



# WildFood

## WildFood Project

### Eating the wild: Improving the value-chain of Mediterranean Wild Food Products (WFP)

#### **D3.4. Report on innovative certification and labelling in WFPs sector: pilot experiences**

Lead by: **INRGREF**  
Type of document: **Deliverable**  
Due date of deliverable: November 2022  
Dissemination level: Public

#### Authors

Ibtissem Taghouti, Mariem Khalfoui, Issam Touhami

## Contents

1.	Introduction .....	2
2.	Context .....	3
3.	Existing and innovative certification programs.....	3
3.1.	Organic certification (oc).....	3
3.2.	Sustainable harvesting certification (shc).....	4
3.3.	Food safety and quality certifications.....	5
4.	Certification and labelling of wild food products: advantages and benefits.....	6
4.1.	Certification programs for WFPs: advantages and benefits .....	6
4.2.	Labelling of WFPs: advantages and benefits.....	7
5.	Methodology.....	8
6.	Results .....	9
6.1.	Pine-nuts .....	9
6.2.	Truffle.....	9
6.3.	Acorn .....	9
6.4.	Aromatic and medicinal plants.....	10
7.	Discussion.....	10
7.1.	Certifying wild products : difficulties and constraints .....	10
7.2.	Difficulties to implement labelling of wild food products .....	11
8.	Policy recommendations.....	12
9.	Conclusions .....	14
10.	References .....	16
11.	ANNEX .....	18

## 1. Introduction

Wild food certification is of paramount importance for both businesses and consumers, as well as for the preservation of biodiversity (Tschardt et al., 2015). In recent years, there has been a growing interest in wild food products due to their unique flavors, cultural significance and perceived health benefits (Martinez de Arano, 2021). However, the unregulated and unsustainable harvesting of wild foods can pose significant risks to ecosystems and local communities (Paumgarten et al., 2018). This is where wild food certification plays a critical role. For businesses, food certification offers several advantages (Escanciano et al., 2014). Firstly, certification provides credibility and differentiation in the market (Anders et al; 2010). It assures consumers that the wild food products have been responsibly sourced, meeting specific sustainability and quality standards (Botonaki et al., 2006). This can help businesses establish a competitive edge, attract environmentally conscious consumers and access niche markets that prioritize ethical and sustainable products (Achilleas & Anastasios, 2008).

Moreover, food certification helps businesses comply with regulations and meet the increasing demand for transparency (Trienekens et al., 2012). Certification programs often require detailed documentation and traceability systems, ensuring that businesses adhere to sustainable practices and can provide accurate information about the origin and handling of their products. By obtaining certification, businesses can demonstrate their commitment to environmental stewardship and build trust with consumers. For consumers, food certification serves as a valuable tool for making informed choices (De Boer, 2003). Certified food products come with labels that provide information about the product's sourcing, sustainable harvesting practices and potential environmental and social impacts. This empowers consumers to support businesses that align with their values and promote the conservation of biodiversity. To our best knowledge, there is no specific certification for Wild Food products (WFPs) (Cecchini & Warin, 2016).

In the case of wild food, certification also could benefit biodiversity conservation (Tschardt et al., 2015). Sustainable wild food harvesting practices, as enforced by certification programs, promote the responsible use of natural resources. By setting guidelines on harvesting techniques, harvest quantities and protection of endangered species, certification helps maintain the ecological balance of ecosystems. This ensures that biodiversity is preserved for future generations and that wild food resources can continue to thrive. Additionally, wild food certification contributes to the well-being of local communities that depend on these resources (Jamal et al., 2006). By promoting sustainable practices and fair trade, certification programs ensure that local communities benefit from the harvesting and commercialization of wild food products. This helps support their livelihoods, preserve traditional knowledge and cultural heritage and foster sustainable development in rural areas.

Wild food certification is of great importance for businesses, consumers and biodiversity. It provides businesses with a competitive advantage, helps consumers make informed choices and supports the sustainable use of natural resources. By promoting responsible harvesting practices and protecting biodiversity, certification programs play a crucial role in conserving ecosystems and supporting the well-being of local communities. The deliverable D3.4 analyses the experiences of companies working on wild food and having success stories with certification of products or processes. These interviews were employed to identify

enabling factors to promote innovative certification and labelling schemes to WFPs. Interviews were made with 9 companies from Tunisia, Spain, Portugal, Italy and Slovenia. These companies with success stories work on Truffle, Pine nuts, Aromatic and medicinal plants and Acorns.

## **2. Context**

Certification is a formal process that involves assessing and verifying whether a product, service, or organization meets specific standards, guidelines, or criteria. It is usually carried out by an independent third party, such as a certification body or regulatory agency. The purpose of certification is to provide assurance to consumers, businesses or regulatory bodies that the certified entity meets established quality, safety or performance requirements. Certification often involves rigorous evaluation, testing and auditing processes to ensure compliance with the defined standards (Sadilek, 2019.). Once certified, the entity typically receives a certificate or documentation attesting to its compliance. Certification of edible wild food products typically involves a process by which certain standards and criteria are established to ensure the safety, sustainability and quality of the products.

A label, on the other hand, is a visual or textual representation attached to a product, package or promotional material that provides information about the product's characteristics, attributes, or compliance with certain standards. Labels can serve various purposes, such as indicating the ingredients, nutritional information, country of origin, environmental impact, or safety warnings associated with a product. Labels may also be used to signify that a product has obtained a particular certification or met specific standards (Meyerding et al., 2019). For example, a label might indicate that a product is organic, fair trade, energy-efficient or eco-friendly. Labels are often regulated by government agencies or industry organizations to ensure accurate and standardized information is provided to consumers. These certification and labelling regulations should be homogenized and harmonized in the case of wild food products.

Comparing these powerful tools, certification is a comprehensive process carried out by a third party to verify compliance with established standards, while a label is a visual or textual representation that provides information about a product, including any certifications or standards it has met. Certification confirms that an entity meets specific requirements, while a label is considered more as a marketing tool, helping to communicate that compliance to consumers or stakeholders. While certifications may vary depending on the specific region or country, here are some common certification schemes related to wild food products:

## **3. Existing and innovative certification programs**

### **3.1. Organic Certification (OC)**

Organic certification is relevant when wild food products are harvested or sourced using organic practices. Organic certification for edible wild food products follows similar principles as certification for other organic products. The specific requirements and processes may vary slightly depending on the certification body and country. Some general aspects are involved in organic certification for edible wild food products, such as:

**(1) organic standards:** WFPs must meet the established organic standards, which typically include criteria related to the use of synthetic pesticides, herbicides, fertilizers and genetically modified organisms (GMOs).

The standards focus on promoting ecological balance, biodiversity conservation and sustainable land management practices; **(2) Wild harvesting practices:** The certification process takes into account the methods used to harvest wild food products. It typically requires that harvesting practices are sustainable and do not harm the long-term health of the wild populations or their habitats. Harvesters may need to follow guidelines regarding the amount of material harvested, the selective harvesting of species and the use of non-invasive techniques; **(3) Organic inputs:** The use of organic inputs, such as organic pest control methods, may be encouraged or required during the certification process. This ensures that any inputs used in the cultivation or management of wild food products are in line with organic standards; **(4) Documentation and traceability:** Certification bodies often require detailed documentation to track the origin and handling of the wild food products. This includes information about the specific location and conditions of harvesting, processing and packaging. Documentation and record-keeping help ensure transparency and traceability throughout the supply chain; **(5) Labeling and Marketing:** Once certified, edible wild food products may be allowed to display the organic certification label on their packaging. This label provides assurance to consumers that the product has been produced according to recognized organic standards.

Certifications like *USDA Organic*, *EU Organic*, or *Canada Organic* are widely recognized organic certifications.

### **3.2.Sustainable Harvesting Certification (SHC)**

This certification ensures that natural resources are harvested or extracted in a sustainable and environmentally responsible manner, taking into consideration factors such as population dynamics, biodiversity conservation and ecosystem health. It may involve guidelines for sustainable harvesting practices, quotas and monitoring of the wild populations. The certification process for wild food products typically involves several key considerations: **(1) Resource Assessment:** Evaluating the abundance and distribution of the target species in their natural habitats to ensure that harvesting levels are within sustainable limits. This assessment may involve scientific studies, monitoring programs, or traditional knowledge from local communities; **(2) Harvesting Practices:** Assessing the methods and techniques used to harvest wild food products to minimize damage to the environment and ensure the selective harvesting of mature specimens. Practices may include guidelines on proper harvesting techniques and avoiding sensitive areas or periods; **(3) Biodiversity Conservation:** Ensuring that the harvesting activities do not negatively impact the overall biodiversity of the ecosystem. This includes minimizing the accidental capture or harm of non-target species, preserving habitat integrity and protecting endangered or threatened species; **(4) Local Community Engagement:** Promoting the involvement and participation of local communities in the decision-making processes related to the sustainable harvesting of wild food resources. This may involve respecting traditional rights and knowledge, establishing fair trade practices and supporting the socio-economic well-being of local communities; **(5) Legal Compliance:** Ensuring that the harvesting activities comply with applicable laws, regulations and permits governing the collection of wild food products. This includes adherence to wildlife protection laws, licensing requirements and compliance with international agreements and conventions related to the conservation of biodiversity.

Certification programs for wild food products may be developed and implemented by organizations, government agencies or indigenous groups with expertise in sustainable resource management. These programs provide a means for producers, harvesters and retailers to demonstrate their commitment to sustainable practices and provide consumers with assurance that the wild food products they purchase have been sourced responsibly. Examples of organizations involved in the certification of wild food products include the *FairWild* Standard, which focuses on the sustainable harvesting of wild plants and various regional certification programs that promote responsible hunting and fishing practices.

### 3.3. Food Safety and Quality Certifications

While there might not be specific certifications dedicated solely to wild food products, several existing food safety and quality certifications can be applicable to them. These certifications focus on ensuring that food products, including those derived from wild sources, meet certain standards and regulations. Here are some examples of widely recognized certifications in the food industry: (1) **Hazard Analysis and Critical Control Points (HACCP)**: HACCP is a systematic preventive approach to food safety that identifies and evaluates potential hazards, establishes control measures and monitors critical control points throughout the food production process. While HACCP is not a certification itself, many organizations implement HACCP-based food safety management systems and may obtain certification to demonstrate their adherence to HACCP principles. (2) **Good Manufacturing Practices (GMP)**: GMP provides guidelines and requirements for the manufacturing and processing of food products. GMP covers various aspects, including facility design, personnel hygiene, equipment maintenance and documentation. Compliance with GMP principles helps ensure the safety and quality of food products; (3) **Global Food Safety Initiative (GFSI) Recognized Standards**: GFSI is an organization that benchmarks and recognizes food safety management standards globally. Several GFSI-recognized standards, such as the British Retail Consortium (BRC) Global Standard for Food Safety, Safe Quality Food (SQF) and International Featured Standards (IFS), focus on food safety, quality and management systems. These certifications provide a framework for ensuring food safety throughout the supply chain including for wild food products. (4) **Third-Party Audited Certifications**: Some organizations or certification bodies may offer specific auditing and certification services for wild food products. These certifications assess compliance with food safety, quality and sustainability criteria, taking into account the unique characteristics of wild food sourcing and processing.

It is important to note that the availability and suitability of these certifications for wild food products may vary depending on the specific product and geographical region. Some regions or countries may have their own certifications or labels specific to wild food products. These certifications often promote local or traditional knowledge, support local economies and may have additional requirements related to cultural heritage or traditional harvesting practices.

In the wild food products sector, innovative certification programs have emerged to address the unique challenges and characteristics of wild food harvesting and promote sustainability. Here are a few examples of innovative certification initiatives in this sector:

1. **FairWild Certification**: FairWild is a certification scheme focused on promoting the sustainable and

fair-trade practices of wild-collected plant ingredients. It ensures that wild plant species are harvested in a way that maintains their populations and natural habitats while providing fair benefits to local communities. FairWild certification verifies that wild collection practices meet specific standards, covering ecological sustainability, fair trade and social responsibility.

2. **Forest Stewardship Council (FSC) Certification:** While primarily focused on timber and non-timber forest products, FSC certification has been adapted to include wild food products such as mushrooms, berries and nuts. FSC certification ensures that the harvesting and management of forest resources follow responsible and sustainable practices, considering ecological, social and economic factors.
3. **Sustainable Agriculture Network (SAN) Wild Harvest Certification:** The SAN has developed a certification system specifically for wild harvests, including wild food products. The certification program evaluates the ecological sustainability of wild harvest practices, ensuring the protection of biodiversity and the sustainable use of natural resources. It also considers social and economic aspects, supporting fair labor practices and community well-being.
4. **Indigenous-led Certifications:** Indigenous communities have developed their own certification initiatives to preserve traditional knowledge, protect cultural heritage and promote sustainable wild food harvesting practices. These certifications are often community-based, incorporating indigenous perspectives, customs and values. They prioritize the conservation of biodiversity, respect for indigenous rights and the equitable distribution of benefits.

These innovative certification programs help address the specific challenges associated with wild food products, such as the variable nature of harvesting, cultural significance and complex ecosystems. They provide assurance to consumers that wild food products are sourced sustainably, supporting the conservation of biodiversity and the livelihoods of local communities. Additionally, they contribute to the preservation of traditional knowledge and cultural diversity while meeting the growing demand for ethically sourced wild food products.

## **4. Certification and labelling of wild food products: Advantages and benefits**

### **4.1. Certification programs for WFPs: advantages and benefits**

Certification of wild food products brings several advantages that contribute to sustainable practices, consumer confidence and the preservation of natural resources. Here are some key advantages behind wild food products certification:

- **Sustainability:** Certification programs for wild food products promote sustainable harvesting practices that ensure the long-term viability of wild food resources. By setting standards and guidelines, certification encourages responsible harvesting, protecting biodiversity and minimizing negative environmental impacts. It helps maintain the ecological balance and preserves wild habitats for future generations.
- **Quality Assurance:** Wild food products certification assures consumers of the quality and safety of the products they purchase. Certification programs establish rigorous standards for harvesting, handling and processing, ensuring that the products meet specific quality criteria. This gives consumers confidence that the products they are buying have been carefully sourced and meet defined quality benchmarks.

- **Traceability:** Certification programs for wild food products enhance traceability throughout the supply chain. They require documentation and record-keeping, enabling the identification of the origin, handling and processing of the products. Traceability ensures transparency and accountability, reducing the risk of fraud, mislabeling and the introduction of counterfeit products into the market.
- **Market Access and Differentiation:** Certified wild food products gain a competitive edge in the market. Certification provides a recognizable and trusted label that can attract consumers who prioritize sustainability, quality and ethical sourcing. It opens doors to new markets that value certified products, allowing producers to access premium price points and expand their customer base.
- **Support for Local Communities:** Wild food products certification often includes engagement with local communities, particularly indigenous communities with traditional knowledge of wild foods. Certification programs promote fair trade practices, respect cultural heritage and support the economic empowerment of local communities. They can provide economic opportunities, training and capacity-building, contributing to the socio-economic development of these communities.
- **Collaboration and Knowledge Exchange:** Certification programs foster collaboration among stakeholders, including producers, certification bodies, government agencies and scientific institutions. These collaborations enable knowledge exchange, best practice sharing and continuous improvement in harvesting, handling and processing techniques. Certification programs provide a platform for dialogue, learning and the dissemination of sustainable practices.
- **Environmental Conservation:** Certified wild food products contribute to the conservation of natural ecosystems and biodiversity. By promoting responsible harvesting practices, certification programs help protect endangered species, preserve habitats and maintain the ecological balance. This contributes to the overall conservation efforts and supports the protection of valuable natural resources.

#### 4.2. Labelling of WFPs: advantages and benefits

Labelling provides several marketing advantages for businesses in the food industry, including those involved in wild food products. Here are some key marketing advantages of labelling:

- **Product Differentiation:** Labelling allows businesses to differentiate their wild food products in the market. Through visually appealing and informative labels, businesses can create a unique brand identity that stands out from competitors. Labelling can highlight the distinctive qualities, flavors and origins of wild food products, capturing the attention of consumers who value unique and specialty offerings.
- **Brand Recognition and Awareness:** Effective labelling helps build brand recognition and awareness. Consistent branding elements, such as logos, colors and design styles, on product labels can help consumers easily identify and remember a particular brand. Over time, this recognition can lead to increased brand awareness, recall and preference when consumers are making purchasing decisions.
- **Storytelling and Consumer Engagement:** Labelling provides an opportunity to tell the story behind wild food products, including their sourcing, cultural significance and sustainability practices. Businesses can use labels to communicate the narrative of their brand, their commitment to quality and their relationship



with local communities or indigenous groups. This storytelling aspect engages consumers emotionally, creating a deeper connection and loyalty to the brand.

- **Health and Nutrition Claims:** Labelling can be used to highlight health benefits, nutritional values, or specific dietary claims of wild food products. For example, labels can mention that a product is organic, gluten-free, or rich in certain nutrients. These claims cater to consumer preferences and dietary needs, attracting health-conscious consumers and those with specific dietary requirements.
- **Visual Appeal and Shelf Impact:** Well-designed labels enhance the visual appeal of wild food products, increasing their shelf impact in retail environments. Eye-catching labels with attractive graphics, colors and typography can draw attention to the product, stimulate curiosity and encourage consumers to pick it up and learn more. The visual appeal of labels can influence impulse purchases and brand recognition.
- **Trust and Credibility:** Clear and accurate labelling builds trust and credibility among consumers. When businesses provide transparent information about the sourcing, production methods, certifications and quality standards on their labels, it instills confidence in the product and the brand. Consumers are more likely to trust and choose products that demonstrate a commitment to safety, quality and ethical practices.
- **Sustainability and Ethical Values:** Labelling can highlight a business's sustainability practices and ethical values, especially in the case of wild food products. Labels can indicate certifications, such as organic, fair trade, or sustainable harvesting, conveying a commitment to environmental stewardship and social responsibility. This resonates with consumers who prioritize ethical and sustainable consumption, driving their purchasing decisions.

Effective labelling strategies encompass a combination of appealing design, clear information, storytelling and alignment with consumer values. By leveraging these marketing advantages, businesses can enhance their brand image, attract target customers and differentiate their wild food products in a competitive marketplace.

## 5. Methodology

Individual interviews were performed for a better understanding of certification's difficulties and benefits, taking into consideration products specificities and national context. Respondents were selected by the project partners in the 5 Mediterranean countries (Tunisia, Spain, Slovenia, Italy and Portugal) from a panel of stakeholders working on the 4 Wild food products chosen within the framework of the project: Pine nuts, Truffles, Aromatic and Medicinal Plants and Acorns.

The selection was based on professionals owning and/or managing companies with a successful experience in being certified or labelled, whose main activity is collecting, transforming and/or selling wild food products. The interviews were performed individually in three ways: face-to-face, telephonic or by email. They were based on a questionnaire including 3 parts. The first part was devoted to collect information and contact details of the respondent's company. The second part was dedicated to the description of the certification experience, starting with questions about contact details of the enterprise and date of obtaining the certification, followed by a section about the overall certification experience, procedure, advantages and difficulties. A third and final part was meant to collect recommendations of the successful stories to those who are planning to get certified.

## **6. Results**

Interviews were made with 9 companies from Tunisia, Spain, Portugal, Italy and Slovenia with Success stories of certification, working on Truffle, Pine nuts, Aromatic and medicinal plants and Acorns.

### **6.1.Pine-Nuts**

A total of 4 interviews were made with companies working on pine nuts; 2 from Spain, 1 from Italy and 1 from Portugal. Interviews were carried out with the owners. Both Spanish companies and the Portuguese are Private companies, while the Italian one is a limited liability company. The interviewed companies were founded relatively recently (from 2014) except for the Spanish company which was created in 1912.

All interviewed companies, described as success stories, are certified. The oldest certification dates back to 2012 (Spanish company) and the most recent is the Italian one in 2022. Both process and product certifications are mentioned in this context: ISO9001, FSSC22000, PEFC and Organic certification. The main motivation behind the certification is satisfying costumers and improving sales and exports. The interviewed companies were also asked about their overall experience in the process of being certified and the main difficulties and they all agreed on the fact the overall process is relatively easy and fine and that the main difficulty is related to bureaucracy (paper work and registration) and expensive costs.

For companies working on Pine-Nuts, the success stories encourage them to get certified, with a particular advice on having a good quality product, equipment and training the staff. Also to be aware of the costs (mainly in Italy).

### **6.2.Truffle**

The interviews were received from two companies working on Fresh Truffles from Italy and Slovenia. Only the Italian company will be considered in this report since it is the only one certified.

The interview was made with the Italian Company CEO. The company is a limited liability company and was created in the 80's. The Italian success story is certified BRC, IFS and Organic. The main reason behind the certification is to be able to enter the Organic food market and take the advantages of being part of it.

However, the process is described as expensive and bureaucratic.

### **6.3.Acorn**

A Portuguese success story working on Acorns was interviewed. The company is private and the interview was made with the owners. It was created in 2013, but the company's current brand was established in 2019, and it is working on the production, transformation and sales of Acorns. The company has initially the Organic products certification, from 2013 to 2015, which they switched with the Alentejo's Km0 due to its high costs. The Alentejo's Km0 certification process is carried out by an external certifying entity. It is described as a guarantee to consumers that the products classified as Km0 are in fact originating from local production, a maximum radius of 50 km from the place of consumption or sale to the final consumer. Getting certified is motivated by the interest in export and customers satisfaction.

The overall process was described as fine, not very demanding. It helps in product valorization and market competition but no direct impact on the revenue was noticed. However, the costs and paper work remain the main difficulties. The success story recommends the certification to companies working on Acorns and interested in the expansion of their activities and export, being aware of the costs.

#### **6.4.Aromatic and Medicinal plants**

For the Aromatic and Medicinal plants, an interview was made with the owner of a private Tunisian Company, created in 2015 and working on AMP. The success story is certified for ECOCERT, USDA, ISO 22716 and ISO 9001. The overall certification experience is described as a long and expensive procedure. According to the company owner the certification has several advantages, allowing a better organization in the industry system, better tractability and facilitating exports. However, it remains expensive to obtain fees and accompaniment fees (for ISO).

### **7. Discussion**

The present deliverable allows a better understanding and a better visualization of Wild food products certification in Mediterranean countries based on effective success stories. The results show that the overall process for being certified is considered fine in all countries except for Tunisia, where the process is particularly long. A common agreement of the interviewed companies, for all products and in all countries, went to the high expenses and paper work of the certification process. This confirmation comes along with the deliverable D3.3, pointing out the challenging aspect of certifying WFPs in terms of administrative and institutional requirements.

#### **7.1.Certifying wild food products: difficulties and constraints**

Certifying edible wild food products can present some unique challenges compared to certifying conventional agricultural products. Here are some difficulties that may arise when attempting to certify an edible wild food product:

- **Variability and Seasonality:** Wild food products depend on natural ecosystems and are subject to natural variations in availability, flavor and nutrient composition. Certifying such products requires accounting for the inherent variability and seasonality, which can make it challenging to establish consistent quality standards.
- **Traceability:** Ensuring traceability throughout the supply chain can be complex for wild food products. Unlike cultivated crops, wild foods are often collected from diverse locations and may pass through multiple intermediaries before reaching the market. Tracking the origin, handling and processing of each batch of wild food can be difficult, making traceability a significant challenge.
- **Environmental Considerations:** Wild food products are closely tied to their natural environments. Certifying these products often requires assessing and managing the environmental impact of harvesting practices. Ensuring sustainable harvesting, minimizing ecosystem disruption and preserving biodiversity pose challenges that must be addressed in the certification process.

- **Safety Concerns:** Wild food products can be exposed to various environmental factors, including contaminants, such as heavy metals, pesticides, or pathogens, which may pose safety risks. Establishing safety standards and monitoring systems to address potential contaminants or foodborne illnesses can be complex, especially considering the diverse sources and locations of wild food harvesting.
- **Legal and Regulatory Frameworks:** Certification of wild food products must consider the applicable legal and regulatory frameworks governing their collection, handling and sale. The regulations can vary significantly between regions, making it challenging to establish standardized certification requirements that meet diverse legal requirements.
- **Cultural and Traditional Knowledge:** Wild food products are often deeply rooted in local cultures and traditional knowledge. Incorporating and respecting this knowledge within certification frameworks can be complex and requires engaging with indigenous or local communities to ensure their perspectives and practices are adequately recognized.
- **Certification Infrastructure:** Establishing a certification program for wild food products requires a robust infrastructure, including certification bodies, auditors and technical experts. Developing the necessary expertise and resources to evaluate and certify wild food products can pose a challenge, particularly in regions where wild food harvesting is prevalent but certification mechanisms are limited.

Addressing these difficulties often requires close collaboration between certification bodies, government agencies, scientific institutions and local communities. It involves developing tailored certification frameworks that consider the unique characteristics of wild food products while ensuring their safety, quality and sustainability.

## 7.2. Difficulties to implement labelling of wild food products

Creating labels for edible wild food products can present certain difficulties due to their unique characteristics and the challenges associated with their sourcing and certification. Here are some difficulties that may arise when creating labels for edible wild food products:

- **Variability in Product Attributes:** Edible wild food products can exhibit natural variations in flavor, texture, size and appearance due to factors like species, location and environmental conditions. Labeling such products accurately to reflect their inherent variability can be challenging, as it may require providing detailed information and using descriptive language rather than standardized measurements.
- **Limited Supply and Seasonality:** Wild food products are often available in limited quantities and have specific harvesting seasons. This can make it difficult to provide consistent supply and maintain a regular labeling process, as the availability of certain products may vary throughout the year.
- **Traceability and Harvesting Locations:** Ensuring accurate traceability and labeling of wild food products can be challenging due to their diverse sourcing locations and potentially complex supply chains. Tracking the exact origins of the products and ensuring that the labeling reflects their true harvesting locations may require robust systems and documentation throughout the supply chain.
- **Authenticity and Counterfeit Concerns:** The unique qualities and popularity of some wild food products may make them vulnerable to counterfeiting or mislabeling. Ensuring the authenticity of wild food

products and protecting consumers from misleading labeling can be a challenge, as it may require rigorous quality control measures and the implementation of anti-counterfeiting strategies.

- **Safety and Allergen Information:** Providing accurate safety information and allergen labeling for wild food products can be complex due to potential contaminants, allergenic properties of certain species, or cross-contamination risks during harvesting and processing. Adequate testing, risk assessment and labeling protocols must be in place to address these concerns.
- **Cultural and Traditional Knowledge Considerations:** Wild food products often have cultural and traditional significance tied to specific regions or communities. Labels should respect and represent the cultural heritage associated with these products accurately. Ensuring appropriate representation while providing clear and informative labeling can be challenging.
- **Regulatory Compliance:** Labeling for wild food products must adhere to applicable regulations and labeling requirements related to food safety, allergen disclosure, nutritional information and country of origin. Compliance with these regulations may require navigating complex legal frameworks and ensuring accurate and up-to-date information on the labels.

Addressing these difficulties requires collaboration between stakeholders, including certification bodies, government agencies, indigenous communities and industry representatives. Developing comprehensive labeling guidelines, establishing robust traceability systems, conducting regular audits and ensuring effective communication with consumers are essential steps to overcome these challenges and provide informative and accurate labels for edible wild food products.

As a summary of all answers and regardless of challenges and difficulties faced during the certification process, certification is unanimously recommended by all success stories, who consider it crucial for expansion and integrating international market. Despite many challenges affecting WFPs certification and labelling, there are still very important opportunities behind these powerful marketing tools. Local forest communities are among the main beneficiaries of certification. Certification by internationally recognized bodies has been seen to help communities who are sustainably harvesting WFPs and they can gain recognition within their own country for their responsible stewardship of natural resources. Performing certification, labelling and branding can consolidate community forest management and valorize best management practices for WFPs. Certification can be an efficient tool to address information asymmetry and restore strategic partnerships between public bodies, industries and communities. People living within forest areas can benefit from certification because it supports collaboration and organization among community members to strengthen community institutions.

Certification can open access to new selling channels and ensure enterprises better entrance to emerging markets: Certifying WFPs may allow communities to tap new niche markets for their products, particularly in areas where consumer concern over forest conservation and equity in trade are well developed.

## **8. Policy recommendations**

Certifying edible wild food products can be challenging, as it involves accounting for the unique characteristics of wild foods, including variability, traceability, environmental considerations, safety concerns,

legal frameworks and cultural knowledge. Here are some policy recommendations that can help eliminate some of the difficulties associated with certifying edible wild food products:

- **Develop certification frameworks tailored to wild food products:** Certification bodies should develop certification frameworks that are tailored to the unique characteristics of wild food products. These frameworks should account for factors such as variability, traceability and environmental considerations that are specific to wild foods.
- **Collaborate with local communities:** Certification bodies should work closely with local communities to incorporate their traditional knowledge and practices into the certification frameworks. This can help ensure that the certification process is culturally appropriate and acceptable to local communities.
- **Establish clear legal and regulatory frameworks:** Governments should establish clear legal and regulatory frameworks for wild food products that can guide the certification process. This can help eliminate confusion and ensure that certification bodies have a clear understanding of their legal obligations.
- **Provide technical assistance and capacity building:** Governments and other organizations should provide technical assistance and capacity building to support the development of certification infrastructure and expertise. This can help certification bodies develop the necessary technical knowledge and resources to evaluate and certify wild food products.
- **Develop monitoring and evaluation systems:** Certification bodies should establish monitoring and evaluation systems to track the performance of the certification frameworks and make necessary adjustments. This can help ensure that the certification process is effective in addressing the unique challenges associated with wild food products.
- **Promote public awareness and education:** Governments and other organizations should promote public awareness and education about the benefits of certified wild food products. This can help increase demand for certified products and create incentives for producers to participate in the certification process.
- **Encourage public-private partnerships:** Governments should encourage public-private partnerships to support the development of certification frameworks for wild food products. This can help leverage the resources and expertise of the private sector to support the certification process.

By implementing these policy recommendations, it is possible to develop effective certification frameworks that can help ensure the safety, quality and sustainability of edible wild food products while respecting the cultural and environmental significance of these products.

Addressing the labeling difficulties of wild food products requires a collaborative effort from various stakeholders, including certification bodies, government agencies, indigenous communities, industry representatives and consumers. Here are some policy recommendations to address the labeling difficulties of wild food products:

1. **Develop clear and comprehensive labeling guidelines:** Governments and certification bodies should develop clear and comprehensive labeling guidelines that take into account the unique characteristics of wild food products, including their variability, seasonality and cultural significance. These

guidelines should also include instructions for providing accurate and informative labeling information related to safety, allergens, nutritional information and origin.

2. Enhance traceability and certification: Governments and certification bodies should work together to enhance traceability systems and certification processes for wild food products. This can include implementing standardized labeling practices, improving supply chain transparency and enhancing the credibility of certification processes through independent audits and evaluations.
3. Foster collaborations between stakeholders: Governments, certification bodies and indigenous communities should collaborate to develop labeling frameworks that are respectful of cultural and traditional knowledge while ensuring the safety and quality of wild food products. This can involve establishing partnerships between industry representatives and indigenous communities, providing training and technical support for small-scale producers and promoting knowledge-sharing and dialogue between stakeholders.
4. Ensure compliance with regulations: Governments and certification bodies should ensure that labeling for wild food products complies with all applicable regulations and labeling requirements related to food safety, allergens, nutritional information and country of origin. This can involve providing guidance and support to producers to meet regulatory requirements and conducting regular audits to ensure compliance.
5. Promote consumer education and awareness: Governments, certification bodies and industry representatives should promote consumer education and awareness about the unique characteristics of wild food products and the importance of accurate labeling. This can include developing consumer education campaigns, creating accessible and informative product labeling and providing easy-to-understand information on the benefits and risks associated with consuming wild food products.
6. Encourage innovation and technology: Governments and industry representatives should encourage innovation and technology to support the labeling of wild food products. This can include developing new technologies for traceability and labeling, implementing blockchain-based systems for supply chain transparency and utilizing smart labeling and packaging technologies to provide more informative and accurate labeling information.

By implementing these policy recommendations, it is possible to develop effective labeling frameworks that can help ensure the safety, quality and sustainability of edible wild food products while respecting the cultural and environmental significance of these products

## **9. Conclusions**

The interviews with success stories gave an overall picture of the certification, process advantages and difficulties, considering the particularity of the Wild food products and national context in some situations. Recognizing the importance and the advantages of certification from the point of view of successful experiences can be motivating for others. While the understanding of the handicaps guarantees more oriented and effective policy recommendations in order to address challenges and overcome certification difficulties.

Certification and labeling play crucial roles in ensuring the safety, quality and sustainability of wild food

products. Wild food products present unique challenges due to their variability, seasonality, cultural significance and diverse sourcing locations. However, addressing these challenges is vital to protect consumers, support sustainable harvesting practices and preserve the cultural heritage associated with wild foods.

Certification programs for wild food products focus on evaluating and promoting sustainable harvesting practices, biodiversity conservation and community engagement. These programs help establish standards, guidelines and monitoring systems to ensure the responsible sourcing and management of wild food resources. Collaboration between certification bodies, government agencies, scientific institutions and local communities is essential to develop effective certification frameworks.

Labeling wild food products requires addressing their inherent variability, ensuring traceability, providing accurate safety information and respecting cultural and traditional knowledge. Clear labeling guidelines, enhanced traceability systems, collaborations between stakeholders and compliance with regulations are necessary to overcome the difficulties associated with labeling wild food products. Consumer education and awareness are also vital to help consumers make informed choices and appreciate the unique qualities and benefits of wild food products.

Overall, certification and labeling efforts for wild food products contribute to the sustainable management of natural resources, the protection of biodiversity, the preservation of cultural heritage and the assurance of consumer safety. By implementing effective certification and labeling practices, we can promote responsible harvesting, support local communities and enable consumers to make informed choices while enjoying the unique flavors and cultural significance of wild food products.



## 10. References

- Achilleas, K., & Anastasios, S. (2008). Marketing aspects of quality assurance systems: The organic food sector case. *British Food Journal*.
- Anders, S., Souza-Monteiro, D., & Rouviere, E. (2010). Competition and credibility of private third-party certification in international food supply. *Journal of International Food & Agribusiness Marketing*, 22(3-4), 328-341.
- Botonaki, A., Polymeros, K., Tsakiridou, E., & Mattas, K. (2006). The role of food quality certification on consumers' food choices. *British Food Journal*, 108(2), 77-90.
- Cecchini, M., & Warin, L. (2016). Impact of food labelling systems on food choices and eating behaviours: a systematic review and meta-analysis of randomized studies. *Obesity reviews*, 17(3), 201-210.
- De Boer, J. (2003). Sustainability labelling schemes: the logic of their claims and their functions for stakeholders. *Business Strategy and the Environment*, 12(4), 254-264.
- Escanciano, C., & Leticia Santos-Vijande, M. (2014). Implementation of ISO-22000 in Spain: obstacles and key benefits. *British Food Journal*, 116(10), 1581-1599.
- Jamal, T., Borges, M., & Stronza, A. (2006). The institutionalisation of ecotourism: Certification, cultural equity and praxis. *Journal of Ecotourism*, 5(3), 145-175.
- Martínez de Arano, I., Maltoni, S., Picardo, A., & Mutke, S. (2021). Non-wood forest products for people, nature and the green economy. Recommendations for policy priorities in Europe.
- Meyerding, S. G., Trajer, N., & Lehberger, M. (2019). What is local food? The case of consumer preferences for local food labeling of tomatoes in Germany. *Journal of Cleaner Production*, 207, 30-43.
- Paumgarten, F., Locatelli, B., & Witkowski, E. T. F. (2018). Wild foods: Safety net or poverty trap? A South African case study. *Human Ecology*, 46, 183-195.
- Sadilek, T. (2019). Perception of food quality by consumers: literature review.
- Trienekens, J. H., Wognum, P. M., Beulens, A. J., & van der Vorst, J. G. (2012). Transparency in complex dynamic food supply chains. *Advanced Engineering Informatics*, 26(1), 55-65.
- Tscharntke, T., Milder, J. C., Schroth, G., Clough, Y., DeClerck, F., Waldron, A., ... & Ghazoul, J. (2015). Conserving biodiversity through certification of tropical agroforestry crops at local and landscape scales. *Conservation Letters*, 8(1), 14-23.



The Partnership for Research and Innovation in the Mediterranean Area will devise new R&I approaches to improve water availability and sustainable agriculture production in a region heavily distressed by climate change, urbanisation and population growth.



The PRIMA programme is an Art.185 initiative supported and funded under Horizon 2020, the European Union's Framework Programme for Research and Innovation.

## 11. Annex

# Interview with Success stories of certification

---

### Contact details of the interviewed person

---

Name

.....

Position in the company

.....

Contact

.....

---

### Information on the company

---

Name of the company

.....

Type of company (private, public, cooperative...)

.....

Date of creation

.....

Field of activities

.....

Main products

.....

Non Wood Forest product used

.....

---

### Experience of certification

---

Could you indicate if your company use any certification for your wild food product/process?

Certified products

.....

Certified process

.....

Date and name of certification

.....

Motivations to apply for certification

.....

How would you describe your certification experience?

.....

How would you describe the certification procedure in your country?

.....

What are the main encountered difficulties in the case of your product/procedure?

.....

What are the advantages of the certification?

.....

After how much time you start noticing the impact of certification on your revenue,sales...? (please indicate any other impact)

.....

Are you planning to get new certification? For what?

.....

---

**Recommendation**

---

Can you give some advices for those who are planning to get certification based on your experience?

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

**Thank you for your collaboration**