



Formats for transferring NbS knowledge

In Latin American and European cities, various initiatives are being used for transferring knowledge to different audiences to raise awareness of Nature-based Solutions (NbS) and improve their uptake and implementation. This factsheet highlights some of these initiatives and their experiences as inspirations for further NbS knowledge transfer.

Background

Knowledge transfer refers to the dissemination and application of knowledge from one entity to another, often to raise awareness or foster learning. Communication and learning are key for developing inclusive, acceptable, local-specific, and sustainable NbS. Specifically, knowledge transfer on NbS helps overcome barriers that impede their uptake and implementation. Knowledge transfer, targeted at different stakeholder groups through

various formats, helps mitigate these challenges by simplifying information and enhancing understanding. Adequate knowledge transfer bridges gaps between NbS research and practice and empowers stakeholders with evidence-based information, including best practices, to inform policies and actions. Ultimately, this helps to promote sustainable environmental practices and ecosystem and community resilience.



Knowledge transfer benefits

1. Raised awareness of NbS for increased understanding and uptake of NbS measures.
2. Offer learning opportunities from successful NbS case studies encouraging replication and upscaling of NbS.
3. Provide information for evidence-based decision-making in NbS planning implementation.
4. Enhance the skills and knowledge of people involved in NbS implementation.
5. Improve inclusivity in planning as local communities are engaged and participate in NbS initiatives.

Knowledge transfer formats

Due to the importance and the many benefits of knowledge transfer on NbS, the CONEXUS project conducted a study on knowledge transfer on NbS in Latin American and European cities. Besides the knowledge needs for NbS, the interviews with practitioners from different organizational backgrounds presented various knowledge transfer formats to raise awareness of NbS and related environmental issues and promote further uptake and implementation of NbS-supporting interventions.

Knowledge transfer formats refer to the various methods or mediums through which knowledge, information, or expertise

on a subject may be conveyed from one entity or individual to another. In the context of NbS, several formats are available. The range of formats is extensive, from written to verbal, static to interactive, and analogue to digital. Printed books, brochures, and posters are examples of written, static, and analogue formats. In contrast, examples of verbal, interactive, and digital formats are online workshops and podcasts with listeners' questions (and answers). Yet, these features can occur and be mixed in different combinations. Some formats are, more often than not, in-person as they depend on stakeholder participation or collaboration, like workshops and visiting demonstration sites.









<p>Academic publications</p>  <ul style="list-style-type: none"> • Formal documents, often undergoing rigorous peer-review process, that provide evidence-based information on NbS <p>Target audience</p> <ul style="list-style-type: none"> • Researchers, academics, policymakers 	<p>Guidelines & manuals</p>  <ul style="list-style-type: none"> • Comprehensive documents offering step-by-step instructions for implementing NbS <p>Target audience</p> <ul style="list-style-type: none"> • Practitioners, policymakers, non-profits 	<p>Educational materials</p>  <ul style="list-style-type: none"> • Concise materials designed for public awareness and education about NbS <p>Target audience</p> <ul style="list-style-type: none"> • Local communities, educators, non-profits, decision-makers, general public 	<p>Online platforms</p>  <ul style="list-style-type: none"> • Websites, NbS databases, NbS knowledge hubs <p>Target audience</p> <ul style="list-style-type: none"> • Researchers, practitioners, policymakers, general public, educators
<p>Media</p>  <ul style="list-style-type: none"> • Broadcasting NbS information to wider audiences through various channels <p>Target audience</p> <ul style="list-style-type: none"> • General public, local communities, policymakers, decision-makers 	<p>Social media</p>  <ul style="list-style-type: none"> • Platforms for sharing NbS information and engaging with audiences through posts and discussion points <p>Target audience</p> <ul style="list-style-type: none"> • General public, young people, community organizations 	<p>Interactive formats</p>  <ul style="list-style-type: none"> • Informal or formal interactive sessions facilitating knowledge exchange <p>Target audience</p> <ul style="list-style-type: none"> • Practitioners, policymakers, non-profits 	<p>Collaborative projects</p>  <ul style="list-style-type: none"> • Real-world examples of showcasing, experimenting, monitoring NbS effectiveness and implementation strategies <p>Target audience</p> <ul style="list-style-type: none"> • Local governments, non-profits, funding agencies



Photo by Andrzej Rembowski.

Radio program

Habitar es Humano program by the Central University of Chile, Santiago



This weekly radio program explores the philosophical and ethical dimensions of human existence, focusing on the aspects of dwelling and the relationship between humans and nature. Experts discuss key works and contemporary frameworks on the need to renaturalize cities, particularly Santiago.

As a medium, radio is reliable for knowledge transfer because it is generally uninterrupted, democratic, and easily accessible. Radio also has broad coverage, making it ideal for disseminating localized knowledge to diverse audiences, as is the case for Almagro's Park's residents and general public (students, teachers, and managers).

The resilience of radio as a knowledge transfer format is a testament to its effectiveness, even during catastrophes. This resilience reassures the audience that important information will be continuously transmitted in a timely way. Radio allows real-time interaction with the public, including answering their questions and valuing feedback. Radio helped to effectively communicate environmental issues and urban sustainability challenges.

Tips

1. Ensure that the message being disseminated is clear, relatable, and easy to recount.
2. Base the content on lived experiences and practical examples.
3. Convey sincere interest and demonstrate that small actions can lead to significant changes.

More information

<https://tinyurl.com/radio-format>

Educational game

OrtiAlti, Torino

OrtiAlti, an Italy-based environmental non-profit, developed an educational game (Pollinations) to explain pollination in the city of Torino. In the game, each player is an insect who has to find a way to pollinate most parts of the city while encountering different barriers, for which the players have to come up with solutions.

Educational games provide innovative ways to convey messages, discover new meanings, and transform relationships between people and nature through an engaging and fun experience. They allow players to see the immediate impact of their decisions and actions, making the learning process interactive and impactful. Moreover, these games can teach complexity by incorporating multiple interacting factors players must consider to succeed.

In Torino, educational games have proven to be a versatile tool for learning as it caters



for diverse learning styles and age groups, making learning accessible, and promoting inclusive education. The ability to play these games multiple times reinforces the educational messages and enhances learning. Their adaptability and fun nature have simplified complex ideas, making learning more appealing for children. Furthermore, the ease of transitioning these games to online platforms has significantly expanded their reach and impact.

Tips

1. Partner with gaming experts to translate scientific content.
2. Start with a simplified version and gradually add complexity.
3. Conduct play trials to identify areas for improvement.
4. Continuously refine the game based on feedback.

More information

<https://ortialti.com/>



Photo by OrtiAlti.



Photo by FARN.

Festival

Fundación Ambiente y Recursos Naturales (FARN), Buenos Aires

Fundación Ambiente y Recursos Naturales (non-profit organization) organized a two-day Biocultural Corridor festival in one of the wetlands in the Matanza-Riachuelo Basin. This initiative gave visibility to such wetlands and their potential for restoration and also provided a significant opportunity to showcase and valorize traditional knowledge, cultural practices, and biodiversity, and unite different local groups.

The festival format serves as a vibrant platform to foster interactive and accessible spaces for knowledge exchange among experts, local communities, authorities, and other stakeholders. Festivals further promote awareness and commitment across urban, agricultural, and ecological sectors towards preserving biocultural corridors. They also facilitate dialogue and collaboration among various organizations.

A broad and diverse audience has been engaged through the festivals beyond academic and specialized circles. Integrating scientific knowledge with local traditional wisdom in an interactive format has effectively promoted



local uptake of the concept of biocultural corridors. The festival format has encouraged community involvement in defending these collective assets (biocultural corridors) and improved collaboration between diverse stakeholders.

Tips

1. Involve local communities, organizations, and government authorities in festival design and planning.
2. Choose a venue that symbolizes and represents the biocultural values that one wants to promote.
3. Incorporate recreational, artistic, and gastronomic activities that revive native cultural expressions alongside educational sessions
4. Conduct post-event evaluations to identify areas for improvement and enhance future editions.

More information

https://taplink.cc/festi_corredoresbioculturales

Comunicados sobre el Festival:

<https://tinyurl.com/festival-format>

Video of Biocultural Corridors Festival in Santa Catalina Reserve:

<https://tinyurl.com/festiva-video>

Biocultural Corridor website:

<https://farn.org.ar/corredor-biocultural-riachuelo/>

Citizen science

Cerros de Bogotá Foundation, Bogota

Citizen science refers to the involvement of the general public in the scientific process.

This process can include collecting data, analyzing information, or reporting observations, typically under the guidance of professional scientists or research institutions. Citizen science allows people with no formal scientific training to contribute to scientific studies, as done in Bogotá to increase urban greenery.

Citizen science is a powerful knowledge transfer format that engages communities in environmental stewardship and fosters understanding of NbS. The format empowered citizens to actively contribute to biodiversity conservation and sustainable practices in the Eastern Hills of Bogotá. The purpose was twofold: to educate the public about local ecology and mobilize them as environmental preservation advocates.



Citizen science facilitated direct community engagement, enabling the residents to observe and comprehend the local ecological challenges. This understanding helped to increase awareness and advocacy for conservation efforts. Leveraging social media platforms further amplified these efforts and enabled rapid dissemination of findings and fostering broader public support for NbS, including promoting pro-environmental behavior.

Tips

1. Tailor activities to suit local community needs and preferences.
2. Utilize both digital platforms and face-to-face interactions to maximize outreach and engagement.
3. Collaborate closely with local experts and organizations to ensure scientific rigor and sustainability of initiatives.

More information

<https://tinyurl.com/citizens-format>



Photo by Valentina Plazas



Podcasts

Fundación Ambiente y Recursos Naturales (FARN), Buenos Aires

Podcasts are a dynamic medium, common in audio form, but can also be in video.

Podcasts consist of episodes available for streaming from different platforms. The FARN podcast addressed themes such as biocultural corridors, the historical and cultural values of wetlands, conservation and restoration of wetlands, the violation of rights with resource extraction, agroecology, and the COP15 in Montreal.

Podcasts are powerful for disseminating research findings and reaching diverse audiences locally and globally. They effectively engage those who may not traditionally interact with written publications or formal presentations. This medium amplifies the voices of engaged communities and fosters dialogue on NbS and environmental conservation.

Utilizing podcasts enabled the team to distribute content efficiently across various platforms,



including podcast directories, community radio stations, YouTube, and messaging apps like WhatsApp. This multi-channel approach enhanced the accessibility of messages to reach multiple stakeholders. The podcasts are popular, as they can be downloaded and listened to on mobile phones whenever, wherever, by whomever, and when no internet connection is available. Indigenous communities, in particular, appreciated this accessibility and used podcasts as local community radio programs.

Tips

1. Collaborate with professional podcast developers to ensure high-quality production.
2. Plan episodes that align with your target audience's needs and interests to maximize engagement.
3. Promote episodes across multiple platforms and encourage listeners to share and subscribe for broader impact.

More information

<https://open.spotify.com/show/3YZyISWYXXAcLT-llDiys4t?si=srgAs-7HTXCyt79juKZleAPo&end=1&dl-si=91b639fle3eb473e>

Posters and banners

Urbem, Lisbon

The non-profit, Urbem, uses posters and banners on-site to summarize their project, its objectives, main features, methods employed, species involved, and the anticipated environmental impact. These materials are designed to integrate interactive elements, such as social media tags and QR codes.



Posters and banners served as effective tools for communicating the essence of the project to the public in a clear and accessible manner. Moreover, they served as navigational aids along trails, guiding visitors through various plot features. The social media tags and QR codes enabled interested individuals to delve deeper into the project and follow its progress.

Making posters and banners available on-site provides a reference to anyone curious about the project and how to be involved. By strategically placing these promotional materials in high-traffic areas, the project team captured

the attention of passersby and engaged them in the initiative. The meticulous design of each poster blended informative content with visually appealing graphics, making it easier to comprehend and understand the key messages. The posters and banners facilitate public awareness and engagement, encouraging community involvement in NbS.

Tips

1. Use clear and concise language with graphical elements to enhance visual appeal.
2. Incorporate images and diagrams to illustrate project objectives and outcomes effectively.
3. Utilize the expertise of a UX designer or graphic artist to optimize poster design for maximum impact.
4. Include interactive features like QR codes or social media tags to encourage further engagement and information sharing.

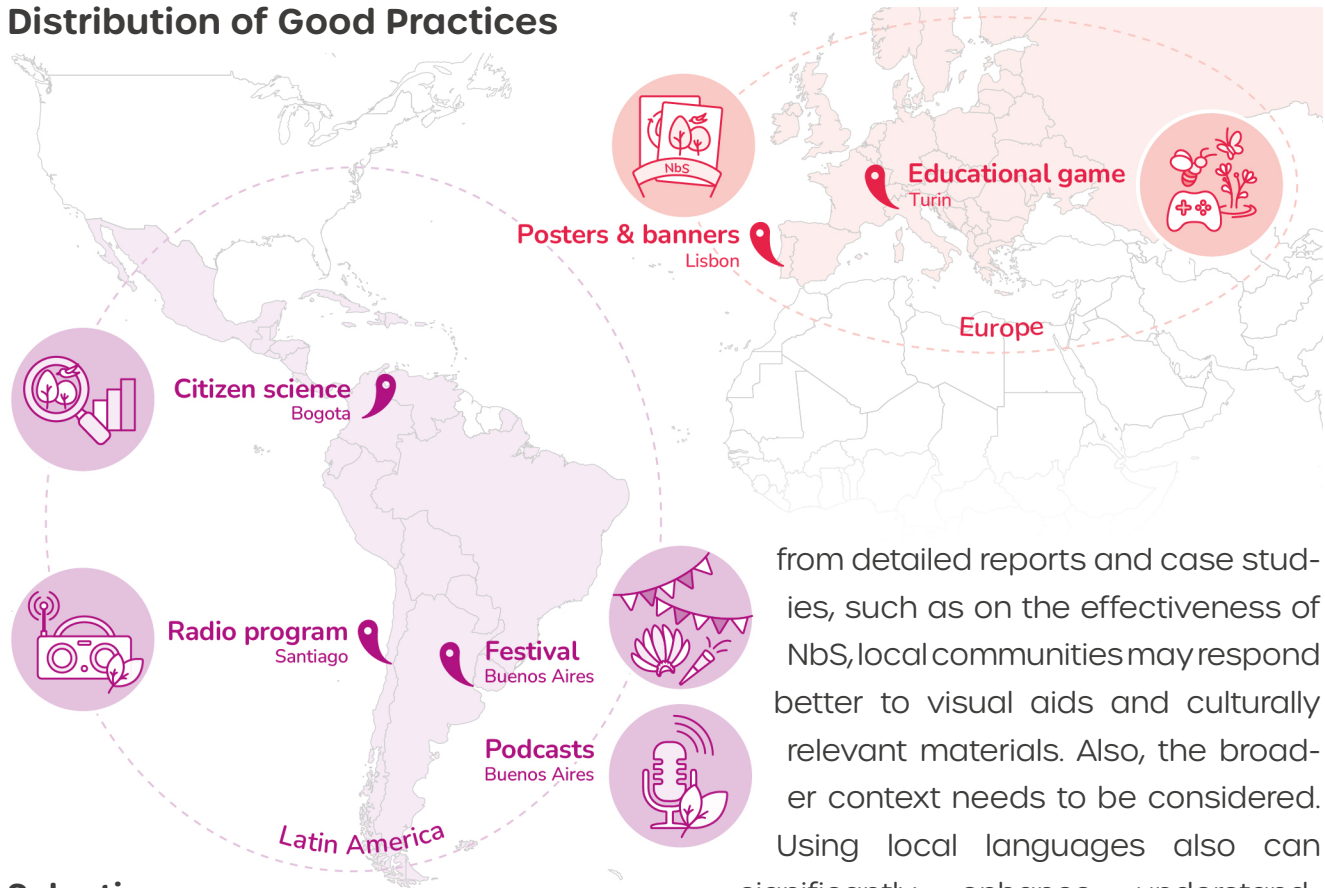
More information

<https://urbem.co/en/2024/05/2023-annual-impact-report/>



Photo by URBEM.

Distribution of Good Practices



Selecting appropriate NbS knowledge transfer formats

Multiple knowledge transfer formats are often used concurrently and complementarily in implementing NbS, such as promoting an online webinar on a project’s handbook through social media. Each knowledge transfer format has its potentials and limitations. Moreover, they can appeal differently to various stakeholders. The mode of presentation of NbS can impact the success of the knowledge transfer. Therefore, selecting the suitable knowledge transfer format(s) for any NbS initiative, considering various factors, is essential.

First the target audience needs to be considered, ensuring that the complexity of the information matches their literacy levels. While policymakers might benefit

from detailed reports and case studies, such as on the effectiveness of NbS, local communities may respond better to visual aids and culturally relevant materials. Also, the broader context needs to be considered. Using local languages also can significantly enhance understanding and engagement. Yet, differences in power, hierarchy, and communication styles across stakeholders can determine how knowledge is perceived and accepted. In some cultures, social reputation or hierarchy might inhibit people from asking questions.

For knowledge transfer to be adequate, the accessibility and the supporting infrastructures to specific formats need to be evaluated. The technological infrastructure, such as electricity and the internet, need to be present to access electronic and online formats; for online formats and webinars, good internet connectivity is essential. Printed materials or community meetings are more suitable for areas with limited internet access. However, as the example of the podcast shows, access

to the internet does not need to coincide with engaging with the format as long the material can be stored locally.

Project timelines also need to be considered when choosing appropriate formats. Web-based platforms make seamless and frequent updates possible, making them suitable for rapidly evolving NbS initiatives and quick feedback. More so, interactive websites or community forums keep dialogue ongoing for continuous feedback-taking. In contrast, information in printed materials is more static, and feedback may be slower.

Furthermore, budget and resources are also worth considering. High-engagement formats, like workshops, tend to be resource-intensive yet are ideal for practitioners with apprehensions or needing hands-on training. Promotion materials (e.g., brochures) require moderate engagement and offer widespread dissemination but are cost-effective. Besides these, formats that are more environmentally friendly should be prioritized. Also, the chosen formats ought to comply with legal and ethical standards.

Lessons learned



1. Different knowledge transfer formats are effective for engaging different audiences if they are aligned with the needs and interests of the audience.
2. Combining different formats helps to convey NbS messages across various demographics and interests to amplify impact.
3. More interactive elements, like games and real-time discussions in podcasts, enhance understanding and retention of NbS.
4. Knowledge transfer formats can inspire behavioral change and collaboration.

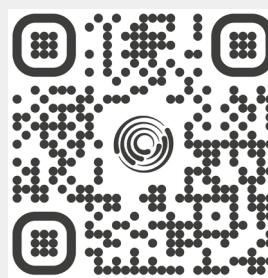
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