



D4.7 MOVING Practice Abstracts

Second set

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Introduction

MOVING Practice Abstracts (PA) aim at communicating easy to access information to practitioners relevant to the project.

The main objective of this deliverable D4.7 Practice Abstracts is to provide: 1) key results and outcomes of tasks T4.3 – T4.5 and other tasks that have been carried out so far in MOVING; and 2) main practical recommendation(s) to enable the practitioners make use of the results.

This document overviews a total of 31 Practice Abstracts¹ based focus on the following topics:

- Vulnerability and resilience of Value Chains in the 23 mountain reference regions
- Cluster S – Social and demographic aspects
- Cluster I – Innovation and infrastructure
- Cluster G – Governance, territoriality and cooperation
- Cluster N – Nature and ecosystem services
- Cluster V – Value and quality products
- Youth engagement – findings from 23 cases
- Vulnerability and resilience of value chains – findings from 23 cases
- Upgrading strategies for 23 value chains to improve resilience

All Practice Abstracts developed by MOVING will be available on the EIP-AGRI database and also published on the MOVING website in the Library section.

→ <https://www.moving-h2020.eu/library/>

They will be communicated and disseminated through the various MOVING channels, including social media, newsletter, blog, etc.

¹ A native language version is included for some of them.

1. The importance of cooperation for sheep pasture farming in the region of Weiz

In the mountainous areas of the Weizer Bergland region traditional pasture farming for meat, milk and dairy production is practiced since centuries. Particularly sheep farming has gained importance in keeping up this traditional practice and contributes to maintaining the region's typical semi-open pasture landscape. This is not only relevant in terms of regional value creation through the production of sheep products, but also for tourism.

The most important natural resource for sheep farming is the quality and productivity of pastures and grassland. During the Summer months the sheep are grazed on the mountainous pastures, during winter they are fed with grass silage, hay, and hay silage, which is all produced on-farm. But this practice is threatened by climate change related developments, such as changes in precipitation and extreme weather events like late frosts, heavy rains, storms, hail and periods of drought.

Furthermore changes in market and socioeconomic crisis pose threats to the market of sheep products due to higher production cost and lower purchasing power of customers. Furthermore bottlenecks in the supply of farm operating equipment may lead to difficulties for production.

Strategies, such as improvements in feeding management and more cooperation such as joint management of resources can further improve and foster the resilience and sustainability of the value chain.

The strong cooperative structure of the Weizer Schafbauern and regional strategies for sustainable development in the region of Weiz are a good basis for building resilient structures further.

MOVING Reference Region
Austrian Alps
Country Austria
Authors Melanie Troppe and Sandra Karner (IFZ)
Anticipated users of PA - Municipal and regional authorities - Nature park Almenland officials
Additional info https://www.youtube.com/watch?v=g3IYn6NPJCs&feature=youtu.be



Native language

Zusammenarbeit für eine gesteigerte Resilienz in der Weidewirtschaft mit Schafen in der Bergland-Region Weiz

In den Berglagen der Region Weiz wird seit Jahrhunderten traditionelle Weidewirtschaft zur Fleisch-, Milch- und Milchproduktion betrieben. Insbesondere die Schafhaltung hat bei der Pflege dieser Tradition an Bedeutung gewonnen und trägt zur Erhaltung der Regions-typischen halboffenen Almlandschaft bei. Diese sind nicht nur für die Schafwirtschaft wichtig sondern spielen auch eine wichtige Rolle für den Tourismus und die Erhaltung des kulturellen Erbes der Region.

Die wichtigste Ressource für die Schafhaltung stellt die Qualität und Produktivität der Weiden und des Grünlands dar. In den Sommermonaten grasen die Schafe auf den Berghängen, im Winter werden sie mit Grassilage, Heu und Heusilage gefüttert, die von den landwirtschaftlichen Betrieben selbst erzeugt werden. Diese Praxis ist durch den Klimawandel und damit einhergehenden Änderungen in Niederschlag, Extremwetterereignissen und Trockenperioden gefährdet.

Auch veränderte Marktbedingungen und sozioökonomische Krisen führen zu steigenden Produktionskosten und geringerer Kaufkraft der Kund/innen und stellen damit eine Bedrohung für die Schafwirtschaft dar. Darüber führen fallweise Lieferengpässe bei landwirtschaftlichen Betriebsmitteln zu Produktionsschwierigkeiten.

Durch Strategien, wie ein verbessertes Fütterungsmanagement und mehr Zusammenarbeit, z. B. durch gemeinsames Ressourcenmanagement, kann die Widerstandsfähigkeit und Nachhaltigkeit der Wertschöpfungskette weiter verbessert werden.

Die Genossenschaftsstruktur der Weizer Schafbauern und regionale Strategien für eine nachhaltige Entwicklung in der Region Weiz bilden eine gute Basis für den Aufbau belastbarer Strukturen..

2. Advocating the use of a result-based payment scheme (RBPS) for maintaining the supply of public goods from High Nature Value (HNV) farmland in Bulgaria

Results-based payment schemes (RBPS) are a new form of agricultural support scheme offering farmers payments for delivering a specific environmental result from the land they manage. Most existing RBPS have biodiversity as the main objective, but they may also have water quality or climate action as additional objectives.

RBPS differ from traditional agri-environment payments that prescribe specifically what a farmer must do or must not do to get an annual payment. Instead, results-based approaches offer farmers the flexibility to use their knowledge and experience to manage their land in a way that delivers the required environmental outcome alongside their usual farming activities. In principle the farmer is free to do what suits the site, the weather, the farm and their own situation - it is only the environmental results that counts!

This result-based approach is very relevant to maintaining the supply of public goods from High Nature Value farmland in the Western Stara Planina region of Bulgaria, one of 23 mountain areas studied in the H2020 MOVING project (<https://www.moving-h2020.eu/>).

However, the development and implementation of an RBPS is a complex task and it is important that support is offered/provided to policymakers to help them adopt this alternative approach. The Society for Territorial and Environmental Prosperity (STEP) is a coordinator of the RBPS Network for Bulgaria (<https://www.step-bg.bg/en/node/250>) and follows the use of RBPS in other EU countries where the approach has been implemented for the last decade. STEP extracts important lessons for Bulgaria and uses this information to advocate for the pilot testing of an RBPS within the Bulgarian CAP Strategic Plan for 2023-2027.

MOVING Reference Region
Stara Planina
Country Bulgaria
Authors Mark Redman (Highclere Consulting)
Anticipated users of PA <ul style="list-style-type: none"> - National policy- and decision-makers - Public authorities in mountain areas <ul style="list-style-type: none"> - Environmental NGOs - Farming organisations
Additional info https://www.moving-h2020.eu/

3. The importance of better targeting of agricultural subsidies and cooperation of local actors for sustainable development of agriculture in the Šumava Mountains

The Šumava Mountains, one of the oldest in Europe, are known for their untouched nature and unique biological communities. For these reasons, the rarest areas have been given the highest level of protection and have become a National Park. Therefore, specific conditions also apply to agricultural production within Šumava Mountains, while at the same time agriculture provides ecosystem services in the form of 'forest-free' farming. However, agriculture in Šumava Mountains is threatened by several negative impacts. These include the effects of depopulation of mountain areas, drought, increasing costs of processing agricultural products and uncertainty about the development of agricultural subsidies.

MOVING Reference Region Šumava - Cesky Les
Country Czechia
Authors Jakub Husák (CZU)
Anticipated users of PA - Public authorities in mountain areas - Agricultural producers in mountain areas - National Park
Additional info https://www.moving-h2020.eu/

One of the mountain value chains investigated in the H2020 MOVING project (<https://www.moving-h2020.eu/>) was BEEF PRODUCTION within Šumava Mountains.

During workshops with local stakeholders in 2022 and 2023 two specific needs for fostering the further sustainable development of agriculture production (especially beef production) in Šumava Mountains were identified:

1. Better cooperation among farmers supported by targeted subsidies policy (e.g. common local slaughter houses) to promote processing and distribution of final products within the region (instead of exporting cattle for finishing) also among smaller farmers. It would increase value added remaining in the region.
2. Intensive cooperation among actors of mountain development (farmers, National Park, tourism industry, local municipalities, NGOs) supported by economic measures in the framework of rural development policy to make mountain areas more attractive to young people and thus prevent mountain depopulation.

Native language

Význam lepšího zacílení zemědělských dotací a spolupráce místních aktérů pro udržitelný rozvoj zemědělství v horských oblastech Šumavy

Šumavské pohoří, které patří k nejstarším v Evropě, je známé pro svoji nedotčenou přírodu a jedinečná biologická společenstva. Z těchto důvodů byla nejvzácnějším oblastem vyhlášena nejvyšší míra ochrany a staly se Národním parkem. Proto i pro zemědělské aktivity na Šumavě platí specifické podmínky a zároveň zemědělství poskytuje ekosystémové služby ve formě „bezlesého hospodaření“. Ovšem zemědělství na Šumavě je ohroženo řadou negativních dopadů. Jedná se především o dopady vylidňování horských oblastí, sucha, zvyšování nákladů na zpracování zemědělských produktů a nejistoty ohledně vývoje zemědělských dotací.

Jedním z horských hodnotových řetězců zkoumaných v rámci projektu H2020 MOVING (<https://www.moving-h2020.eu/>) byla PRODUKCE HOVĚZÍHO MASA na Šumavě.

Během workshopů s místními stakeholdery v letech 2022 a 2023 byly identifikovány dvě konkrétní potřeby pro podporu úspěšného a udržitelného rozvoje zemědělství (zejména produkce hovězího masa) na Šumavě:

1. Lepší spolupráce mezi zemědělci podpořená cílenou dotační politikou (např. sdílená lokální jatka) na podporu zpracování a distribuce finálních produktů v rámci regionu (namísto vývozu zástavového skotu) i mezi menšími zemědělci. To by zvýšilo přidanou hodnotu, která zůstává v regionu.
2. Intenzivní spolupráce mezi místními aktéry (zemědělci, Národní park, aktéři cestovního ruchu, místní samosprávy, nevládní organizace) podpořená ekonomickými nástroji v rámci politiky rozvoje venkova pro zvýšení atraktivity horských oblastí pro mladé lidi a zabránění jejich vylidňování.

4. The importance of scientific and technical support to organizational actors of the value chain for a better governance of development (example of the impact of a pest: Cynips)

The Protected Denomination of Origin (PDO) for the production of chestnut flour is the main value chain (VC) within Corsican mountains. This natural resource is also the basis for 4 other PDOs (Honey, 3 charcuteries).

Obtained in 2010 after 30 years of professionalization, this PDO was confronted during that same year with the arrival of a new pest: the Cynips (*Dryocosmus kuriphilus*). This drastically reduce flour production. After more than 10 years of biological fight led by the value-chain actors (the PDO and local stakeholders), the production starts again slowly showing new vulnerabilities.

The efforts to rationalise the techniques of orchard management, processing and support to operators carried out before the arrival of Cynips had been handled since. The same applies to actions to promote, diversify and qualify of the product. This has led on the one hand to a loss of knowledge and awareness of this product and to a significant increase in price of the other.

During the workshops with local stakeholders in 2022 and 2023 two issues were identified:

- (1) The need for technical and scientific support to the organizational actors of the VC for a better distribution of their roles and responsibilities: a new organization of the production unit, new management of the resource, new product valorisation (qualification, diversification, range effect, market study)
- (2) The need for a new governance of the region to accompany the new challenges of development of the VC (management of new systems of financing and regulation of the plural production status, election of financing, activity attractiveness, management of natural resources - land, degradation and diseases).

MOVING Reference Region
Corsica
Country France
Authors Marie-Noëlle Ottavi and Jean Michel Sorba (INRAE - UMR Selmét-LRDE)
Anticipated users of PA - Regional politic authorities - Public authorities in mountain areas - Organizational actors of the value chain (PDO union, professional group)
Additional info https://www.moving-h2020.eu/

Native language

L'importance de l'appui scientifique et technique aux acteurs organisationnels de la CV pour une meilleure gouvernance du développement (exemple d'un ravageur : le Cynips).

La production de farine de châtaigne AOP est la seule filière en zone de montagne corse. De cette ressource naturelle dépendent aussi 4 autres AOP (Miel, 3 charcuteries).

Née en 2010 après 30 ans de professionnalisation, cette AOP a été confrontée la même année à l'arrivée d'un nouveau ravageur : le Cynips. Réduisant drastiquement la production de farine, après 10 ans de lutte biologique menée par les acteurs organisationnels de la CV (syndicat AOP et groupement de professionnels), celle-ci redémarre lentement en montrant de nouvelles vulnérabilités.

Les efforts entrepris avant le Cynips pour rationaliser les techniques de gestion des vergers, de transformation et d'appui aux opérateurs ont été stoppés. Les efforts de promotion, de diversification et qualification du produit ont été stoppés. Cela a conduit à une perte de connaissance et de reconnaissance du produit ainsi qu'une augmentation du prix du produit.

Au cours des ateliers organisés avec les parties prenantes locales en 2022 et 2023, deux points ont été identifiés :

- (1) La nécessité d'un appui technique et scientifique aux acteurs organisationnels de la CV pour une meilleure répartition de leurs rôles et responsabilités face aux récents défis de la CV : nouvelle organisation de l'unité de production, nouvelle gestion de la ressource, nouvelle valorisation du produit (qualification, diversification, effet de gamme, étude de marché).
- (2) Nécessité gouvernance de la région renouvelée pour accompagner les nouveaux enjeux de développement de la CV (nouveaux systèmes de financement et de régulation de la production pluriactive -statut, type de financement, attractivité de l'activité-, gestion des ressources naturelles -foncier, dégradation et maladies-).

5. The importance of territorial dialogue, reclaiming pastoral areas and promoting local products to sustain the sheep industry in the Drôme Valley

Mountain pastoralism in France plays a considerable role in the production of quality products, dynamism, cultural identity and management of mountain territories. However, this sector is now under economic, political and environmental pressure. At the same time, this extensive livestock activity is suffering from the consequences of climate change with droughts and changes in vegetation.

However, pastoral systems are by nature adaptable to the environment in which they find themselves and resilient to the changes they undergo. Within the framework of H2020 MOVING (<https://www.moving-h2020.eu/>) extensive sheep farming in the Drôme valley is the subject of work because of its strong contribution to local sustainable development and the resilience of its value chain model.

During the workshops organised with local stakeholders in 2022 and 2023, specific needs were identified to perpetuate this sector in the area:

- 1) Maintain a dialogue between elected officials, local authorities and pastoral groups to a) carry out consistent educational and awareness-raising work on the multiple use of pastoral areas in the context of increasing predation, plus b) maintain links between the various actors in the sector;
- 2) Reclaim pastoral areas and diversify grazing resources (woody areas, trees, vineyards) by collectively organising private owners in order to cope with climate change;
- 3) Structure the local products and maintain the existing infrastructure (slaughterhouse, processing plant) to enhance the value of local offer from the sheep industry.

MOVING Reference Region
Drome Valley
Country France
Authors Anna Galmot (CCVD)
Anticipated users of PA - Public authorities in mountain areas - Local authorities in mountain areas - Sheep farmers in mountain areas
Additional info https://www.moving-h2020.eu/



Native language

L'importance du dialogue territorial, de la reconquête d'espaces pastoraux et de la valorisation des produits locaux pour pérenniser la filière ovine dans la vallée de la Drôme

En France, le pastoralisme de montagne joue un rôle considérable dans la production de produits de qualité, le dynamisme, l'identité culturelle et la gestion des territoires de montagne. Toutefois, certaines pressions économiques, politiques et environnementales pèsent désormais sur ce secteur. Parallèlement, cette activité d'élevage extensif souffre des conséquences du changement climatique avec des sécheresses et des changements de végétation.

Cependant, les systèmes pastoraux sont par nature adaptables à l'environnement dans lequel ils se trouvent et résilients aux changements qu'il subit. Dans le cadre du H2020 MOVING (<https://www.moving-h2020.eu/>) l'élevage ovin extensif dans la vallée de la Drôme fait l'objet de travaux en raison de sa forte contribution au développement durable local et de la résilience de son modèle.

Lors des ateliers organisés avec les acteurs locaux en 2022 et 2023, des besoins spécifiques ont été identifiés pour pérenniser cette filière sur le territoire :

- 1) Maintenir un dialogue entre les élus, les collectivités territoriales et les groupements pastoraux pour a) réaliser un travail de pédagogie et de sensibilisation conséquent sur le multiusage des espaces pastoraux dans le contexte de prédation croissant, plus b) maintenir des liens entre les divers acteurs de la filière ;
- 2) Reconquérir des espaces pastoraux et diversifier les surfaces de pâturage (surfaces ligneuses, arboricoles, viticoles, etc.) en s'inscrivant dans une dynamique d'organisation des propriétaires privés afin de faire face au changement climatique ;
- 3) Structurer l'offre locale et maintenir les outils existants (abattoir, atelier de découpe) pour valoriser les produits locaux issus de la filière ovine.

6. Responding to threats to the Cretan Carob Flour Value Chain

Carob trees are representative of the agro-forest ecosystems of Crete, and carob products have been part of agrifood chains for centuries in Central Rethymno's semi-mountainous terrain. The carob agrifood value chain is culturally significant, having been used extensively at times of social turmoil where food is scarce. Of late, the interdependencies of the carob flour value chain with animal husbandry, Cretan gastronomy, and tourism have increased carob flour's popularity and use.

Nevertheless, the carob flour value chain has faced and continues to face considerable threats. They include the recent replacement of traditional crops such as carob tree with more profitable or subsidised ones and significant and continuing demographic changes in the mountainous villages. Legislative changes in forest mapping and management and insufficient support from agricultural directorates have also challenged the value chain. The lack of product authentication (such as goods being recognized as PGI or PDO) is an obstacle for the Cretan carob flour, lowering its value and diminishing the regional cultural capital.

There is currently more awareness of the climate crisis and extreme weather events and its impact in this value chain. Other concerns include the "skyrocketing" energy prices that have increased production, packaging, and distribution costs, resulting in further economic strain. Stakeholders prioritised the following policy objectives in order to ameliorate the risks in the carob flour: the establishment of the agricultural cooperatives; promotion of the Cretan diet and the carob flour's health benefits; and linking the two economic pillars of Crete—agriculture and tourism.

MOVING Reference Region
Crete
Country Greece
Authors Kostis Pigounakis, A. Vavvos (UoC) Kodylia Skrapaliori, Charalambo Piteris (Region of Crete)
Anticipated users of PA - Farmers, agricultural businesses, policy makers
Additional info https://www.moving-h2020.eu/

Native language

Αντιμετωπίζοντας τις απειλές για την αλυσίδα αξίας του κρητικού χαρουπάλευρου

Εδώ και αιώνες, οι χαρουπιές αποτελούν μέρος των αγροδασικών οικοσυστημάτων της Κρήτης και των αγροδιατροφικών αλυσίδων αξίας στο ημιορεινό έδαφος του Κεντρικού Ρεθύμνου. Η αλυσίδα αξίας του χαρουπιού έχει μεγάλη πολιτισμική αξία, καθώς έχει αξιοποιηθεί εκτενώς σε περιόδους κοινωνικής αναταραχής όπου υπάρχει έλλειψη τροφίμων. Πρόσφατα, οι αλληλεξαρτήσεις της αλυσίδας αξίας του χαρουπάλευρου με την κτηνοτροφία, την κρητική γαστρονομία και τον τουρισμό έχουν αυξήσει τη δημοτικότητα της.

Ωστόσο, η αλυσίδα αξίας του χαρουπάλευρου αντιμετωπίζει σημαντικές απειλές. Αυτές περιλαμβάνουν την πρόσφατη αντικατάσταση παραδοσιακών καλλιεργειών όπως το χαρούπι με πιο κερδοφόρες και τις έντονες και συνεχείς δημογραφικές αλλαγές στα ορεινά χωριά. Οι νομοθετικές αλλαγές στους δασικούς χάρτες και τη διαχείριση των δασών και η ανεπαρκής υποστήριξη από τις γεωργικές διευθύνσεις έχουν επίσης θέσει σε κίνδυνο την αλυσίδα αξίας. Η έλλειψη πιστοποίησης των προϊόντων (ΠΓΕ, ΠΟΠ κ.ά) αποτελεί εμπόδιο για το κρητικό χαρουπάλευρο, υποβαθμίζοντας την αξία του και μειώνοντας το πολιτιστικό κεφάλαιο του.

Πλέον, υπάρχει μεγαλύτερη ευαισθητοποίηση σχετικά με την επικείμενη κλιματική κρίση και τα ακραία καιρικά φαινόμενα. Άλλες ανησυχίες περιλαμβάνουν την «εκτόξευση» των τιμών της ενέργειας που έχουν αυξήσει το κόστος παραγωγής, συσκευασίας και διανομής, με αποτέλεσμα την περαιτέρω οικονομική επιβάρυνση. Οι ενδιαφερόμενοι έθεσαν σε προτεραιότητα τους ακόλουθους στόχους προκειμένου να αμβλυνθούν οι απειλές για το χαρουπάλευρο: την ίδρυση αγροτικών συνεταιρισμών, την προώθηση της κρητικής διατροφής, την ανάδειξη των οφελών του χαρουπάλευρου για την υγεία και τη σύνδεση των δύο οικονομικών πυλώνων της Κρήτης - της γεωργίας και του τουρισμού.

7. Knowledge economy for sustainable livelihoods - Cold Mountain Shelter value chain analysis in Transdanubian mountain reference landscape

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-base on sustainable livelihoods. They organize courses, events, exhibitions in permaculture, orcharding, sustainable water/energy management, construction and community building. Climate related threats (precipitation, soil erosion) and urbanization pressure are difficult for their agriculture, however, the generally growing environmental consciousness brings much interest for their knowledge economy. They use territorial capital (landscape, biodiversity, proximity to a touristic area) very efficiently. Within their knowledge economy, knowledge processing is their bottleneck: documentation of knowledge

production, lifting their experiences and tacit knowledge to a conscious level and creating training materials, videos, handouts should be much improved. However, Cold Mountain Shelter 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.

MOVING Reference Region
Transdanubian Mountains
Country Hungary
Authors Gusztáv Nemes (Rural Bt)
Anticipated users of PA - agricultural producers working with sustainable methods - urban migrants starting their rural life - anyone interested in sustainability and more ecological life - public authorities in mountain areas
Additional info https://youtu.be/0uS6ZVrpSCY https://youtu.be/PvE26zwEvjo https://youtu.be/szR6vmyfG4Q https://www.facebook.com/HideghegyiMenedek/

Native language

A fenntartható életvitel tudásgazdasága - 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 étellel 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. Az éghajlattal kapcsolatos veszélyek (csapadék, talajerózió) és az urbanizációs nyomás nehezíti mezőgazdasági tevékenységüket, ugyanakkor az általánosan növekvő környezettudatosság növeli az érdeklődést tudásgazdasági tevékenységük iránt. A területi tőkét (táj, biológiai sokféleség, turisztikai terület közelsége) nagyon hatékonyan használják ki. Tudásgazdaságukon belül a tudásfeldolgozás a szűk keresztmetszetük: a tudástermelés dokumentálásán, tapasztalataik és tacit tudásuk tudatos szintre emelésén, valamint képzési anyagok, videók, kézikönyvek összeállításán sokat kellene javítani. A Hideghegyi-menedék kiváló példa arra, hogy egy tudatos és erős közösség hogyan hozhat létre és terjeszthet megélt tudást a fenntartható étellel 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. Empowering the mountain: strategies for a sustainable future

The Alto Molise in the Central Apennines mountain region in Italy is known for its vast pastures and wooded lands. They are closely linked to livestock farming (such as cheese and meat production) and forestry products.

The production of spun paste cheese is an important part of the area's economy, reflecting traditional practices passed down through generations. These practices connect the landscape, environment, dairy products, and cultural heritage in a positive relationship. By combining tourism and meat production, farmers can diversify their income since milk production alone may not be enough for the farm to survive.

However, the spun paste cheese industry faces various threats, such as drought, depopulation of rural villages, rising raw material prices, and farmers' reluctance to accept EU agricultural policy reforms that focus on territorial development rather than the growth of the agricultural sector.

By implementing diverse strategies, local actors can make the Alto Molise region stronger and more resilient. Conservation breeding programs, raising animals that can be used both for milk and meat production and direct milk processing are all ways to support the local economy and cultural heritage. Tourist visits can also provide additional income streams for farmers. By focusing on high-quality products and effective marketing strategies, producers can increase their earnings. The use of digital technology can further enhance product sales.

MOVING Reference Region Central Apennines
Country Italy
Authors Angelo Belliggiano, Sara Bispini, Raiza Rocha, Corrado Levoli (UNIMOL)
Anticipated users of PA - Public authorities in mountain areas - Breeders and cheesemakers in mountain areas
Additional info https://www.moving-h2020.eu/



Native language

La valorizzazione della montagna: strategie per un futuro sostenibile

L'Alto Molise è una zona rurale di montagna italiana situata nell'Appennino centro-meridionale, caratterizzata da un bellissimo paesaggio montano e un'economia basata sull'allevamento bovino da latte e sulla produzione di formaggi a pasta filata. Questi ultimi rappresentano l'espressione maggiormente simbolica e feconda di pratiche rurali secolari, tramandate per generazioni in aziende familiari ancora esistenti. La relazione armonica tra società e natura sottesa alle stesse è inoltre un forte attrattore di turismo esperienziale.

Tuttavia, questo sistema produttivo è minacciato dalla siccità, dallo spopolamento, dall'aumento dei prezzi degli input, così come dal l'ostinata ricerca degli agricoltori di utilizzare le risorse della PAC per aumentare la produttività delle proprie aziende, piuttosto che per migliorare lo sviluppo del territorio.

La sfida è quella della diversificazione aziendale, sia come trasformazione diretta delle produzioni casearie, che come potenziamento dell'offerta turistica rurale, capace di ampliare la domanda locale di prodotti caseari e di attivare tipologie estese di filiere corte.

La diversificazione aziendale e l'aumento della qualità delle produzioni lattiero-casearie, accompagnate da adeguate strategie cooperative, potranno rigenerare le economie locali garantendo la tutela degli ecosistemi e delle tradizioni locali, soprattutto mediante l'ampliamento e l'internazionalizzazione dei mercati facilitata dalle nuove tecnologie digitali e dalla razionalizzazione della logistica.

9. Mountain wine from Trento – threats and adaptive capacity

The mountain wine production in Trento Province, in the Eastern Alps, consists of international and local grape varieties produced in its slopes. It is then processed into still white, rosè and red wines, while the most iconic wine is the bottle-fermented Trento DOC sparkling wine that is under Protected Denomination of Origin. The market value and market demand value drove production towards increasing its environmental engagement by way of widespread adoption of organic and low input farming and processing practices.

The main environmental threats for this value chain are extreme weather events, hail, heavy rainstorms and increasing risk of late frost and soil fertility loss. In the long-term, the two factors increase the risk of massive landslides and consequent vineyard and landscape, destruction. The efficiency of water use is another concern for coming years, as the need for irrigation also at higher altitudes, due to higher temperature and precipitation reduction, will increase. Due to social changes, scarcity of workforce for seasonal work in the vineyard and for non-qualified work in the winery starts to be an issue.

The implementation of environmentally friendly agronomic practices along with accurate choice of grape varieties (including resistant/tolerant new ones) and the delocalization of vineyards in higher areas can significantly increase the resilience of the Value Chain in terms of soil quality and health, yield and quality of grapes and longevity of the vineyards. Policy changes regarding the employment of foreign workers and young people could speed sector dynamics and attract workforce. The potential for tackling the challenges strongly depends on the market and on the increase of the value of the product.

MOVING Reference Region
Eastern Alps
Country Italy
Authors Cristina Micheloni, Gianni Trioli and Ekaterina Kleshcheva (VINIDEA)
Anticipated users of PA - value chain's actors (i.e., wine growers, wine-makers, Consortia managers) - advisors - local policy makers and authorities
Additional info https://www.moving-h2020.eu/

Native language

Il vino di montagna di Trento: minacce e capacità di adattamento

La produzione di vino di montagna nella provincia di Trento, nelle Alpi Orientali, parte dalle uve di varietà internazionali e locali prodotte sui pendii, che vengono trasformate in vini bianchi, rosati e rossi fermi, il vino più rappresentativo è lo spumante metodo classico Trento DOC. Il valore del prodotto finale e il riconoscimento del mercato hanno spinto a un crescente impegno ambientale che ha portato a un'ampia adozione di pratiche agricole biologiche e a basso input.

Le principali minacce ambientali per la catena del valore sono gli eventi meteorologici estremi, la grandine, le forti piogge e il crescente rischio di gelate tardive e di perdita di fertilità del suolo. A lungo termine, questi fattori aumentano il rischio di smottamenti massicci e di distruzione dei vigneti. L'efficienza dell'uso dell'acqua è un'altra preoccupazione per il futuro, poiché aumenterà la necessità di irrigazione anche ad altitudini più elevate, a causa del cambiamento climatico. A seguito dei cambiamenti sociali, la scarsità di forza lavoro per le attività stagionali in vigna e per il lavoro non qualificato in cantina inizia a essere un problema.

L'implementazione di pratiche agronomiche rispettose dell'ambiente, una scelta accurata delle varietà di uva (comprese le nuove varietà resistenti) e alla delocalizzazione dei vigneti in aree più elevate possono aumentare la resilienza della catena del valore in termini di salute del suolo, resa e qualità delle uve e longevità dei vigneti. I cambiamenti politici riguardanti l'impiego di lavoratori stranieri e giovani potrebbero accelerare le dinamiche del settore e attrarre forza lavoro. Il potenziale per affrontare le sfide dipende fortemente dal mercato e dalla valorizzazione della produzione.

10. Together for more prosperous Apuan Alps – Current threats and future resolutions

Alta Versilia (Tuscany, Central Italy) is well known for its marble quarries and its attractive mountain landscape. The region has been known for producing chestnut and its flour for centuries. Locals used to call it “the bread tree”, and it gained economic and socio-cultural importance over time. In the frame of the MOVING project, the chestnut flour value chain in Alta Versilia is one of the 23 case studies to analyse.

Nowadays, the value chain is facing numerous threats that weaken its resilience including climatic and demographic changes, land fragmentation, financial difficulties, pests, and many others. During our interactions with local stakeholders, we found out that drought and demographic changes are the most alarming drivers making the system more vulnerable. Moreover a disturbing threat was raised concerning the loss of traditional practices, especially since chestnut flour is considered a patrimony of the region. Another noteworthy driver is the inefficiency to allocate incentives and subsidies.

Across the first two years of MOVING, workshops and meetings with local stakeholders took place regularly, during which we could learn about the abovementioned drivers, and the potential reactions to mitigate their effects based on participants' knowledge. These meetings are the first practice to make the system more resilient by gathering different stakeholders to synergize their efforts and strengthen their network.

Several proposals to increase the value chain’s resilience include involving the Natural Geopark of Apuane Alps and enhancing its governance role, better financial aid distribution, ensuring knowledge sharing, more youth involvement, adoption of good agricultural practices while protecting biodiversity.

MOVING Reference Region Northern Apennines
Country Italy
Authors Manola Colabianchi, Tarek Allali, Francesco Felici, Michele Moretti (UNIFI)
Anticipated users of PA - Value chain’s actors (i.e., producers, processors, association and cooperatives members) - Apuan Alps Geopark officers and employees - Municipal and Regional authorities
Additional info https://www.moving-h2020.eu/



Native language

Insieme per Alpi Apuane più prospere - Minacce attuali e soluzioni future

L'Alta Versilia (Toscana) è famosa per le sue cave e per il suo affascinante paesaggio. La regione produce da secoli farina di castagne. La gente la chiamava "l'albero del pane" e nel tempo ha acquisito una grande importanza socio-culturale. Nell'ambito del progetto MOVING, la filiera della farina di castagne è uno dei 23 casi studio da analizzare.

Oggi, il sistema sta affrontando numerose minacce che ne indeboliscono la resilienza, inclusi cambiamenti climatici e demografici, difficoltà finanziarie, parassiti e molti altri. Durante i vari workshop, abbiamo scoperto che la siccità, la scarsa manutenzione del bosco, e i cambiamenti demografici rendono il sistema più vulnerabile. Inoltre, è stata sollevata una minaccia emergente riguardante la perdita delle pratiche tradizionali, tanto più che la farina di castagne è considerata un patrimonio della regione. Un'altra importante minaccia è l'inefficienza nell'allocazione degli incentivi pubblici.

Durante i primi due anni di MOVING, nei workshop e incontri con gli attori locali, abbiamo potuto conoscere i driver sopra menzionati e le potenziali reazioni per mitigarne gli effetti. Questi incontri sono la prima pratica per rendere il sistema più resiliente riunendo diverse parti interessate per sinergizzare i loro sforzi e rafforzare la loro rete.

Inoltre, le proposte per aumentare la resilienza del VC-A includono il coinvolgimento del Geoparco Naturale delle Alpi Apuane e il rafforzamento del suo ruolo di governance, una migliore distribuzione degli aiuti finanziari, garantendo la condivisione delle conoscenze, un maggiore coinvolgimento dei giovani, l'adozione di buone pratiche agricole, la protezione della biodiversità.

11. Adjustment of policies and practices, and targeted investments in green economies—mandatory for sustainable development of rural tourism in Maleshevski region

The Maleshevski region is known as spa of the Balkans, renowned for its green forests, biodiversity, peaceful landscapes ideal for hiking and biking, clean air and traditionally prepared, organic food. The region is already experiencing negative effects of climate change and socio-economic disturbances. Increased temperatures are causing fires; forests and biodiversity are endangered; agricultural land is decreasing due to water deficiency; active population, especially youth is leaving the region. Maleshevski region is natural protected area.

CNVP, in partnership with representatives of Multi-Actor Platform (MAP) of this MOVING Horizon 2020 project, is exploring vulnerabilities, resilience and potentials for sustainable development of rural tourism in Maleshevski Region.

In a period 2022- 2023, we organised serial workshops with the local stakeholders to discuss mitigation strategies and to identify priority policies and measures for sustainable development of rural tourism in Maleshevski region. Below are recommendations:

1.Strategies for development of the region: establishing Maleshevski brand; increased marketing promotion of locally produced products; creating new offers for active tourism; subsidies for women and young farmers; subventions for local agricultural production and diversification of the offer; subsidies for farmers using innovative technologies

2. Respond to climate change: creating local strategy for climate change; subsidies for renewable energy in agriculture and dairy production; establishing systems for reuse of the rain; subsidies for increasing bee families; subsidies for organic production; generating biomass; strengthened policies for environmental protection.

<p style="text-align: center;">MOVING Reference Region</p> <p style="text-align: center;">Maleshevski mountains</p>
<p style="text-align: center;">Country</p> <p style="text-align: center;">North Macedonia</p>
<p style="text-align: center;">Authors</p> <p style="text-align: center;">Merita Kuli and Nehat Ramadani (CNVP North Macedonia)</p>
<p style="text-align: center;">Anticipated users of PA</p> <ul style="list-style-type: none"> - Decision makers on local government and national level - Business entites in rural tourism Value Chain - Investors in roural tourism Value Chain - General public
<p style="text-align: center;">Additional info</p> <p style="text-align: center;">https://www.moving-h2020.eu/</p>



Native language

Прилагодување на политиките и мерките, и целени инвестиции во зелени економии- задолжителни чекори кон одржлив рурален туризам во Малешевијата

Малешевскиот регион е позната воздушна бања на Балканот. Познат е и поради зимзелените шуми, биодиверзитетот, мирните предели идеални за планинарење и возење велосипед, чистиот воздух и традиционалната храна од органски производи. Сепак, регионот се соочува со негативните ефекти од климатските промени и социо-економските турбуленции. Високите температури се причина за пожари, загрозуваат шумите и биодиверзитетот; се намалуваат обработливите површини поради намалените количини на вода; активното население, посебно младите ја напуштаат земјата. Малешевскиот регион е заштитено подрачје.

ЦНВП преку MOVING ,и програмата Хоризонт 2023, во партнерство со претствниците на Мулти- секторската платформа ги истражува:вулнерабилностите, издржливоста и потенцијалите за одржлив развој на руралниот туризам во Малешевскиот регион.

Во 2022/ 23 год. организиравме работилници на кои со соработниците од регионот дискутиравме за превентивни стратегии, но се идентификуваа и приоритетни политики и мерки за одржлив рурален туризам во регионот. Предложени беа наредни чекори, ова се некои од предлозите:

1. Стратегии за развој на регионот:основање Малешевски бренд; зајакната промоција на локалните производи;подготовка на понуда за активен туризам; субвенции за жени и млади фармери, како и за фармери кои употребуваат иновативни технологии
2. Одговор на климатски промени:креирање нова стратегија за климатски промени; зајакнати политики за заштита на животна средина субвенции за употреба на обновливи извори на енергија, органско производство, за зголемување на пчелните семејства; изградба на системи за реупотреба на дождовницата;генерирање биомаса.

12. Maintaining the link between cheese and the mountain landscape

The Serra da Estrela PDO cheese is made with milk from native sheep breeds. Sheep and cheese have to be produced within the area demarcated for this Protected Denomination of Origin, which extends far beyond the mountain area. There is growing market demand for the cheese where both PDO and nonPDO cheese are included.

Next to its economic value, the Serra da Estrela PDO cheese contributes to the preservation of native sheep breeds – whose hardiness and aptitude for altitude grazing has allowed until some decades ago to make use of high and medium altitude pastures. These pastures are crucial for the landscape characteristic pattern and biodiversity, and to maintain open areas which reduce vulnerability to fire.

The native breeds produce less milk than other breeds and the differentiated price of the milk hardly compensate for the lower productivity. Some producers opt for a change towards other more productive breeds.

Certification is done at the cheesemaker level. Associated bureaucracy and costs mean that smaller, family-run business often opt for not certifying as PDO. This opens the floor to sell cheese made with other milk, marketed as similar to the PDO, and sold at a lower price.

And with these changes, and the decreasing number of sheep, the use of high and medium altitude pastures has severely decreased.

The link between the PDO cheese and the mountain landscape, can be strengthened by:

- Recognizing grazing services beyond their economic value, and paying shepherds for their services
- Provide permanent technical support to shepherds
- Educate consumers on the added value and territory impact of the PDO product
- Ease the burden of certification
- Tourism activities contributing to paying sheep grazing in medium altitude pastures.

MOVING Reference Region
Cordilheira central
Country Portugal
Authors Catarina Esgalhado and Teresa Pinto Correia (University of Évora)
Anticipated users of PA - Local/regional technical staff - Policy makers - Entrepreneurs
Additional info https://www.moving-h2020.eu/

Native language

Manter a ligação entre o queijo e a paisagem de montanha

O queijo DOP Serra da Estrela é feito com leite de ovelhas autóctones. Ovelhas e queijo têm de ser produzidos dentro da região demarcada DOP que se estende para lá da zona de montanha. Há uma procura crescente do mercado quer para o queijo DOP como o não DOP.

Além do seu valor económico, o queijo DOP Serra da Estrela contribui para a preservação das raças autóctones - cuja rusticidade e aptidão para o pastoreio em altitude permitiu, até há algumas décadas, fazer uso de pastagens de alta e média optam. Estas pastagens são cruciais para manter a biodiversidade e o padrão característico da paisagem, bem como para manter áreas abertas e reduzir vulnerabilidade ao fogo.

As raças ovinas autóctones produzem menos leite do que outras e o preço diferenciado do leite dificilmente compensa a menor produtividade. Alguns produtores optam por uma mudança para outras raças mais produtivas.

A certificação é feita a nível das queijarias. A burocracia e os custos associados significam que as pequenas empresas familiares frequentemente optam por não se certificar. Isto abre caminho para que queijo feito com outro leite seja vendido como idêntico ao DOP, mas a um preço mais baixo.

Com estas mudanças, e com a diminuição do número de ovelhas, a utilização de pastagens de alta e média altitude diminuiu drasticamente

A ligação entre o queijo DOP e a paisagem de montanha, pode ser reforçada por:

- O reconhecimento dos serviços de pastagem para além do seu valor económico, e pagamento aos pastores pelos seus serviços
- Apoio técnico permanente aos pastores
- Educar os consumidores sobre o valor acrescentado e o impacto territorial do produto DOP
- Aliviar a certificação
- Contribuições do turismo para o pagamento do pastoreio de ovelhas em pastagens de média altitude.

13. Mountain wine from Alto Douro – threats and adaptive capacity

Wine production in the Upper Douro Valley (Maçico Noroeste in Portugal) has a long-standing tradition of widely-known PDO wines. It is based on small scale family grape producers and cooperative cellars. Over the last 60 years the area has undergone a fast loss of population and a progressive aging. Viticulture, as well as other agriculture activity, faced a declining profitability and, therefore, was drastically reduced. But in last decades, the increase of temperatures in lower areas and the interest in site specific wines led large wine companies from the lower valley to invest in the area. The result is a renewed growth of vineyards managed by large companies that often process the grapes outside the region, with a consequent loss of added value for the area. Few cooperative cellars maintain their activity, often in collaboration with the large companies, and some small-scale producers started to process the grapes by their own.

MOVING Reference Region
Maçico Noroeste
Country Portugal
Authors Cristina Micheloni, Ekaterina Kleshcheva and Gianni Trioli (VINIDEA)
Anticipated users of PA - vine growers and winemakers - PDO-PGI Consortia managers - advisors - local policy makers and authorities
Additional info https://www.moving-h2020.eu/

The main threat for this value chain remains demographic change as it affects work-force availability and the vitality of the rural area. Climate change is also impacting in terms of extreme events, like hail or heavy rainstorms, while water availability for viticulture is uncertain as potentially conflicting with other uses.

Wine companies are active in finding solutions to the workforce scarcity, but it does not solve the more general problem of few and aged residents. Agronomic practices, mainly linked to conservative soil management and agroecology, are tools for the mitigation of climate change effects and for an increased resilience of the vineyard, also towards the changing pest and diseases and their biological cycles.

Native language

Vinho de montanha do Alto Douro – ameaças e capacidade adaptativa

A produção de vinho no Alto Vale do Douro (Maçico Noroeste, Portugal) tem uma longa tradição, ligada a apreciados vinhos DOP, com base em pequenos produtores familiares de uvas e adegas cooperativas. Nos últimos 60 anos a área sofreu uma rápida perda de população e um envelhecimento progressivo. A viticultura, como toda a agricultura, enfrentava uma queda na rentabilidade e, como consequência, foi drasticamente reduzida. Mas nas últimas décadas, o aumento das temperaturas nas zonas mais baixas e o interesse pelos vinhos autoctonos levaram grandes empresas vitivinícolas do baixo vale a investir na zona. O resultado é um crescimento de vinhas geridas por grandes empresas que muitas vezes processam as uvas fora da região, com consequente perda de valor adicionado para a área. Poucas adegas cooperativas mantêm a actividade, muitas vezes em colaboração com as grandes empresas, e alguns pequenos produtores começaram a processar as uvas.

A principal ameaça para a cadeia de valor continua sendo a mudança demográfica, que impacta a disponibilidade de mão de obra e, em geral, a vitalidade do meio rural. Por outro lado, as mudanças climáticas estão impactando em termos de eventos extremos, como granizo ou tempestades. A disponibilidade de água para a viticultura é incerta, potencialmente em conflito com outros usos.

As empresas vinícolas estão empenhadas em encontrar soluções para a falta de mão-de-obra, mas isso não resolve o problema mais geral dos poucos e idosos residentes. As práticas agronómicas, principalmente ligadas à gestão conservadora do solo e à agroecologia, são ferramentas para mitigar os efeitos das alterações climáticas e para aumentar a resiliência da vinha, também face à evolução das pragas e doenças e dos seus ciclos biológicos.

14. The importance of better governance and the decentralization of funding for the development of sustainable mountain tourism in the Southern Romanian Carpathians

The Southern Romanian Carpathians are internationally renowned for their exceptional biodiversity and natural landscapes, but these natural assets are threatened by numerous pressures including the negative impacts of mass tourism (including chaotic construction of buildings and infrastructure), abandonment of agricultural land and loss of traditional ‘high nature value’ farming practices.

One of the mountain value chains investigated in the H2020 MOVING project (<https://www.moving-h2020.eu/>) is sustainable (notably ‘certified ecotourism’) with a specific focus on the Făgăraş mountain massif, including the Piatra Craiului National Park and neighbouring Țara Făgăraşului micro-region.

During workshops with local stakeholders in 2022 and 2023 two specific needs for fostering the further development of sustainable tourism in the Southern Romanian Carpathians were identified:

(1) Better and stronger governance of the region to a) support the livelihoods of local small-scale producers by prioritizing their grazing rights on local pastures, providing professional training courses and facilitating the certification of their agricultural products, plus b) have stricter planning regulation for new (and often inappropriate) buildings for tourism and leisure purposes;

(2) More decentralised decision-making and funding guided by local stakeholders (public and private). One specific success story of relevance to other mountain areas is the ‘Intercommunity Development Association of the Țara Făgăraşului Microregion’ which successfully applied for Integrated Territorial Investment (ITI) for the region – one of only 4 ITIs funded in Romania under the 2021-2027 EU Cohesion Policy so far.

<p>MOVING Reference Region</p> <p>Southern Romanian Carpathian mountains</p>
<p>Country</p> <p>Romania</p>
<p>Authors</p> <p>Cătălina Rogozan and Mark Redman (Highclere Consulting)</p>
<p>Anticipated users of PA</p> <ul style="list-style-type: none"> - Public authorities in mountain areas - Sustainable tourism operators in mountain areas - Small agricultural producers in mountain areas
<p>Additional info</p> <p>https://www.moving-h2020.eu/</p>

Native language

Importanța unei mai bune guvernante și a descentralizării finanțării pentru dezvoltarea turismului montan sustenabil în Carpații Meridionali din România

Carpații Meridionali sunt recunoscuți la nivel internațional pentru biodiversitatea și peisajele lor naturale excepționale, însă aceste bunuri naturale sunt sub presiunea unor numeroase amenințări, incluzând impactul negativ al turismului de masă (inclusiv construcția haotică de clădiri), abandonarea terenurilor agricole și pierderea practicilor agricole tradiționale de „înaltă valoare naturală”.

Unul dintre lanțurile valorice montane analizate în cadrul proiectului MOVING este TURISMUL SUSTENABIL (în special "ecoturismul certificat"), acordând o atenție deosebită masivului muntos Făgăraș, inclusiv Parcul Național Piatra Craiului și Țara Făgărașului – microregiunea învecinată.

În timpul întâlnirilor de lucru cu părțile interesate locale din 2022 și 2023 au fost identificate două nevoi specifice pentru stimularea dezvoltării în continuare a turismului durabil în zonă:

(1) O guvernantă îmbunătățită și mai puternică a regiunii pentru a) sprijinirea mijloacelor de trai ale micilor producători locali prin prioritizarea drepturilor lor de pășunat pe pășunile locale, oferind cursuri de formare profesională și facilitând certificarea produselor lor agricole, și b) o reglementare mai strictă a construcțiilor noi (și adesea nepotrivite) în scopuri turistice și de agrement;

(2) Descentralizarea procesului decizional și finanțărilor, coordonată de părțile interesate locale (publice și private). O poveste de succes relevantă pentru alte zone montane este „Asociația de Dezvoltare Intercomunitară ITI Microregiunea Țara Făgărașului”, care a aplicat cu succes pentru o Investiție Teritorială Integrată pentru regiune - una dintre cele doar 4 ITI finanțate în România în cadrul Politicii de Coeziune a UE 2021-2027.

15. Sjenica Lamb quality and origin valorisation through mobilization of actors and supportive policies

Serbia Dinaric Mountains, and is well known for its beauty, pristine pastures and harsh climate. The autochthonous breed of this plateau is the Sjenica sheep. This breed is the base of three products of origin (PDO) – Sjenica Lamb, the main product of this Value chain, Sjenica cheese and Sjenica stelja (dry sheep meat).

Though rooted in the traditional mountain farming system of the Pešter highlands, its great natural value and biodiversity, the Sjenica lamb and its products' high reputation is not sufficiently appreciated. This disconnect between reputation, origin and quality, lowers market demand and the ability for produces to increase the value of their produce.

Additional substantial threat to the area and to the Sjenica lamb production, is the intensive outmigration. More middle-aged producers are predominantly involved in livestock production and has a strong connection to the traditional production; however, the next generation is seeking other alternatives and a different, less demanding lifestyle.

Well-planned, continuous and informed policies defined and implemented at local and national level, would be important to reverse these negative trends and create sustainable incentives for young people who stay in the area and are engaged in agriculture. The policies need to improve the farmers- prospects and build on producer groups initiatives that strengthen market linkages and capitalise on the high quality products from the Pester plateau.

The focus would be on “working smarter not harder”, promoting social and technical innovation, for making Sjenica and Pešter not only a place of unique products, but also a place of good quality of life for its people.

MOVING Reference Region
Dinaric Mountains
Country Serbia
Authors Tamara Zivadinovic, Dragana Tar, Jeroen Arends (Mena Group)
Anticipated users of PA - Sjenica sheep producers - Producer associations - Local and regional policy makers - Advisors - Development organiastitutions and NGOs
Additional info https://www.moving-h2020.eu/

Native language

Mobilizacija aktera i institucionalne podrške za bolje vrednovanje kvaliteta i porekla Sjeničkog jagnjeta

Pešterska visoravan koja pripada Dinarskim planinama Zapadne Srbije, poznata je po nesvakidašnjoj prirodnoj lepoti, pašnjačkim prostranstvima, ali i surovoj klimi. Autohtona Sjenička ovca, kojoj je Pešter dom, preradom se transformiše u tri proizvoda sa zaštićenim poreklom – Sjeničko jagnje, Sjenički sir i Sjeničku stelju.

Iako se proizvodnja oslanja na tradicionalni planinski pašnjački uzgoj, koji karakteriše velika vrednost prirode i biodiverziteta, ugled i reputacija Sjeničkog jagnjeta i njegovih proizvoda nije dovoljno vrednovana. Rezultat toga su pokidane veze između reputacije, porekla i kvaliteta, čime se smanjuje interesovanje i mogućnost proizvođača iz ovog regiona, da dodaju vrednost svojim proizvodima.

Intenzivna migracija iz regiona Sjenice i Peštera je dodatna pretnja održivosti ruralnih područja. Srednja generacija proizvođača, kojoj uglavnom pripadaju uzgajivači ovaca, snažno je povezana sa tradicionalnim stočarstvom, dok mladi traže druge mogućnosti i promenu stila života.

Dobro isplaniran, strateški razvoj nacionalnih i lokalnih politika zasnovan na podacima, je važan činilac za zaustavljanje negativnih trendova i kreiranje održivih prilika za mlade koji žele da ostanu u pešterskim selima i bave se poljoprivredom.

Javne politike treba da unaprede perspektivu za mlade farmere i podrže inicijative proizvođačkih grupa za boljim povezivanjem sa tržištem i vrednovanje visoko kvalitetnih proizvoda.

Fokus bi trebalo da bude na tome da se radi "pametnije" a ne više, kao i na promociji društvenih i tehnoloških inovacija, kako bi Sjenica i Pešter bili ne samo mesto jedinstvenih proizvoda i hrane, nego i dobro mesto za život ljudi.

16. Honey value chain vulnerabilities and required adaptation improvements in Slovak mountains

Beekeepers and experts on mountain area identified the main threats affecting the Slovak mountain honey value chain (VC). Climate change developments such as drought, torrential rains, and heat waves adversely affect honeybees' quality and quantity of forage, which represents an essential resource for honey VC. Insufficient bee nourishment causes vulnerability of bee colonies and consequent parasite overgrowth and diseases. Moreover, biodiversity reduction is ongoing due to changes in rural lifestyles in the mountains and the decrease in meadows and pastures. However, even in the meadows that have been preserved, the agronomic practices suitable for bee grazing are rarely used. The VC is also threatened by inflation and lack of accurate information leading to consumer preference for cheaper, non-local honey, and even for non genuine honey.

The proposed improvements for VC resilience are far from being in the hands of beekeepers alone and relate to the following:

1. Adequate landscape planning to help maintain water in the landscape, promote plant diversity, and allow the selection of suitable habitat locations for honeybees.
2. Agricultural legislation listening to experts in beekeeping and opportunities for effective communication between beekeepers, farmers, and foresters to apply bee-friendly management
3. Improving demand and trust for local quality products through the support of sustainable beekeeping, direct sales, communication between beekeepers and consumers, and implementation of regional brand logos
4. Education of the public and authorities about the multifunctionality of beekeeping and the interconnectedness between the health of the landscape, bees, and people

MOVING Reference Region Slovak Carpathian mountains
Country Slovakia
Authors Diana Surová (CZU)
Anticipated users of PA - Public authorities - Agricultural and forestry producers in mountain areas - Education and research entities - Policy makers
Additional info https://www.youtube.com/watch?v=GhmbV0agA4o

Native language

Zraniteľnosť medového hodnotového reťazca a požadované adaptačné zlepšenia v horských oblastiach na Slovensku

S participatívnou pomocou včelárov a odborníkov na horské oblasti sme identifikovali hlavné hrozby, ktoré ovplyvňujú horský med.

Klimatické zmeny prejavujúce sa ako sucha, prívalové dažde a vlny horúčav nepriaznivo ovplyvňujú kvalitu a množstvo pastvy pre včely medonosné, ktoré predstavuje základný zdroj pre medový hodnotový reťazec. Nedostatočná výživa včiel spôsobuje zraniteľnosť včelstiev a následné premnoženie parazitov a chorôb. Okrem toho dochádza k znižovaniu biodiverzity v dôsledku zmien životného štýlu vidieckeho obyvateľstva v horách a úbytku lúk a pasienkov. Avšak aj na lúkach, ktoré sa zachovali, sa len zriedkavo používajú agrotechnické postupy vhodné pre včeliu pastvu. Hodnotový reťazec čelí aj riziku, že spotrebiteľia uprednostnia lacnejší (nemiestny a falošný) med v dôsledku inflácie alebo nedostatku presných informácií.

Navrhované zlepšenia odolnosti VC zďaleka nie sú len v rukách včelárov a týkajú sa nasledujúcich oblastí:

1. Adekvátne krajinné plánovanie, ktoré pomôže udržať vodu v krajine, podporí diverzitu rastlín a umožní výber vhodných stanovišť pre včely medonosné.
2. Poľnohospodárska legislatíva naslúchajúca odborníkom na včelárstvo a možnosti efektívnej komunikácie medzi včelármi, poľnohospodármi a lesníkmi s cieľom uplatňovať hospodárenie priaznivé pre včely
3. Zlepšenie dopytu a dôvery po kvalitných miestnych produktoch prostredníctvom podpory udržateľného včelárstva, priameho predaja, komunikácie medzi včelármi a spotrebiteľmi a zavedenia loga regionálnych značiek
4. Vzdelávanie verejnosti a úradníkov o multifunkčnosti včelárstva a vzájomnej prepojenosti medzi zdravím krajiny, včiel a ľudí.

17. Adaptive capacity of organic mountain olive groves

The organic production system of mountain olive groves generates positive results in different ways. However, it cannot be considered a major or fully sustainable sub-sector.

It is a value chain subject to the adverse effects of multiple drivers of change that negatively impact productivity and other variables. These include: drought and other extreme weather events, loss of soil quality, demographic changes, unequal market pricing and profit sharing, and declining public support.

On the other hand, there are several preconditions for adaptation to these impacts. These range from the maintenance of permanent ground covers; the incorporation of biomass from pruning, the protection of local varieties; the increased reuse of residues for the production of compost; the introduction of some regenerative practices.

Having local strategies and greater sectoral and territorial articulation would give stability to this transition towards a more resilient value chain. In terms of available territorial capital, there is an unequal correlation of forces where the immobilism of the most conservative actors coexists with the fear felt towards and by the most innovative actors. This occurs within a context of political and media pressure from groups promoting intensive and agro-industrial production systems, lack of holistic analysis and strategies to respond to these various threats and a lack of collective, political and sectoral leadership.

MOVING Reference Region
Betic Systems
Country Spain
Authors Antonio Zafra and Raquel Moreno (ADEGUA)
Anticipated users of PA - General public and actors of the whole value chain of (organic) mountain olive groves and olive oil, together with members of the MAP
Additional info https://www.youtube.com/watch?v=uw5ev-Gwa64



Native language

Capacidad de adaptación de los olivares ecológicos de montaña

El sistema ecológico de producción relacionado con los olivares de montaña genera resultados positivos de diferentes maneras, pero no puede hablarse todavía de un subsector mayoritario ni plenamente sostenible.

Se trata de una cadena de valor sujeta a los efectos adversos de múltiples factores de cambio que impactan negativamente sobre la productividad y otras variables. Nos referimos a la sequía y otros eventos meteorológicos extremos, la pérdida de calidad de los suelos, los cambios demográficos, la desigual posición en los mercados para fijar precios y repartir beneficios, y el descenso de las ayudas públicas.

Por otro lado, se observa la presencia de diversas precondiciones para la adaptación a estos efectos. Desde el mantenimiento de cubiertas permanentes en el suelo o la incorporación de la biomasa resultante de la poda, la protección de variedades locales, el mayor reaprovechamiento de residuos para producir compost o la introducción de algunas prácticas regenerativas.

Sería muy positivo contar con estrategias locales y una mayor articulación sectorial y territorial que diera estabilidad a esta transición hacia una cadena de valor más resiliente. En cuanto al capital territorial disponible, observamos una desigual correlación de fuerzas donde el inmovilismo de los actores más conservadores convive con el miedo que no dejan de sentir los actores más innovadores, un contexto de evidente presión política y mediática por parte de grupos vinculados a sistemas de producción intensivos y agroindustriales y un entorno de falta global de análisis y estrategias para responder a las amenazas descritas en un escenario general de falta de liderazgo político y sectorial colectivo.

18. Main aspects of boosting the contribution of PDO Iberian ham to the sustainability and resilience of the Sierra Morena mountains

Dehesas (or montados in Portuguese) are seminatural landscapes formed by anthropized Mediterranean forests mostly composed of holm oaks and pastures. Sheep, cattle, and pig rearing are the most important activities in Dehesa farms, being rearing Iberian pigs one of the essential sectors in economic, environmental, and social terms.

The Iberian ham value chain has been explored in the context of MOVING H2020. Iberian ham PDO Los Pedroches is one of the most valuable products coming from dehesas and hence a key sector to boost the sustainability of the territory of Sierra Morena. Iberian ham is also traditionally produced using the knowledge and culture in the management of dehesas, where humans and Mediterranean forests have been coexisting for centuries.

During the workshops with local stakeholders in 2022 and 2023, three specific needs to foster the further development of the traditional production of Iberian ham PDO Los Pedroches have emerged:

1. Differentiation of the products' quality under an "Iberian ham" designation. Fighting against fraud and informing consumers is essential for the acknowledgment of this valuable product and the sustainable practices which involve it.
2. Specific regulations for small farmers to facilitate the elaboration and marketing of their products. Sanitary standards have to take into account artisanal production. Small farm practices are essential to maintain the dehesas due to their dependence on natural resources.
3. Improvement of the transfer of knowledge between locals, technicians, and researchers. Knowledge exchange methods should recognise the needs and different perspectives within the sector. Technology should help to simplify bureaucracy and not the opposite.

MOVING Reference Region
Sierra Morena
Country Spain
Authors Carmen Maestre-Díaz and Mar Delgado-Serrano (University of Cordoba)
Anticipated users of PA - general public and actors of the whole value chain
Additional info https://www.moving-h2020.eu/



Native language

Acciones para mejorar la contribución de la cadena de valor del jamón ibérico DOP Los Pedroches a la sostenibilidad y resiliencia de Sierra Morena

Las dehesas son bosques mediterráneos antropizados compuestos mayoritariamente por encinas y pastos. La actividad económica más importante en las fincas de dehesa es la cría de ganado ovino, bovino o porcino, destacando la cría de cerdo ibérico por su repercusión económica, social y ambiental.

La cadena de valor del jamón ibérico DOP Los Pedroches ha sido analizada en el contexto del proyecto H2020 MOVING, por ser uno de los productos más valorados de la dehesa, además del sector clave para aumentar la sostenibilidad de Sierra Morena. Este jamón ibérico es producido tradicionalmente usando el conocimiento local sobre el manejo de la dehesa, desarrollado a lo largo de siglos de gestión de este bosque autóctono.

Durante los talleres organizados en 2022 y 2023, han emergido tres necesidades específicas para mejorar el funcionamiento de la producción tradicional del jamón ibérico DOP Los Pedroches:

1. Una diferenciación real del “jamón ibérico” ligada a la raza y a la cría en dehesa. Es esencial luchar contra el fraude e informar a los consumidores para que reconozcan este producto y las prácticas que lo avalan.
2. Regulaciones específicas para facilitar la elaboración y comercialización de productos de pequeñas explotaciones. La normativa sanitaria debe tener en cuenta a la producción artesanal. Las prácticas de las pequeñas explotaciones son esenciales para mantener las dehesas debido a su dependencia de los recursos naturales.
3. Mejora de la transferencia de conocimiento entre actores locales, técnicos e investigadores. Los métodos de intercambio de conocimiento deberían reconocer las necesidades y distintas perspectivas dentro del sector. La tecnología debe ser una herramienta para simplificar la burocracia y no al revés.

19. Threats and adaptive capacities of wine production in Spanish Pyrenees

The region of Hoya de Huesca is a transition zone between the pre-Pyrenean Mountains and the Ebro valley. About half of the Huesca province's surface is flat arable land used for intensive crops, such as cereals and animal husbandry. Mountain wine production in Huesca province is a relatively young value chain but based on a strong historical background. The community synergy and interaction is among the main features of the value chain.

The most important driver is the demographic negative trend affecting the region since the late 60s, linked to the crisis of labour market and land abandonment, whose consequence is the concentration of land ownership in the hands of large investment companies. Unfortunately, nowadays the region is still unattractive for young people and families, due to the lack of infrastructures and social services. As environmental threats, drought and increasing air temperature, especially heat waves in summer are of major concern. Low soil quality is a common problem for mountain landscape, in the case of Huesca, soil was also impacted by decades of intensive agronomic practices connected to arable crops cultivation.

An efficient set of policy supporting farmers can reduce the negative trend and support current social and technological innovation processes. A lower tax burden for the residents and an access to digital (broadband) and physical (roads, railways) infrastructures are essential aspects to be considered together with access to services (health, education, etc.). Policies should also foster the uptake of economic diversification opportunities such as rural tourism, energy production, ecosystem services.

MOVING Reference Region Spanish Pyrenees
Country Spain
Authors Cristina Micheloni, Gianni Trioli and Ekaterina Kleshcheva (VINIDEA)
Anticipated users of PA - vine growers and winemakers - advisors - local policy makers and authorities
Additional info https://www.moving-h2020.eu/

Native language

Amenazas y potencial de adaptación de la producción vitivinícola en los Pirineos españoles

La comarca de la Hoya de Huesca es una zona de transición entre la cordillera prepirenaica y el valle del Ebro. Casi la mitad de la superficie de la provincia de Huesca está dedicada a cultivos intensivos como cereales y a la ganadería. La producción de vino de montaña en la provincia de Huesca es una cadena de valor relativamente joven, pero basada en sólidos antecedentes históricos. La sinergia de la comunidad es una de sus principales características.

El factor más importante es la tendencia demográfica negativa que afecta a la región desde finales de los años 60, vinculada a la crisis del mercado laboral y al abandono de tierras, cuya consecuencia es la concentración de la propiedad de la tierra en manos de grandes empresas. Hoy la región sigue siendo poco atractiva para los jóvenes y las familias, debido a la falta de infraestructura y servicios sociales. Como amenazas medioambientales, la sequía y el aumento de la temperatura del aire con las olas de calor en verano son motivo de preocupación. La baja calidad del suelo es un problema común en montaña; en el caso de Huesca, el suelo también se ha visto afectado por décadas de prácticas agronómicas intensivas.

Un conjunto eficaz de políticas de apoyo a los agricultores puede reducir la tendencia negativa y apoyar los actuales procesos de innovación social y tecnológica. Una menor presión fiscal para los residentes y el acceso a las infraestructuras digitales (banda ancha) y físicas (carreteras, ferrocarriles) son aspectos esenciales que deben tenerse en cuenta, junto con el acceso a los servicios (sanidad, educación). Las políticas también deberían fomentar el aprovechamiento de las oportunidades de diversificación económica: el turismo rural, la producción de energía y los servicios ecosistémicos.

20. Scaling New Heights: Strengthening the Mountain Cereal Value Chain with collaboration, innovation and education for greater resilience

The Gran Alpin Value Chain is a cooperative of organic farmers with the goal of maintaining the value chain of organically grown mountain cereals in Grisons since the 1980s. The cooperative focuses on the local production and distribution of premium cereal products such as flour, pasta or beer.

The main challenges consist of the high variety of different types of processed grains with mostly small volumes and the remote location of the farms that lead to complicated logistics and long transport distances. Moreover, the local infrastructure is insufficient, as proper machinery for small fields or more and smaller grain silos are needed. Also, there is a lack of qualified staff, especially in the processing stages, for example millers or brewers.

The key recommendations for improving the value chains' resilience are as follows:

- increase collaboration with other value chains and actors in the region to leverage their knowledge and resources, especially in areas such as logistics and infrastructure.
- innovate in areas such as processing and storage to reduce costs, increase efficiency and improve product quality.
- invest in training and capacity building for its stakeholders to improve their skills and knowledge in areas such as business management, marketing and quality control.

By implementing these recommendations, the Gran Alpin value chain can become more resilient and better able to withstand external shocks and keep up with future trends.

MOVING Reference Region
Swiss Alps
Country Switzerland
Authors Anna Geiser, Carmen Forrer and Gianna Lazzarini (ZHAW)
Anticipated users of PA - Public authorities in mountain areas - Actors in logistics and processing stages of mountain cereals - Small agricultural producers in mountain areas - Education and research institutes
Additional info https://www.moving-h2020.eu/

Native language

Neue Höhen erklimmen: Stärkung der Wertschöpfungskette von Berggetreide durch Zusammenarbeit, Innovation und Bildung für mehr Resilienz

Im Zentrum unserer Fallstudie steht die Gran Alpin, eine in den 1980er Jahren gegründete Genossenschaft von Biobauern, die sich zum Ziel gesetzt hat, die Wertschöpfungskette des biologisch angebauten Berggetreides in Graubünden aufrechtzuerhalten. Die Genossenschaft konzentriert sich auf die lokale Produktion und den Vertrieb von hochwertigen Getreideprodukten wie Mehl, Teigwaren oder Bier.

Die grössten Herausforderungen bestehen in der grossen Vielfalt an verschiedenen verarbeiteten Getreidesorten mit meist kleinen Mengen und der abgelegenen Lage der Betriebe, die zu einer komplizierten Logistik und langen Transportwegen führen. Darüber hinaus ist die lokale Infrastruktur unzureichend, da geeignete Maschinen für kleine Felder oder mehr und kleinere Getreidesilos benötigt werden. Außerdem fehlt es an qualifiziertem Personal, insbesondere in den Verarbeitungsstufen, z. B. Müllern oder Brauern.

Unsere wichtigsten Empfehlungen zur Stärkung der Wertschöpfungskette lauten daher:

- die Zusammenarbeit mit anderen Wertschöpfungsketten und Akteuren in der Region stärken, um deren Wissen und Ressourcen zu nutzen, insbesondere in Bereichen wie Logistik und Infrastruktur.
- auf Innovationen in den Bereichen Verarbeitung und Lagerung setzen, um Kosten zu senken, die Effizienz zu steigern und die Produktqualität zu verbessern.
- in die Ausbildung und den Aufbau von Kapazitäten für ihre Akteure investieren, um deren Fähigkeiten und Kenntnisse in Unternehmensführung, Marketing und Qualitätskontrolle zu verbessern.

Durch die Umsetzung dieser Empfehlungen kann die Gran Alpin Wertschöpfungskette widerstandsfähiger werden und sich besser gegen externe Schocks wappnen und mit zukünftigen Trends mithalten.

21. Tête de Moine Value Chain: Challenges and Opportunities for a High-Quality Cheese Production in the Swiss Jura Region

The Tête de Moine PDO value chain is located in the Swiss Jura mountain region. This value chain includes cheese, milk, and meat production. The cheese, in particular, secures better milk prices for farmers and has gained popularity due to its unique presentation with a girolle.

A joint-trade partnership manages the Tête de Moine value chain, promoting consumption and better quality. This value chain generates 400 jobs with an annual turnover of over 80,000 Swiss francs. It also collaborates with Gruyère PDO to address the seasonal mismatch between production and consumption.

Being an important local product from the Swiss Jura, Tête de Moine faces environmental and socio-economic challenges linked to climate change and changes in market demand. Feed and milk production is sensitive to meteorological events, and farmers are highly dependent on public support, which accounts for half of their income.

Another growing challenge is meeting increasing societal demands while maintaining a high added value. Developing new services, high-quality products, and promotion methods will allow for the development of new markets and sustain farmers' livelihoods. Better environmental integration in quality products, policy support, diversification, and actor integration will help increase the resilience of cheese production and the livelihoods of farmers. Strong coordination between the actors of the value chain and consumers can improve the sustainability of the region.

MOVING Reference Region
Swiss Jura
Country Switzerland
Authors Kamar Habli and Isabella Maglietti Smith (ORIGIN)
Anticipated users of PA - Value chain key actors - Researchers interested in Tête de Moine PDO value chain - Intermediaries that link the producers and other actors in VC-A (e.g. farm advisors etc.)
Additional info https://www.moving-h2020.eu/



Native language

Chaîne de valeur du Tête de Moine: défis et opportunités pour une production de fromage de haute qualité dans la région suisse du Jura

La chaîne de valeur de l'AOP Tête de Moine est située dans le Jura suisse. Elle comprend la production de fromage, de lait et de viande. En particulier le fromage garanti de meilleurs prix du lait aux agriculteurs et a gagné en popularité grâce à sa présentation unique avec une girole. Une interprofession gère la chaîne de valeur de l'AOP, en garantissant la qualité et en promouvant les ventes. Cette chaîne génère 400 emplois et un chiffre d'affaires annuel de plus de 80 000 francs suisses. Elle collabore aussi avec l'AOP Gruyère pour remédier au décalage saisonnier entre la production et la consommation. Cependant, en tant que produit local important du Jura suisse, la chaîne de valeur est confrontée à des défis environnementaux et socio-économiques liés au changement climatique et à l'évolution de la demande du marché. La production d'aliments pour animaux et de lait est fortement affectée par les événements météorologiques. Sa production dépend également des subventions. L'entretien des pâturages boisés et la dépendance à l'égard des aides publiques sont d'autres défis à relever. Les aides publiques, telles que les paiements directs, représentent la moitié du revenu des agriculteurs. Un autre défi croissant est l'augmentation des demandes de la société tout en maintenant une valeur ajoutée élevée. Le développement de méthodes de promotion, de nouveaux services, de produits de haute qualité permettra de maintenir le revenu des agriculteurs. Une meilleure intégration de l'environnement dans les produits de qualité, le soutien politique, la diversification, l'intégration des acteurs de la chaîne de valeur et les consommateurs contribueront à accroître la résilience de la production fromagère et les moyens de subsistance des agriculteurs.

22. Greenhouse tomato production in Beydaglari: Increasing value added, sustainable and resilient value chain

Elmalı is a small plateau located in Beydaglari. Highland greenhouse cultivation in Elmalı started in 2000s and greenhouse tomato production, which is mostly export-oriented and is gradually increasing. The expansion of greenhouse production has strengthened the regional economy and improved the living conditions of the local population. However, uncontrolled increase in greenhouse areas is not compatible with the natural resource potential of the region.

The main threats for greenhouse tomato production are mainly caused by climate change. Non-native invasive species are the major threat which is followed by drought and overexploitation of natural resources (groundwater, surface water, soil). In addition, stakeholders in the region also consider inflation as a threat.

It is necessary to avoid the uncontrolled increase of greenhouse areas in order to ensure the sustainability of tomato greenhouse cultivation and prevent the overexploitation of natural resources in the region. Efficient use of water resources and water conservation is another important issue. Input subsidies need to be increased for high input prices. In order to increase the effectiveness of the marketing system, it is necessary to set up a cooperative that will play a crucial role in marketing of product and expansion of contract farming in the region will make the value chain more efficient. Marketing cooperatives will ensure collective sales and supply, which will reduce production costs and increase farmers' incomes. Farmers' training in modern agricultural techniques is important to protect natural resources and increasing income.

MOVING Reference Region
Beydaglari
Country Turkey
Authors Murat Yercan, Hakan Adanacioglu, Duygu Tosun, Filiz Kinikli (EGE)
Anticipated users of PA - Local authorities - Exporters - Policy makers - Farmers
Additional info https://www.youtube.com/watch?v=uw5ev-Gwa64

Native language

Beydağlarında sera domatesi üretimi: Katma değerin artırılması, sürdürülebilir ve dirençli değer zinciri

Elmalı Beydağları içerisinde yer alan küçük bir platodur. Elmalı'da yayla seracılığı 2000'li yıllarda başlamış olup çoğunlukla ihracata dayalı yapılan sera domates üretimi her geçen yıl artmaktadır. Seracılığın yaygınlaşması bölge ekonomisini güçlendirmiş ve yerel halkın yaşam koşullarında iyileşmeler görülmüştür. Bununla birlikte sera alanlarının kontrolsüz şekilde artması yörenin doğal kaynak potansiyeli ile uyumlu bir artış değildir.

Sera domatesi üretimini tehdit eden faktörlerin başında iklim değişikliği kaynaklı sorunlar gelmektedir. Zararlı ve hastalıklar en büyük tehdit olarak görülmektedir. Bunu kuraklık ve doğal kaynakların aşırı kullanımı (yer altı, yerüstü suları, toprak) izlemektedir. Bunun yanında yöredeki paydaşlar enflasyonu da bir tehdit olarak görmektedirler.

Bölgede domates seracılığının sürdürülebilirliğini sağlamak ve doğal kaynakların aşırı kullanımını engellemek için sera alanlarının kontrolsüz artışını önlemek gerekmektedir. Su kaynaklarının etkin kullanımı ve su tasarrufunun sağlanması da diğer önemli bir husustur. Artan girdi fiyatlarının yüksekliği için girdi sübvansiyonlarının artırılması gerekmektedir. Pazarlama sisteminin etkinliğini arttırmak için yörede kurulacak bir kooperatifin ürün pazarlamasını üstlenmesini ve sözleşmeli üretim modelinin yörede yaygınlaştırılması değer zincirinin daha etkin çalışmasını sağlayacaktır. Pazarlama kooperatifleri ile toplu satış ve tedarik sağlanacağı için çiftçinin üretim maliyetleri azalacak ve gelirinin yükselmesinin önü açılacaktır. Çiftçilere modern tarım teknikleri konusunda eğitim verilmesi, hem doğal kaynakların korunması hem de gelirin arttırılması açısından önemlidir.

23. Resilience in Whisky, Food and Drink Value Chains: technology, cooperation and youth are the answer if funding is provided

During workshops held in 2022 stakeholders from the Speyside Whisky and food and drink tourism Value Chain Assemblage (VC-A) discussed threats to their industries. The following threats were voted most important: demographic changes (causing workforce problems), inflation, and water temperature and low flows.

Stakeholders suggested a number of solutions. Promotion of the industry to young people and more favourable living conditions were suggested to encourage people of working age into the area. This could be achieved through increases to the national living wage, local planning regulations, and housing targets.

Energy efficiency and use of renewables within the whisky and tourism sectors was suggested to mitigate impacts of inflation. This change is already being implemented using biofuels to generate electricity. Continued expansion of this could help to provide lower cost energy and heat to local businesses, whilst reusing waste products.

Water saving interventions were suggested to stabilize river temperature and flow. Expansion of heat reduction technologies already in use for the wastewater released by distilleries would continue to reduce impact on water temperature. Similarly, the planting of riparian woodlands would help to shade and cool rivers. Leaky dams were suggested as a buffer against water shortages.

Due to its international market and northern location the Speyside Whisky and Tourism VC-A has some increased resiliency to these threats. However, it still faces some negative impacts, which is in part already being felt. Stakeholders were confident about the potential for mitigation, but less confident about implementing these solutions. They require significant funding, which is currently lacking.

MOVING Reference Region Highlands and Islands
Country UK-Scotland
Authors Chloe Thompson and Kirsty Blackstock (The James Hutton Institute)
Anticipated users of PA - MOVING related stakeholders - Local authorities
Additional info https://www.hutton.ac.uk/research/projects/moving-mountain-valorization-through-interconnectedness-and-green-growth-2020-2024

24. Food chains and society in mountain areas – From depopulation to new inclusive communities based (also) on food production

Looking at the role that food value chains (VCs) can play for a sustainable and resilient future of local communities in mountain areas requires a focus on social and demographic features that characterize those spaces, and on how they are – or can be – influenced by food networks.

For example, the young generations often tend to leave mountain areas, whereas these areas can be attractive for people pursuing a new way of life (economic migrants, former urban dwellers, retired people etc.).

In this context, the presence of mountain VCs, based on the local resource systems but also connected to other regions, represent an opportunity for employment, and also can contribute to the deepening and widening of the social fabric - both internally and externally to the region - in areas that are often sparsely populated. This is even truer when we look at the VCs as assemblages of individual and collective actors that evolve over time, engaging new people, employing new resources and creating personal and professional linkages.

Studying selected VCs across regions marked by different socio-economic characteristics can provide insights into the following issues:

- To which extent mountain VCs contribute to create employment opportunities in their area? Which is the quality of those jobs?
- How do the VCs strengthen the local networks and the social wellbeing at the local/regional level?
- Under which conditions these employment opportunities and/or these social benefits are provided?
- How do the selected VCs influence the condition of youngsters and women, and of the other specific social groups / communities, in the identified areas?

Findings will be available in November 2023.

Cluster S – Social and demographic aspects
<p style="text-align: center;">Authors</p> <p style="text-align: center;">Michele Moretti and Stefano Grandò (University of Pisa)</p>
<p style="text-align: center;">Anticipated users of PA</p> <ul style="list-style-type: none"> - Actors participating on MOVING's CoPs - local administrators - local civil society
<p style="text-align: center;">Additional info</p> <p style="text-align: center;">https://agrifoodecon.springeropen.com/articles/10.1186/s40100-023-00244-z</p>

25. Innovation and Infrastructure for Resilient Mountain Value Chains

Innovation and infrastructure could play a crucial role in supporting sustainable and resilient value chains (VCs) in mountain regions. The remoteness and difficult terrain within these regions often result in high infrastructure costs, low investment interest and centralisation of services. The rate of innovation in mountain communities tends to be lower than in urban areas due to various factors, e. g. ageing population and the dominance of the primary sector. Furthermore, the availability and quality of infrastructure play an important role in the performance, innovation capacity and modernisation of VCs in these regions.

Cluster I – Innovation and infrastructure

Authors

Anna Geiser, Carmen Forrer and Gianna Lazzarini (ZHAW)

Anticipated users of PA

- Actors participating on MOVING's CoPs
- local administrators
- local civil society

Additional info

<https://www.moving-h2020.eu/>

The cluster will focus on exploring how infrastructure, including roads, technology, processing plants and storage facilities, can form the backbone of a supportive environment for economic activities along food and tourism VCs. The structural characteristics of VCs in mountain regions are examined, to identify barriers to innovation, efficiency and investment. Finally, the cluster will explore how social innovations and new forms of collaboration, such as cooperatives and informal associations, can emerge and support the transition to a green and resilient economy in mountain regions.

Key research questions include:

- How do infrastructure quality, digitalization and innovation rates influence the VC performance?
- What are the structural barriers for innovation, efficiency, new technologies and investments in the VC?
- How do innovations and technologies support mountain VCs a shift towards a green and resilient economy?
- How can innovation and infrastructure best support the essential skills and tools for resilient VCs now and in the future?

Findings will be available in November 2023.

26. Governance, Cooperation and Territoriality: comparing value chains and connections to tourism across six European mountain areas

The governance of mountain landscapes involves many actors and institutions, bringing challenges and opportunities for cooperation to achieve goals and ensure resilience. The priorities of different communities and markets may bring tensions between actors. Mountain areas often have special characteristics that attract tourism visitors, however, tourism-related pressures often occur in addition to benefits that arise from hosting visitors to mountain areas.

To support understanding of the ways tourism is situated in mountain areas, in terms of the people, places and value chains that interact within them and connect them to other regions, a cross-comparison of six case studies across Europe is being undertaken: Sumava (Czech Republic), Drome (France), Trento (Italy), Maleshevski (North Macedonia), Brasov (Romania), and Speyside (Scotland, UK). The aim is to identify key factors relating to governance, cooperation and territoriality that contribute towards sustainability and resilience of mountain areas that are often susceptible to socio-economic and environmental challenges.

This research will examine how different actors and institutions govern and co-operate to manage opportunities and tensions in (and connecting to) mountain areas, focusing on tourism. The investigation will consider: relationships between tourism value chains, and the area they are situated; the ways that value chains enhance qualities/values of the area; expertise (and skills development) in relation managing tensions arising from tourism; the role of collaboration; and ways that investment in tourism and related value chains supports tourism and local populations.

The findings will be available in November 2023.

Cluster G – Governance, territoriality and cooperation

Authors

Sharon Flanigan and Liz Dinnie
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Anticipated users of PA

- Researchers, policy makers, VC stakeholders, advisors

Additional info

<https://www.moving-h2020.eu/>

27. Ecosystem services in high nature value farming regions of European mountains

The mountain environment is typically associated with unique natural resources. As part of the MOVING project, we are looking at how to combine the protection of these natural resources with agricultural activities. In order to do so, we are exploring what agricultural practices of extensive farming are suitable for protection of biodiversity and the maintenance of the cultural landscape (so-called high nature value farming), in context of the global climate changes that make mountain agricultural activities particularly vulnerable.

Experience from different European regions shows that farms do not only have to be providers of public goods (such as landscape character) but can also play an important role in terms of food production.

The MOVING project specifically addresses the issue of climate change impacts. In the context of nature-rich agriculture, it is appropriate to ask to what extent natural capital is threatened by global climate change and how any impacts may affect the functioning of farms in these areas. Moreover, these changes raise new dilemmas in terms of conservation policy and the search for a new boundary between private and public interests in these naturally valuable areas.

The issue of ecosystem services in mountain areas is explored through farming examples that cover the regions of Austria, Romania, Czechia, France, Serbia and Switzerland. The research includes the creation of a platform for sharing the experiences of farmers and other experts from these areas. Details can be found on the project website (<https://www.moving-h2020.eu/>). Findings will be available in November 2023.

Cluster N – Nature and ecosystem services
<p style="text-align: center;">Authors</p> <p style="text-align: center;">Lukas Zagata (CZU)</p>
<p style="text-align: center;">Anticipated users of PA</p> <ul style="list-style-type: none"> - Policy makers - Farmers - Interested public
<p style="text-align: center;">Additional info</p> <p style="text-align: center;">https://www.moving-h2020.eu/</p>

28. Cluster V: Value and quality products

Europe has a long-standing tradition in the definition and protection of quality agri-food products: a) Geographic Indications highlighting the value of the areas where the products originate and/or are processed and which promote local knowledge and tradition; b) Organic products, whose value rest on the production/processing method used; c) other Mountain products or products from Protected areas that boost the value of these territories.

The overall purpose of the labelling is to define the identity of the products and contribute to the sustainability of the areas where they come from. At the same time, it enhances the competitiveness of EU food and drinks on the local and global market.

Key aspect of EU quality products is their certification (based on a common standard and third-party certification), intended to guarantee the authenticity of the product and production process.

MOVING identified several “certified quality products” from mountain areas value chains, where they are linked to local resources and site-specific conditions, production systems, traditions and knowledge. Main examples are specialty cheese and processed meat, wine, honey, olive oil. An innovative case deals with ecotourism, defined by National Romanian rules, that opens the concept of quality certification also for services.

Despite the original scope of quality certification, some issues need to be assessed:

1. How are value chains linked to a territory enhancing the value of local resources?
2. What is the actual and potential value (and also cost) of optional quality terms such as “mountain agriculture”?
3. What are the contributions of territorialized value chains to territorial resilience and sustainability?

The findings will be available in November 2023.

Cluster V – Value and quality products

Authors

Cristina Micheloni, Ekaterina Kleshcheva and Gianni Trioli (VINIDEA)

Anticipated users of PA

- local policy makers
- certified quality products consortia managers
- farmers, processors, distributors

Additional info

<https://www.moving-h2020.eu/>

29. Engaging young people to make mountains more resilient: Findings from 23 cases across Europe

In many mountain areas of Europe, the exodus of young people and an ageing population threatens the demographic balance, impacting the social cohesion and economic vigour. Retaining young people is essential to secure the long-term sustainability of mountain communities across Europe. The MOVING project held participatory workshops during 2022 to explore young people's views.

Young people were quite pessimistic regarding the future of their mountain areas but offered numerous solutions to improve the situation. However, the solutions are context-specific to each country and case study, covering a range of governance issues. Solutions proposed by the young people included improving transport infrastructure (e.g. roads and rail) and frequency of public transport services; increasing access to social services, hospitals and child nurseries; enhancing capacity building through improving education and training courses; economic diversification away from agriculture and developing new supply chains for agricultural products; construction of new and affordable houses, as well as shops, offices and other facilities; improving internet access and speed. Of the numerous solutions offered, commonly cited solutions included the importance of improving education and capacity building opportunities, along with construction and upgrading of transport infrastructure. The above-mentioned solutions should be considered by relevant authorities and stakeholders within each of the case study countries.

These findings, along with the engagement activities with schools and school-aged groups planned for 2023 provides valuable future direction to keep young people within sustainable mountain communities across Europe.

Youth engagement – findings from 23 cases

Authors

Matthew England and Rachel Creaney
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Anticipated users of PA

- Young people, researchers, policy makers, VC stakeholders, advisors

Additional info

https://www.euromontana.org/wp-content/uploads/2022/01/2022-01-24-Being-young-in-a-mountain-area_FinalReport_EN.pdf

<https://www.hutton.ac.uk/sites/default/files/files/research/ODT-presentation-Engaging-young-people-in-mountains-and-value-chains-Creaney-et-al.pdf>

30. Perceived threats of 23 mountain value chains across Europe and building adaptive capacity to increase resilience

Due to the high reliance of the mountain value chain on natural processes, the vulnerability of the 23 evaluated regions is potentially very high. However, local actors perceive themselves as being more successful in mobilising resources for developing adaptation strategies that rely on their own practices, local knowledge, farm resources or implementing a new technology. They are less successful in developing strategies that require mobilisation of resources that are not directly under their control. This includes not only global level but also local resources that require collaboration of actors within a single VC or across multiple VCs.

Achieving increased autonomy and resilience both in the context of local and global level requires

- on-farm energy production and integration of renewable energies
- conditions should be created for knowledge exchange about adaptive/improved management practices using joint infrastructures and vocational trainings with experts.
- long-term contracts with suppliers are essential for stability and long-term planning
- stronger focus on intra-family farm succession and support for new entrants and young farmers, access to land
- preservation and promotion of local and resistant varieties, promote crop diversification and establishment of new drought resistant species/varieties and dissemination knowledge about these crops.

Vulnerability and resilience of value chains – findings from 23 cases

Authors

Tomas Uhnak (CZU)

Anticipated users of PA

- Farmers
- Processors
- Beekeepers
- Consumers
- Researchers
- Policy makers
- Civil society members

Additional info

<https://www.moving-h2020.eu/>

31. Applying value chain upgrading strategies to mountain value chains to improve resilience

The H2020 MOVING project has explored 23 mountain value chains (VCs) described in earlier practice abstracts: <https://www.moving-h2020.eu/library>. These VCs are vulnerable to climate change, demographic change, and changes in policies and consumer demand. Mountain entrepreneurs need respond to these threats.

Value chain strategies can help. These Strategies include: upgrading the product (new products, premium product certification) or using process upgrading to cut costs and improve efficiencies.

Other forms include expanding the functions undertaken beyond production into processing, distribution and marketing or inter-chain diversification (developing more than one VC). There are two further types of collective action upgrading. Improving 'vertical' connections between different firms across VC stages (e.g. between farmers and the retailers). The second is 'horizontal' upgrading through firms cooperating within a VC stage to share information and improve efficiency. This economic focus is increasingly complemented by attention to social and economic value added, addressing how product, processing, functional, intra- or inter-chain upgrading strategies can improve working conditions and reduce environmental impacts.

Our VCs used all these upgrading strategies, generally in multiple and innovative combinations. The territorial focus on mountains highlighted the importance of public-private partnerships in these strategies. Protecting mountain natural, social and cultural capital and innovating around traditions were important ways to make the VCs resilient. Mountain areas must extend VC upgrading strategies beyond a narrow economic interpretation to safeguard the special mountain qualities.

Upgrading strategies for 23 value chains to improve resilience
<p style="text-align: center;">Authors</p> <p>Kirsty Blackstock (The James Hutton Institute)</p>
<p style="text-align: center;">Anticipated users of PA</p> <ul style="list-style-type: none"> - Policy actors implementing policy coherence in mountain territories - Knowledge brokers - Mountain and product associations
<p style="text-align: center;">Additional info</p> <p>https://www.moving-h2020.eu/</p>