finanszírozás és a támogatás növelése: A fenntarthatósággal kapcsolatos tudás fejlesztésére és terjesztésére szánt támogatás növelése és az FTG integrálása a meglévő tudásrendszerekbe.
- A szakpolitikai integráció: Olyan szakpolitikák kidolgozása, amelyek összhangban vannak a fenntartható fejlődési célokkal, és támogatják az FTG intézményesítését.
- A közvélemény tudatosságának erősítése: Kampányok indítása az FTG előnyeinek tudatosítására és a fogyasztói részvétel ösztönzésére.
- Az együttműködés erősítése: A politikai döntéshozók, kutatók és gyakorlati szakemberek közötti együttműködés elősegítése az FTG kereteinek kidolgozása, megszilárdítása érdekében.
- Alkalmazkodás a helyi körülményekhez: A politikáknak a helyi területek sajátos igényeihez és jellemzőihez való igazítása a hatékonyság maximalizálása érdekében.

30. Policy Recommendations for The Resilience of the Central Apennine Pasta Filata Cheese Value Chain

Foresight Analysis
Italy (Central Apennines)
Authors
Angelo Belliggiano, Sara Bispini, Mauro Conti, Corrado Ievoli **(UNIMOL)**
More info
https://www.moving-h2020.eu/reference_regions/central-apennines-italy/

Without specific policy interventions, the scenario foreseen by 2050 for the pasta filata cheese value chain of the Central Apennines is not the most encouraging, especially in light of the unstoppable demographic decline and the effects of climate change. A panel of local stakeholders and experts, who worked together in the living lab of the MOVING project, in order to counter these increasingly visible and tangible threats, formulated the following policy recommendations:

- incentives for the agro-ecological reconversion of production processes and the dissemination of ICTs in the restoration and management of rural practices;
- enhancement of essential services (education, health, transport) to tackle the processes of depopulation and the ageing of the population;
- promotion of research for new distribution channels capable of enhancing product quality, emphasising the attributes of traceability and sustainability;
- promotion of the long life learning approach of local actors, also through the use of non-formal and informal education practices;
- focus of agri-environmental policies on the protection and recovery of pastures, on the adoption of regenerative farming techniques, on the management of the impact of wildlife on agricultural resources;
- valorisation of cooperative approaches, aimed at the development of co-planning practices, also through participatory education policies.

Native language

Raccomandazioni di policies per la resilienza della catena del valore del formaggio a pasta filata dell'Appennino Centrale

In assenza di specifici interventi di policy lo scenario previsto al 2050 per la filiera dei formaggi a pasta filata dell'Appennino Centrale non è dei più confortanti, anche alla luce dell'inarrestabile declino demografico e degli effetti del cambiamento climatico. Un panel di attori locali e di esperti, che ha lavorato congiuntamente nel living lab del progetto MOVING, al fine di scongiurare tali minacce sempre più visibili e tangibili, ha formulato le seguenti raccomandazioni di policy:

- incentivi alla riconversione agroecologica dei processi produttivi e alla diffusione delle ICT nel recupero e nella gestione delle pratiche rurali;.
- potenziamento dei servizi essenziali (educazione, sanità, trasporti) per affrontare i processi di spopolamento e di invecchiamento della popolazione;
- promozione della ricerca di nuovi canali distributivi capaci di valorizzare la qualità dei prodotti, enfatizzando gli attributi di tracciabilità e di sostenibilità;
- promozione dell'approccio long life learning degli attori locali, anche mediante il ricorso a pratiche di educazione non formale e informale;
- focalizzazione delle politiche agro-ambientali sulla tutela e il recupero dei pascoli, sull'adozione di tecniche di agricoltura rigenerativa, sulla gestione dell'impatto della fauna selvatica sulle risorse agricole;
- valorizzazione degli approcci cooperativi, finalizzati allo sviluppo di pratiche di co-progettazione, anche mediante politiche di educazione alla partecipazione.

31. Future scenario for mountain wine Value Chain in Eastern Alps

Foresight Analysis
Italy (Eastern Alps)
Authors
Cristina Micheloni, Ekaterina Kleshcheva, Gianni Trioli **(Vinidea)**
More info
https://www.moving-h2020.eu/reference_regions/eastern-alps-italy/

Mountain wine Value Chain (VC) in Eastern Alps is the focus of the foresight exercise where participants, mainly from Trento area, defined the key variables affecting the VC and transform them into two long-term forces that were identified in: a) changes in water availability for vine irrigation and b) changes in the number of active populations working in viticulture. Consequently, 4 possible future scenarios of territorial development were developed and the effects of each scenario on the key variables were evaluated. The final envisioned scenario assumes that the water shortage problem is solved through a combination of agronomic and technological tools that can assure a reduced amount of water can secure viticulture to be continued. On the other hand, the reduction of population active in viticulture and wine production is a more critical element, due to the loss of attractiveness of mountain viticulture as a sector to work in, because of low profitability, reduced social services availability etc. The emphasis of regional strategy was put on different actions encouraging people to live and create new wine-related businesses in the mountain environment: 1) develop local and national actions for attracting young professionals, considering multifunctional family farms an asset; 2) implement necessary legislation adjustments to support land consolidation; 3) assure simplified and efficient support policies, focused on projects with real potential to contribute to local innovative and environmentally friendly rural development; 4) strengthen the knowledge system for better innovation uptake 5) adopt advanced agronomic practices to improve water management and reduce negative environmental impacts.

Native language

Scenario futuro per la catena del valore del vino di montagna nelle Alpi Orientali

La Catena del Valore del Vino di Montagna (VC) nelle Alpi Orientali è al centro dell'esercizio di previsione in cui i partecipanti hanno definito le variabili chiave che influenzano la VC e le hanno trasformate in due forze a lungo termine, identificate in: a) cambiamenti nella disponibilità di acqua per l'irrigazione della vite e b) cambiamenti nel numero di popolazione attiva che lavora nella viticoltura. Di conseguenza, sono stati sviluppati 4 possibili scenari futuri di sviluppo territoriale. Lo scenario finale ipotizza che il problema della carenza idrica venga risolto attraverso una combinazione di strumenti agronomici e tecnologici in grado di assicurare una quantità ridotta di acqua per garantire la viticoltura. D'altra parte, la riduzione della popolazione attiva nella produzione di vino è un elemento più critico, dovuto alla perdita di attrattiva della viticoltura di montagna come settore in cui lavorare. L'enfasi della strategia regionale è stata posta su diverse azioni che incoraggiano le persone a vivere e a creare nuove imprese legate al vino nell'ambiente montano: 1) sviluppare azioni locali e nazionali per attrarre giovani professionisti, considerando le aziende agricole multifunzionali a conduzione familiare come una risorsa; 2) implementare i necessari adeguamenti legislativi per sostenere la ricomposizione fondiaria; 3) assicurare politiche di sostegno semplificate ed efficienti, focalizzate su progetti con un reale potenziale per contribuire allo sviluppo rurale locale innovativo e rispettoso dell'ambiente; 4) rafforzare il sistema di conoscenze per una migliore adozione dell'innovazione 5) adottare pratiche agronomiche avanzate per migliorare la gestione delle acque.

32. Living in the Northern Apennines: Scenarios and Strategies for The Future

Foresight Analysis
Italy (Northern Apennines)
Authors
Colabianchi, M.; Allali, T.; Felici, F; Moretti, M. **(UNIPI)**
More info
https://www.moving-h2020.eu/reference_regions/northern-apennines-italy/

The foresight exercise for the North Apennines required the identification of several key variables, including public expenditure, local governance capacity, forest and chestnut groves management, demographic trends, and declining biodiversity. Of these, the two most critical variables, based on their uncertainty and importance, are demographic trends and the maintenance of chestnut groves. These two, named long-term forces, were used to develop four scenarios, with the preferred scenario being a synthesis of "Market Utopia" and "Wild Land." This preferred scenario envisions an influx of new residents from the urban areas due to factors like rising temperatures and pollution. New residents stimulate the local economy but also boost tourism and locals collaborate to develop infrastructure and activities that highlight the region's natural qualities while preserving local resources and supporting small-scale farming.

To realize this preferred scenario, the regional strategy focuses on several critical areas. A major initiative is the establishment of a technical committee at the inter-municipal level dedicated to overseeing improvements in public basic services such as transportation and healthcare. Additionally, there is a concerted effort to reclaim and sustainably manage abandoned or underutilized lands, transferring them to new owners committed to re-use. The strategy emphasizes fostering a sustainable living model that reduces dependency on external resources and minimizes environmental impact. This involves nurturing a collaborative relationship between new and existing residents, who work together to take care of forests and other communal resources. Traditional agricultural practices are not only preserved but also largely embraced and shared, creating a vibrant, self-sufficient community.

Native language

Vivere nell'Appennino Settentrionale: scenari e strategie per il futuro

L'esercizio di foresight per l'Appennino settentrionale ha richiesto l'identificazione di diverse variabili chiave, tra cui la spesa pubblica, la capacità di governance locale, la gestione dei boschi e dei castagneti, le tendenze demografiche e il calo della biodiversità. Di queste, le due variabili più critiche, basate sulla loro incertezza e importanza, sono le tendenze demografiche e la manutenzione dei castagneti. Queste due, denominate forze a lungo termine, sono state utilizzate per sviluppare quattro scenari, con lo scenario auspicabile che è una sintesi di "Utopia di Mercato" e "Terra Selvaggia". Questo scenario auspicabile prevede un afflusso di nuovi residenti dalle aree urbane a causa di fattori come l'aumento delle temperature e l'inquinamento. I nuovi residenti stimolano l'economia locale ma favoriscono anche il turismo e la comunità locale collabora per sviluppare infrastrutture e attività che valorizzino le qualità naturali della regione, preservando al contempo le risorse locali e sostenendo l'agricoltura su piccola scala

Per realizzare questo scenario auspicabile, la strategia regionale si concentra su diverse aree critiche. Una delle principali iniziative è l'istituzione di un comitato tecnico a livello intercomunale dedicato alla supervisione dei miglioramenti nei servizi pubblici di base, come trasporti e sanità. Inoltre, c'è uno sforzo concertato per recuperare e gestire in modo sostenibile terreni abbandonati o sottoutilizzati, trasferendoli a nuovi proprietari impegnati nel riutilizzo. La strategia pone l'accento sulla promozione di un modello di vita sostenibile che riduca la dipendenza dalle risorse esterne e minimizzi l'impatto ambientale. Questo implica la coltivazione di una relazione collaborativa tra i nuovi e i vecchi residenti, che lavorano insieme per prendersi cura delle castagneti e delle altre risorse comuni. Le pratiche agricole tradizionali non sono solo preservate, ma anche ampiamente adottate e condivise, creando una comunità vibrante e autosufficiente.

33. The Long Road Towards Sustainable Rural Tourism

Foresight Analysis
North Macedonia
Authors
Merita Kuli, Nehat Ramadani **(CNVP)**
More info
www/cnvp-eu.org

By 2050, the Maleshevski region aims to be a SMART rural tourism hub, attracting youth to manage natural resources and develop innovative green economies. To achieve this vision, members of the informal working group (MAP) and the rural tourism value chain were engaged in foresight analysis to identify key variables and long-term forces influencing mountain area development. Key variables include natural resources, environmental, socio-economic, and production factors. The group prioritized environmental effects, socio-economic factors, centralized decision-making, and political influences as the most influential long-term forces. They created four scenarios for the region's development until 2050, based on the influence of environmental and socio-economic variables. A fifth scenario reflects current negative trends. Through discussions and analysis, the group concluded that the preferred scenario could be positive if relevant institutions respond appropriately, and the value chain survives the turbulent period caused by the post- pandemic and economic crises. Strategic objectives include establishing destination management, implementing forest protection laws, supporting women entrepreneurs, funding alternative energy, investing in green technology research and training, increasing ranger employment, implementing protected area laws, creating a certified Maleshevski brand, designing marketing strategies for rural tourism, and strengthening cooperation between local governments and the rural tourism value chain.

Native language

долго е патешествието до одржлив рурален туризам

До 2050 година, Малешевскиот регион има за цел да стане СМАРТ центар за рурален туризам, привлекувајќи млади луѓе да управуваат со природните ресурси и да развиваат иновативни зелени економии. За да се постигне оваа визија неформалната работна група(МАП) и синџирот на вредности на руралниот туризам се вклучија во анализа на предвидувања за да ги идентификуваат клучните променливи и долгорочните сили кои влијаат на развојот на планинските области. Клучните променливи ги вклучуваат природните ресурси, животната средина, социо-економски и производствени фактори. Групата ги приоритизираше ефектите врз животната средина, социо-економските фактори, централизираните одлуки и политичките влијанија како највлијателни долгорочни сили. Тие создадоа четири сценарија за развој на регионот до 2050 година, врз основа на влијанието на променливите на животната средина и социо-економските фактори. Петтото сценарио ги одразува тековните негативни трендови. Преку дискусии и анализа, групата заклучи дека преферираното сценарио може да биде позитивно ако релевантните институции реагираат соодветно и синџирот на вредности го преживее турбулентниот период кој е резултат и на пост пандемиската и економската криза.. Стратешките цели вклучуваат воспоставување на дестинациски менџмент, спроведување на закони за заштита на шумите, поддршка за жени претприемачи, финансирање на алтернативна енергија, инвестирање во истражување и обука за зелени технологии, зголемување на вработувањето на ренџери, спроведување на закони за заштитени подрачја, создавање сертифициран Малешевски бренд , дизајнирање маркетинг стратегии за рурален туризам и зајакнување на соработката меѓу локалните власти и синџирот на вредности на руралниот туризам.

34. Embeddedness of Serra da Estrela Cheese into the Landscape is Demanding but Desired

Foresight Analysis
Portugal (Cordilhera Central)
Authors
Catarina Esgalhado, Teresa Pinto Correia **(UEvora)**
More info
https://www.moving-h2020.eu/reference_regions/cordilheira-central-portugal/

Local stakeholders and research team collaboratively mapped the pastoral system in Serra da Estrela, identifying key variables and relationships. Natural altitude pastures were the focus as they are repositories of high biodiversity values and key in maintaining an open landscape and reducing fire risks. While imagining the future, the favoured scenario entailed “high willingness to pay for ES, strong link between PDO cheese and the mountain”. It was named "demanding" and envisioned a “lived” mountain and preservation of culture and tradition. Rural fires are a growing concern, and maintaining an open landscape mosaic is fundamental to contain fire risks. Barriers in access to medium/high altitude pastures, increased availability of low altitude pastures and declining number of shepherds and sheep, has decreased grazing in the mountain, leading to shrub encroachment, degradation of priority habitats and increased fire risk. It is urgent to foster conditions and incentives for shepherds to use altitude pastures. Possible mechanisms are “altitude surcharges” or payment for results. In any case, it would require an integrated approach at different levels:

- Integration between forestry and pastoralism. Most altitude pastures fall under the Natural Park jurisdiction or commons associations, which are primarily forest-focused creating barriers to grazing.
- Territorial cooperation between the 6 municipalities in Serra da Estrela. Ensuring open paths for shepherds and animals to move within the mountain and collectively deciding of priority areas to keep open, as well as collectively deciding on market integration strategies and value chain proper integration and justice.

Native language

A reconecção do queijo Serra da Estrela DOP com o território de montanha é exigente mas desejada

Atores locais e a equipa MOVING mapearam em conjunto o sistema pastoral na Serra da Estrela, identificando as principais variáveis e relações. As pastagens naturais de altitude foram o foco, por serem repositórios de biodiversidade e essenciais para manter uma paisagem aberta e reduzir os riscos de incêndio. O cenário futuro preferido envolve “elevada disponibilidade para pagar por Serviços de Ecossistema, e forte ligação entre o queijo DOP e a montanha”. Este cenário “exigente” prevê uma montanha “vivida” e cuidada, preservando cultura e tradição.Os incêndios rurais são uma preocupação crescente, e a manter uma paisagem aberta é fundamental para conter os riscos de incêndio. Obstáculos no acesso a pastagens de média/alta altitude, o aumento da disponibilidade de pastagens de baixa altitude e diminuição do número de pastores e ovelhas, diminuíram o pastoreio na montanha. Isto levou à expansão de áreas de mato, degradação de habitats prioritários e ao aumento do risco de incêndio. É urgente criar condições e incentivos para que os pastores utilizem as pastagens de altitude. Exemplos de mecanismos possíveis são “majorações de altitude” ou o pagamento por resultados. Em qualquer caso, seria necessária uma abordagem integrada a diferentes níveis:

- Integração entre silvicultura e pastorícia. A maior parte dos pastos de altitude está sob a jurisdição do PNSE ou de associações de baldios, que se centram principalmente na floresta e menos no pastoreio.
- Cooperação territorial entre os 6 municípios da Serra da Estrela para coletivamente: a) manter uma rede de caminhos abertos na montanha, b) decidir áreas prioritárias a manter abertas, c)decidir estratégias de integração no mercado e a integração e justiça adequadas da cadeia de valor.

35. Future scenario for mountain wine Value Chain in Maçico Noroeste

Foresight Analysis
Italy (Eastern Alps)
Authors
Cristina Micheloni, Ekaterina Kleshcheva, Gianni Trioli **(Vinidea)**
More info
https://www.moving-h2020.eu/reference_regions/macico-noroeste-portugal/

Mountain wine Value Chain (VC) in Maçico Noroeste is the focus of the foresight exercise where participants, mainly from area of Vila Real and Foz Coa, defined the key variables affecting the VC and transform them into two long-term forces, that were identified in: a) declining and agingof farming population and b) water availability and conflicts for its use. Consequently, 4 possible future scenarios of territorial development were developed and the effects of each scenario on the key variables were evaluated. The final envisioned scenario assumes that rural population will contiunue its decline, small farms will be further reduced, and large companies will take over the main part of vineyards. Water will not be a problem per se but its availability for farming is questioned as other sectors, i.e. energy production or industry, are more competitive.

The emphasis of regional strategy was put on the need of an overarching and long-term approach, able to combine economic sectors and develop the promising touristic offers (culture, paleo engraves, sport.) in combination with wine and food tourism. Migration and seasonal workers policies should be developed, within a private/public initiative, with the scope of securing manpower for viticulture, maintain young professionals on site and avoid the “wine social desert” effect. Conflicts for water use should be prevented by public authorities.

Native language

Cenário futuro para a Cadeia de Valor do vinho de montanha no Maçico Noroeste

A Cadeia de Valor (CV) do vinho de montanha no Maçico Noroeste é o foco do exercício de prospectiva onde os participantes, principalmente da zona de Vila Real e Foz Coa, definiram as principais variáveis que afectam a CV e as transformaram em duas forças de longo prazo, identificadas em: a) declínio e envelhecimento da população agrícola; b) disponibilidade de água e conflitos pela sua utilização. Foram formulados 4 cenários futuros de desenvolvimento territorial, avaliado os efeitos nas variáveis-chave. O cenário final assume que a população rural continuará a diminuir, as pequenas explorações serão ainda mais reduzidas e as grandes empresas assumirão a maior parte das vinhas. A água não será um problema por si só, mas a sua disponibilidade para a agricultura é questionada, uma vez que outros sectores são mais competitivos.

A ênfase da estratégia regional foi colocada na necessidade de uma abordagem abrangente e de longo prazo, capaz de combinar sectores económicos e desenvolver as ofertas turísticas promissoras (cultura, paleogravuras, desporto..) em combinação com o turismo vínico e gastronómico. As políticas de migração e de trabalhadores sazonais devem ser desenvolvidas, no âmbito de uma iniciativa pública/privada, com o objectivo de garantir mão-de-obra para a viticultura, manter jovens profissionais na area e evitar o efeito “deserto social do vinho”. Os conflitos pelo uso da água devem ser evitados pelas autoridades públicas.

36. Southern Romanian Carpathians in 2050: A Glimpse into the Future

Foresight Analysis
Romania
Authors
Cătălina Rogozan, Alina Alexa **(HCC)**
More info
https://www.moving-h2020.eu/reference_regions/southern-romanian-carpathian-mountains-romania/

The envisioned future of the Southern Romanian Carpathians in 2050 is based on four interconnected pillars: stronger communities, controlled building development, sustainable tourism, and better integrated agricultural activities. During the foresight workshop, together with the local and regional stakeholders, we identified the main key variables impacting the resilience and sustainability of the area (land use change, mass tourism and associated infrastructure and demographic changes) which transformed into two long-term forces that shape the dynamics of the Southern Romanian Carpathians: increasing demand for land for building development and socio-demographic trends (out-migration and ageing population). For building the envisioned future and for strengthening the resilience of the Southern Romanian Carpathians stakeholders agreed that diverse and integrated strategic course of actions are needed:

1) Implementation of sustainable forms of tourism – for ensuring an efficient and long-term collaboration between stakeholders, and the protection and conservation of local biodiversity, while contributing to safeguarding and promoting the local cultural heritage and supporting entrepreneurship and traditional agricultural activities.
2) Development and promotion of green local economy – for ensuring multiple, diverse and sustainable sources of income to the local community.
3) The protection and sustainable use of the natural and cultural resources of the area.
4) Social cohesion – rekindle the local community and focus on the importance of collaboration between multiple stakeholders.
5) Investments in road and utility infrastructures.

Native language

Carpații Meridionali în 2050: o privire în viitor

Viitorul Carpaților Meridionali în 2050 este construit pe patru piloni interconectați: comunități mai puternice, dezvoltarea controlată a construcțiilor, turism durabil și integrarea mai eficientă a activităților agricole. În timpul atelierului am identificat împreună cu părțile interesate locale și regionale principalele variabile care au un impact asupra rezilienței și sustenabilității zonei (schimbarea utilizării terenurilor, turismul de masă și infrastructura asociată și schimbările demografice), care s-au transformat în două forțe pe termen lung ce modelează dinamica în Carpații Meridionali: cererea tot mai mare de terenuri pentru dezvoltarea construcțiilor și tendințele socio-demografice (emigrarea și îmbătrânirea populației). Pentru a avea viitorul dorit și pentru consolidarea rezilienței Carpaților Meridionali, părțile interesate au fost de acord că sunt necesare acțiuni strategice diverse și integrate:

1) Implementarea formelor durabile de turism – pentru a asigura o colaborare eficientă și pe termen lung între părțile interesate, precum și pentru protecția și conservarea biodiversității locale, contribuind în același timp la conservarea și promovarea patrimoniului cultural local și la sprijinirea antreprenoriatului și a activităților agricole tradiționale.
2) Dezvoltarea și promovarea economiei locale verzi – pentru asigurarea unor surse de venit multiple, diverse și durabile pentru comunitatea locală.
3) Protecția și utilizarea durabilă a resurselor naturale și culturale ale zonei.
4) Coeziunea socială – revigorarea comunității locale și sublinierea importanței colaborării în comunitate.
5) Investiții în infrastructuri rutiere și de utilități.

37. Valorisation And Resilience for Future of Sjenica Lamb PDO In the Pester Plateau

The Pester plateau and Sjenica are widely known by their high-quality products, among which Sjenica lamb is of the highest reputation. Traditional family production of Sjenica lamb enables its resilience through extensive grazing systems and maintenance of sustainable and environmentally friendly practices.

Foresight Analysis
Serbia
Authors
Tamara Zivadinovic, Dragana Tar **(MENA)**
More info
https://www.moving-h2020.eu/reference_regions/dinaric-mountains-serbia/

During the foresight process environmental, economic and social key variables were detected. They led to the two long term forces that are expected to be crucial for future of this value chain and its resilience – climate change and market forces. According to the foresight group it can be expected that the climate would moderately change, with higher frequency or intensified weather extreme events, while positive market forces could contribute to the improvement and consolidation of the Sjenica lamb market valorisation.

The vision is that the region will stay widely known for high-quality food produced in sustainable, climate-friendly ways. The production will remain traditional, with implementation of innovations to adopt, reduce and combat climate changes

Strategies to achieve this include critical changes in the Sjenica lamb production area. Traditional food production systems need to become fully sustainable and adoptable through implementation of climate-friendly solutions and approaches. Holistic and sustainable rural and agricultural development policies specifically tailored for the region are needed, while tailored and innovative marketing strategies are crucial for valorisation of Sjenica lamb in the market. All this should be followed by significant investments in infrastructure, production, research, training, and education of producers and relevant players in the Sjenica lamb VC.

Native language

Valorizacija i otpornost kao osnova za budućnost Sjeničkog jagnjeta PDO na Pešterskojvisoravni

Pešterska visoravan i Sjenica nadaleko su poznati po visokokvalitetnim proizvodima, među kojima je najpoznatija Sjenička jagnjetina. Tradicionalna porodična proizvodnja Sjeničke jagnjetine omogućava njenu otpornost kroz ekstenzivne sisteme ispaše i primenu održivih i ekološki prihvatljivih praksi. Tokom dugoročnog predviđanja detektovane su ekološke, ekonomske i društvene ključne varijable. One su dovele do dve dugoročne sile za koje se očekuje da će biti ključne za budućnost i održivost ovog lanca vrednosti – klimatske promene i tržišna kretanja. Prema proceni grupe za predviđanje, može se očekivati umerena promena klime, sa većom učestalošću ili intenziviranjem vremenskih ekstremnih pojava, dok bi pozitivne tržišne sile mogle da doprinesu poboljšanju i konsolidaciji valorizacije Sjeničke jagnjetine na tržištu. Vizija predviđa da region ostane čuven po visokokvalitetnoj hrani proizvedenoj na održive, klimatski prihvatljive načine. Proizvodnja će ostati tradicionalna, uz primenu inovacija za adaptiranje, smanjenje uticaja i borbu protiv klimatskih promena. Strategije za postizanje ove vizije uključuju kritične promene u oblasti proizvodnje Sjeničke jagnjetine. Tradicionalni sistemi proizvodnje hrane treba da postanu potpuno održivi i prilagodljivi kroz primenu klimatski prihvatljivih rešenja i pristupa. Potrebne su holističke i održive politike ruralnog i poljoprivrednog razvoja posebno skrojene za region, dok su prilagođene i inovativne marketinške strategije ključne za valorizaciju Sjeničke jagnjetine na tržištu. Sve ovo bi trebalo da prate značajna ulaganja u infrastrukturu, proizvodnju, istraživanje, obuku i edukaciju proizvođača i relevantnih aktera u VC Sjenička jagnjetina.

38. The Future for the Mountain Honey

Foresight Analysis
Slovakia
Author
Diana Surová **(CZU)**
More info
https://www.moving-h2020.eu/reference_regions/slovak-carpathian-mountains-slovakia/

Predictive analysis for the production of mountain honey showed that the actors of this value chain wish to prepare themselves for a scenario in which the conditions for beekeeping will be even more challenging than today. Their perception of the situation is based on trends over the past decades. During the workshops, together with local and national stakeholders, we identified the main key variables affecting the resilience and sustainability of mountain beekeeping (extreme weather, drought, declining landscape and bio-diversity, agricultural practices, societal values, consumer preferences, adulteration of honey, and legislation). Subsequently, two long-term forces were derived that are likely to have the most significant impact on mountain beekeeping in the future: climate change and trends in biodiversity loss (affecting bee health). The proposed measures for a sustainable honey value chain relate primarily to the support of landscape and species biodiversity, support of small and medium-sized beekeepers, and territorial planning not only in beekeeping (arrangement of bee colonies adapted to grazing conditions and territorial treatment interventions) but also in land management and water retention in the country. Strategic cooperation between beekeepers and different chains in the region is necessary to ensure diversified sources of income for the local community. New knowledge and practices for sustainable bee colonies are also needed for sustainable and resilient bee colonies. Last but not least, it is necessary to raise legislators', consumers', and the general public's awareness of the specifics of production in mountain areas and the importance of high-quality local products for the sustainability of rural mountain areas.

Native language

Budúcnosť horského medu

Prognostická analýza pre produkciu horského medu ukázala, že aktéri tohto hodnotového reťazca si želajú byť do budúcna pripravení predovšetkým na scenár, v ktorom budú podmienky pre včelárstvo ešte viac náročnejšie než doteraz. Ich vnímanie situácie vychádza z trendov za posledné desaťročia. Počas workshopov sme spolu s miestnymi a národnými zainteresovanými stranami identifikovali hlavné kľúčové premenné ovplyvňujúce odolnosť a udržateľnosť včelárstva v horských oblastiach (extrémy počasia, sucho, ubúdajúca krajinná a bio-diverzita, poľnohospodárske praktiky, hodnoty spoločnosti, preferencie spotrebiteľov, falšovanie medu, legislatíva), z ktorých sa odvodili dve dlhodobé sily, ktoré budú pravdepodobne najviac ovplyvňovať včelárstvo v horských oblastiach do budúcna: klimatické zmeny a trendy v úbytku biodiverzity (ovplyvňujúce zdravie včiel).

Navrhované opatrenia pre udržateľný medový hodnotový reťazec sa týkajú predovšetkým podpory krajinnej aj druhovej biodiverzity, podpory malých a stredne veľkých včelárov, teritoriálneho plánovania nielen vo včelárstve (rozvrhnutie včelstiev adaptované na pastevné podmienky a teritoriálne liečebné zásahy), ale aj v hospodárení v krajine a v zadržiavaní vody v krajine. Strategická spolupráca medzi včelármi a medzi rôznymi reťazcami v regióne je potrebná pre zabezpečenie diverzifikovaných zdrojov príjmu pre miestnu komunitu. Pre udržateľné a odolné včelstvá sú taktiež potrebné nové poznatky a praktiky pre odolné včelstvá. V neposlednom rade je nevyhnutné zvýšiť povedomie zákonodarcov, spotrebiteľov a širokej verejnosti o špecifikách produkcie v horských oblastiach, a o význame kvalitných lokálnych produktov pre udržateľnosť vidieckych horských oblastí.

39. A Vision for Sustainable Success: Keeping Alive and Healthy the Olive Oil Value Chain in The Betic Systems

Foresight Analysis
Spain (Betic System)
Authors
Raquel Moreno, Tristan Roullier, Antonio Zafra **(ADEGUA)**
More info
https://www.moving-h2020.eu/reference_regions/betic-systems-spain/

The Sierras Subbéticas are facing a mix of challenges and opportunities from policy changes, market dynamics, and environmental factors. There is also a need for sustainable practices, rural development, and conservation efforts. Stakeholders are exploring scenarios like regenerative agriculture and ecosystem services to enhance the value chain's resilience and sustainability in the face of uncertainties. Collaboration, innovation, and strategic planning are key for navigating towards a more sustainable future.

This is why, picturing ourselves in a not-so far future, Olive Oil value chain in the Subbéticas will yield high-quality organic olive oil, because of sustainable environmental practices, fair pricing, and revitalized rural communities. Organic farming will ensure superior olive oil, while sustainable methods to preserve resources and biodiversity. Fair pricing will benefits small producers, and rural investments will sustain local economies. Practitioners gain market differentiation and mountain product recognition therefore, long-term sustainability. By adopting regenerative agriculture, collaborating with stakeholders, educating consumers, and investing in rural development, a competitive, sustainable, and socially responsible value chain is created, enhancing regional well-being.

Native language

Una visión para el éxito sostenible: Mantener viva y saludable la cadena de valor del aceite de oliva en los Sistemas Béticos

"Las Sierras Subbéticas se enfrentan a una mezcla de retos y oportunidades que vienen de los cambios de políticas, las dinámicas mercantiles o los factores medioambientales. Se necesitan prácticas sostenibles, desarrollo rural y trabajo para la conservación. Los actores exploran distintos escenarios como la agricultura regenerativa o el reconocimiento de los servicios ecosistémicos para reforzar la resiliencia y sostenibilidad de la cadena de valor. Las colaboraciones, la innovación y la planificación estratégica son claves para alcanzar un futuro sostenible en buena forma.

Así pues, si nos planteamos un futuro no muy lejano, podríamos imaginarnos esta cadena de valor del aceite de oliva produciendo un aceite incluso de mejor calidad debido a prácticas medioambientales más sostenibles, una remuneración más justa y comunidades rurales revitalizadas. El cultivo ecológico asegurará un aceite de calidad superior, a la vez que métodos de cultivo sostenibles preservarán los recursos y la biodiversidad. Una remuneración justa beneficiará a los productores más pequeños y las inversiones rurales apoyarán la economía local. Los productores ganarán diferenciación en el mercado por el reconocimiento de productos de montaña y, por tanto, sostenibilidad a largo plazo. Al adoptar una agricultura regenerativa, colaborar entre productores, educar a los consumidores e invertir en el desarrollo rural se mantiene una cadena de valor competitiva, sostenible y socialmente responsable, sumando de este modo al bienestar de la región."

40. The Future for The Iberian Ham

Foresight Analysis
Spain (Sierra Morena)
Authors
María del Mar Delgado Serrano, Verena Arndt **(UCO)**
More info
https://www.moving-h2020.eu/reference_regions/sierra-morena-spain/

Sierra Morena Iberico ham production will likely face several challenges: climate change, the lack of generational renewal, overexploitation, limited digitalisation intake, and dependency on feed/energy prices. Smaller farms will face economic problems and bureaucracy and complex regulations worsen the situation, concentrating ownership on bigger companies.

MOVING envisions a preferred scenario in which producers have adapted to climate change, and Dehesa-uniqueness and provided ecosystem services are recognised, protected, and compensated. Afforestation resulted in healthy dehesas, and farmer upskilling ensured sustainability. Family and business farms coexist, each contributing to the territory's benefit. Business farms enhance efficiency, and traditional farms preserve knowledge/identity. The cultural significance is acknowledged. Iberico ham is in high demand and has evolved into an experiential option tied to visiting and understanding Dehesas. Digitalisation supports traditional practices and focuses on product differentiation and accurate labelling. Online sales streamline connections with informed consumers willing to pay premium prices. Improved infrastructure allows efficient processing and selling. Policies and assistance programs promote multifunctionality, cooperation, and generational renewal, ensuring access to basic services like healthcare, communication, education, digital infrastructure, and culture. Policies are inclusive, long-term, flexible, and adaptable to Dehesa's uniqueness. Public institutions actively promote local product consumption, reinforce territorial identity/value, and centralise the Iberico pig genetic book to protect small producers' rights.

Native language

El futuro para el jamón ibérico

La producción de jamón ibérico en Sierra Morena se enfrentará a varios retos: cambio climático, relevo generacional, sobreexplotación de dehesas, problemas de digitalización y fluctuación en los precios de piensos y energía. Las pequeñas explotaciones tendrán problemas económicos y la burocracia y la compleja regulación empeorará la situación, concentrando la propiedad en empresas más grandes.

En el escenario deseable de MOVING, los productores se han adaptado al cambio climático, y la singularidad de la dehesa y los servicios ecosistémicos que provee son reconocidos, protegidos y compensados. La reforestación da lugar a dehesas saneadas, y la formación de los agricultores garantiza la sostenibilidad. Las explotaciones familiares e industriales coexisten, proveyendo ambas de beneficios al territorio de Sierra Morena. Las explotaciones empresariales mejoran la eficiencia, y las tradicionales preservan los conocimientos y la identidad. Se reconoce la importancia cultural de la dehesa y del ibérico. El jamón ibérico es muy demandado y se ha convertido en una experiencia ligada a la visita y apreciación de las Dehesas. La digitalización apoya las prácticas tradicionales y permite la diferenciación del producto y el correcto etiquetado. Las ventas online permiten la interacción con consumidores bien informados que pagan precios justos. Las infraestructuras permiten una transformación y venta eficientes.

Las políticas y los programas de apoyo promueven la multifuncionalidad, la cooperación y el relevo generacional, garantizando el acceso del mundo rural a servicios básicos de sanidad, comunicaciones, educación, infraestructuras digitales y cultura. Las políticas son integradoras, de largo plazo, flexibles y adaptadas.

41. Future Scenario for Mountain Wine Value Chain in Spanish Pyrenees

Foresight Analysis
Spain (Spanish Pyrenees)
Authors
Ekaterina Kleshcheva, Gianni Trioli **(Vinidea)**
More info:
https://www.moving-h2020.eu/reference_regions/spanish-pyrenees-spain/

Mountain wine Value Chain (VC) in Spanish Pyrenees is the focus of the foresight exercise where participants, mainly from Huesca area, defined the key variables affecting the VC and transform them into 2 long-term forces that were identified in: a) economic context development and b) changes in the number of active populations working in viticulture. Consequently, 4 possible future scenarios of territorial development were described and the effects of each scenario on the key variables were evaluated. The final envisioned scenario is represented by a favourable economic context, but with a reduced active population dedicated to viticulture. There are economical resources available, but they are not used optimally to encourage the engagement of population, especially young people linked to the territory, willing to work in mountain viticulture and protect the rural habitat.

In order to adapt to rising challenges and to achieve the regional strategy defined by the local multi-actor foresight group, 4 critical changes are needed in the Spanish Pyrenees region: 1) develop local and national actions for attracting of young professionals to the wine sector; 2) assure simplified and efficient support policies, focused on projects with real potential to contribute to the local innovative and environmental friendly rural development; 3) upgrade and strengthen existing social infrastructures in mountain rural areas and establish new ones to assure the possibility to live and work in the territory for labour force, entrepreneurs and their families; 4) consolidate the efforts of all the producers on territorial and product communication and marketing, developing an efficient common branding strategy.

Native language

Escenario futuro de la cadena de valor del vino de montaña en los Pirineos españoles

La cadena de valor del vino de montaña (CV) en los Pirineos españoles es en el centro del ejercicio de previsión en el que los participantes, principalmente de la zona de Huesca, definieron las variables clave que afectan a la CV y las transformaron en 2 fuerzas a largo plazo que se identificaron en: a) el desarrollo del contexto económico y b) los cambios en el número de población activa que trabaja en la viticultura. En consecuencia, se describieron 4 posibles escenarios futuros de desarrollo territorial. El escenario final previsto está representado por un contexto económico favorable, pero con una población activa dedicada a la viticultura reducida. Hay recursos económicos disponibles, pero no se utilizan de forma óptima para fomentar el compromiso de la población, especialmente de los jóvenes vinculados al territorio, dispuestos a trabajar en la viticultura de montaña y a proteger el hábitat rural.
Con el fin de adaptarse a los crecientes desafíos, son necesarios 4 cambios críticos en la región de los Pirineos españoles: 1) desarrollar acciones locales y nacionales para atraer a jóvenes profesionales al sector vitivinícola; 2) garantizar políticas de apoyo simplificadas y eficientes, centradas en proyectos con potencial real para contribuir al desarrollo rural local innovador y respetuoso con el medio ambiente; 3) mejorar y reforzar las infraestructuras sociales existentes en las zonas rurales de montaña y establecer otras nuevas para garantizar la posibilidad de vivir y trabajar en el territorio a la mano de obra, los empresarios y sus familias; 4) consolidar los esfuerzos de todos los productores en materia de comunicación y marketing territorial y de producto, desarrollando una estrategia de marca común eficiente.

42. Scaling Heights: Mountain Grain Cultivation in the Swiss Alps in 2050

Foresight Analysis Switzerland (Swiss Alps)
Authors Carmen Forrer, Isabel Jaisli **(ZHAW)**
More info: https://www.moving-h2020.eu/reference_regions/swiss-alps-switzerland/

The rural areas in the Grison Alps are facing increasing challenges such as an ageing population, emigration of young people and the lack of skilled labour. Also, the increasing occurrence of extreme weather events like heavy rains and droughts, driven by climate change, are especially challenging for mountain crop cultivation, leading to yield loss, and decreasing quality of the products.

However, the increasing demand of consumers for local traditional, sustainable, and innovative products presents an important opportunity for the future of Grisons mountains and its farming system.

During the MOVING project, observations were shared that provide opportunities for transformation, including success stories of pioneers, changes in the support system, collaborations and research that foster innovation, but also the opportunity to build on local traditions. Expanding arable farming in the mountains holds a potential for diversification, increasing resilience and to meet consumer demands. However, it has been stressed, that traditional livestock farming will still play an important role in mountain agriculture making use of the abundant grassland resources. Within the participatory foresight exercise of MOVING, the stakeholders expressed their visions for the future that is build on a responsible society and an Agricultural Policy that supports the conservation of resources. In this scenario, communities work together towards sustainable farming and economy that connects people with nature. To enable this desired transformation, innovations are needed, especially on farm and processing level. By intertwining innovation with education, a dynamic environment with sustainable development can be created.

Native language

Berggetreideanbau in Graubünden im Jahr 2050

Graubünden steht vor wachsenden Herausforderungen: Alterung der Bevölkerung, Abwanderung junger Menschen oder Fachkräftemangel. Auch die durch den Klimawandel bedingte Zunahme von Wetterextremen wie Starkregen oder Trockenheit stellen die Berglandwirtschaft vor Herausforderungen.
Eine grosse Chance für die Zukunft der Berglandwirtschaft in Graubünden liegt jedoch in der steigenden Nachfrage nach lokalen, traditionellen, nachhaltigen und innovativen Produkten.
Innerhalb des MOVING-Projekts wurden Erfahrungen und Ideen geteilt, die zu einer Transformation führen können. Darunter Erfolgsgeschichten von Pionier:innen, Systemänderungen, Kooperationen und Forschung, die Innovationen fördern, aber auch die (Wieder)Nutzung lokaler Traditionen. Der Berggetreidanbau birgt Potenzial zur Diversifizierung, Resilienz und zur Nachfragedeckung. Es wurde jedoch betont, dass die traditionelle Tierproduktion weiterhin eine wichtige Rolle in der Berglandwirtschaft spielen wird, indem sie die Graslandressourcen nutzt. Mit der partizipativen Zukunftsforschung von MOVING teilten die Beteiligten ihre Visionen, die auf einer verantwortungsvollen Gesellschaft und einer Agrarpolitik aufbaut, die die Erhaltung der Ressourcen unterstützt. In diesem Zukunftsszenario arbeiten die Gemeinschaften zusammen an einer nachhaltigen Landwirtschaft und Wirtschaft, die Mensch und Natur verbindet. Um diese gewünschte Transformation zu ermöglichen, sind Innovationen erforderlich, insbesondere auf der Ebene der landwirtschaftlichen Produktion und der Verarbeitung. Durch die Verflechtung von Innovation und Bildung kann ein dynamisches Umfeld für nachhaltige Entwicklung geschaffen werden.

43. Foresight for Tete de Moine PDO - Swiss Jura

Foresight Analysis
Switzerland (Swiss Jura)
Author
Dominique Barjolle **(ORIGIN)**
More info
https://www.moving-h2020.eu/reference_regions/swiss-jura-switzerland/

The future of Tête de Moine has been screened in a participatory way with local stakeholders in 3 workshops: economics (grass and feed production which affects consecutively the milk and cheese production and quality, authenticity of the product and its reputation, economic and political support); social (attractiveness of professions, change of market consumption); and natural resources and environmental variables (extreme weather conditions, water, biodiversity, energy, woodland and carbon footprint, and pests and diseases).
The long-term vision of the Tête de Moine stakeholders is mainly economics driven. The scenario they envisage is shaped among a strong climate change and uncertain socio-economic context.
Stakeholders agreed that, In the long-term (horizon 2050), nature faces mounting pressure from extreme weather and declining biodiversity, impacting fodder and therefore the milk production which are crucial for long-term technical and economic success of Tête de Moine cheese. Despite uncertainties, already on-going small-scale adjustments, such as extended cheese maturation, signal resilience within the Tête de Moine sector. In the long-term perspective, what is expected is that strong adaptation is needed, to overcome the pressure on the farmers' incomes, exacerbating the challenge of an already arduous profession. These adaptations should address the challenges posed by the climate change, which will bring increased pest threats and energy price uncertainties. Public understanding of agriculture will most probably remain limited, complicating market adaptability. Yet, amidst these challenges, innovations like mechanization offer some adaptation capacities. Adapting marketing strategies becomes crucial amid market volatility.
Six critical policy changes are needed in this Swiss region: developing all initiatives that increase multi-actor dialogue, supporting local projects with low-threshold support, administrative simplification, cantonal and federal parliaments making climate and food policies, agriculture and value chains adopting circular economy principles and advisory bodies supporting the agroecological transition.

Native language

Prospective pour la Tête de Moine AOP - Jura suisse

L'avenir de la Tête de Moine a été examiné de manière participative avec les acteurs locaux dans le cadre de trois ateliers : économie ; social ; ressources naturelles et variables environnementales. La vision à long terme des acteurs de la Tête de Moine est principalement axée sur l'économie. Le scénario qu'ils envisagent s'inscrit dans un contexte de fort changement climatique et d'incertitude socio-économique.
Les parties prenantes s'accordent à dire qu'à long terme (horizon 2050), la nature est confrontée à une pression croissante due à des conditions météorologiques extrêmes et au déclin de la biodiversité, ce qui a un impact sur le fourrage et donc sur la production laitière, qui sont cruciaux pour le succès technique et économique à long terme de la Tête de Moine. Dans une perspective à long terme, on s'attend à ce qu'une forte adaptation soit nécessaire pour surmonter la pression sur les revenus des agriculteurs, exacerbant le défi d'une profession déjà ardue.
Ces adaptations devraient permettre de relever les défis posés par le changement climatique, qui entraînera une augmentation des menaces liées aux ravageurs et des incertitudes concernant les prix de l'énergie. La compréhension de l'agriculture par le public restera probablement limitée, ce qui compliquera l'adaptabilité du marché. Pourtant, face à ces défis, des innovations telles que la mécanisation offrent certaines capacités d'adaptation. L'adaptation des stratégies de commercialisation devient cruciale dans un contexte de volatilité des marchés.
Des changements politiques sont cruciaux pour soutenir le dialogue, les projets locaux et la transition vers les principes de l'économie circulaire et les organismes de conseil soutenant la transition agroécologique.

44. What Can Be Done for the Future of Highland Greenhouse Tomato Farming in Beydaglari?

Foresight Analysis
Turkey
Authors
Murat Yercan, Hakan Adanacıoğlu, Duygu Tosun, Filiz Kınıklı **(EGE)**
More info
https://www.moving-h2020.eu/reference_regions/beydaglari-turkey/

Highland greenhouse production, which has started to develop in Turkey and can be an alternative production option for mountainous areas. Greenhouse tomato production in the highlands started after 2000 and the number of greenhouses is increasing steadily. The growing demand for food, both domestically and for export, will lead to an increase tomato production.

In the region, the impact of drought is increasing due to climate change. Difficulties in the supply of irrigation water will be the main problem for production. Also, the continuous increase in the number of greenhouses, high input costs, crop diseases, global risks in the foreign markets, labour shortages and the tendency of young people to leave agriculture will affect the greenhouse tomato production in the region. It is important to protect and plan water resources. To achieve this a drought action plan should be prepared, irrigation projects should be developed and supported in the region. In addition, increasing the subsidies given to small-scaled family farms, training farmers to protect soil and water resources, encouraging farmers to use smart agricultural techniques, improving market structure, increasing the interaction between actors and institutions are the other important measures that need to be taken against these problems.

Native language

Beydağlarında Yaylada Sera Domatesi Yetiştiriciliğinin Geleceği İçin Neler Yapılabilir?

Türkiye'de gelişmeye başlayan yayla seracılığı, dağlık alanlar için alternatif bir üretim seçeneği olabilecektir. Yaylada sera domatesi üretimi 2000 yılından sonra başlamış olup sera sayısı giderek artmaktadır. Hem yurt içinde hem de ihracat için artan gıda talebi, domates üretiminin artmasına yol açacaktır.

Bölgede iklim değişikliği nedeniyle kuraklığın etkisi artmaktadır. Sulama suyu teminindeki zorluklar üretim için temel sorun olacaktır. Ayrıca sera sayısının sürekli artması, yüksek girdi maliyetleri, ürün hastalıkları, dış pazarlardaki küresel riskler, işgücü sıkıntısı ve gençlerin tarımdan ayrılma eğilimi bölgedeki sera domatesi üretimini etkileyecektir. Su kaynaklarının korunması ve planlanması önemlidir. Bunun için kuraklık eylem planı hazırlanmalı, bölgede sulama projeleri geliştirilmeli ve desteklenmelidir. Ayrıca küçük ölçekli aile çiftliklerine verilen desteklerin artırılması, toprak ve su kaynaklarının korunması için çiftçilerin eğitilmesi, çiftçilerin akıllı tarım tekniklerine teşvik edilmesi, pazar yapısının iyileştirilmesi, aktörler ve kurumlar arası etkileşimin artırılması bu sorunlara karşı alınması gereken diğer önemli önlemlerdir.

45. Foresight Analysis Practice Abstract: Scotland

Foresight Analysis
UK-Scotland
Authors
Chloe Thompson, Liz Dinnie, Kirsty Blackstock, Rachel Creaney **(HUTTON)**
More info
For more information on the Scottish MOVING value chain, visit our website here

When conducting foresight analysis for the Badenoch, Strathspey and West Moray Scottish MRL, a number of key variables were identified by the research team. These included variables that were social, environmental, and economic.

Through a Serious Game participants discussed linkages between the different variables, and developed underlying long-term drivers that were influencing these. These included climate change, globalisation, societal attitudes, demographic changes, and land use changes. Participants then voted and ranked the two most uncertain and important long-term drivers. The two that scored the highest for uncertainty and importance were globalisation and societal attitudes.

The research team then developed four scenarios based on these two drivers being either high or low, before participants in a second workshop chose the scenario that they most preferred. The chosen scenario was 'Socially conscious society within highly globalised markets,' characterised by Whisky production that is both environmentally sustainable and socially responsible, while still being globally connected. In this scenario tourism in the region grows whilst successful environmental awareness and outreach campaigns minimise environmental impacts. Investment in affordable housing, local facilities, and wages see the local working population increase.

In a final workshop, participants suggested a range of local and national policies that may help this be achieved. These included policies addressing housing, transport, tourism, health and well-being, engagement with young people and education, agriculture, ecosystems and wildlife conservation, and emphasis on the private sector.

46. Cross Regional – Archetype Economy

Cross-Regional Archetype Analysis
Author
Dominique Barjolle **(ORIGIN)**
More info
https://www.moving-h2020.eu/from-archetypes-strategic-options-and-policy-needs-for-mountains-in-2050/

Archetype Economy aims to foster sustainable economic growth in mountain regions, ensuring a secure and prosperous future while balancing environmental and social considerations.

The vision for 2050 is to foster sustainable development across various sectors, including food systems, rural environments, and climate action. This vision assumes that moderate climate change impacts and favorable market conditions will enable mountain communities to achieve ambitious economic goals. It emphasizes local, agroecological food systems, innovative rural development, and integrated landscape management. Additionally, it highlights the importance of sustainable and innovative agri-food systems, targeted subsidies, and infrastructure development in mountain areas. Long-term forces such as market dynamics, climate change, and tourism will significantly influence the region's future. Achieving this vision involves overcoming trade-offs, such as balancing market success with the risk of overexploiting natural resources, and the potential loss of biodiversity due to specialization and monocropping. Technological advancements and improved production facilities, including mechanization and automation, are crucial for maintaining efficiency and competitiveness.

Policy linkages are integral to supporting this strategy. Quality schemes like Geographical Indications, mountain labeling, and organic certifications should be strengthened for securing product value. The Common Agricultural Policy (CAP) should support this through its first pillar, flagging producer organizations and operational programmes for mountain producers, and its second pillar, where rural development, investments, and agri-environmental schemes are crucial for mountain value chains.

Native language

Archétype de l'économie

L'archétype de l'économie vise à favoriser une croissance économique durable dans les régions de montagne, en garantissant un avenir sûr et prospère tout en équilibrant les considérations environnementales et sociales.

La vision 2050 est de favoriser le développement durable dans différents secteurs: les systèmes alimentaires, les environnements ruraux et l'action climatique. Les effets modérés du changement climatique et des conditions de marché favorables permettront aux communautés de montagne d'atteindre des objectifs économiques ambitieux. En particulier sur les systèmes alimentaires locaux et agroécologiques, le développement rural innovant, la gestion intégrée des paysages, les systèmes agroalimentaires durables et innovants, des subventions ciblées et du développement des infrastructures en montagne. Les forces à long terme: la dynamique du marché, le changement climatique et le tourisme influenceront l'avenir de la région. Cette vision implique de surmonter des compromis, l'équilibre entre la réussite du marché et le risque de surexploitation des ressources naturelles, ainsi que la perte de biodiversité due à la spécialisation et à la monoculture. La technologie est essentielle pour maintenir l'efficacité et la compétitivité.

Les liens politiques font partie intégrante du soutien à cette stratégie. Les systèmes de qualité tels que les IG, les labels de montagne et les certifications bio doivent garantir la valeur des produits. La PAC devrait soutenir cette stratégie par le biais de son premier pilier (les organisations de producteurs et les programmes destinés aux producteurs de montagne), et par le deuxième pilier (les organisations de consommateurs et les programmes destinés aux consommateurs.)

47. Knowledge & Innovation Archetype

Cross-Regional Archetype Analysis
Author
Dominique Barjolle **(ORIGIN)**
More info
https://www.moving-h2020.eu/from-archetypes-strategic-options-and-policy-needs-for-mountains-in-2050/

Knowledge and innovation play a pivotal role in addressing the challenges posed by Climate Change, as well as in the emergence of new business models centered around knowledge and innovation. The long-term outlook for the Knowledge and Innovation (K&I) economy is ensured through dynamic processes of knowledge creation and sharing.

For this archetype, the vision for 2050 entails the dissemination of reliable information on sustainable livelihoods, with a focus on excellence in cognitive, practical, and ecological dimensions.

The Theory of Change for this archetype is predicated on the idea that if new knowledge, tailored to address existing challenges, is made accessible to the public, then the community will be able to realize the envisioned future.

Nevertheless, the Knowledge and Innovation Archetype faces risks, such as the privatization of the new knowledge then after exclusively accessible against payment, the lack of public funding to recoup investments, and unintended consequences from innovation leading to the overexploitation of specific resources. This future of this archetype is dependent from effective nature-based solutions, technological advancements, digitization, artificial intelligence, and the accessibility of new knowledge to the public. Furthermore, long-term driving forces such climate change and market trends in the realms of knowledge and innovation will put strong strain on it, both as positive as the adaptation needed by the farms and enterprises is strong.

Establishing policy linkages is essential for upholding this vision, particularly through initiatives like European Innovation Partnerships, which encompass research and development programs, innovation support, digitalization, and the support for the smart villages initiatives.

Native language

Archétype connaissance et innovation

La connaissance et l'innovation jouent un rôle essentiel pour relever les défis posés par le changement climatique et l'émergence de nouveaux modèles d'entreprise. Les forces à long terme cet archetype (K&I) sont assurées par des processus dynamiques de création et de partage des connaissances. La vision pour 2050 implique la diffusion d'informations fiables sur les moyens de subsistance durables, en mettant l'accent sur les dimensions cognitives, pratiques et écologiques.

La théorie du changement de cet archétype repose sur l'idée que si de nouvelles connaissances, adaptées pour relever les défis existants, sont mises à la disposition du public, la communauté réalisera l'avenir envisagé.

Néanmoins, l'archétype de la connaissance et de l'innovation est confronté à des risques, tels que la privatisation des nouvelles connaissances, le manque de financement public pour récupérer les investissements et les conséquences involontaires de l'innovation conduisant à la surexploitation de ressources spécifiques. L'avenir de cet archétype dépend de solutions efficaces basées sur la nature, des avancées technologiques, de la numérisation, de l'intelligence artificielle et de l'accessibilité des nouvelles connaissances au public. En outre, des forces motrices à long terme telles que le changement climatique et les tendances du marché dans les domaines de la connaissance et de l'innovation exerceront une forte pression sur cet archétype, aussi bien positive que l'adaptation requise par les exploitations agricoles et les entreprises est forte. L'établissement de liens entre les politiques est essentiel pour soutenir cette vision, en particulier en ce qui concerne l'adaptation des exploitations et des entreprises.

48. Niche & Diversification Archetype

Cross-Regional Archetype Analysis
Author
Dominique Barjolle **(ORIGIN)**
More info
https://www.moving-h2020.eu/from-archetypes-strategic-options-and-policy-needs-for-mountains-in-2050/

The vision for a region which belongs to the archetype “Niche and diversification” is to transition into a SMART region by the year 2050 by safeguarding natural resources, investing in sustainable economies, and enhancing human capital. This vision underscores the importance of fostering sustainable tourism, eco-friendly economic growth, and inclusiveness. Moreover, there is a focus on advancing local food systems, promoting sustainable consumption patterns, establishing innovative and short value chains, and engaging the community within the region.

The long-term goal of the community engaged in the archetype “Niche & Diversification” is to enhance local self-reliance and facilitate niche expansion while keeping prices stable. Niche & Diversification oriented strategy addresses vulnerabilities by managing risks stemming from various factors like climate change, market fluctuations, among others. Long-term trends such as market and consumers trends, as well as tourism dynamics, will play a crucial role in shaping the region's future.

Nevertheless, achieving these objectives involves risks such as the costs associated with introducing new diversification activities, high transaction costs from collective actions, and limitation of economies of scale.

To address those risks, value chain actors should care about building high reputation of the region or product, fostering collective action in all local initiatives (e.g., local markets, fairs), and taking stock of the local consumption habits.

Policy connections are crucial to uphold this vision, particularly through the second pillar of the Common Agricultural Policy (CAP): aligning production with local markets, promoting short supply chains, fostering diversification for resilience, emphasizing "close to nature" and "rural tourism" approaches, supporting organic farming, permaculture, small-scale agriculture, and micro-farms.

Native language

Archétype diche et diversification

La vision d'une région appartenant à l'archétype "Niche et diversification" est de devenir une région SMART d'ici 2050 en préservant les ressources naturelles, en investissant dans des économies durables et en renforçant le capital humain. Favoriser le tourisme durable, la croissance économique respectueuse de l'environnement et l'inclusion, l'amélioration des systèmes alimentaires locaux, la promotion de modes de consommation durables, l'établissement de chaînes de valeur innovantes et courtes, et l'engagement de la communauté au sein de la région. L'objectif à long terme de la communauté est de renforcer l'autonomie locale et de faciliter l'expansion de la niche tout en maintenant les prix stables. La stratégie axée sur les créneaux et la diversification s'attaque aux vulnérabilités tels que le changement climatique, les fluctuations du marché, etc. Les tendances à long terme du marché et des consommateurs, et la dynamique du tourisme, joueront un rôle crucial dans le façonnement de l'avenir de la région.

Néanmoins, la réalisation de ces objectifs comporte des risques tels que les coûts associés aux activités de diversification, les coûts de transaction des actions collectives et la limitation des économies d'échelle. Les acteurs améliorent la réputation de la région/du produit grâce à des initiatives locales et à des habitudes de consommation. Soutien politique à l'alignement de la production sur les marchés locaux, à la promotion des chaînes d'approvisionnement courtes et à d'autres stratégies.

49. Nature Archetype

Cross-Regional Archetype Analysis
Author
Dominique Barjolle **(ORIGIN)**
More info
https://www.moving-h2020.eu/from-archetypes-strategic-options-and-policy-needs-for-mountains-in-2050/

Narrative for this archetype is that the Socio-Ecological System is preserved thank a good balance between human interventions and the natural resources.

The vision of the communities led by “Nature” is to reduce their crucial reliance on public funding systems by promoting a sustainable local economy, eco-tourism, climate-resilient landscape management, and integrated regional development. The vision emphasizes strong cooperation among various stakeholders to support ecosystem services, promote local food production and consumption, and invest in education and skills.

The long-term perspective of the value chain is secured through enough motivation of young farmers, and enough remuneration for ecosystem services.

The Theory of Change linked to this archetype posits that if the demographic situation remains stable and if payments for ecosystem services adequately support farms and local Value Chains, then the community will realize their envisioned future. Nevertheless, the operation of this archetype necessitates to address in a very consistent way worrying trade-offs such as balancing nature preservation with decreases in demography. The leverage points that will foster a community led by “nature” values are all policies regarding the support favouring: the land use changes that preserve the natural resources; to job creation facilitated by sustainable tourism and environmental stewardship; and to fair remuneration for the ecosystem services encompassing biodiversity, as well as the preservation of fauna, flora, and water resources. Long-term factors influencing this archetype encompass Demography, Climate Change, and Tourism. Policy connections play a vital role for this archetype, particularly with respect to the 2nd Pillar of the CAP (agri-environmental schemes), notably LIFE programs, which focus on Nature Preservation strategies like NATURA2000 at the European level.

Native language

Arquetype nature

L'arquetype nature implique que le système socio-écologique est préservé grâce à un bon équilibre entre les interventions humaines et les ressources naturelles. La vision des communautés est de réduire leur dépendance aux systèmes de financement public en promouvant une économie locale durable, l'écotourisme, la gestion des paysages résistants au climat et le développement régional intégré. Elle met l'accent sur une forte coopération entre les différentes parties prenantes pour soutenir les services écosystémiques, la production et la consommation d'aliments locaux et l'éducation et les compétences. La perspective à long terme de la chaîne de valeur est assurée par une motivation suffisante des jeunes agriculteurs et une rémunération suffisante des services écosystémiques. La théorie du changement postule qu'une démographie stable et des paiements pour les services écosystémiques peuvent conduire à l'avenir souhaité par la communauté. L'équilibre entre la préservation de la nature et le déclin démographique est crucial pour la mise en œuvre. Les politiques qui soutiennent les changements d'affectation des sols, le tourisme durable, le paiement équitable des services écosystémiques et la préservation des ressources naturelles peuvent façonner une communauté guidée par les valeurs de la nature.
Les facteurs à long terme qui influencent cet archétype sont la démographie, le changement climatique et le tourisme. Les liens politiques jouent un rôle essentiel pour cet archétype, en particulier en ce qui concerne le deuxième pilier de la PAC (programmes agro-environnementaux), notamment les programmes LIFE, qui se concentrent sur les stratégies de préservation de la nature telles que NATURA2000 au niveau européen.

50. European Cross Case Workshop

Eu Foresight Analysis
Author
Dominique Barjolle **(ORIGIN)**
More info
https://www.moving-h2020.eu/from-archetypes-strategic-options-and-policy-needs-for-mountains-in-2050/

On January 11, over 50 high-level European experts gathered in Brussels for the European Foresight Workshop for resilient mountain areas, organized by the EU-funded MOVING project. The workshop aimed to set strategic pathways for mountain regions up to 2030, focusing on Economy, Nature, Knowledge and Innovation, and Niche and Diversification.

Dominique Barjolle presented 2050 foresight scenarios for the 23 MOVING mountain regions, emphasizing local communities' role in transforming their future through empowerment, collective action, and improved governance. The discussions explored policies to scale up strategic options for mountain value chains, with insights from France and Catalonia, Spain.

Key recommendations from the workshop highlighted the need to recognize mountains as vital living spaces and to consider mountain resources as a common good, with governance adapted to diverse needs. Emphasizing the connection between people and nature, the workshop stressed the importance of long-term sustainability in policymaking and diversified development of mountain policies. The participants recommended creating a research platform to facilitate the use of existing scientific research, focusing on capacity building for local representatives and professionals through initiatives like an “Erasmus Altitude.” They also suggested establishing a "triple helix of capacity building" for mountain nature-based businesses, combining traditional knowledge and modern technologies. Additionally, adapting governance to be inclusive and flexible, recognizing non-economic benefits of value chains, and sharing failures and challenges to foster learning and innovation were emphasized as crucial steps for sustainable mountain development.

Native language

Atelier européen «Cross Case» (cas croisés)

Le 11 janvier, plus de 50 experts européens de haut niveau se sont réunis à Bruxelles pour l'atelier européen de prospective sur les zones de montagne résilientes, organisé par le projet MOVING financé par l'UE. L'atelier visait à définir des voies stratégiques pour les régions de montagne à l'horizon 2030, en se concentrant sur l'économie, la nature, la connaissance et l'innovation, ainsi que sur les niches et la diversification.

Dominique Barjolle a présenté des scénarios de prospective à l'horizon 2050 pour les 23 régions de montagne du projet MOVING, en soulignant le rôle des communautés dans la transformation de leur avenir grâce à l'autonomisation, l'action collective et l'amélioration de la gouvernance. Les principales recommandations de l'atelier ont mis en évidence la nécessité de reconnaître les montagnes comme des espaces vitaux et de considérer les ressources des montagnes comme un bien commun, avec une gouvernance adaptée aux différents besoins. L'atelier a mis l'accent sur l'importance de la durabilité à long terme dans l'élaboration des politiques et sur le développement diversifié des politiques de la montagne. Les participants ont recommandé la création d'une plateforme pour faciliter l'utilisation de la recherche existante, par le biais d'initiatives telles qu'un «Erasmus de l'altitude». Ils ont aussi suggéré d'établir une «triple hélice de renforcement des capacités». En outre, l'adaptation de la gouvernance pour qu'elle soit inclusive et flexible, la reconnaissance des avantages non économiques des chaînes de valeur et le partage des échecs et des défis pour favoriser l'apprentissage et l'innovation ont été soulignés comme des étapes cruciales pour le développement durable des montagnes.

Cross-Cutting PAs

Practice Abstract

51 to 56

51. Data Imaging and DSS Tools

Data Imaging and DSS Toos Austria
Authors Valentina Bartalesi **(CNR)**

CNR designed, developed, and released an online tool - the Story Map Building and Visualizing Tool (SMBVT) - that allows users to create story maps within a collaborative environment and a usable Web interface. SMBVT is hosted by the open science-oriented e-Infrastructure D4Science. Story maps are computer science realizations of narratives based on maps, which are accessible through many digital devices (e.g., PCs, tablets, smartphones, interactive displays). SMBVT displays the results of a workflow that takes an unstructured textual MS Excel file as input and automatically generates textual stories enriched with media objects, presented as story maps. Additionally, the tool offers a search functionality for data exploration and analysis. These functionalities allow a better understanding of the different characteristics and problems that affect the MOVING value chains. Indeed, the workflow we developed aggregates all the data collected within the project based on the topic they refer to. It shows the aggregated data in a user-friendly and simple way (as story maps) and allows users to explore the data through predefined queries. Finally, by exploiting the advantages of the use of a formal model (i.e., the Narrative Ontology), our workflow adds a storytelling dimension to value chains' processes, providing valuable insights into the contextual factors that can influence decision-making. This narrative aspect enhances the qualitative understanding of value chains' processes and opens avenues for storytelling within the maker community.

Native language

Visualizzazione dati e sistemi di supporto alle decisioni

CNR ha progettato, sviluppato e rilasciato uno strumento online - lo Story Map Building and Visualizing Tool (SMBVT) - che consente agli utenti di creare story map in un ambiente collaborativo e con un'interfaccia Web usabile. SMBVT è ospitato dall'infrastruttura di ricerca D4Science orientata all'open science. Le story map sono realizzazioni informatiche di narrazioni basate su mappe, accessibili attraverso molti dispositivi digitali (ad esempio, PC, tablet, smartphone, display interattivi). SMBVT visualizza i risultati di un flusso di lavoro che prende come input un file MS Excel testuale non strutturato e genera automaticamente storie testuali arricchite con oggetti multimediali, presentate come story map. Inoltre, lo strumento offre una funzionalità di ricerca per l'esplorazione e l'analisi dei dati. Queste funzionalità consentono una migliore comprensione delle diverse caratteristiche e dei problemi che influenzano le catene del valore di MOVING. Infatti, il flusso di lavoro che abbiamo sviluppato aggrega tutti i dati raccolti all'interno del progetto in base all'argomento a cui si riferiscono. Mostra i dati aggregati in un modo semplice e intuitivo (come story map) e consente agli utenti di esplorare i dati attraverso query predefinite. Infine, sfruttando i vantaggi dell'uso di un modello formale (ovvero, l'Ontologia della Narrazione), il nostro flusso di lavoro aggiunge una dimensione narrativa ai processi delle catene del valore, fornendo preziose informazioni sui fattori contestuali che possono influenzare il processo decisionale. Questo aspetto narrativo migliora la comprensione qualitativa dei processi delle catene del valore e apre nuove strade per lo storytelling all'interno della comunità di MOVING.

52. Community of Practice on Mountain Areas

Community of Practice on Mountain Areas
Author Carla Lostrangio **(AEIDL)**

A Community of Practice is 'is a group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis' (Wenger et al., 2002).

Established in 2020, the MOVING Community of Practice (CoP) is understood as a European-wide Science-Society-Policy Interface aimed at engaging stakeholders on the resilience of mountain value chains to climate change. The MOVING CoP consists of 23 Regional Multi-Actor Platforms (MAPs) and 1 EU-level MAP.

The MOVING Regional Partners coordinate activities and stakeholder engagement in the Regional MAPs. Cross-regional exchange meetings are organised among MAPs to exchange on each other's experience and activities. In addition, AEIDL is responsible of monitoring activities and progress of the Regional MAPs. Both qualitative and quantitative information are captured by means of a monitoring and evaluation tool, which is regularly shared and filled in by Regional MAP's coordinator. Over four years' time, more than 900 actors have been engaged through Regional MAPs, of which more than a third are women.

The MOVING EU-level MAP offers an additional platform for external stakeholders engaged on mountain resilience to contribute to the project's outputs and learn from its results. Actors from policy, research and practice are part of this community, and get regularly engaged through online activities and events.

The MOVING CoP mobilise stakeholders at multiple levels, from local to European, ensuring that key issues for mountain resilience are adequately addressed and knowledge transfer and capitalisation is fostered. It also offers a long-lasting opportunity for the MOVING project to continue and perpetuate its impacts after its end.

53. Comparing Mountain Value Chains: Understanding Respective Potentials and Problems

Assessing the impact of value chains (VCs) on resilience and sustainability in European mountain regions, MOVING categorised 23 VCs based on their contribution to social and demographic aspects, quality products, innovation, ecosystem services, and governance and cooperation.

Comparative Assessment of Value Chains

Authors

María Mar Delgado Serrano,
Verena Arndt
(UCO)

We found that networks and cooperation improve VC resilience, but challenges like depopulation, the lack of skilled labour, gender imbalances, and low educational levels increase vulnerability. Quality schemes like PDO and organic production often foster cooperation and diversification, but small producers face unfavourable market positions. Skilled human capital, good access to advisors, financial capital, and good digital infrastructure were identified as the base for innovation, which is especially necessary in the context of changing environmental conditions.

Mountain VCs might use natural resources sustainably and create cultural landscapes. However, conflicting interests, hesitance to cooperate, and corruption (especially in Eastern Europe) can act counterproductively. Results showed that enhancing trust and collective action among VC actors, decentralising decision-making at the local level, and sharing information, machinery, and practices can boost sustainability and resilience.

We consistently found that VCs contribute to both private and public goods, but their valuable contributions often go unrecognised. We emphasise the need to raise awareness and provide fair compensation through communication campaigns.

Comparing our findings reveals the interconnectedness of various factors and challenges, underscoring the importance of collaborative efforts to address sustainability and resilience in mountain areas.

54. Repertoire of Strategic Options

Repertoire Of Strategic Options
Author Dominique Barjolle **(ORIGIN)**

Strategic Options (SOs) for sustainable development in European mountain regions are combining various interventions and diverse immaterial support measures and funding mechanisms to address challenges that are specific to the local context, and to achieve long-term consensual goals.

These options, characterized by their adaptability and potential for replication, vary in geographical and sectoral scope.

As existing and long-time running, Regional Parks and Smart Villages are exemplary Strategic Options that are spread in all the mountains but not only. Regional Parks focus on natural resource conservation through a consortium of municipalities, with funding from municipal, national, and European sources, supporting conservation and educational activities. Smart Villages aim to digitalize rural areas, managed by private or municipal consortia, funded by municipal, regional, and European sources, addressing transport, energy, and public services challenges. Both examples demonstrate high replicability with necessary local adaptations and are supported by national and European policies.

Emerging Strategic Options were identified and discussed at a European workshop showcasing innovative strategies for sustainable and resilient mountain value chains. These Strategic Options emphasize community governance, connectivity with nature, and sustainable policy integration. Workshop conclusions highlight the importance of viewing mountains as vital living spaces, fostering community ownership, incorporating long-term sustainability and resilient into policies, promoting capacity building, and adopting inclusive governance.

This approach aims to meet the evolving needs of mountain communities, fostering a sustainable and resilient future for European mountain regions through adaptable and replicable Strategic Options.

55. The MOVING Conceptual and Analytical Framework

Conceptual and Analytical Framework
Author
Michele Moretti
(UNIPI)

The MOVING (Mountain Valorization through Interconnectedness and Green Growth) project, funded by the EU Horizon 2020 Framework, aims to build resilient mountain value chains delivering private and public goods. Central to MOVING's approach is the Conceptual and Analytical Framework (CAF), which integrates value chain literature with the socio-ecological system (SES) approach. This framework emphasizes the interplay between sustainability, vulnerability, and resilience of SESs influenced by value chain practices and governance systems.

The CAF provides a holistic perspective on value, recognizing the importance of its cultural, ecological, and social dimensions alongside economic output. This broader consideration of value is crucial for the preservation of landscapes, cultural heritage, and ecosystem services in mountain regions, contributing to sustainable development.

The CAF links the dynamics of value chains with the characteristics of SESs, highlighting the interconnectedness and interdependencies between them. It identifies key research questions guiding the analysis of value chains. These questions focus on practices that shape sustainable and resilient mountain SESs and the conditions that enable local value generation and retention. The concept of "telecoupling" is adopted to understand the socio-economic and environmental interactions between geographically distant SESs, enhancing the analysis of how these systems are interconnected through value chains.

By defining the SES boundaries based on actual material and immaterial flows rather than spatial or institutional borders, the CAF supports the creation of local-based policies and solutions that balance ecological, social, and economic priorities. By emphasizing these characteristics, the CAF provides a robust framework for understanding and enhancing mountain value chains, ensuring they contribute to the resilience and sustainability of mountain SESs.

56. A Policy Roadmap for “Unlocking the Power” of Mountain Product Value Chains

Mountain food, drink and rural tourism products have the potential to strengthen the resilience and sustainability of the mountain areas from which they originate.

Policy Roadmap
Author Mark Redman **(HCC)**

A key objective of the MOVING project was to co-develop relevant policy frameworks that can "unlock" this potential through the development of more favourable enabling conditions for the establishment of new and/or upgrading of new mountain product value chains. Policy recommendations were developed from the synthesis of all MOVING project results and outputs that were created through extensive engagement with approx. 1,000 stakeholders in a total of 23 mountainous regions around Europe located in 11 EU Member States, 3 EU candidate countries - plus Scotland and Switzerland.

Over 30 needs-driven policy recommendations were identified and elaborated as relevant and applicable to the broad range of national / regional / local contexts, challenges and opportunities that exist in Europe’s mountain areas. These were organised into 8 ‘coherent bundles’ of recommendations referred to as 'Policy Building Blocks' with each Block containing a) practical operational guidance on opportunities for the SHORT- to MEDIUM-TERM use of currently available policy instruments in 2021-2027, and; b) relevant recommendations for LONGER-TERM term improvements in future policies in the context of post-2027 policy developments. Particular attention was given to ensuring alignment of all recommendations with contemporary policy processes, including the EU’s Long-Term Vision for Rural Areas (LTVRA) and preliminary discussions regarding post-2027 Common Agricultural and Cohesion Policies. For further information see the MOVING project website: https://www.moving-h2020.eu/.