



Facilitating Innovation in NWFPs; **Lessons learnt**



Innovation Networks of Cork, Resins and Edibles in the Mediterranean basin - INCREDIBLE

Coordination and Support Action H2020-RUR-2017-1: Thematic Networks compiling knowledge ready for practice

Grant Agreement number: 774632

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Start date of project: 1 November 2017

Organisation name of lead contractor for this deliverable: ESSET

Reference: Libbrecht, S. (2020) Facilitating Innovation in NWFPs. Lessons learnt - Deliverable 1.4. H2020 project no. 774632 RUR-2017-1 European Commission, 72 pp.

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List of abbreviations

The following acronyms have been used across this document:

- **AS** Acceleration service
- **COP** Community of practice
- **CRM** Customer relationship management
- **GDPR** General data protection rule
- **iNet** Innovation network
- **NWFP** Non-wood forest product
- **OIC** Open innovation challenge

Executive summary

INCREDIBLE aims to address the existing research and innovation knowledge divide in Non-Wood Forest Products (NWFP) across the Mediterranean basin. To this extent, the project has initiated a series of innovation networks (iNets), that gather best practices and ready to use knowledge (both practical and science-based) related to NWFP conservation, collection, production, transformation and trade channels. By collecting, sharing, and transferring these practices and knowledge in and across the iNets, the iNets work towards their objective of strengthening the NWFP value chains.

These iNets are networks of actors each active in a NWFP (sub)sector, spanning different regions in the Mediterranean area. In order to reach their objectives, the iNets have been engaging with stakeholders - sometimes at local/regional level, sometimes at interregional level. The interactions among the stakeholders are meant to give them the opportunity to get to know each other and discuss the challenges they face, to exchange and learn potential solutions to these challenges. These solutions can come from other stakeholders from the same region, but potentially also from other regions or even other iNets.

In order to support the animation of the iNets and the stakeholder interactions, the INCREDIBLE project design includes a Community of Practice (COP). The INCREDIBLE COP is a platform where innovation facilitators from all five iNets meet, share experiences and discuss approaches for the next steps.

This report sets out how the INCREDIBLE COP has operated, and how it supported both the iNet operations and intra-iNet exchanges (between different regions of the same iNet) as well as cross-iNet exchanges. The activities of the COP are documented, explaining how these contributed to the INCREDIBLE objectives. Furthermore, the report also covers the use of the tools and instruments that have been introduced to support the iNets.

Finally, this report also includes recommendations and lessons learnt with respect to facilitating innovation in NWFP.

1. Setting the scene

Forests in the Mediterranean area are an intrinsic part of the landscape for which the area is known. Apart from their aesthetic qualities, the Mediterranean forests constitute ecosystems with important ecological values, offer a wide range of essential ecosystem services to society, and play an increasing role in combatting and mitigating the impacts of climate change.

Apart from their indirect economic relevance (provision of water and clean air, water cycle regulation, soil protection), Mediterranean forests also represent a direct economic potential: they offer market opportunities for rural development. Yet, these opportunities are still rarely valued. Even worse, many regions in the Mediterranean region where forests still exist are genuine backwoods, with worrying socio-economic indicators: often linked to mountain areas and with lack of infrastructure, they render poor economic performance, leading to land abandonment and towards emigration, often leaving behind sparse, over-aged local populations.

In view of these socio-economic concerns and considering the predicted negative impacts of climate change, it is mandatory to create favourable conditions in order to tap the economic potential related to the Mediterranean forests. Creating favourable conditions requires a reflection on the challenges including the knowledge gaps: what are these challenges, and how can the gaps be addressed?

The thematic network INCREDIBLE focusses on five distinct categories of non-wood forest products (NWFP): aromatic and medicinal plants, cork, mushrooms and truffles, resin, and wild nuts and berries. For each type of these non-wood forest products, innovation networks have been created, with the aim to address the challenges for that specific product NWFP category.

These interregional **innovation networks (iNets)** span the Mediterranean basin and are the cornerstones of INCREDIBLE. Their objective is to strengthen the NWFP value chains by seeding, collecting, generating, transferring and disseminating relevant technological, economic, innovative and research knowledge.

Each INCREDIBLE iNet consists of:

- Network coordinator and co-coordinator;
- Regional contact points, based in the countries in which the iNet is active and acting as the reference contact point for local stakeholders;
- Network stakeholders.

The innovation network coordinator, co-coordinator as well as the regional contact points are project partners. Together, they constitute the team that manages the iNet (Figure 1).

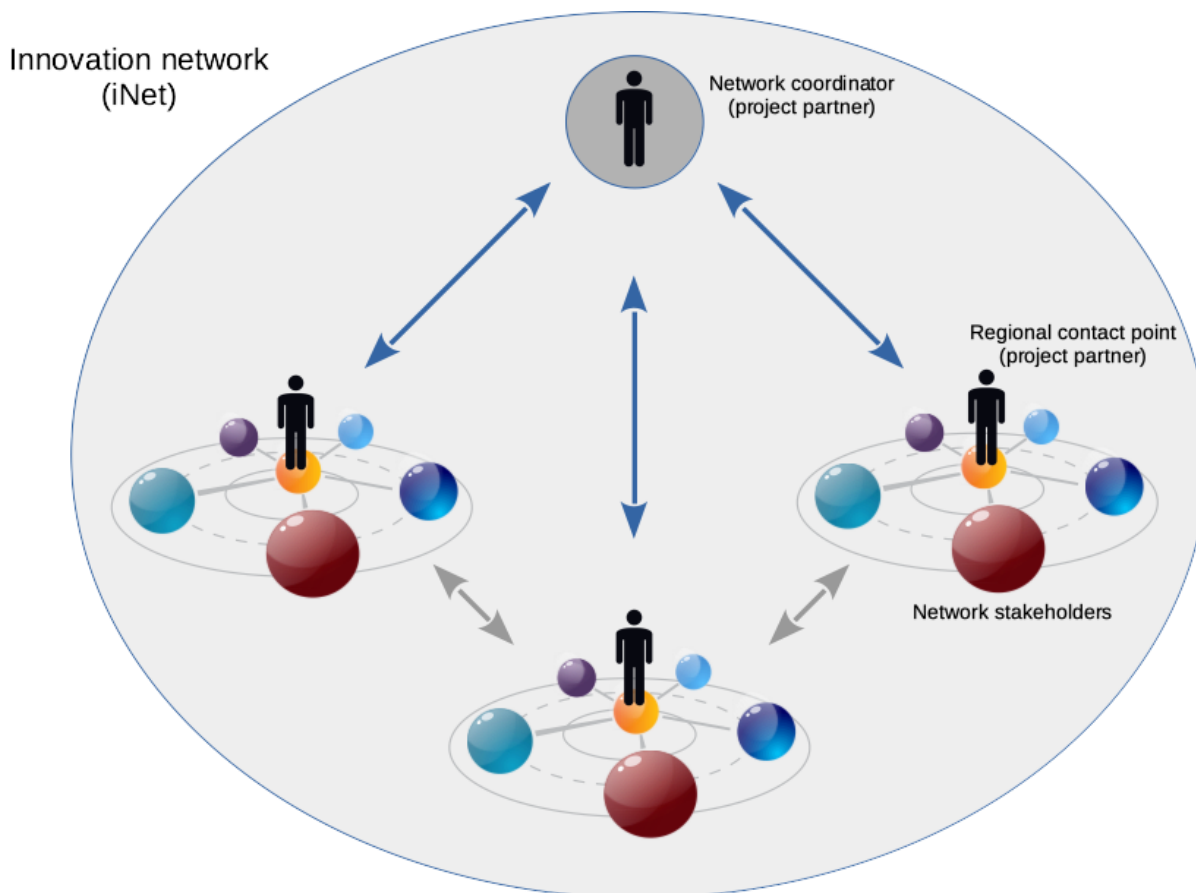


Figure 1. Graphical representation of an innovation network.

Such iNet structures have been created for 5 NWFP categories, with participating countries as listed in Table 1:

Table 1. Overview of the 5 INCREDIBLE iNets, with participating countries and languages used.

iNet	Countries	Languages
Aromatic and Medicinal Plants	Croatia, France, Greece, Spain, Tunisia	Arabic, Catalan, Croatian, French, Greek, Portuguese, Spanish
Cork	France, Italy, Portugal, Spain, Tunisia	Arabic, Catalan, French, Italian, Portuguese, Spanish
Mushrooms and Truffles	Croatia, France, Greece, Italy, Spain	Catalan, Croatian, French, Greek, Italian, Spanish
Resin	France, Portugal, Spain, Tunisia	Arabic, Catalan, French, Spanish, Portuguese
Wild Nuts and Berries	France, Portugal, Spain, Tunisia,	Arabic, Catalan, French, Portuguese, Spanish

Table 1 clearly shows the geographic span and multicultural nature of each iNet. For more information on the background and structure of the iNets, we refer to Deliverable D1.1 *iNet Manual*.

In an iNet, stakeholders from different regions are brought together, to discuss the challenges they face and to explore potential solutions. Sometimes, stakeholders will realise that participants from another region (or value chain) may have developed solutions to certain challenges, e.g. a more refined harvesting technique or a protocol for quality control. That knowledge can then be transferred between regions (or value chains). Sometimes, new solutions need to be developed. The interregional networks facilitate collaboration across regions which might lead to the desired solution.

This participatory approach of INCREDIBLE has created opportunities for stakeholders to interact and discuss, to exchange experience, to learn from each other as well as to co-create knowledge. By working together, they contributed to addressing the challenges of the NWFP sector, ultimately supporting rural development. Moreover, as NWFP value chains are often global (cork, resins, edibles, etc.) rather than local, contact with local players from abroad can foster horizontal value chain integration.

As stated above, the five INCREDIBLE iNets are innovation networks. These can be defined as¹: "*all forms of organisations that serve the exchange of information, knowledge and resources and by suitable learning among at least three partners help to bring about innovation and are based on confidence and stable cooperation relations*".

Based on this definition, innovation networks have to:

1. Realise and maintain information exchange across the network;
2. Maintain internal trust and cooperation across members;
3. Foster co-learning process among the network members;
4. Bring innovation about.

Analysing these objectives, it can be stated that the first two objectives are closely linked to organisational aspects of the innovation network: it requires a body - preferably consisting of network members from the regions/countries in which the innovation network is active - that takes the governance of the network at heart, that is responsible for managing and promoting the information exchange across the network by taking all sorts of initiatives and that fosters a culture of trust and cooperation.

The third and fourth objectives are of a different nature: without these, an innovation network would be merely a network of members that meet and exchange information. Objective three (co-learning) and four (innovation) give a purpose and direction to the network. In order to be successful, an innovation network needs to succeed in developing and/or transferring knowledge. It also needs to be successful in supporting innovation.

In order to reach these objectives, the iNets need the active participation and engagement of the stakeholders. Therefore, animation of the iNets is a key task.

1 InnoSupport, 2018. What are Innovation Networks? Accessed on 07-02-2018.
<http://innosupport.net/index.php?id=2330>

In order to support the iNets in their mission to transfer knowledge and to innovate, the INCREDIBLE project design has an organizational structure referred to as **Community of Practice (COP)**. The COP is a platform where innovation facilitators from each iNet meet, where they share their experiences, the challenges they face in their iNet (Figure 2). It is a vehicle for cross-iNet learning, for coordination across the iNets, for reviewing and agreeing on participatory approaches that are applied coherently in all iNets, for discussing instruments or tools that might support the iNets or the cross-iNet learning etc.

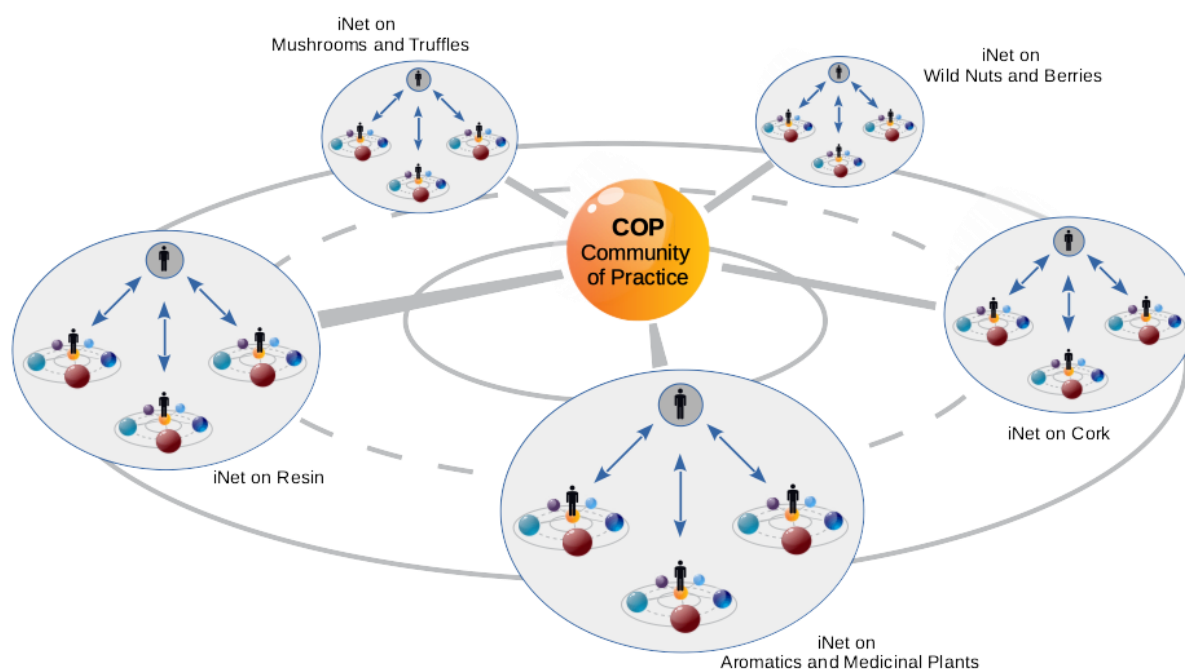


Figure 2. Graphical representation of the INCREDIBLE Community of Practice.

This report is structured as follows:

After this introductory chapter, In **Chapter 2**, the activities of the COP are documented, with a particular focus on how the COP has operated, and how it supported both the iNet operations and intra-iNet exchanges (between different regions of the same iNet) as well as cross-iNet exchanges.

The activities of the COP are documented, explaining how these contributed to the INCREDIBLE objectives. Furthermore, the report also covers the use of methodologies, tools and instruments that have been introduced to support the iNets.

In **Chapter 3**, an analysis is made on facilitating innovation in NWFP, from the perspective of the operation of thematic networks (the iNets). Lessons learnt in the INCREDIBLE project are presented and recommendations formulated.

2. The INCREDIBLE Community of Practice

2.1. Introduction

INCREDIBLE is a thematic network on Non-Wood Forest Products (NWFP), consisting of 5 sub-networks (called innovation networks, or iNets) each aimed at a specific type of NWFP. Each of the five iNets constitute a network of project partners based in different countries and regions. These project partners have their contacts with regional stakeholders and together with the iNet coordinator they work together to operate their iNet network and make steps to reach the project objectives.

In view of the regional contextual differences between the iNet partners (cultural, linguistic, socioeconomic), managing one such iNet can already be a challenge. For some iNets (such as the iNet on Mushrooms and Truffles), (most) partners knew each other already before the start of INCREDIBLE. This certainly helped to kickstart the activities and exchanges within these iNets. For other iNets, this was not (or to a clearly lesser extent) the case.

In order to organise the knowledge exchange in and across these five iNets, the INCREDIBLE project design includes several instruments, the most important being (Figure 3):

- the organisation of science to practice events and interregional workshops, promoting the intra-iNet knowledge exchange;
- the organisation of 3 cross-cutting seminars, each aiming at themes of cross-iNet relevance;
- communication: offering a comprehensive communication plan that amongst others aimed at sharing information in and across iNets;
- the creation of a knowledge repository, consisting of NWFP innovation abstracts (fact sheets). This is a compilation of co-developed ready-to-implement innovative knowledge (research, success stories, best practices, databases, technical reports, policies), collected by iNet partners. As the knowledge repository is accessible for all iNets, it is an instrument that contributed to both intra- as well as cross-iNet knowledge exchange;
- the creation of a Community of Practice (COP) where innovation facilitators from the five iNets can meet, exchange experiences and discuss.

Instruments to foster learning in and across the 5 NWFP iNets

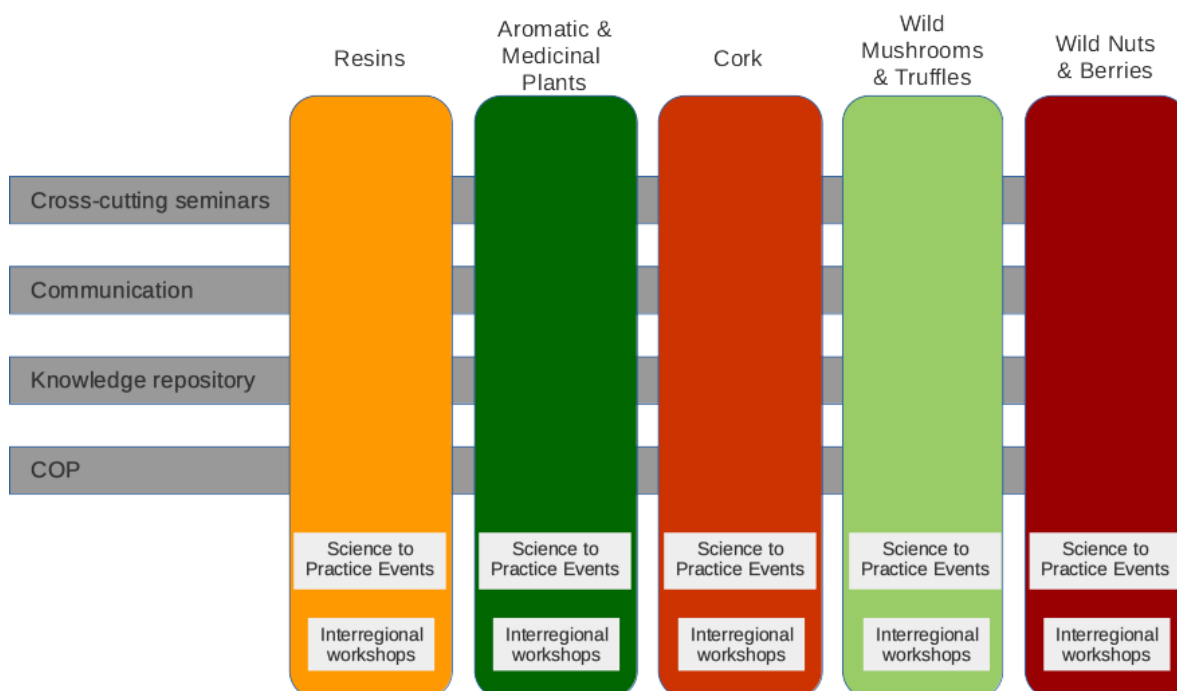


Figure 3. Instruments to foster learning in and across the 5 NWFP iNets of INCREDIBLE.

In this document, the focus will primarily be on the COP. With respect to the COP, the Description of Action states the following (see description of Task 1.4 of Work Package 1):

[...] Community of Practice where innovation facilitators will share experiences and learn from each other and other facilitators in order to create a smooth knowledge sharing process. It will facilitate the mutual learning and will guarantee the coordination across the different iNets and regions. The Community of practice will combine physical and online meetings and activities in a six-month periodicity (M6, M12; M18, M24; M30; M36). It will be professionally coached and it will be open to inputs from agricultural advisors within the iNets and from facilitators or brokers involved in other EIP Thematic Networks (i.e., AFINET).

In other words, the Community of Practice establishes a community of, and platform for, innovation facilitators from all INCREDIBLE iNets:

- where they can share **experiences** and **learn** from each other and other facilitators (knowledge sharing, mutual learning);
- that supports the **coordination** across the regions in each iNet as well as across the iNets;
- and that harvests knowledge about the innovation process and the functioning of **Thematic Networks**.

In practice, the main tasks of the COP are:

1. to support the intra-iNet knowledge exchange;
2. to support the cross-iNet knowledge exchange;
3. to coordinate the use of methodologies (more specifically methodologies that involve stakeholder engagement) in order to achieve coherence of approach across iNets and in

support of INCREDIBLE;

4. to offer innovation facilitators a sounding board for stakeholder engagement, a “safe house” to discuss the animation of the iNet, the use of participatory approaches, and provide coaching or assistance when needed.

In the next sections, these tasks are briefly elaborated and illustrated.

2. 1. 1. COP Task 1: Support intra-iNet knowledge exchange

Intra-iNet learning refers to the learning as a consequence of the exchange between stakeholders from different regions that are part of the same iNet (Figure 4).

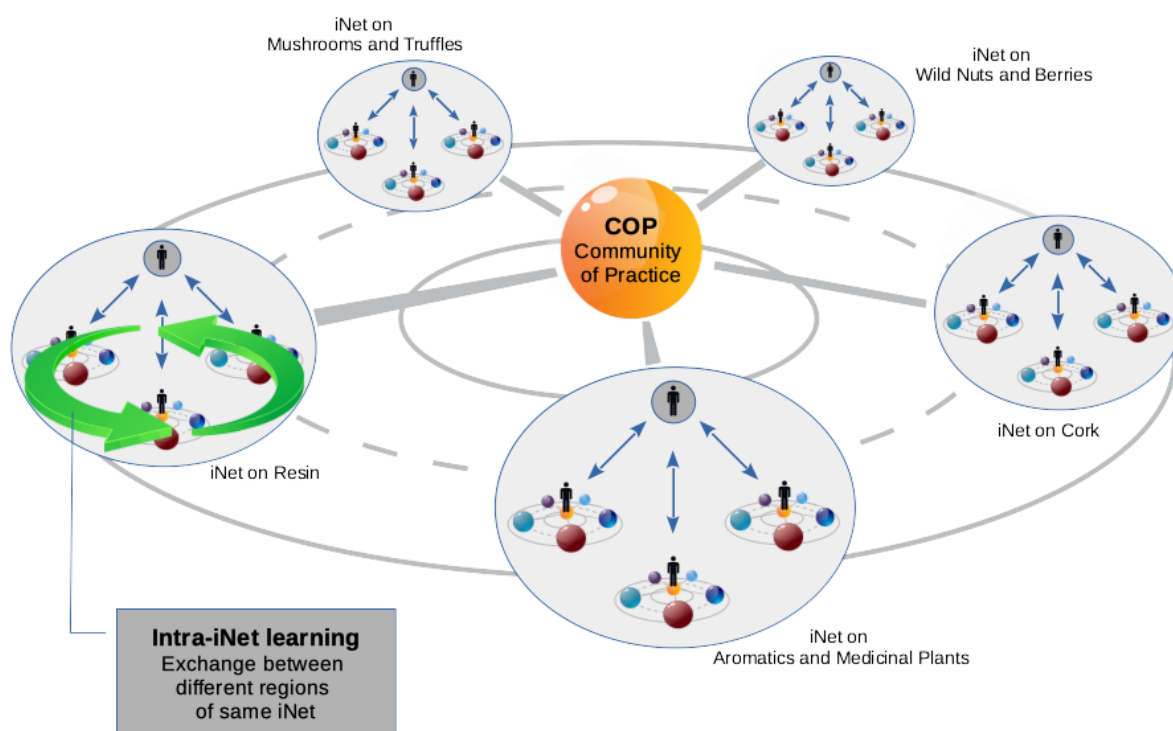


Figure 4. Graphical representation of intra-iNet learning and exchange (in this case, in the iNet on resin).

An example of intra-iNet learning in NWFP is given by the experience of the cork sector in Portugal and Spain with respect to the system and procedures to assess cork quality (covering the statistical approach of cork sampling, the sampling procedure, the inspection techniques, cork quality categories and quality assessment). This is knowledge that is standard for the cork sector in regions of southern Portugal and south-west Spain, but that is neither harmonised between these regions, nor disseminated and practiced in other relevant cork iNet regions (north-east Spain, France, Sardegna, Tunisia).

Exchange of this knowledge between stakeholders of the various regions of the cork iNet, resulted in a transfer of these quality procedures, protocols and methods. This not only contributes to the harmonisation and dissemination in the cork sector, but is an important step to the creation of a pan-Mediterranean cork quality system.

This example also illustrates that challenges of the NWFP sector can be addressed collectively (i.e., involving stakeholders), and that knowledge transfer on a seemingly technical matter (a

methodology, protocol, technique) has wider implications: social learning, leveraging forest owners and managers, increasing transparency.

2. 1. 2. COP Task 2: Support cross-iNet knowledge exchange

Cross-iNet learning refers to the new knowledge acquired as a consequence of the exchanges between stakeholders from different iNets (Figure 5).

As for the intra-iNet knowledge exchange, cross-iNet learning is not only about the transfer of the knowledge as such. Interesting ideas, examples of solutions that work in other NWFP (sub)sectors, are sources of inspiration and constitute valuable reference points. Furthermore, they act as motivators and increase the confidence of iNet actors and stakeholders that they will be able to address the challenges they face, that they will find and implement solutions, that they can make a difference.

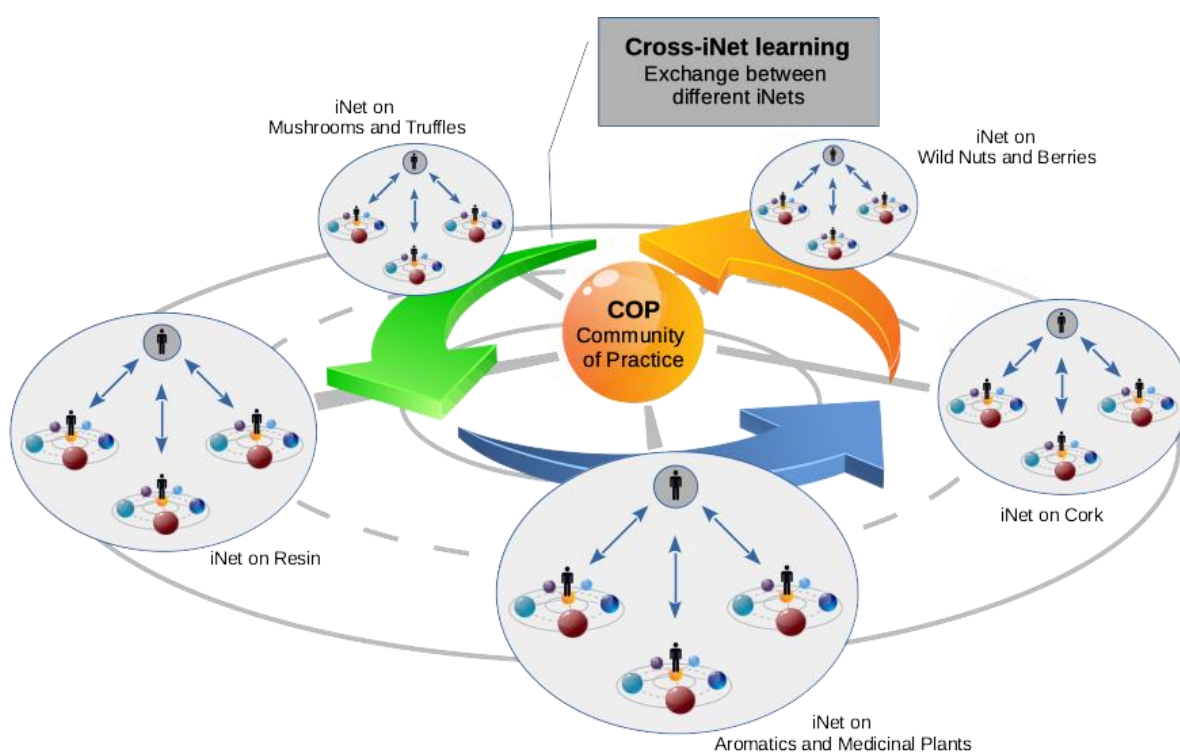


Figure 5. Graphical representation of cross-iNet learning and exchange.

As examples of cross-iNet learning, we refer to one of the challenges that has been identified as a common challenge for the NWFP sector: lack of transparency. During the cross-iNet interactions, several ideas have surfaced to improve transparency, amongst others:

- the creation of a Mediterranean (market) observatory for NWFP products, building on the example of the existing Portuguese cork observatory. The idea is to take an initiative that exists for one specific NWFP (cork), in one specific region (Portugal) and expand it to all NWFP, for several participating regions. The full implementation will undoubtedly require several years and is clearly beyond INCREDIBLE's scope, but partners of several iNets are working to pave the way for this NWFP observatory;
- the creation of traceability tools, more specifically apps, to increase transparency - for producers and/or end users - along the value chain. In the resin iNet, an app was developed

with the focus on traceability of the raw product i.e., from forest to factory. On the other hand, in the iNet on aromatics and medicinal plants, a different tool was developed, with main focus on providing transparency to the final customer. Due to the exchanges, it is now being considered how these traceability tools could be enlarged to cover more NWFP.

Other examples of cross-iNet learning are provided by the discussions in the Cross-Cutting Seminar on territorial marketing, where opportunities for NWFP have been discussed, or on the Cross-Cutting Seminar on entrepreneurship in NWFPs. In both cases, the examples that were presented (e.g., cases of innovative business models in NWFP) were sources of inspiration to other regions and other NWFPs. The discussions allowed to explore and highlight necessary framework conditions to support innovations in all NWFP.

2. 1. 3. COP Task 3: Coordinate the use of methodologies in order to achieve coherence across iNets

By bringing innovation facilitators of all five iNets together, the COP provided a coordination mechanism to discuss and agree on methodologies that involved iNet stakeholders. This coherence of approach enabled cross-iNet comparisons of the outcomes of and the experiences with the use of the methodology. It also contributed to an efficient use of INCREDIBLE's resources.

An example of this coordination is given by the discussions regarding the use of the NWFP value chain maps:

- the exchanges, in the COP, on the value chain maps for the different NWFP, resulting in a coherent approach, representation and format across iNets;
- the use of the value chain map as a tool to identify iNet stakeholders (in each of the iNets);
- the use of the value chain maps to structure the stakeholder discussions during the iNet scoping seminars: to refine and validate the value chain maps of the respective NWFP, to explore and prioritise sector challenges as perceived by the stakeholders and to explore potential solutions to these challenges.

2. 1. 4. COP Task 4: Offer innovation facilitators a sounding board for stakeholder engagement

Most iNet partners have been selected for their expertise on NWFP. Some of them are familiar with stakeholder engagement methodologies, the design and implementation of participatory approaches, and have practical experience with the facilitation of group processes. For several, however, this was not the case. Therefore, the COP offered innovation facilitators of all iNets a platform, even a “safe house” to discuss and learn about how they could implement participatory approaches in their iNets, a sounding board for matters related to stakeholder engagement. Furthermore, the COP would also provide coaching and/or practical assistance on the animation of the iNets, upon request of the innovation facilitators.

2.2. Organisation and timeline of the COP meetings

In practice, the composition of the COP consisted of members of the five iNets, more specifically those taking up the role of innovation facilitators: the coordinators, co-coordinators and/or other proactive iNet partners (also to ensure good representation of all geographic areas). The COP was facilitated by ESSET (consortium partner), a professional expert in stakeholder engagement, design

and facilitation of participatory approaches and innovation. Furthermore, EFI actively participated as project coordinator. In Table 2, the list of COP members is presented.

Table 2. Members of the Community of Practice.

iNet	COP members
Aromatic and Medicinal Plants	INRGREF (coordinator), UOI
Cork	UNAC (coordinator), FoReSTAS
Mushrooms and Truffles	CTFC (coordinator), CFRI, ETIFOR
Resin	CESEFOR (coordinator), CNPF, ISA
Wild Nuts and Berries	INIA (coordinator), CESEFOR, UNAC
Cross-iNet	
INCREDIBLE coordinator	EFI
COP leader	ESSET

Meetings of the COP have been organised with a periodicity of approximately six months - alternating physical meetings with on-line COP sessions.

The timeline of the COP meetings over the duration of the INCREDIBLE project is presented (Figure 6). Distinction is made between the physical COP meetings (represented by the dark blue dots) and the on-line COP sessions (light blue dots). The white dots indicate the timing of the mini-COP sessions. The term “mini-COP” refers to a COP-type meeting, with the following characteristics:

- the members of a mini-COP session are all iNet partners of a particular iNet (so not only those participating to the COP);
- the main focus is to provide support to the intra-iNet learning and knowledge exchange, as well as to coherence of approach.

●	COP meeting / physical session
○	COP meeting / skype session
○	mini-COP skype sessions

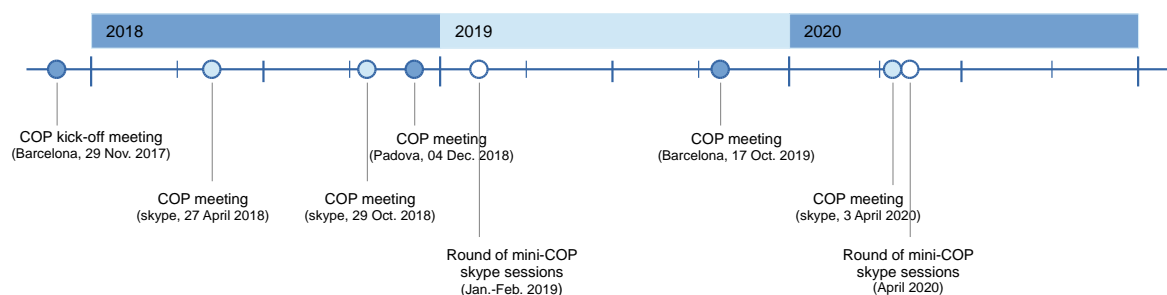


Figure 6. Timeline of the COP meetings. Physical COP meetings are represented by the dark blue dots; on-line sessions by the light blue dots. Mini-COP sessions are indicated by the white dots.

2.3. Overview of the COP meetings

Table 3. Overview of the COP meetings.

Meeting No.	Date	Type of meeting	Location	Topics treated
#1	29 Nov. 2017	physical COP meeting	Barcelona	COP kick-off meeting Mapping expectations of COP members Agreements on composition of COP and operating principles
#2	27 April 2018 (+ follow-up on 3 May 2018)	on-line COP session	(on-line)	Organisation of the COP (letters of commitment) Value chain maps for the NWFP of the iNets Preparation of the scoping seminar
#3	29 October 2018	on-line COP session	(on-line)	Tools for iNet stakeholder management / stakeholder database
#4	4 Dec. 2018	physical COP meeting	Padova	Mapping challenges for the iNets and for cross-iNet operation Discussion on instruments to reinforce intra and cross-iNet exchange
#5	Jan.-Feb. 2019	round of mini-COP sessions (1 session per iNet)	(on-line)	Supporting the iNet operation: knowing the iNet members and their expertise discussion on iNet challenges
#6	17 Oct. 2019	physical COP meeting	Barcelona	Generating impact for the iNets Recommendations and lessons learnt

				Review and evaluation of COP tools
#7	03 April 2020	on-line COP session	(on-line)	Discussion on potential use of on-line tools for iNet stakeholder events
#8	April 2020	round of mini-COP sessions (1 session per iNet)	(on-line)	Supporting the iNet operation: Discussion on fact sheets Generating impact: follow-up on flagship initiatives Exchange on Science-to-Practice events (in view of the lockdown due to coronavirus)

2.4. The COP in practice

2. 4. 1. COP Meeting #1: Kick-off

Meeting	Date	Type of meeting	Location	Topics treated
#1	29 Nov. 2017	physical COP meeting	Barcelona	COP kick-off meeting Mapping expectations of COP members Agreements on composition of COP and operating principles

Setting and agenda

The first COP session was organised as a physical meeting integrated in the programme of the kick-off meeting of the INCREDIBLE project (organised by EFI, Barcelona, 28-29 November, 2017).

As it was the first time that the COP convened and as INCREDIBLE was at its very start, the emphasis was on making sure that the COP members of all iNets could get to know each other, and discuss their expectations with respect to the COP and its role in INCREDIBLE. Clarifying and agreeing on a number of practicalities (with respect to the organisation of COP meetings, the composition of the COP) was equally important.

To a certain extent, through these discussions, the COP already initiated its tasks related to cross-iNet knowledge exchange (COP Task 2), achieving coherence of approach across iNets (COP Task 3) and offering a sounding board to innovation facilitators (COP Task 4).

The specific objectives for this session were:

- Mapping and discussing the expectations of the participants with respect to the COP;
- Discussing the scope and practical aspects of the operation of the COP;
- Review the composition of the COP.

Relation to INCREDIBLE objectives

At the start of INCREDIBLE, it was important to understand and manage expectations - of COP members, of iNet partners, of iNet stakeholders. This COP session offered a first opportunity to share and explore some of these expectations. Indeed, even though the project was at its initial

- (Ambition to) Change in legislation ²
- Organisation (setting up NWFP oriented structure / board)
- Business oriented approach
- Innovation

The **fears** were clustered in groups with the following titles:

- Lack of knowledge
- Lack of inputs / Stakeholder involvement
- Lack of impacts (the need for impact, also to keep the interest of stakeholders)
- Organisation in the project

During the subsequent discussions on the role and operations of the COP, the need for **methodological support** was expressed, more specifically on:

- Stakeholder engagement (including stakeholder identification, management and motivation);
- Innovation (including business models).

Furthermore, the COP members indicated the importance of generating (long-term) impact in/through the iNets and that (also) having a business perspective would be instrumental to achieve that.

Finally, it was highlighted that the project should initiate reflections (including business model reflections) on the post-INCREIBLE era sufficiently early, in order to prepare the sustainability of the iNets.

2. 4. 2. COP Meeting #2: NWFP value chain maps

Meeting	Date	Type of meeting	Location	Topics treated
#2	27 April 2018 (+ follow-up on 3 May 2018)	on-line COP session	(on-line)	Organisation of the COP (letters of commitment) Value chain maps for the NWFP of the iNets Preparation of the scoping seminar

2 “Change in legislation” was a hope expressed by one of the participants. It is clear that this statement refers to an ambition, a desired outcome of the project, rather than an expectation towards the COP. For reasons of completeness, the statement is included in this document.

Setting and agenda

The second COP meeting was organised on April 27th 2018, as an on-line session (Skype for Business). Participating project partners: CESEFOR, CFRI, CTFC, FoReSTAS, INIA, INRGREF, EFI, ESSET.

The meeting covered three main items:

1. Making sure the formal arrangements with respect to the composition of the COP were properly finalised, more specifically: The Letters of Commitment in which project partners of each iNet would state their commitment to actively support and participate to the COP;
2. Discussing and reviewing the NWFP value chain maps for each iNet. This discussion would feed the cross-iNet knowledge exchange (cf. COP Task 2) and contribute to achieving coherence of approach (d. COP Taks 3);
3. Preparing for the Scoping Seminars that would be organised in each of the five iNets. This discussion would mainly contribute to achieving coherence of approach across iNets (COP Task 3) and offering a sounding board to innovation facilitators (COP Task 4).

As a result, the COP session had the following points on the agenda:

- Status on the Letters of Commitment from each iNet;
- Status and discussion on the NWFP value chain map for each iNet;
- Discussion on the overall approach and structure of the iNet Scoping Seminars.

In order to further continue the preparations to the iNet Scoping Seminars, a follow-up skype session was planned on 03 May 2018. That session focussed on the following agenda points:

- NWFP value chain maps for each iNet:
 - status of mapping of the value chain for the NWFP of each of the respective iNets;
 - use of the value chain as a tool to identify iNet stakeholders;
- iNet Scoping Seminars: discussion on proposed structure.

Relation to INCREDIBLE objectives

The preparation of the Scoping Seminars (one in each of the five iNets) was critical for INCREDIBLE, for the following reasons:

- there was a need for a clear framework for the identification of stakeholders within the iNets;
- there was a need for a concept on how to design and prepare the Scoping Seminar in such a way that it best contributed to the objectives of INCREDIBLE;
- there was a preference for consistency of approach across the iNets, meaning that - to the best possible extent - the frameworks and concepts and the ways they would be used should be highly similar (while allowing to adjust for the typical characteristics of each of the NWFPs). Indeed, this would allow cross-iNet comparisons;
- for each of the five iNets, the Scoping Seminars constituted the first time that stakeholders would be brought together within the framework of INCREDIBLE. It was therefore important to ensure that these events would be well appreciated by the stakeholders, in order to contribute

to a positive perception of INCREDIBLE (among iNet stakeholders) and feed a positive dynamic within the iNets.

This COP meeting aimed at coordinating the preparations to the Scoping Seminars, from the point of view of methodology, stakeholder engagement and process design (referring to the structuring of the seminar as a participatory event).

As stated in Deliverable D1.1 *INCREDIBLE iNet Manual*³, the value chain of each of the distinct NWFPs was chosen as the central framework and concept. In fact, it was considered to go for a more elaborated value chain, in which side branches or additional actors playing a role in supporting the value chain would be made explicit. This approach offered the following benefits:

- Stakeholders could be identified as stakeholders representing various portions and branches of the NWFP value chain map;
- The map could be used as one of the concepts to be discussed, explored and/or validated during the Scoping Seminar:
 - discussing and refining/detailing the value chain maps with the aim to further complete the maps or to provide a view on regional differences, or differences for specific subsectors (e.g. different end uses);
 - identification of main challenges across the value chain maps, which would offer a good view on the main challenges as perceived by the stakeholders.

However, there was a clear need to exchange, compare and discuss various aspects of the value chain maps:

- the general approach to the value chain map (perspective to be taken);
- the level of detail;
- the graphical representation.

The COP meeting offered the platform for the COP members to present, discuss and review how they had been preparing the value chain map for their iNet (so for a specific NWFP category). The exchanges and review led to a coherent approach across iNets and an overall increased quality of the maps.

Furthermore, it also provided a solid basis to identify iNet stakeholders, as well as directly feed into the preparations to the Scoping Seminars - which contributed to a coherence of approach for all Scoping Seminars across iNets.

Animation techniques

As this COP meeting was organised as an on-line session, it was approached as an interactive discussion rather than a workshop style event. In the weeks prior to this COP meeting, the iNet coordinators had been developing a value chain scheme for their respective NWFP. During the on-

3 Martinez de Arano, I., Marini Govigli, V., Tripodi, G., Andrighetto, N., Libbrecht, S., Mutke, S., Paulo, J., Rubio, R., (2018). INCREDIBLE iNET Manual, Deliverable D1.1. H2020 project no.774632 RUR-10-2016-2017 European Commission, 26 pp.

line COP session, the different value chain maps were presented, reviewed and discussed (Figure 8).

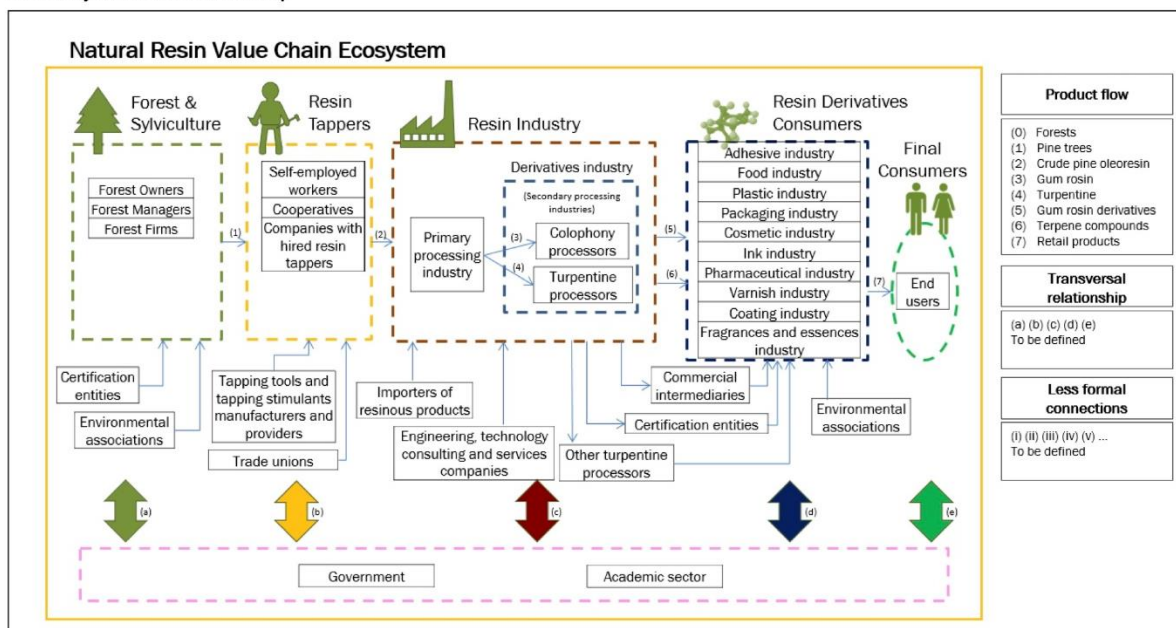


Figure 8. Example of a value chain map, as prepared for the Resin iNet.

Outcomes

As a result of the meeting, each of the COP members received valuable feedback on the value chain representation of the NWFP of their iNet. Furthermore, the COP members agreed on a common approach with respect to perspective, level of detail and graphical representation.

The resulting value chain maps for the various NWFP categories, where subsequently be used as one of the main concepts for the upcoming Scoping Seminars (one per iNet). In these seminars, participating stakeholders would review and validate the value chain, by:

- checking all portions of the value chain;
- completing and refining where needed;
- indicating if the value chain would look different for different end uses of the NWFP;
- indicating if there would be regional differences to the value chain map;
- indicating relevant groups of stakeholders (even if not strictly linked to the value chain).

2. 4. 3. COP Meeting #3: Tools for iNet stakeholder management

Meeting	Date	Type of meeting	Location	Topics treated
#3	29 October 2018	on-line COP session	(on-line)	Tools for iNet stakeholder management / stakeholder database

Setting and agenda

This COP session was organised as an on-line session on October 29th 2018, attended by the following COP members: CESEFOR, FoReSTAS, INIA, ISA, UOI, EFI, ESSET. By that time, all iNets had finalised the scoping seminars and had identified and contacted a network of stakeholders. The question that needed to be dealt with centred around iNet stakeholder data management and more specifically: how do we deal with stakeholder related information in each iNet, or even within each region of each iNet? Will this information be aggregated and managed at the level of regional iNet partners, or rather at the iNets, or even at the level of INCREDIBLE? What tools are available to organise and manage stakeholder data and in what conditions can these be used?

In order to answer these questions, a COP meeting was initiated, with the following agenda:

- presentation of a tool for stakeholder data management;
- exchange of experiences in the use of such tools (cf. COP Task 2);
- discussion on the potential use in INCREDIBLE. This discussion fitted the coordination of the use of methodologies (COP Task 3) and provided a sounding board to check ideas (COP Task 4).

Relation to INCREDIBLE objectives

As stakeholder participation in the five iNets is one of the corner stones of INCREDIBLE, having a clear view on how to deal with the abundance of stakeholder related data - whilst respecting all relevant legislation and directives - was important. Exchanges on how to best organise and manage these data, including the potential use of specialised instruments and tools, were therefore considered valuable. This COP session contributed to the exchange on these matters.

Animation techniques

As this COP meeting was organised as an on-line session, it was approached as an interactive discussion. In the weeks prior to this meeting, the project coordinator (EFI), together with the leader of Task 1.2 (INIA) as well as the COP leader (ESSET) had multiple exchange in order to review the stakeholder database (Deliverable 1.2) as well as the potential use of specialised software such as: Odoo, Capsule, MS Dynamics, etc.

On the basis of these findings, a presentation was prepared, which was used to kick-start and feed the discussions in the COP.

Outcomes

The meeting ensured all iNets were on equal footing with respect to basic concepts on the organisation of stakeholder data. This also allowed the project coordinator and the leader of

INCREDIBLE Task 1.2. Creation of iNets to continue their tasks on structuring, feeding and managing the stakeholder database.

2. 4. 4. COP Meeting #4: Intra- and cross-iNet exchange

Meeting	Date	Type of meeting	Location	Topics treated
#4	4 Dec. 2018	physical COP meeting	Padova	Mapping challenges for the iNets and for cross-iNet operation Discussion on instruments to reinforce intra and cross-iNet exchange

Setting and agenda

This COP session was organised as a physical meeting integrated in the General Assembly meeting held at Padova (3-4 December, 2018), and was attended by the following project partners: CESEFOR, CFRI, CTFC, FoReSTAS, INIA, INRGREF, UNAC, UOI, INIA, EFI, ESSET. By that time, roughly one year of the project had passed, and it was considered useful to review the experience with respect to the operation of the iNets as well as the cross-iNet exchange, in order to evaluate how the COP could best support both (cf. COP Task 1 (intra-iNet knowledge exchange) and COP Task 2 (cross-iNet knowledge exchange)). Consequently, this COP meeting had the following agenda items:

- mapping challenges faced by the iNets and in cross-iNet exchange;
- discussion on options to remedy the most pressing challenges and to support the intra- and inter-iNet exchange.

Relation to INCREDIBLE objectives

After the first year of operation of the iNets - with the Scoping Seminars finished and work progressing well in each iNet, it was a perfect moment to review how the COP could add most value to the iNets, from the perspective of: what can we learn from our experience of one year of iNet operation and how can the COP best support the intra-iNet exchange as well as the cross-iNet exchange?

Animation techniques

The first part of the COP meeting was organised as a session in the programme of the General Assembly meeting, as to give all participants to the General Assembly (so not only the COP members) the opportunity to participate. During that first part, a brainstorming was held with the following assignment:

- What challenges / issues do we need to address in order to establish and maintain the iNets as thriving networks?
- What challenges / issues do you see with respect to cross-iNet exchange?

After receiving the opportunity to reflect individually, participants clustered their contributions, with clusters relevant to intra-iNet and cross-iNet exchange and operations (Figure 9).



Figure 9. Participants clustering the outcome of the brainstorm session.

Subsequently, these clusters were presented and discussed in plenary (Figure 10).



Figure 10. Participants presenting the clustered outcome of the brainstorm session.

In the second part of the meeting - organised as a separate work session for the COP members - the outcome was reviewed, from the perspective of “What needs to be done to best address these challenges? What can we do to better support the iNets, the intra-iNet as well as the cross-iNet exchange?”

Outcomes

When listing the outcomes of this COP meeting, it is useful to indicate:

- Outcomes of the brainstorming session;
- Outcomes of the discussion on ways to address the challenges;
- Outcomes that have been realised after the COP meeting, but as a consequence of the COP meeting.

Outcomes of the brainstorming session

An overview of the clusters is presented in (Figure 11):

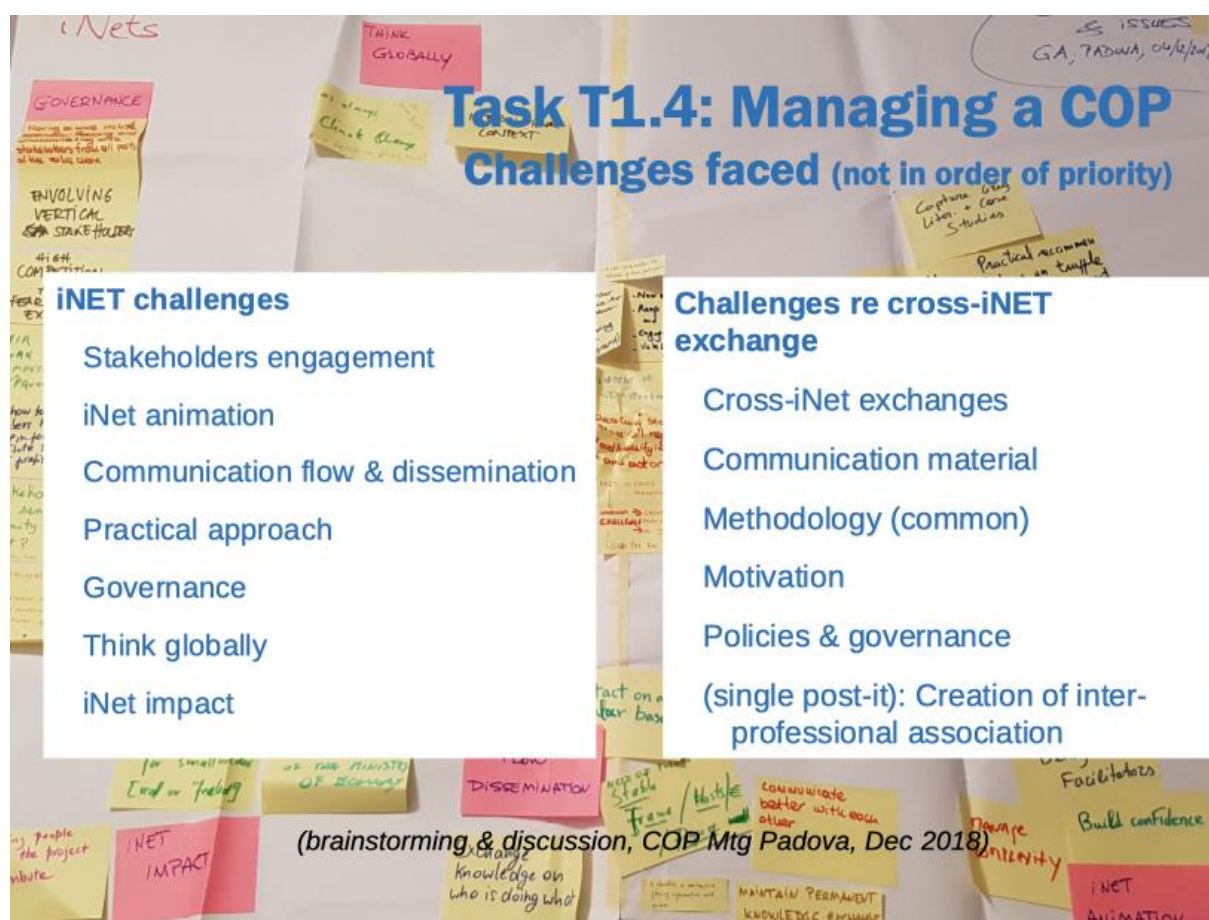


Figure 11. Outcome of the brainstorming on iNet challenges and challenges for cross-iNet exchange.

As can be seen in Figure 11, it appeared that some of the cluster titles were similar to the expectations signalled during the COP Kick-off meeting (COP Meeting #1, Barcelona, November 2017), more specifically:

- the continued need for support on matters related to stakeholder engagement as well as iNet animation;
- the need for impact (also to keep stakeholders motivated);
- the need for methodological support.

Obviously, in December 2018, the project was at a quite different stage compared to November 2017. Indeed, in each iNet, stakeholder engagement had been properly initiated:

- stakeholders had been identified, contacted;
- stakeholder data had been organised in a database;
- each iNet had completed its Scoping Seminar, for which methodological support had been provided.

The expressed need for continued support reflected that the iNets fully understood the importance of stakeholder engagement as a key factor for INCREDIBLE.

Furthermore, the brainstorming also revealed the need to improve the information flows among partners of the same iNet (intra-iNet communication) as well as the exchange between iNets (cross-iNet communication).

For more details on the clusters, we refer to the meeting reports of both the General Assembly Meeting as well as the COP Meeting #4 (Padova, December 2018).

Outcomes of the discussion on ways to address the challenges

When discussing the challenges, following options and actions were identified (Table 4):

Table 4. Challenges and options for intra- and cross-iNet knowledge exchange.

Challenge	Options
Support for intra-iNet communication and exchange	Creation of Discussion Forum as separate section on the website of INCREDIBLE Introduction of the format of “mini-COP” sessions: COP-type of session with project partners of all regions, active in the same iNet Creation of a document “iNet Status Update” (monthly basis, for each iNet, telegram style contributions)
Support to cross-iNet communication and exchange	Discussion forum (see intra-iNet) iNet Status Updates (see intra-iNet) would be shared with all iNets
Support to animation of iNets	Creation of a Toolbox for animation of iNet stakeholder events Ad-hoc support by COP leader whenever felt useful (as a sounding board, as coach or hands-on support for the design and facilitation)
Methodological support	The COP would continue to act as a platform to discuss and review concepts, frameworks needed for the project
Impact	Would receive proper attention in the project as well as from the COP

Outcomes that have been realised after the COP meeting, but as a consequence of the COP meeting

In the weeks and months after COP Meeting #4 meeting, a number of initiatives were developed and implemented, aimed at improving intra- and cross-iNet information flows and knowledge exchange. These initiatives are listed in Table 5.

Table 5. Overview of the initiatives that have been implemented to improve intra- and cross-iNet information flows and knowledge exchange.

Initiative	Actors	Outcome
Discussion forum	CESEFOR	Discussion forum was implemented and opened to all project partners
Mini-COP sessions	All iNet partners, initiative taken by COP leader	Format of on-line sessions, per iNet, bringing together all project partners active in the same iNet Welcomed by iNet partners - considered valuable to support the iNet operations
“iNet Status Update”	All iNet partners, initiative taken by COP leader	“iNet Status Updates” have been introduced in February 2019 Style deliberately chosen to reduce the required effort from iNet partners (short, bullet-style contributions)
Toolbox for organisation and animation of iNet stakeholder events	COP leader	Toolbox was written and made available by February 2019
Ad-hoc support for animation of iNets	COP leader	Support (as sounding board, coach, or hands-on process design and facilitation) was used for many of the larger stakeholder events (Interregional Workshops, Cross-cutting seminars)

Some of the mentioned outcomes:

- Impression of the Toolbox for the organisation of stakeholder events
- Snapshot of the set of iNet Status Updates
- Impression on the content, look and feel of one of the iNet Status Updates

2. 4. 5. COP Meeting #5: Round of mini-COP sessions to support iNet operations

Meeting	Date	Type of meeting	Location	Topics treated
#5	Jan.-Feb. 2019	round of mini-COP sessions (1 session per iNet)	(on-line)	Supporting the iNet operation: knowing the iNet members and their expertise discussion on iNet challenges

Setting and agenda

One of the actions agreed during the physical COP meeting held at Padova (COP Meeting #4, December 2019), was to support the exchange between project partners of the same iNet. As a COP meeting (physical or on-line) by definition convenes actors of different iNets, a new format had to be created: a COP-type session restricted to actors of the same iNet. As a consequence, instead

of one such session, there would be one for each iNet - five in total. Each time, all project partners active in that particular iNet contributed. These sessions are referred to as mini-COP sessions.

Table 6. Members of the five mini-COP.

INCREDIBLE Partner	mini-COP Resin	mini-COP Aromatic and Medicinal Plants	mini-COP Cork	mini-COP Wild Mushrooms & Truffles	mini-COP Wild Nuts and Berries
CESEFOR	Coordinator			X	X
CFRI		X		X	
CNPF	X	X	X	X	X
CTFC		X		Coordinator	
ETIFOR				X	
FoReSTAS			X		
INIA	X		X		Coordinator
INRGREF	X	Coordinator	X		X
ISA	X		X		X
UNAC			Coordinator		X
UOI		X		X	
ESSET	Facilitator	Facilitator	Facilitator	Facilitator	Facilitator

In the period of January-February 2019, the first round of such mini-COP sessions was organised, aiming to intensify the intra-iNet information flows and knowledge exchange (cf. COP Task 1: support intra-iNet knowledge exchange), by:

- ensuring that all expertise and experience present among the iNet partners could become explicit, by providing each partner the time to present him/herself;
- offering a platform to exchange experience and insights on the regional differences regarding issues for the iNet e.g., challenges faced by the partners in their interaction with local stakeholders, or the identification of areas that deserve attention across the iNet.

Relation to INCREDIBLE objectives

Providing support to the cross-regional collaboration within the iNets was considered important. Indeed, and most understandably, as each of the regional partners was absorbed by INCREDIBLE related activities in their own region (engaging with local stakeholders, initiating the tasks that had to be carried out at local level etc.), organising the cross-regional exchanges (among partners of the same iNet) was never going to be “automatic” or “easy”, especially for iNets that consisted of partners that didn't know each other from previous collaborations.

The purpose of this round of mini-COP sessions was to boost the cross-regional collaboration between partners of the same NWFP iNet. In doing so, it directly supported several INCREDIBLE work packages and tasks and fed in the larger objective of promoting exchange and learning in the iNets.

Animation techniques

This round of mini-COP sessions was organised as a series of on-line sessions held as interactive, discussions, prepared in collaboration with the iNet coordinator and moderated by the COP leader.

The idea for this first round was to provide a platform for an open discussion. At the beginning, each participant (iNet partner) could state how he/she experienced the collaboration and the challenges for the iNet in his/her region.

After this round, the discussion would move towards reviewing INCREDIBLE objectives, themes and operational aspects related to the iNet.

To a certain degree, this round of mini-COP sessions served as iNet team induction moments. Indeed, even if the project partners of the same iNet had been working together on INCREDIBLE tasks, it appeared several partners didn't really know each other.

Outcomes

As one of the outcomes of the mini-COP sessions, it was agreed to prepare a “Who's who” guide for each iNet. The main idea was on presenting not only the organisation (iNet partner) but the individual team members, with their areas of expertise and experience. In the weeks after the mini-COP sessions, all iNet partners contributed to the creation of these guides, with the COP leader coordinating the action (see Figure 12).

Furthermore, all iNet partners agreed that it would be useful to adopt the concept of the iNet Status Updates (see outcomes COP Meeting #4) as an instrument to support the communication and information flows within the iNet, even if there was no formal project deliverable associated to these documents.

Following this round of mini-COP sessions, the iNet Status Updates were implemented, with active contributions from all iNet partners.

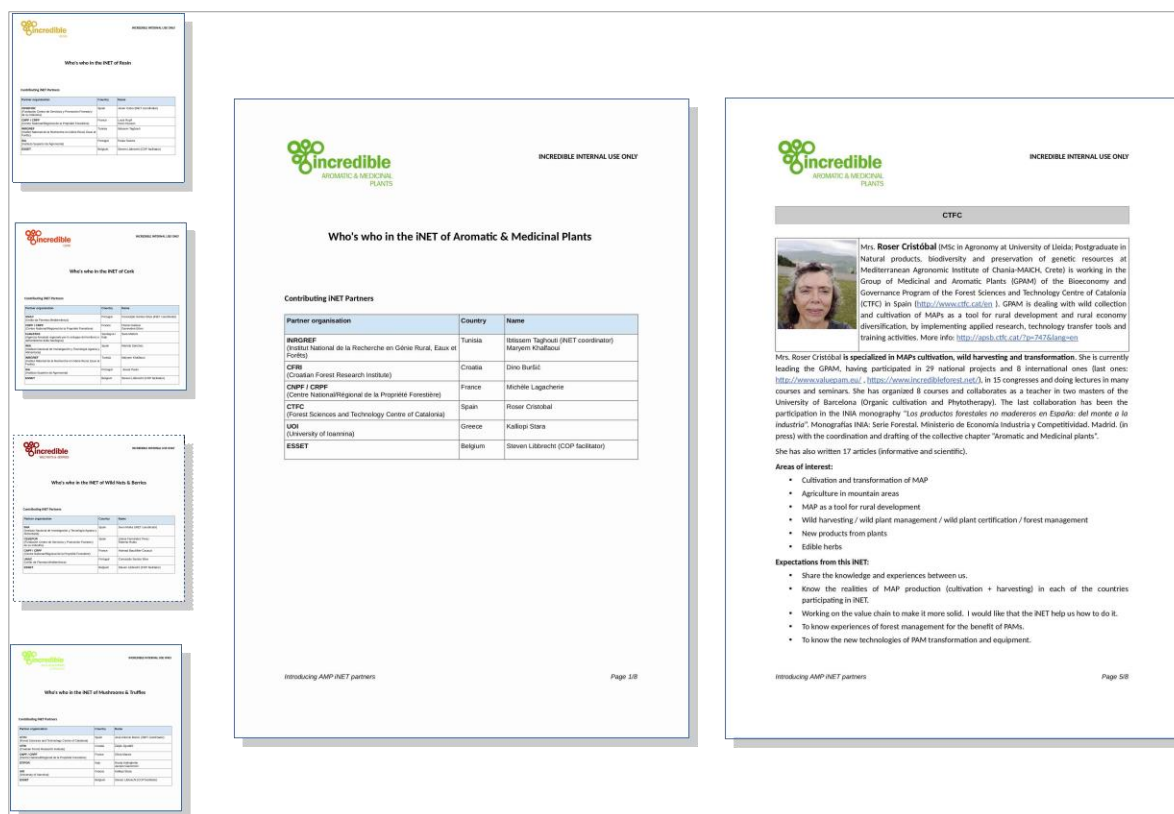


Figure 12. Extracts from the "Who's who" guides, created for all iNets.

2. 4. 6. COP Meeting #6: Generating impact

Meeting	Date	Type of meeting	Location	Topics treated
#6	17 Oct. 2019	physical COP meeting	Barcelona	Generating impact for the iNets Recommendations and lessons learnt Review and evaluation of COP tools

Setting and agenda

This COP session was organised as a physical meeting integrated in the General Assembly meeting held at Barcelona (17-18 October, 2019). The meeting was attended by the following partners: CESEFOR, CFRI, CNPF, CTFC, ETIFOR, FoReSTAS, INIA, INRGREF, ISA, UNAC, UOI, EFI, ESSET, together with members from the Advisory Board.

During this meeting, the following items were covered:

- Introduction of a framework to support the iNets in generating impact (fitting the methodological support - COP Task 3);
- Based on that framework: mapping of challenges with respect to the generation of impact (fitting the cross-iNet knowledge exchange - COP Task 2);
- Identification of lessons learnt and/or recommendations as to creating impact for the iNets

(fitting the cross-iNet knowledge exchange - COP Task 2, as well as the sounding board for innovation facilitators - COP Task 4);

- Evaluation of the tools and instruments introduced after the COP Meeting #4 (Padova, December 2018) (fitting the support to intra- and cross-iNet knowledge exchange - COP Tasks 1 and 2; also fitting methodological support - COP Task 3).

Relation to INCREDIBLE objectives

At that stage of the project - the end of the second year - it was considered valuable to review and evaluate the tools and instruments that had been introduced after the COP session of Padova (COP Meeting #4, December 2018). Furthermore, as the project entered its final year of operation, it was felt important to shift the focus on maximising impact as well as to discuss recommendations and lessons learnt.

Animation's techniques

As it was a physical meeting, this COP session was held in workshop style, with essentially two main parts: one focussing on impact generation, the other on evaluating the instruments and tools aimed at supporting the iNets, introduced at the beginning of 2019.

In the first part, a presentation was given by the COP leader, in order to introduce some concepts on the stages in the process of successfully bringing innovation to the market.

Subsequently, a brainstorming was held to identify challenges related to creating impact through innovation. In order to structure that session, the framework presented in Figure 13 was introduced. It highlights main stages, from: understanding the innovation need (as part of the process of finding the right innovation), to: achieving a successful uptake of the innovation.

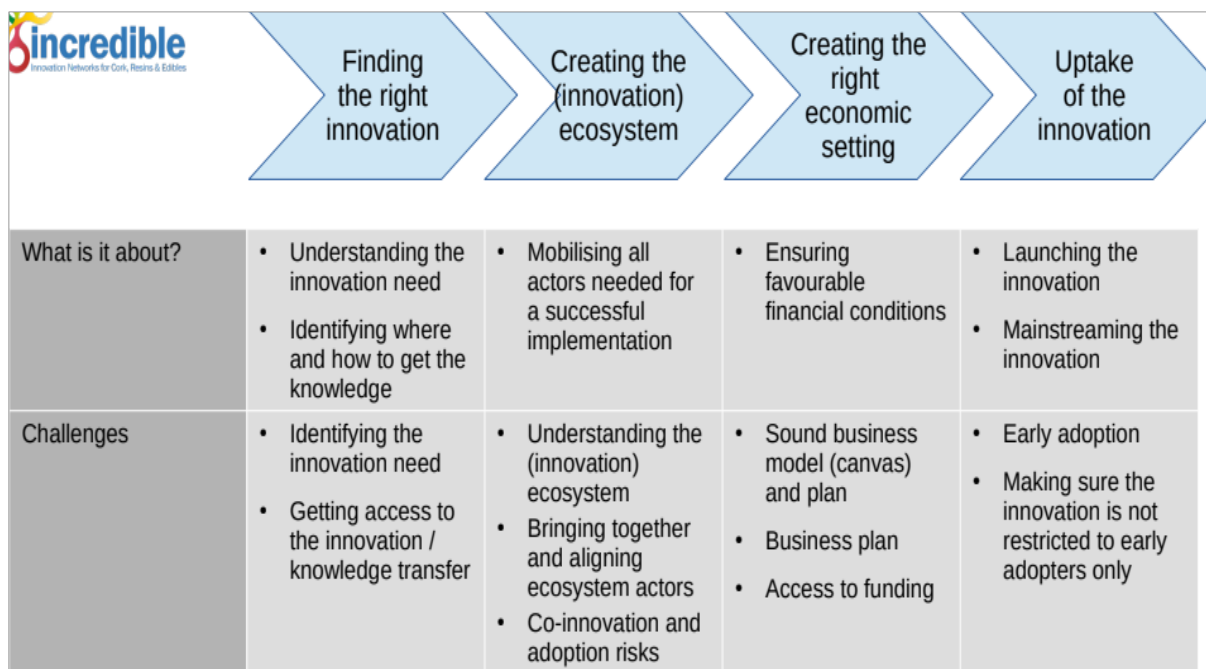


Figure 13. The framework used for the brainstorming on stages in successfully innovating in NWFP.

The subsequent brainstorming centred around collecting examples of barriers for the NWFP sector in each of the stages. Participants were encouraged to mention specific cases.

In the next step of that session, participants were invited - in smaller groups - to reflect on and explore recommendations and lessons learnt, based on their experience in NWFP. In Figure 14, an impression is given of the setting and the type of outcomes that have been created.



Figure 14. An impression on the workshop setting and the types of outcomes.

In the second part of the COP session, the discussion focussed on the evaluation of the instruments and tools that had been introduced after COP Meeting #4. To this extent, the tools were reviewed and mapped on two axes: added value (usefulness) and adoption (attractiveness).

Outcomes

Based on the outcome of the discussions, following recommendations and lessons learnt for each of the four phases can be formulated:

Phase1: Finding the right innovation

In essence, this phase refers to the “match” that needs to be found between:

- the needs in the “target setting”, i.e. the region to which the innovation is going to be transferred and/or in which it is going to be implemented or launched;
- and the knowledge or innovation being available in the “source setting”.

This matching process requires that the innovation needs (in the target setting) become explicit and that there is a way to find settings where suitable knowledge or experience is available.

Some lessons learnt and recommendations:

- INCREDIBLE has shown that interactions between different NWFP chains matter: several NWFP products suffer similar or common problems, so common research is possible;
- Within NWFP sectors, the challenges are known, but finding (suitable) innovation requires the participation of many and different actors (not necessarily from NWFP).

Phase 2: Creating the innovation ecosystem

This phase refers to the need to grow, in the target setting for the innovation, a network of actors that together created the favourable conditions for the innovation to become viable.

Some lessons learnt and recommendations:

- Taking initiatives to enhance market transparency, such as traceability tools, might be beneficial to the NWFP sector, but not all actors are in favour of it;
- Communication is important to create favourable conditions (involving NWFP actors but also targeting end consumer in order to increase awareness);
- Associations are important players in such ecosystems. In some countries they are lacking; in some cases, their focus is on other matters. An interprofessional and interregional approach might be of interest;
- Attention needs to be paid to the equity of the ecosystem. At present, there is a disbalance between small and big players;
- The perceived added value of NWFP is an important point of attention.

Phase 3: Creating the right economic setting

This phase refers to the need to create viable economic conditions in the target setting: securing (long term) funding, sound business models, economic returns, taxation levels, etc.

Some lessons learnt and recommendations: creating the right economic setting requires paying attention to the following aspects:

- Quality standards;
- Legal framework;
- Self-organisation / Empowerment;
- Market access / Segments;
- Lobby / Targeted communication;
- Innovation system sustained by economic returns (of innovation).

Phase 4: Launch and uptake of the innovation

Implementing an innovation is not enough. In order to be successful, the innovation needs to become more widely adopted. Phase 4 refers to this uptake and mainstreaming.

Some lessons learnt and recommendations:

- Broad adoption of an innovation such as a pan-Mediterranean quality system for cork will take time and sustained efforts;
- Data collection as a challenge for the implementation of a market data observatory for NWFP;

- Resilience against innovation is also related to the fact that (some) forest owners don't work full-time;
- Successful marketing of NWFP (e.g., as delicacy and local product) is key;
- Actors contributing to e.g., a traceability system for NWFP need to see and experience a direct benefit.

As to the evaluation of the tools and instruments introduced after COP Meeting #4, the outcome of the mapping exercise is presented in Figure 15:

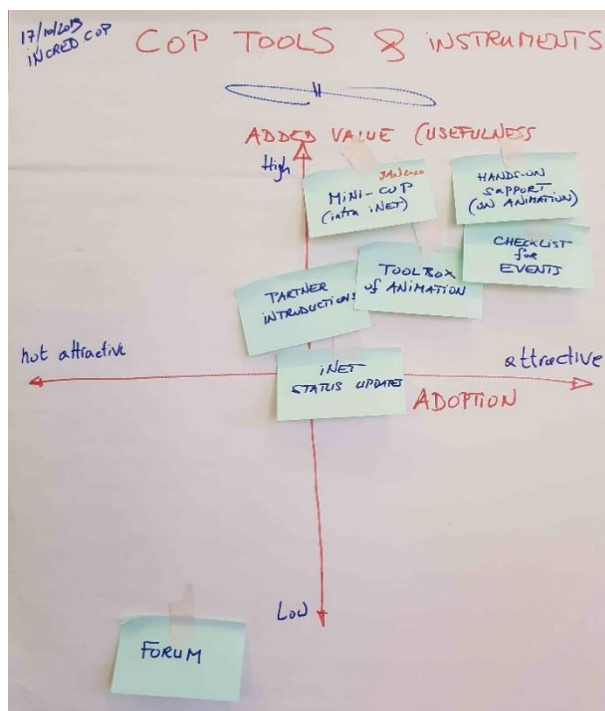


Figure 15. The outcome of the evaluation of tools and instruments introduced to support the iNets.

The main conclusions from the discussions are:

- Most of the tools introduced had proven to be useful and attractive, even though the format had to evolve. By way of example: based on reflections and feedback, the monthly iNet Status Updates had undergone the following changes:
 - focussing on contributions from each iNet region (country) rather than from each iNet partner (especially as some regions had several partners);
 - keeping the focus of the iNet Status Update in line with the main points of attention for a given stage of the INCREDIBLE project. More specifically: as the project was gradually evolving to its final stages, the focus on the Status Updates changed to communicating on status of deliverables, other outcomes and impacts;
 - shift the periodicity of the iNet Status Updates from monthly to quarterly (in order to respect the already challenging workload of the iNet partners).
- One tool scored rather poorly (low on added value, low on adoption): the discussion forum for iNet partners. This forum had been developed on specific demand (expressed and discussed

at the COP Meeting #4 held at Padova (December 2018), and was created as a separated section of the website of INCREDIBLE. However, although project partners were alerted on the existence of the tool and some attempts were made to initiate discussions, the tool was never really adopted. The reasons for this failure: it was felt that one more communication channel to check, to feed, to respond had proved not to be a good idea.

2. 4. 7. COP Meeting #7: On-line tools for stakeholder event

Meeting	Date	Type of meeting	Location	Topics treated
#7	03 April 2020	on-line COP session	(on-line)	Discussion on potential use of on-line tools for iNet stakeholder events

Setting and agenda

In March 2020, it was clear that the coronavirus crisis would have a significant impact on the organisation of stakeholder events such as: cross-cutting seminar, interregional workshop, science-to-practice events. As it was becoming clear that these meetings would not be simply delayed by a couple of weeks, it was considered important for INCREDIBLE⁴ to have a major review of the overall project planning, as well as to explore alternative ways to organise stakeholder events. Therefore, it was decided to hold a COP session, focussing on reviewing and discussing on-line tools and platforms that could be used as alternatives to physical stakeholder meetings and events. This COP session was organised as an on-line session on April 3rd, 2020 and was attended by the following partners: CESEFOR, CFRI, CNPF, CTFC, ETIFOR, INIA, INRGREF, ISA, UNAC, EFI, ESSET.

The session aimed at presenting suitable on-line tools with recommendations on how to use them (fitting methodological support - COP Task 3), at organising a discussion to exchange experience of COP members with the use of on-line tools (knowledge exchange - COP Task 2) as well as at reflecting with the COP members on the potential use in INCREDIBLE (sounding board - COP Task 4).

The COP meeting consisted of the following parts:

- presentation of a number of on-line tools for stakeholder participation;
- exchange of experiences in the use of such tools, including best practices, guidelines etc.
- discussion on the potential use in INCREDIBLE.

Relation to INCREDIBLE objectives

By the time of the COP meeting, there were still several stakeholder events to be organised: cross-cutting seminar, interregional workshop, science-to-practice events. All of these were intrinsic parts of INCREDIBLE tasks and objectives. Therefore, discussing alternative ways to organise these

4 cf. INCREDIBLE Project Management Team Meeting (PMT), held on March 24th, 2020.

events and/or reflecting on contingency plans in order to best respond to the particular circumstances (lockdown) can only be considered an essential action.

Animation techniques

In the weeks prior to the session, the COP leader had contacted various project partners and other parties to collect relevant insights and experiences regarding the use of on-line platforms for participatory approaches: type of platforms and instruments, features they offer, insights based on experiences, as well as guidelines. Subsequently, this information was structured using a framework listing different meeting types for different purposes, and prepared as a presentation (see Figure 16).

Why do you want to bring people together? <i>Meeting purpose</i>		
MAIN PURPOSE	WHAT NEEDS TO HAPPEN? (PROCESS)	EXAMPLES
Information sharing	Transfer of information (mainly unidirectional communication)	<ul style="list-style-type: none"> • On-line training, e-learning • Webinar
Discussing	Debate, exchange of opinions or positions (bi / multidirectional communication process)	<ul style="list-style-type: none"> • INCREDIBLE PMT Meetings • Extraordinary GA Mtg • Mini-COP sessions
Exploring a topic	Divergence (brainstorming process, growing shared insights: collecting arguments & ideas opening up perspectives, deepening a subject)	<ul style="list-style-type: none"> • Simple: on-line polling, collecting arguments • Complex: on-line brainstorming or workshops
Decision making	Convergence (clustering, decision process: making sense, evaluate, prioritize, coming to a conclusion)	<ul style="list-style-type: none"> • Simple: on-line voting • Complex: on-line brainstorming or workshops

Figure 16. Framework to categorise different meeting types according to purpose.

This presentation was shown at the beginning of the COP meeting and used to kickstart an exchange with the COP members to collect and compare additional insights or experience, as well as to evaluate the usefulness for such instruments for INCREDIBLE stakeholder events such as the Science-to-Practice events.

Outcomes

After the session, the presentation was further completed and shared among the COP members, and distributed to all iNet partners of all five iNets. This presentation also served as the report of the COP session. The following graphs (Figure 17 and Figure 18) show some sections of the presentation.

Examples of on-line platforms and tools

Please note

- The landscape of existing tools changes continuously
- The functionality offered by the tools evolves continuously

FUNCTIONALITY	TOOL	NOTES
On-line training, e-learning	Moodle	Applied by many universities e.g. University of Padova
	H5P	Free tool for e-learning courses (not for real-time interaction)
	Zoom	Used by ISA for on-line training, there have been concerns on security
Discussion platforms	Skype	Suitable for smaller groups
	MS Teams	Better stability than Skype4Business
	Zoom	Suitable for larger audiences, plenary and subgroup sessions possible
	Webex	Suitable for larger conferences

Figure 17. Some examples of on-line platforms and tools, categorised by functionality.

Examples of on-line platforms and tools

FUNCTIONALITY	TOOL	NOTES
Voting and polling	General remarks	1. These tools require preparation + active coaching and facilitation 2. Easy reporting of the outcomes
	Poll Everywhere	Simple polling, voting tool (word clouds possible)
	Mentimeter	Offers more functionality than Poll Everywhere
	Wooclap	Even more functionality than Mentimeter
	Slido	
	Kahoot!	Simple tool, originally aimed for quizzing purposes, can be used for polling
Virtual workshops	General remarks	1. High level of preparation + very active coaching and facilitation required 2. Process can continue after the on-line meeting (asynchronous brainstorming) 3. Easy reporting of the outcomes
	MeetingSphere	Shared workspace for collecting and sharing contributions
	HOTSWOT	Similar to MeetingSphere, more limited functionality
	Miro	
	Mural	Graphically more "advanced" and rich shared workspace (canvas) with virtual post-its, polling, commenting
	Stormboard	

Figure 18. Some examples of on-line platforms and tools, categorised by functionality.

The report also covers:

- suggestions on setting up an on-line meeting;
- suggestions on facilitation of on-line meetings;
- examples of practical guidelines.

2. 4. 8. COP Meeting #8: Round of mini-COP sessions to support iNet operations

Setting and agenda

As the coronavirus crisis generated a lot of uncertainty with respect to the planning and the ability to make progress in all iNets, during the Project Management Team meeting of 24 March 2020, it was decided to organise a round of mini-COP sessions (one Skype session per iNet) to have an exchange with iNet partners on the project status at the local /regional level with a particular focus on (potential) impacts caused by the COVID-19 lockdown, related to:

- the further creation of the fact sheets (cf. work package WP2 Sharing knowledge, spreading innovation, Task 2.1 Collection of knowledge from research and practice);
- the flagship initiatives i.e., initiatives that had been selected in each iNet, to focus resources on achieving impact;
- the organisation of Science-to-Practice events (cf. Work Package 2) knowing that alternatives to a physical meeting (notably the use of on-line platforms) might not always constitute a feasible solution for the target audience and/or the topic at hand;
- the organisation of the Knowledge Contest (cf. WP2 Sharing knowledge, spreading innovation).

As the sessions predominantly focussed on the intra-iNet challenges, the exchanges among partners fitted the of intra-iNet knowledge exchange (COP Task 1), although some learning points from other iNets (on the fact sheets, the flagship initiatives, the organisation of Science-to-Practice events) were discussed (cross-iNet knowledge exchange - COP Task 2).

This round of mini-COP sessions was held in the first two weeks of April 2020.

Relation to INCREDIBLE objectives

All topics discussed are directly related to achieving INCREDIBLE tasks, with the exception of the iNet flagship initiatives. Indeed, there is no INCREDIBLE deliverable entitled “flagship initiatives”. On the other hand, as they are closely related to maximising project impact and making a difference for the iNet stakeholders, they are treated as important though informal targets.

Animation techniques

As for the other on-line COP meetings, this session was approached as an interactive but structured and moderated discussion. For this particular session, the approach adopted was:

- regarding the discussion on fact sheets: the discussion aimed not only at a review of the status and progress of the fact sheet production, but also at offering a platform to match “knowledge on offer” by iNet partners with “knowledge in demand” for other iNet partners. This way, interesting topics for remaining fact sheets could be identified;
- regarding the discussion on the flagship initiatives: here, the discussion centred around

reviewing the scope and agreeing on the next steps;

- the other agenda items (science-to-practice events, knowledge contest) were treated in an open discussion not dissimilar to a regular meeting.

Outcomes

After each of the sessions, minutes with the agreements were prepared and shared with the iNet members.

3. Lessons learnt and recommendations

3.1. Introduction

The INCREDIBLE thematic network aimed at supporting innovation in NWFP by establishing and animating 5 innovation networks (iNets), each focusing on one particular type of NWFP. At the same time, INCREDIBLE has been a learning opportunity with respect to facilitating innovation in NWFP. During the project, several lessons have been learnt, on the basis of which some recommendations can be formulated.

These recommendations are grouped according to the following perspectives:

- the internal perspective: focussing on the team that creates and operates the network;
- the external perspective: focussing on engaging stakeholders of the thematic network;
- the innovation perspective, which is about the purpose and short to midterm goals of the thematic network;
- the sustainability perspective, which is about the longer-term goals of the network.

The structure of this chapter reflects these perspectives, with sections being:

1. Creation and operation of thematic networks
2. Engaging stakeholders in thematic networks
3. Innovating in thematic networks
4. Sustainability of thematic networks

In each of these sections, a substructure is created by focussing on different aspects of the perspective. Each time, a series of lessons learnt and recommendations is listed, with indication of:

- the stage of the thematic network at which the recommendation applies (if applicable). For the stages, reference is made to the framework used in EURAKNOS's "Thematic Network Explorer's Guide"⁵: conceptualisation, initialisation, execution, post-execution; the project partner that might benefit from applying the recommendation.

3.2. Creation and operation of thematic networks

Creating and operating a thematic network requires a considerable effort from a dedicated, engaged and experienced group of people. In INCREDIBLE, these were the five teams that each consisted of consortium partners that were responsible for one innovation network (iNet) on one particular NWFP.

Some recommendations with respect to the creation and operation of thematic networks:

5 EURAKNOS (<https://www.euraknos.eu/>). The framework is explained in "The Thematic Network Explorer's Guide - How to design and implement Thematic Networks to maximise en-user engagement and impact".

1	Creation and operation of thematic networks
1.1	Team composition
	1.1 For future thematic networks, make sure to include expert partners on innovation and on stakeholder engagement (in addition to the scientific, technical, communication, project management experts).
	1.2 Include a Community of Practice (or similar) in the design of future thematic networks, and position it as vehicle to support the multi-actor approach (both intra-project as well as with stakeholders).
1.2	Team induction
	1.3 For future thematic networks, organise a team induction moment (for all groups that will have to work as a team) at the start of the project.
	1.4 Ensure that people that have not attended the team induction meeting at the start of the thematic network (such as newcomers), receive a proper induction
1.3	Team dynamics
	1.5 Include, in future thematic networks, a structure that offers support for participatory approaches applied to project or network partners.
1.4	Internal communication
	1.6 Invest in internal communication to stimulate knowledge flows. Remain flexible, keep it simple and adjust the format when needed.
1.5	Tools to support the network operations
	1.7 At each stage of the project, look for tools that address the needs of the team at that specific stage.

3. 2. 1. Team composition

As the thematic networks will be initiated and operated by a team, it is important to have the right group of people in that team. Some considerations with respect to the composition of the team:

In first instance, the composition of the team needs to cover the expertise needed to operate a thematic network. This refers to the scientific and technical expertise as required for the project, including in-depth knowledge on the sector at hand. Other important areas of expertise include: innovation, communication, stakeholder engagement, participatory process design and facilitation, project management.

Apart from this, the team composition should also be checked regarding other characteristics such as:

- Proximity of the project partners with stakeholders: make sure the team includes a partner for each geographic area covered by the thematic network (at country level in the case of INCREDIBLE), as these will likely become the local contact points for the stakeholders in that area;
- Acceptance to stakeholders: each local contact point (project partners representing a particular geographic area for the thematic network) need to be a party that is considered knowledgeable and trusted by the stakeholders in that area. Examples include sector organisations (as they are known and trusted by the sector), or research centres (that offer expertise based on science);
- Team size: for larger teams, it is easier cover more areas of expertise, more regions and in

general fulfill more criteria. Smaller teams, on the other hand, are more agile (shorter decision lines, easier communication, etc.). A careful balance needs to be found.

Most of these criteria apply to the level of an organisation (a project partner). In addition, it might also be useful to consider the composition of the team at the level of the individuals, regarding e.g.:

- gender balance;
- language capacity which is especially important for thematic networks that operate across borders;
- or team member profiles from a point of view of team roles and team dynamics. All roles are important and ideally a well-balanced team covers several roles. Belbin' team roles for high performing teams might offer a relevant framework⁶.

The choice of the team members according to their roles and profiles should ideally be done at the conceptualisation stage of the thematic network. However, in reality, it is not always possible to consider team roles and profiles. Furthermore, it is not unusual that the team composition changes over the course of a project: people change positions, leave organisations, retire, etc.

In INCREDIBLE, the iNet partners indeed each represented a geographic area in which the iNet would be active. Their profiles (forest research institutes, universities, sector organisations, innovation experts, business accelerator, stakeholder engagement expert) and location ensured that they were perceived as competent actors, accepted by the local stakeholders.

Lessons learnt

- As INCREDIBLE operated five iNets in parallel, it means that in reality five groups of partners each had to work as a team in order to run their respective iNets. This complicated project management (many meetings - sometimes only involving all partners from one iNet, sometimes involving only iNet coordinators, sometimes with all project partners) as well as governance (not all project partners were part of the project management team meetings). Furthermore, in addition to the project team, five separate iNet teams had to be started up, develop the constructive team dynamics that would allow them to operate effectively. At the beginning of the project, the challenges associated to the organisation of work in this complex setting were probably not well enough understood;
- Having partners that are experts in innovation (consultants, business accelerator) has been a must. The INCREDIBLE consortium included partners ETIFOR (I) and ESSET (B) - both SMEs and practitioners with a track record in the hands-on support of innovation processes. The presence of partners with that profile was necessary to achieve the ambitions of the project in terms of innovation, e.g. the organisation of the Acceleration Service (by ETIFOR, with its experience a.o. in ECOSTAR) to boost the business ideas of the winners of the Open Innovation Challenge (also led by ETIFOR);
- Having a partner that is an expert in stakeholder engagement and facilitation (ESSET), was equally important. Especially in the complex setting depicted above, it quickly appeared that a

6 R. Meredith Belbin, "Team Roles at Work", Routledge, 2010.

partner offering facilitation skills, was not only helpful in the implementation of the stakeholder engagement processes, but also valuable to support (internal) project and team operations;

- While it would obviously have been an attractive situation if each iNet team would have had expertise on stakeholder engagement and facilitation, INCREDIBLE has shown that the use of the COP as a project structure, to support the intra- en cross-iNet exchange, is a workable and good option (the COP leader being ESSET).

Recommendations

Recommendation 1.1

For future thematic networks, make sure to include expert partners on innovation and on stakeholder engagement (in addition to the scientific, technical, communication, project management experts).

For who

Project coordinator

Relevant stage

Conceptualisation

Recommendation 1.2

Include a Community of Practice (or similar) in the design of future thematic networks, and position it as vehicle to support the multi-actor approach (both intra-project as well as with stakeholders).

For who

Project coordinator

Relevant stage

Conceptualisation

3. 2. 2. Team induction

It is straightforward to get a good idea of the areas of expertise of an organisation - a simple check of the website usually reveals the information. However, individuals don't necessarily cover all or the same areas of expertise of the organisation they work for. It is therefore important that each of the participating individuals gets an opportunity to introduce themselves, to indicate specific competences that they have and share their expectations with the other team members. The most obvious time to do so would be at the start of the thematic network, typically during the kick-off meeting. In reality, however, partner organisations will send only a limited number of staff members to the project kick-off meeting. As a consequence, not all team members will have had the opportunity to become properly introduced (preferably in-person). Blended on-line / physical meetings might offer a solution.

In addition, as time passes, people might change jobs, retire, or (temporarily) withdraw from the project. So new individuals join the team, sometimes without having the opportunity to become familiar with the other team members, that are (likely) based in other countries.

It was not obvious for INCREDIBLE to create sufficient time for the five networks to have their own team induction session during the kick-off meeting of the project. Indeed, and as can be expected, the project kick-off meeting was already fully packed with a long list of project related discussions needed to initiate the project (introduction of the consortium member organisations, the structure of the project, the decision bodies, advisory board, work packages and tasks, communication etc.).

Therefore, later on in the project, a proper iNet team induction moment was organised, as an on-line meeting, early in the second year of the project. In addition, in collaboration with all iNet team members, a "who's who" guide was prepared for each of the iNets. In this guide, all members of an

iNet team introduced themselves as well as their organisation. All iNet guides were made available to all INCREDIBLE consortium partners.

Lessons learnt

In hindsight, it would have been better to organise a proper team induction moment at the level of each iNet, at the start of INCREDIBLE. Not doing so has slowed down the interactions among iNet partners, at the early stage of the project.

Also, new arrivals in the project team would have benefitted from an induction moment to bring them up to speed.

Recommendations

Recommendation 1.3	
For future thematic networks, organise a team induction moment (for all groups that will have to work as a team) at the start of the project.	
For who	Relevant stage
Project coordinator COP leader / stakeholder engagement expert	Conceptualisation (Project coordinator) Initialisation

Recommendation 1.4	
Ensure that people that have not attended the team induction meeting at the start of the thematic network (such as newcomers), receive a proper induction	
For who	Relevant stage
Project coordinator COP leader / stakeholder engagement expert	Execution

3. 2. 3. Team dynamics

In order to create a high-performing team, it isn't sufficient to simply bring a number of people together. In fact, it is known that in order for a team to grow, to face up to challenges, tackle problems and resolve conflicts together and to deliver results, the team has to go through several stages of group development, referred to as: forming-storming-norming-performing⁷.

The same applies to the team that runs a thematic network. Some of the team members might have known each other for years; for others the collaboration is new.

When the thematic network is initiated as a project (as is the case for EC funded thematic networks), the description of the tasks and work packages that the team members need to successfully complete, is a welcome guide to direct the team efforts and activities.

⁷ The forming–storming–norming–performing model of group development was first proposed by Bruce Tuckman in 1965: Tuckman, Bruce (1965). "Developmental sequence in small groups". Psychological Bulletin. 63 (6): 384–99. doi:10.1037/h0022100. PMID 14314073.

However, even when the work is cut out in clear and detailed plans or roadmaps, it will require some time before a team develops the dynamics of an ambitious and high-performing team, steadily working towards the objectives. Only high-performing teams can deliver ambitious objectives, which is the case for teams working on innovation.

In INCREDIBLE, during the COP meeting of the first General Assembly (14 months after the start of the project), a higher level of support was asked to support the intra-iNet communication and operation.

For this reason, the concept of mini-COP was created: a platform, facilitated by the COP leader, in which all partners of a particular iNet would meet and discuss challenges and agree on the best course of action for that particular iNet (in contrast to the COP which was designed as a platform for cross-iNet collaboration and exchange, with a different composition).

Whereas the iNet coordinators would focus on the formal coordination of the iNets, the mini-COPs would focus on information exchange, on decision processes, on team dynamics.

At key points in the planning of the project, a round of mini-COP sessions (one per iNet) was organised and moderated by the COP leader, to support the team dynamics. This helped the iNets to develop and keep momentum, to work towards the completion of the formal deliverables, to state and make progress towards ambitious goals (such as the Flagship Initiatives - see also 3.3 Innovating in thematic networks).

Lessons learnt

The lesson learnt is that it was valuable to create an additional, informal structure (the mini-COP) at the level of the iNet, in order to support the team dynamics and team processes (exploring options, decision making). It should be noted that all iNet partners actively contributed to the mini-COP sessions, even if these were no formal project deliverables nor governance structures listed in the Description of Action.

In fact, this mini-COP was a means to apply participatory approaches to iNet partners.

Recommendations

Recommendation 1.5	
Include, in future thematic networks, a structure that offers support for participatory approaches applied to project or network partners.	
For who	Relevant stage
Project coordinator	Conceptualisation (Project coordinator)

3. 2. 4. Internal communication

Members of a team that runs a thematic network are part of different organisations based in different locations (often different countries). Because of the physical distance, they can easily become disconnected from the other team members. Furthermore, they most likely spend a portion of their time on other assignments, which also increases the risk for disconnects within the team. Internal communication is a means to keep the team members informed, to stimulate the interactions and contribute to positive team dynamics.

In INCREDIBLE, a number of communication initiatives had been developed as part of Work Package Communication, Awareness and Impact. Many of these served both external as well as internal communication (e.g. website, newsletters). Notwithstanding these efforts, during the COP meeting of the first General Assembly (14 months after the start of the project), it was felt that the iNets would benefit from improved intra-iNet as well as inter-iNet exchange of information. The feeling was that additional communication instruments, tailored to the needs of the iNets were needed. To this extent, two initiatives were taken:

- the introduction of a discussion forum;
- the introduction of monthly iNet Status Updates.

The **Discussion Forum** was created by project partner responsible for the project website, who integrated the forum functionality as a separate section of the website of the project (<https://incredibleforest.net/user>), in the second year of the project. Though the forum was created on explicit request of iNet partners, in practice it has never really been adopted. After reviewing and discussing this situation with iNet partners as well as during the COP Meeting at the end of the second project year, it appeared that the main reason for this low adoption rate had to do with a lack of time and lack of enthusiasm to add (yet) another communication channel to the existing range of communication channels (mail, Skype, SharePoint...).

The **iNet Status Updates** were introduced as a communication format in which each iNet partner would communicate, by the end of a month, some highlights of the past month as well as upcoming events or planned activities. The main objective was to create a format in which partners could share with other iNet partners whatever they believed would be interesting to be shared (so no formal reporting on resource consumption and formal task progress). The style was deliberately chosen as short, bulleted-style in order to reduce (to the best extent possible) the time required for iNet partners to contribute. Apart from reinforcing the intra-iNet communication, the Status Updates also contributed to improve the inter-iNet communication, as all Status Updates from all iNets were made available to all iNet partners (of all 5 iNets). It should be noted that all iNet partners actively contributed to the Status Updates, even if these were no formal project deliverables listed in the Description of Action.

During the project, the format of the Status Updates evolved in order to better address the needs of the partners:

Content wise:

- the attention shifted towards reporting contributions from iNet regions rather than contributions from all iNet partners (this was important as some iNets had multiple partners coming from the same geographic region - their contributions would be blended in one regional update);
- toward the later stages of the project, the attention shifted towards reporting on outcomes and impacts (e.g., deliverables such as Fact Sheets, but also publications, Flagship Initiatives);

Time wise:

- after the initial monthly releases, the frequency of appearance was slowed down to a quarterly release, in order to better match the work load of iNet partners.

Lessons learnt

People might want more and better tailored communication tools, but the experience shows that it is not obvious to keep up with the seemingly continuous increase of number of apps, platforms, forums etc. There is an argument to be made in favour of simple communication channels and tools.

Furthermore, some communication channels or formats might be well adopted by one team but prove unattractive to and remain non-adopted by another team.

Even when a format is adopted, it might need to be adjusted during the project, to respond to changing needs.

Recommendations

Recommendation 1.6	
Invest in internal communication to stimulate knowledge flows. Remain flexible, keep it simple and adjust the format when needed.	
For who	Relevant stage
All partners Communications expert	All stages

3. 2. 5. Tools to support the networks operations

During the INCREDIBLE project, several instruments were explored, discussed in the iNets and implemented, to support the iNet operations:

- Tools for stakeholder contact management;
- A toolbox for the organisation of stakeholder events;
- The concept of mini-COP sessions;
- “Who’s who” guides for each iNet;
- Tools for internal communication (discussion forum and status updates - see 1.4);
- An overview of tools to organise on-line stakeholder events.

Each of these instruments had been introduced in response to a need that had been expressed or felt. Some of them prove successful, others less so. Some were useful only at one stage of the project (e.g., the “who’s who” guides) while other were actively used over a larger period of time (e.g., iNet Status Updates).

The lesson learnt is that there is no clear recipe or definite list of tools that will solve all issues. Furthermore, what works for one team at one stage can be ineffective for other teams or at other stages. Instead, it is needed to flexibly respond to needs as they are expressed.

Recommendations

Recommendation 1.7
At each stage of the project, look for tools that address the needs of the team at that specific stage.

For who	Relevant stage
All partners COP leader	All stages

3.3. Engaging stakeholders in thematic networks

EIP's website states: "thematic networks are multi-actor projects which collect existing knowledge and best practices on a given theme to make it available in easily understandable formats for end users such as farmers, foresters, advisers and others".⁸

In view of their multi-actor approach, stakeholder engagement is a core aspect of thematic networks. This was also the case for INCREDIBLE.

The list of recommendations:

2	Engaging stakeholders in thematic networks
2.1	Stakeholder identification
	2.1 Use a framework such as a value chain map to identify stakeholder categories that are specific to the thematic network, in addition to the generic stakeholder categories.
	2.2 Refine and validate the stakeholder categories e.g. during a stakeholder workshop.
	2.3 Along the project, revise and refine the stakeholder categories, as additional stakeholder groups will be identified.
2.2	Local contact points for the stakeholders
	2.4 Make the development of the stakeholder network a priority right from the start of the thematic network, and provide proper methodological support.
2.3	Stakeholder data management
	2.5 Make a basic decision on how to organise stakeholder data, at the start of the thematic network.
	2.6 Adopt a 100% digital approach to organising the stakeholder consent forms (paperless, included in the digital registration form, centralised to ease reporting and auditing).
	2.7 Explain at the beginning of each stakeholder event, what approach is used, by the thematic network, to comply with GDPR. Also explain the options stakeholders have.
2.4	Planning of stakeholder events
	2.8 Respect the seasonality of agriculture and forest related products when planning stakeholder events.
2.5	An integrated approach to stakeholder engagement
	2.9 In future thematic networks, include a flexible structure such as the COP as a coordination and support mechanism on matters related to stakeholder engagement, and the design and facilitation of participatory approaches.
	2.10 For future thematic networks, organise, at the beginning of the project, a multiple-day intensive course to train project partners (especially those involved in event organisation, but open to all) on facilitation skills and animation techniques.
2.6	Purposeful stakeholder events

⁸ <https://ec.europa.eu/eip/agriculture/en/about/thematic-networks-%E2%80%93-closing-research-and>

	2.11 Prepare stakeholder events as a joint effort from the scientific experts and the stakeholder engagement experts, right from the start of the preparations.
	2.12 Make sure each stakeholder event has a clear purpose that contributes to the objectives of the thematic network.
	2.13 Conduct an evaluation at the end of each stakeholder event, in which participants / stakeholders are asked to evaluate the event on its usefulness, relevance, content as well as the process.
	2.14 Use stakeholder events for communication purposes: invite stakeholders to contribute e.g., through video testimonials.
2.7	Physical stakeholder events vs on-line events
	2.15 Make use of suitable combinations of on-line tools for meetings and stakeholder engagement activities, but only for settings (purposes, target audiences) for which these tools can be effective.

3. 3. 1. Stakeholders' identification

For any network, thematic or other, it is of strategic importance to know who the stakeholders are. Stakeholders of a network can be identified as: “any group or individual who is affected by or can affect the achievement of the network’s objectives.” Prior to listing individuals as stakeholders, larger categories of stakeholders have to be identified. These can be found by considering generic categories of stakeholders such as:

- education and academia
- research centres
- media
- civil society
- business actors
- administrations / authorities
- policy makers
- youth;

and linking these to:

- the sector or subsector that is the main focus of the network;
- the objectives of the network.

For INCREDIBLE, for each iNet, the value chain map of the respective NWFP (sub)sector was taken as the reference framework for the identification of stakeholders. Stakeholder categories were identified by analysing each section of the value chain.

In fact, rather than the purely linear value chain, a slightly broader concept was applied (similar to a value blueprint, (including side branches of the value chain, as well as other actors not strictly connected to the value chain but of strategic importance e.g., to create favourable conditions for the value chain).

On the basis of this initial map and its resulting stakeholder categories, participants (representing these categories) were invited to the Scoping Seminars. During these Scoping Seminars, participants discussed and validated the value chain maps and identified additional stakeholder categories. This way, both the value chain as well as the identification of stakeholders went through an iterative process of identification and refinement.

As the project continued and the challenges and objectives became more specific, yet additional stakeholder groups could be identified.

Lessons learnt

The use of value chain maps per NWPF (sub)sector as a framework to identify stakeholder categories (on top of the generic categories) worked well. The upfront creation of the maps by the iNets was an exercise that proved more challenging than expected as such maps were not readily available (for all NWFP types).

For reasons of cross-iNet coherence, a shared approach and lay-out had to be agreed upon, which required some iterations.

Having the stakeholders analysing, completing and refining the value chain maps yielded valuable insights: refinements to the maps were made e.g., additional steps, or variations on the maps for specific NWFP applications / end users, or variations for regional differences.

Recommendations

Recommendation 2.1	
Use a framework such as a value chain map to identify stakeholder categories that are specific to the thematic network, in addition to the generic stakeholder categories.	
For who	Relevant stage
iNet partners	Initialisation
Scientific experts	Execution
COP leader	

Recommendation 2.2	
Refine and validate the stakeholder categories e.g., during a stakeholder workshop.	
For who	Relevant stage
iNet partners	Execution
Scientific experts	
COP leader	

Recommendation 2.3

Along the project, revise and refine the stakeholder categories, as additional stakeholder groups will be identified.

For who	Relevant stage
iNet partners COP leader	All stages

3. 3. 2. Local contact points for the stakeholders

The process of contacting stakeholders can be time consuming and frustrating. It is an intense activity that is often underestimated, especially as establishing direct personal contacts (e.g., through a face-to-face meeting or telephone call) tends to work better than sending an e-mail (e.g. as part of a mass mail initiative).

Furthermore, it is not a one-off activity as there will be a need to maintain stakeholders' interest and engagement over a longer period. Therefore, liaising with stakeholders and establishing close connections with stakeholders is a key activity.

In INCREDIBLE, ensuring the interface with the stakeholders was part of the tasks and role of the iNet partners. They were best positioned to establish and maintain contacts with (local) stakeholders because of their proximity, familiarity with the NWFP (sub)sector as well as linguistic and cultural affinity. The two latter aspects (language and culture) are quite important: the reality of local stakeholders working in the forest, collecting NWFP products and often only speaking the local language, significantly differs from the reality of an EC funded project in which theoretical concepts and studies might be presented and discussed and English tends to be the *lingua franca*.

Lessons learnt

While the iNet partners were indeed the most suitable project partners to take up the role of local contact points for the NWFP stakeholders, not all of them had experience in contacting stakeholders. Some of the iNet partners had to initiate the stakeholder identification process from scratch as they only had limited established contacts in their NWFP sector. Growing a network of stakeholders in their region, and developing close relationships with these stakeholders took time.

In hindsight, it would have been better if this process could have started immediately after the Kick-Off meeting of INCREDIBLE, with stronger guidance from the COP. An additional COP meeting in the early stages of INCREDIBLE would have been useful to provide methodological support and cross-iNet coherence. As this support would need to be provided to all iNet partners and not only COP members, a round of mini-COP sessions (involving all iNet partners) would also have been useful. Note however, that the concept of mini-COPs was not part of the project structure and was only created in the second year of the project.

Recommendations

Recommendation 2.4

Make the development of the stakeholder network a priority right from the start of the thematic network, and provide proper methodological support.

For who	Relevant stage
Coordinator iNet partners COP leader	Conceptualisation (Coordinator) Initialisation and Execution

3. 3. 3. Stakeholder data management

While identifying and contacting stakeholders, liaising with them, inviting them for events, you accumulate information on them. For obvious organisational reasons, lists with names, affiliations, titles, addresses etc. will be created. In addition, as the project continues, it can be valuable to keep track on who participated to what event etc.

Managing this growing amount of data requires a database, which is best designed early in the project in order to avoid that (in the meantime) a multitude of lists and files in a variety of formats and designs, will be created. It is recommended to consider the use of a Customer Relationship Management (CRM) software package that might be tuned to the specific use case of stakeholder management for a thematic network.⁹ Note that, most likely, there will be a cost associated to the use of such tools that has to be budgeted in advance.

While collecting and managing stakeholder data, compliance with Regulation (EU) 2016/679 (GDPR) on data protection and privacy in Europe needs to be maintained. Furthermore, also when taking pictures of participants during stakeholder events, or recording video testimonials for communication purposes, consent from the stakeholders is required.

Lessons learnt

In INCREDIBLE, the use of CRM software was discussed during one of the COP meetings. As INCREDIBLE is a thematic network on the NWFP sector, but in reality, operating as 5 different innovation networks (iNets) each associated to one particular subsector of NWFP, the following questions had to be addressed:

- Would it be more interesting to create a separate database for each iNet or rather one aggregated at project level?
- Who will be responsible to manage the stakeholder database? (project level? network coordinators? regional partners?)
- Who will be responsible to feed the stakeholder database? (project level? network coordinators? regional partners?)

⁹ There are many options for commercial CRM packages, such as: Zoho, Odoo, Capsule, MS Dynamics.

Initially, for INCREDIBLE it was planned to opt for one aggregated stakeholder database, managed at project level by the project coordinator EFI, for reasons of coherence, database management as well as the possibility to conduct cross-iNet searches. Indeed, the operative effort to set up, maintain and update a CRM would be compensated by the added value of the foraged personal data, more specifically:

- the possibility of segmentation of the communication & dissemination;
- the analysis of stakeholder activity levels (detection of the most active stakeholders);
- easier reporting (e.g., to EC) on the number of stakeholders per iNet, number of attendees per event, etc.

Note that EFI, that appointed for this purpose a data protection officer,

The decision process on the use of a CRM turned out to be complex and time consuming:

- The practical implementation of the Regulation (EU) 2016/679 (GDPR) on data protection and privacy in the Europe in 2018 limited the possibility of shared use of one common CRM for the network consortium.
- In addition, there was a lack of willingness or legal ability of some project partners, namely forest owners' associations or public sectoral agencies involved, to share their own wider member or client database with EFI and the entire project team, especially regarding sensitive personal contact data that are nevertheless essential for an operative daily work with a CRM beyond mere static statistical outcomes.

Instead, an effective bidirectional information flow throughout stakeholder communities was achieved by cascading, spreading news or collecting responses through national or regional partners as relays or multipliers into professional networks, reaching hundreds of individual stakeholders, and more often than not overcoming the mentioned language barriers, too.

In practice, when registering at a stakeholder event, participants were asked to sign a consent form with which they gave their permission for their name and contact data to be stored in a database that would only be used for the purposes of the project. They also agreed to the use of pictures and video material taken during the event, for communication purposes related to the project. Furthermore, at the beginning of the event, this was also orally explained, with a clear statement that participants feeling uncomfortable with pictures being taken could signal this at all times and that their wish would be respected. The experience shows that if things are explained properly, most participants accept that their data and pictures are used.

Recommendations

Recommendation 2.5	
Make a basic decision on how to organise stakeholder data, at the start of the thematic network.	
For who	Relevant stage
Coordinator Data officer iNet partners	Conceptualisation (Coordinator) Initiation and Execution

Recommendation 2.6

Adopt a 100% digital approach to organising the stakeholder consent forms (paperless, included in the digital registration form, centralised to ease reporting and auditing).

For who	Relevant stage
Project coordinator Data officer iNet partners	Conceptualisation (Coordinator) Initiation and Execution

Recommendation 2.7

Explain at the beginning of each stakeholder event, what approach is used, by the thematic network, to comply with GDPR. Also explain the options stakeholders have.

For who	Relevant stage
Data officer iNet partners COP leader / stakeholder engagement expert	Initiation and Execution

3. 3. 4. Planning of stakeholder's events

Lessons learnt

As NWFP are natural products, they follow a natural cycle. This seasonality dictates the rhythm and intensity of the NWFP related activities carried out by stakeholders (collecting, harvesting, cutting, inspecting) and often also network partners. It therefore also restricts their availability for events.

It is the experience of INCREDIBLE that it is important to consider and respect the seasonality of the NWFP when planning stakeholder events. This might even apply to timings (starting and finishing times for events) as well as to the topics discussed during stakeholder events. Not doing so significantly decreases the likelihood that stakeholders attend events.

In this context, it is also important to have in mind that NWFP activities are developed together with many other farming activities. Avoiding seasons associated to more intense labour (ex: seeding) should also be avoided. (The same applies to (school) vacation periods that are more or less seasonal at least at the national level.)

Recommendations

Recommendation 2.8

Respect the seasonality of agriculture and forest related products when planning stakeholder events.

For who	Relevant stage
iNet partners	Execution

3. 3. 5. An integrated approach to stakeholder engagement

In INCREDIBLE, the majority of tasks and work packages involved the participation of stakeholders. So, it is easy to state that stakeholder engagement was integrated by design, as should be for multi-actor projects.

To support this integrated approach to stakeholder engagement, the Community of Practice (COP) was built in the project structure as a platform where innovation practitioners from all iNets could exchange experiences, discuss and learn. This way, there was a formal project body to structurally support stakeholder engagement processes, as well as to promote cross-iNet knowledge transfer.

Already at the Kick-off meeting of INCREDIBLE, several project partners signalled that they would need support on stakeholder engagement: identification of stakeholders, animation of the iNets etc.

It was therefore decided that support would be organised through the COP, including hands-on support on facilitation of stakeholder events by the COP leader (ESSET), an expert on the matter.

Furthermore, in the second year of the project, a short guide (toolkit) was created to introduce some basics on the design of participatory approaches, to further support the iNets with the organisation and facilitation of stakeholder events.

The COP also offered a platform to explore and review tools that were considered relevant for the operation of the iNets such as databases for stakeholder management or platforms for on-line stakeholder events.

Lessons learnt

The use of the COP as a platform and sounding board to exchange experiences and learn about participatory approaches for stakeholder events was welcomed and has proven useful. However, this way only direct support was given to the COP members. The other iNet partners were not reached. Furthermore, the frequency of the (formal) COP meetings (6-month periodicity, alternating physical and on-line meetings) was not high enough to provide the the necessary support.

In hindsight, it would have been better to organise a “crash course on participatory process design and facilitation skills” at the start of INCREDIBLE: a multiple-day intensive course to train event organisers on facilitation skills and animation techniques. The course could be open to all interested project partners but would specifically be aimed at all iNet partners. This course would give a common basis for all iNet partners, on which could be built during the project. In INCREDIBLE, such a training was not included in the project planning.

One of the positive experiences is that the COP had the flexibility to tune its operations to the needs expressed by the COP members, or the challenges faced by the iNets or the project. For this reason, all the physical COP meetings (#1 (kick-off meeting, November 2017), #4 (first General Assembly, December 2018), #6 (second General Assembly, October 2019)) included a session on mapping and discussing points that deserved attention from the COP.

Recommendations

Recommendation 2.9

In future thematic networks, include a flexible structure such as the COP as a coordination and support mechanism on matters related to stakeholder engagement, and the design and facilitation of participatory approaches.

For who	Relevant stage
Coordinator	Conceptualisation

Recommendation 2.10

For future thematic networks, organise, at the beginning of the project, a multiple-day intensive course to train project partners (especially those involved in event organisation, but open to all) on facilitation skills and animation techniques.

For who	Relevant stage
Coordinator	Conceptualisation (Coordinator)
All partners	Initiation (All partners, COP leader)
COP leader / stakeholder engagement expert	

3. 3. 6. Purposeful stakeholder events

As stated before, thematic networks are networks of stakeholders that are gathering around a shared theme. However, while it is the theme that brings the actors together, that theme alone is rarely going to be sufficient to keep stakeholders interested in the network.

Networks need to have a clear purpose with objectives that matter to the stakeholders, that keep them motivated to participate. Consequently, each stakeholder engagement activity (event, workshop, seminar...) needs to be planned in such a way that it contributes to reaching these objectives. It needs to have a clear purpose and be designed accordingly.

In INCREDIBLE, prior to each main stakeholder event, a discussion was held (e.g., within the COP, or between the event organisers and the COP leader) to clarify the answer to the questions:

- “How does the event contribute to INCREDIBLE's objectives?”
- “What needs to be achieved by the end of this event in order to consider it a success?”

The answers to these questions constituted the basis to clarify or refine (often during iterative rounds):

- The target participants;
- The main topics for the sessions (larger blocks) of the event as well as their sequence, objectives and nature for each session (presentations? round table discussion? interactive group work? plenary discussion?);
- The desired outcomes (including their format);
- The frameworks and/or concepts that would be used as the basis for the interactivity (value chain map, business model canvas, SWOT analysis...) ;

- The detailed process design, eventually resulting in a “script” for the event.

Preparations of stakeholder events from this “process design” point of view, require an intense collaboration between the scientific experts (often the ones that organise the event and that mainly focus on the content) and stakeholder engagement experts (who will likely take care of the facilitation of the event and mainly focus on the process). Such collaboration can be time consuming and this time needs to be added to the considerable time required for all the other preparations (logistical, content preparations, liaising with presenters and participants, etc.). However, it is the best way to avoid that a stakeholder event gets trapped in the pitfalls of “too many presentations, no time for interactivity” or “nice exchange but no clear purpose”.

For INCREDIBLE, these preparations also allowed to ensure the desired level of coherence for similar events across iNets e.g., Scoping Seminars, Interregional Workshops etc.

Developing a purposeful participatory process design for a stakeholder event is important. Strong facilitation skills, to facilitate the events is equally important, as it can make the difference between a highly-interactive energetic event or a more passive, low-energy one.

Conducting an evaluation at the end of the event enables the organisers to collect valuable feedback with respect to how the event was perceived by the participants.

Furthermore, it should be realised that stakeholder events might contribute to several tasks or work packages. One obvious work package is Communication: stakeholder events provide excellent opportunities to collect e.g., video testimonials. In INCREDIBLE, video testimonials of stakeholders were recorded during workshop breaks and field trips of Interregional Workshops.

Recommendations

Recommendation 2.11

Prepare stakeholder events as a joint effort from the scientific experts and the stakeholder engagement experts, right from the start of the preparations.

For who	Relevant stage
All partners organising events Scientific experts COP leader / Stakeholder engagement experts	Execution

Recommendation 2.12

Make sure each stakeholder event has a clear purpose that contributes to the objectives of the thematic network.

For who	Relevant stage
All partners organising events Scientific experts COP leader / Stakeholder engagement experts	Execution

Recommendation 2.13

Conduct an evaluation at the end of each stakeholder event, in which participants / stakeholders are asked to evaluate the event on its usefulness, relevance, content as well as the process.

For who	Relevant stage
All partners organising events Scientific experts COP leader / Stakeholder engagement experts	Execution

Recommendation 2.14

Use stakeholder events for communication purposes: invite stakeholders to contribute e.g., through video testimonials

For who	Relevant stage
All partners organising events Communication expert COP leader / Stakeholder engagement experts	Execution

3. 3. 7. Physical stakeholder events vs on-line events

The coronavirus crisis of the first half of 2020 forced INCREDIBLE to reconsider the planning for several stakeholder events - at local level (Science-to-Practice events), as well as at international level (Interregional Workshop, Cross-cutting Seminar, Policy Forum, Final Conference).

An on-line COP meeting was held (April 2020) to review and explore the use of on-line tools (platforms for hosting on-line conferencing or on-line trainings or even workshops) as an option to still proceed with the project in times of social/physical distancing and restrictions to travelling and gathering.

Subsequently, a round of mini-COP sessions was held to discuss and consult with iNet partners on the desirability and feasibility of the use on-line instruments for stakeholder events.

The general feeling was: while these tools might be useful and effective for certain types of meetings, they are less suitable for certain settings (target audiences, topics) that are quite important for INCREDIBLE.

For instance: several Science-to-Practice events are aimed at local stakeholders, sometimes working and living in remote areas or areas with less good internet connectivity. Their options to connect to the internet might be hindered by a lack of suitable hardware. Furthermore, oftentimes, Science-to-Practice events would be aimed at transferring practical knowledge in the field, such as harvesting or cutting techniques, quality inspection etc. This sort of knowledge transfer demands (repeated) demonstrations, the opportunity for the participants to explore, touch things, try a technique and receive feedback and coaching. For this sort of events, on-line tools are deemed less useful if not impossible.

This being said, there is an argument to be made to apply on-line platforms for train-the-trainer concepts, or to design trainings following a two-step approach, partly consisting of on-line session(s) and partly as a physical meeting to be organised at an appropriate time. Finally, multimedia tools can be used to document good practices such as harvesting, cutting or inspection techniques.

Recommendations

Recommendation 2.15

Make use of suitable combinations of on-line tools for meetings and stakeholder engagement activities, but only for settings (purposes, target audiences) for which these tools can be effective.

For who	Relevant stage
All partners	All stages

3.4. Innovating in thematic networks

INCREDIBLE is a thematic network. As such, it is a multi-actor project that collects existing knowledge and best practices on a given theme to make it available in easily understandable formats for end users such as farmers, foresters, advisers and others.¹⁰ Multi-actor projects are projects in which end users and multipliers of research results such as farmers and farmers' groups, advisers, enterprises and others, are closely cooperating throughout the whole research project period.¹¹

Innovation in thematic networks has to be understood from the framework of the "European Innovation Partnership (EIP) for agricultural productivity and sustainability"¹², created to promote a faster and wider transposition of innovative solutions into practice, by facilitating the information flow between research and practice. Innovation in this sense refers to a multi-actor or interactive innovation approach, meaning that farmers, farm advisors, scientists and other stakeholders collaborate throughout the project to develop innovative solutions to practical problems.¹³

For INCREDIBLE, it means that iNets implement an innovation-driven knowledge transfer process, in which iNets stakeholders are active partners and co-creators of the knowledge rather than a dissemination target group.

In practice, the transfer of knowledge and solutions is to be understood as:

- intra-iNet transfer: knowledge flows within the partners of one specific iNet (hence one specific NWFP (sub)sector), e.g., between different geographic areas;
- cross-iNet transfer: knowledge flows across different iNets;
- knowledge transfer from other sectors to NWFP.

The process of knowledge transfer needs to be purposeful: the knowledge and solutions that are transferred need to address challenges that exist in the NWFP (sub)sectors. Therefore, the identification of these innovation needs is an essential task for the iNets.

The overview of recommendations:

10 <https://ec.europa.eu/eip/agriculture/en/about/thematic-networks-%E2%80%93-closing-research-and>

11 <https://ec.europa.eu/eip/agriculture/en/about/multi-actor-projects-scientists-and-farmers>

12 <https://ec.europa.eu/eip/agriculture/en/about>

13 https://ec.europa.eu/info/research-and-innovation/research-area/agriculture-and-forestry/interactive-innovation-and-eip-agri_en

3	Innovating in thematic networks
3.1	The ambition of the thematic network
	3.1 Apply the project instruments of thematic networks to (also) work on ambitious initiatives that are demonstrably impactful even if they go beyond the scope of the project and cannot be completed within the project lifetime.
3.2	An integrated approach to innovation
	3.2 Integrate an Accelerator Service as a substantial part of the project design for future thematic networks.
	3.3 Develop strong network connections to financial parties that might support network outcomes (investors, financial institutions, business angels) and engage with them from the start of the thematic network.
3.3	Actors in the innovation process
	3.4 Organise a training on basic concepts and frameworks for innovation in multi-actor settings and how these will be implemented, at the start of the project.

3. 4. 1. The ambition of the thematic network

In some languages, there is a saying that states: “Aim high, as the arrow drops while flying.” Put differently: if you only plan for a church, you will never build a cathedral.

INCREDIBLE has been rather ambitious by design as is demonstrated by the following (incomplete) list of initiatives that had to be organised or completed, according to the Description of Action:

Seminars and workshops:

- 5 Scoping Seminars (1 per iNet);
- 15 Interregional Workshops (3 per iNet);
- 3 Cross-cutting Seminars (on cross-iNet themes);
- 45 Science-to-Practice events for local stakeholders;
- 1 Policy Forum;
- 1 Final Conference;

Publications:

- 250 Fact Sheets (50 per iNet);
- Infographics produced after each Cross-Cutting Seminar;
- Policy recommendations;
- other reports that are part of the formal deliverables;

Other:

- a Knowledge Contest;
- an Open Innovation Challenge;
- an Acceleration Service programme for the five winners of the Open Innovation Challenge;
- a Delphi type of expert consultation process.

Notwithstanding this important workload, at the first INCREDIBLE General Assembly, the notion of “Flagship Initiatives” was discussed. The idea was that, apart from the long list of “formal project duties”, the iNets should also consider a limited number of key initiatives (1-2 per iNet) that are of strategic relevance to the iNet viz.:

- they address a key challenge for the NWFP (sub)sector, as identified earlier in the project (e.g., the priority themes identified at the iNet Scoping Seminars);
- they would entail a transfer of knowledge or a co-creation process;
- successfully completing that initiative would generate significant impact for the respective NWFP (sub)sector, in the sense of: making an important contribution to addressing the challenge.

Examples of these INCREDIBLE “Flagship Initiatives” are:

- initiating a **pan-Mediterranean approach to cork quality assessment**, building on the experience in Portugal and Spain (see section 2.1);
- the development of a traceability tools, more specifically **traceability apps**, to increase transparency - for producers and/or end users - along the NWFP value chain (see section 2.1);
- the creation of **guidelines** (e.g., on best practices with respect to harvesting) for specific NWFP;
- the creation of a **pan-Mediterranean NWFP observatory** (for market related and/or other types of data) (see section 2.1);
- give leverage to the Italian experience in **legislation** to support the NWFP sector (more specifically mushrooms and truffles).

Several of these Flagship Initiatives are too ambitious to be completed within the limited timespan of INCREDIBLE, nor within the project structure. Still, INCREDIBLE partners believed that it was important to take (first) steps that would allow the initiative to grow and potentially become a reality.

For example, establishing a pan-Mediterranean observatory on NWFP is beyond the project scope of INCREDIBLE and will require the involvement of parties that are not part of the INCREDIBLE consortium. The realisation of this initiative will require resources (time, funding, staff) for a sustained period of time and fits a (longer-lasting) network rather than a project approach. Notwithstanding this reality, the INCREDIBLE partners acknowledged the potential value and impact that can be generated by such an observatory and decided to initiate steps to support the creation of it.

INCREDIBLE supported these Flagship Initiatives by using its existing range of instruments to realise what could be achieved within INCREDIBLE, e.g.:

- **pan-Mediterranean cork quality assessment:** INCREDIBLE Interregional Workshops and Science-to-Practice events were used to initiate the practical transfer and exchange of knowledge on cork quality procedures to interested countries and regions. The full implementation and mainstreaming of a pan-Mediterranean cork quality assessment will obviously take much more time. Yet, articulating this ambition and taking the first steps within INCREDIBLE have contributed to pave the way for such a system;
- **NWFP traceability app:** during INCREDIBLE, a prototype version will be completed, and several iNet partners will contribute to provide real cases made available from iNet stakeholders, to feed, test and demonstrate the app. Furthermore, the app will be

showcased in the third Cross-cutting Seminar. While the full roll-out of the app will not be possible within INCREDIBLE, the interactions and collaboration between iNet partners created the setting in which this demonstration version could be developed and tested;

- **pan-Mediterranean NWFP Observatory:** as for the cork quality system, creating such an observatory will take time and the collaboration of many parties in several regions. Stating this ambitious goal and raising awareness on the benefits such an observatory might offer e.g., in terms of increasing market transparency, are the first and essential steps. INCREDIBLE has contributed to take these steps by activating the stakeholder network (with relevant authorities, administrations, associations), by discussing the creation of the NWFP observatory to ensure the idea would get support, possibly become integrated in regional strategic planning processes, and by taking first steps to identify existing relevant data sets;
- **legislation on mushroom and truffles:** while it would not be realistic to expect or assume that INCREDIBLE would lead to a change in legislation in several countries, the project certainly contributes to the dissemination of the knowledge on what has been achieved in Italy, and by doing so fed reflections and political decision processes in other countries and regions.

Lessons learnt

Whether a Flagship Initiative will eventually be successfully completed or not is an open question. The answer ultimately depends on actors and factors out of INCREDIBLE's span of control. However, identifying, outlining (in some cases blueprinting) the initiative and taking the first steps to the implementation was considered important by the iNet partners.

For INCREDIBLE, the Flagship Initiatives were a means to provide direction, focus the use of the available resources on priority themes and priority initiatives and ensure that the range of INCREDIBLE instruments was used most effectively.

The Flagship Initiatives also proved to be a source of enthusiasm and motivation as INCREDIBLE partners felt they were contributing to something ambitious, highly relevant, and potentially impactful, even if the flagship initiatives were not part of the formal project deliverables as stated in the Description of Action.

Recommendations

Recommendation 3.1

Apply the project instruments of thematic networks to (also) work on ambitious initiatives that are demonstrably impactful even if they go beyond the scope of the project and cannot be completed within the project lifetime.

For who	Relevant stage
Project coordinator	Conceptualisation (Project coordinator)
All partners	Execution (All partners)
	Post-execution (All partners)

3. 4. 2. An integrated approach to innovation

The interactive innovation approach based on knowledge transfer should cover the following steps:

- the identification of the (innovation) needs. These can be challenges that affect specific or wider sections of the value chain in a geographic area (referred to as “target setting” for the innovation), or challenges for the entire sector and/or its value chain.;
- the identification of potential solutions to the innovation needs (which might be existing solutions in other geographic areas, or other sectors);
- the transfer of the solution to the target setting;
- the preparation of the implementation. This includes the adaptation of the solution to the target setting, the organisation of the innovation ecosystem of actors required to implement the solution, as well as the creation of a sound economic picture (through funding schemes, business modelling);
- the organisation of the launch, uptake and mainstreaming of the solution.

In section 2.4.6, a framework consisting of four phases from “Finding the right innovation” to “Launch and uptake of the innovation” is described used.

The only way to cover all these steps using a multi-actor approach is to make sure innovation is not considered one specific (isolated) work package in the project, but is fully integrated in the design of the thematic network, with active participation from all network partners.

The INCREDIBLE project had several instruments aimed at various steps of the innovation process:

- the Scoping Seminars, that served to identify the most pressing NWFP challenges within each iNet (the innovation needs);
- Interregional Workshops and Cross-cutting Seminars, together with the Fact Sheets, Knowledge Contest and Open Innovation Challenge, were instrumental in exploring potential solutions to the innovation needs;
- the Science-to-Practice events offered bridges to implementation to knowledge transfer at the most practical level; or to
- the Open Innovation Challenge (OIC) together with the related Acceleration Service (AS)¹⁴ were used to mobilise and support NWFP entrepreneurs by providing hands-on support and coaching to new and innovative NWFP businesses.

Lessons learnt

The Open Innovation Challenge (OIC) together with the Acceleration Service (AS) proved very effective in mobilising and supporting NWFP entrepreneurs. The INCREDIBLE project design provided budget to offer the Acceleration Service programme to 5 winning ideas. With a larger

¹⁴ A full account and analysis of the Acceleration Service is given in Deliverable 3.2 - Synthesis Report on Acceleration Session. As stated in Deliverable 3.2: the OIC aimed to select the most innovative ideas at seed stage or start-up stage available in the professional and research communities and at transforming them into concrete solutions capable of meeting the most pressing needs of NWFPs sector. Representatives from the five winning projects joined the AS, which was a two-weeks training course, focused on business, marketing and communication strategies.

budget, a larger number of NWFP entrepreneurs and innovative ideas could have been supported. It is recommended to repeat similar schemes in future thematic networks - even with a larger scope.

As part of the second Cross-cutting Seminar, a market place was organised in which innovation actors could meet and connect. This market and broker event offered an opportunity for the AS participants to present and promote their projects. Furthermore, also the non-winning participants to the OIC were invited to meet and present their ideas.

Unfortunately, it had proven difficult to attract financial parties (investors, financial institutions, business angels). Their presence would have created further added value.

Recommendations

Recommendation 3.2	
Integrate an Accelerator Service as a substantial part of the project design for future thematic networks.	
For who	Relevant stage
Project coordinator All partners	Conceptualisation (Project coordinator) Execution (All partners) Post-execution (All partners)

Recommendation 3.3	
Develop strong network connections to financial parties that might support network outcomes (investors, financial institutions, business angels) and engage with them from the start of the thematic network.	
For who	Relevant stage
All partners	Initiation, Execution, Post-execution

3. 4. 3. Actors in the innovation process

Innovation cannot be restricted to the innovation specialists only. In INCREDIBLE, all iNet partners played an active role in all steps of the innovation process listed in section 3.3.2 as they were the ones that had developed the connections with the iNet stakeholders, that had to organise most of the seminars, workshops and events.

Attracting participants to the stakeholder events, but also to the Knowledge Contest, as well as to the Open Innovation Challenge relied on active networking and mobilisation efforts by the iNet partners, obviously supported by targeted communication efforts handled by the partners responsible for Communication (Work Package Communication, Awareness and Impact).

Furthermore, as thematic networks are multi-actor projects, there is also an active role to be played and contributions to be made by the stakeholders, at all steps of the innovation process.

Lessons learnt

As innovation was not restricted to the innovation experts, all iNet partners would ideally have had a shared understanding of a number of concepts related to innovation, including a good understanding of the Acceleration Service and Open Innovation Challenge. This was not the case.

The COP organised a session in which a framework with the main stages of the innovation process was introduced and discussed (see section 2.4.6) but only COP members attended that session.

It should have been better to organise a “mini-training” on innovation, at the start of INCREDIBLE. This training session (for all project partners) would have enabled to create a shared understanding of the innovation process in multi-actor settings.

Recommendations

Recommendation 3.4	
Organise a training on basic concepts and frameworks for innovation in multi-actor settings and how these will be implemented, at the start of the project.	
For who	Relevant stage
Project coordinator	Conceptualisation (Project coordinator)
All partners	Initiation, Execution (All partners)

3.5. Sustainability of thematic networks

It takes considerable efforts to create and operate thematic networks. If no measures are taken to actively sustain the networks, they will tend to decompose again. As thematic networks constitute cradles to foster innovation in the NWFP sectors and agriculture in general, and as these sectors will continue to need innovative solutions and networking, the question on their sustainability is a pertinent one. It is therefore normal that networks will be looking for ways to:

- ensure all outcomes of the thematic networks remain available for future use;
- sustain the networking i.e., the human interactions between members resulting in exchange of knowledge and experience.

On the other hand: sustaining a network will require resources and efforts, so any ambition in that direction will need to be substantiated by articulating answers to a number of questions. This will require reflections that are best initiated in time.

Some recommendations:

4	Sustainability of thematic networks
4.1	Sustainability of network outcomes
	4.1 In future thematic networks, integrate the use of widely and easily accessible storage options for network outcomes (such as the one being developed by EURAKNOS) in the project design.
4.2	Sustainability of network initiatives and achievements
	4.2 Ensure that network initiatives that are considered valuable (impactful, relevant) and that require post-project efforts in order to achieve implementation and uptake, become appealing and ready to be adopted (by external stakeholders).
4.3	Sustainability of the network
	4.3 Integrate reflections on the sustainability of the network in the design of future thematic networks (e.g., as a work package in the project structure).
	4.4 All thematic network partners need to be involved in reflections on the sustainability of the network.
	4.5 Provide sufficient opportunities for partners and stakeholders to meet in person in order to develop strong relationships.

3. 5. 1. Sustainability of network outcomes

In many thematic networks, a wealth of expertise, experience, knowledge, good practices etc. is being developed and collected. Usually, each of these networks makes this information available to its network members and/or stakeholders e.g., through a section of the network website) While this is obviously a good thing, it creates two questions:

- How can we ensure the long-term (post-project) availability of the information?
- How can we promote cross-network learning and use of knowledge? Indeed, as each network has its own website, the outcomes of many thematic networks will be distributed over several websites, each targeting a specific audience (group of stakeholders). This will be a barrier to cross-network knowledge flows.

For INCREDIBLE, one of the important outcomes of the project is the creation of a NWFP knowledge repository, containing 250 fact sheets on 5 types of NWFP. These fact sheets are being stored at a specific section of the website of the project (www.incredibleforest.net/), more specifically: <https://repository.incredibleforest.net/>

However, in order to ensure longer-term availability and wider accessibility and use of the fact sheets, it was decided to also integrate the fact sheets in a repository offering free long-term storage of project results. INCREDIBLE used Oppla (<https://oppla.eu/>). Other repositories exist, such as Zenodo (<https://zenodo.org/>). The project had to evaluate and choose the most appropriate one.

Lessons learnt

The INCREDIBLE team spent resources and time to develop the knowledge repository and link it to Oppla. In the meantime, the EURAKNOS project (<https://www.euraknos.eu/>) has been launched, aiming at providing longer-term availability of the outcomes of thematic networks on agriculture and forestry. As soon as its storage solution will be operational, EURAKNOS should become the default storage option for future NWFP network outcomes.

Recommendations

Recommendation 4.1	
In future thematic networks, integrate the use of widely and easily accessible storage options for network outcomes (such as the one being developed by EURAKNOS) in the project design.	
For who	Relevant stage
Project coordinator The team crafting the project proposal	Conceptualisation

3. 5. 2. Sustainability of network initiatives and achievements

Apart from outcomes of the type discussed in 3.4.1, thematic projects can also be a cradle for initiatives that are particularly relevant from the point of view of creating impact in the sector, even if these initiatives cannot be completed during the lifetime of the project. The Flagship Initiatives discussed in 3.3.1 are examples of such network initiatives.

Lessons learnt

INCREDIBLE has been the vehicle that allowed to identify and create momentum around the Flagship Initiatives, and develop them as appealing initiatives, that can hopefully be adopted by external stakeholders (or a longer-lasting network) in order to bring them to completion. If this succeeds, the sustainability has been achieved.

Recommendations

Recommendation 4.2	
Ensure that network initiatives that are considered valuable (impactful, relevant) and that require post-project efforts in order to achieve implementation and uptake, become appealing and ready to be adopted (by external stakeholders).	
For who	Relevant stage
All partners	Post-execution (all partners)

3. 5. 3. Sustainability of the network

Network outcomes and initiatives aside, probably the most valuable achievement of thematic networks lies in the networking between stakeholders and experts across regions. It is this networking that generates the knowledge flows, the cross-regional exchange of ideas, insights, best practices etc. It required active steps and resources to build these networks, as well as willingness and commitment from the stakeholders, to participate and contribute. Keeping the networks alive will require:

- an entity (organization, legal entity, informal entity) that takes the initiative to continue the network;
- an appropriate governance structure (probably with presence in all participating countries/regions);
- a clear vision with strategic plan and associated roadmap that provides purpose and direction;
- the capacity to organize and facilitate the necessary (both physical as well as on-line) network events in which stakeholders can meet and exchange, as well as take care of platforms and communication (website, collaboration platforms, etc.);
- a funding scheme to cover the operational costs.

However, reflections on governance, funding, and vision require time and resources, that are rarely covered by the work packages of a project. If they have to be initiated after the end of the project, valuable time might get lost and the network initiatives that needed to be completed after the end of the project (such as several of INCREDIBLE's flagship initiatives) might lose momentum.

In the case of INCREDIBLE, some of the iNets will most likely merge with other networking initiatives in the same sector, and give rise to a larger (possibly European scale) network. As an example, the iNet on Resin has the potential to establish structural links with SustForest Plus (<https://www.sust-forest.eu/en>) in order to create a sustainable network initiative focusing on resin. Options like these might be identified by all project partners and stakeholders during the lifetime of the thematic network.

Lessons learnt

- Because of the workload, there was only limited time for the partners to share thoughts and take decisions on the sustainability of the iNets (including the governance, funding and vision). Therefore, these reflections should best be integrated in the project design;
- Options to sustain the thematic network might come from all project partners as well as stakeholders;
- It was important for partners and stakeholders to have opportunities to meet in person. Physical meetings allowed them to create bonds and contributed to building trust. These bonds and trust eased the on-line interactions. The resulting on-line relationships can be used to keep the network alive after the end of the project (while looking for funds to organise in-person events);
- On-line tools are not a panacea: they are less effective to engage with certain stakeholders (e.g., that do not have the needed skills, equipment or quality of connection) or for certain types of interactions (e.g., hands-on knowledge transfer of techniques). While on-line platforms and tools will continue to become better and more expanded, there will be a continued need for opportunities to meet in-person.

Recommendations

Recommendation 4.3

Integrate reflections on the sustainability of the network in the design of future thematic networks (e.g. as a work package in the project structure).

For who	Relevant stage
Project coordinator The team crafting the project proposal	Conceptualisation

Recommendation 4.4

All thematic network partners need to be involved in reflections on the sustainability of the network.

For who	Relevant stage
All project partners	All stages but particularly post-execution

Recommendation 4.5

Provide sufficient opportunities for partners and stakeholders to meet in person in order to develop strong relationships.

For who	Relevant stage
Project coordinator The team crafting the project proposal	All stages

3.6. List of recommendations

1	Creation and operation of thematic networks
1.1	Team composition

	1.1 For future thematic networks, make sure to include expert partners on innovation and on stakeholder engagement (in addition to the scientific, technical, communication, project management experts).
	1.2 Include a Community of Practice (or similar) in the design of future thematic networks, and position it as vehicle to support the multi-actor approach (both intra-project as well as with stakeholders).
1.2	Team induction
	1.3 For future thematic networks, organise a team induction moment (for all groups that will have to work as a team) at the start of the project.
	1.4 Ensure that people that have not attended the team induction meeting at the start of the thematic network (such as newcomers), receive a proper induction
1.3	Team dynamics
	1.5 Include, in future thematic networks, a structure that offers support for participatory approaches applied to project or network partners.
1.4	Internal communication
	1.6 Invest in internal communication to stimulate knowledge flows. Remain flexible, keep it simple and adjust the format when needed.
1.5	Tools to support the network operations
	1.7 At each stage of the project, look for tools that address the needs of the team at that specific stage.

2	Engaging stakeholders in thematic networks
2.1	Stakeholder identification
	2.1 Use a framework such as a value chain map to identify stakeholder categories that are specific to the thematic network, in addition to the generic stakeholder categories.
	2.2 Refine and validate the stakeholder categories e.g. during a stakeholder workshop.
	2.3 Along the project, revise and refine the stakeholder categories, as additional stakeholder groups will be identified.
2.2	Local contact points for the stakeholders
	2.4 Make the development of the stakeholder network a priority right from the start of the thematic network, and provide proper methodological support.
2.3	Stakeholder data management
	2.5 Make a basic decision on how to organise stakeholder data, at the start of the thematic network.
	2.6 Adopt a 100% digital approach to organising the stakeholder consent forms (paperless, included in the digital registration form, centralised to ease reporting and auditing).
	2.7 Explain at the beginning of each stakeholder event, what approach is used, by the thematic network, to comply with GDPR. Also explain the options stakeholders have.
2.4	Planning of stakeholder events
	2.8 Respect the seasonality of agriculture and forest related products when planning stakeholder events.
2.5	An integrated approach to stakeholder engagement
	2.9 In future thematic networks, include a flexible structure such as the COP as a coordination and support mechanism on matters related to stakeholder engagement, and the design and facilitation of participatory approaches.

	2.10 For future thematic networks, organise, at the beginning of the project, a multiple-day intensive course to train project partners (especially those involved in event organisation, but open to all) on facilitation skills and animation techniques.
2.6	Purposeful stakeholder events
	2.11 Prepare stakeholder events as a joint effort from the scientific experts and the stakeholder engagement experts, right from the start of the preparations.
	2.12 Make sure each stakeholder event has a clear purpose that contributes to the objectives of the thematic network.
	2.13 Conduct an evaluation at the end of each stakeholder event, in which participants / stakeholders are asked to evaluate the event on its usefulness, relevance, content as well as the process.
	2.14 Use stakeholder events for communication purposes: invite stakeholders to contribute e.g. through video testimonials.
2.7	Physical stakeholder events vs on-line events
	2.15 Make use of suitable combinations of on-line tools for meetings and stakeholder engagement activities, but only for settings (purposes, target audiences) for which these tools can be effective.

3	Innovating in thematic networks
3.1	The ambition of the thematic network
	3.1 Apply the project instruments of thematic networks to (also) work on ambitious initiatives that are demonstrably impactful even if they go beyond the scope of the project and cannot be completed within the project lifetime.
3.2	An integrated approach to innovation
	3.2 Integrate an Accelerator Service as a substantial part of the project design for future thematic networks.
	3.3 Develop strong network connections to financial parties that might support network outcomes (investors, financial institutions, business angels) and engage with them from the start of the thematic network.
3.3	Actors in the innovation process
	3.4 Organise a training on basic concepts and frameworks for innovation in multi-actor settings and how these will be implemented, at the start of the project.

4	Sustainability of thematic networks
4.1	Sustainability of network outcomes
	4.1 In future thematic networks, integrate the use of widely and easily accessible storage options for network outcomes (such as the one being developed by EURAKNOS) in the project design.
4.2	Sustainability of network initiatives and achievements
	4.2 Ensure that network initiatives that are considered valuable (impactful, relevant) and that require post-project efforts in order to achieve implementation and uptake, become appealing and ready to be adopted (by external stakeholders).
4.3	Sustainability of the network
	4.3 Integrate reflections on the sustainability of the network in the design of future thematic networks (e.g., as a work package in the project structure).

	4.4 All thematic network partners need to be involved in reflections on the sustainability of the network.
	4.5 Provide sufficient opportunities for partners and stakeholders to meet in person in order to develop strong relationships.