

Module 1:

Facilitation and Conflict Resolution, Communication

Ivana Connor

National Museum of Country Life

Institution

National Museum of Country Life

Contact

Edmond Aylward: edmond@leavenotraceireland.org

Type of participants

Go Green Participants

Date

28/05/2024

Location

Turlough, Castlebar, Co.Mayo, Ireland

Report

Goals of the visit

The main goals of the visit are reflected below:

- ❖ *Learning and Reflection: To deepen participants' understanding of Ireland's rural heritage and cultural dynamics through guided exploration and facilitated discussions.*
- ❖ *Skill Development: To foster skills in communication, facilitation, and conflict resolution, essential for engaging in sustainability initiatives and community-based projects.*
- ❖ *Conflict Resolution: To equip participants with strategies and insights into resolving conflicts that may arise in environmental conservation efforts, promoting constructive dialogue and cooperation.*
- ❖ *Awareness of Environmental Issues: To raise awareness of environmental conservation challenges and the importance of sustainable development practices, as exemplified by the Greenway Walk and cycle track.*
- ❖ *Community Engagement: To encourage active participation and collaboration within local communities, promoting dialogue and cooperation with stakeholders, including landowners, towards shared environmental goals.*
- ❖ *Educational and Inspirational: To inspire participants to apply learned knowledge and skills in their own communities, contributing to ongoing efforts in environmental stewardship and heritage preservation.*

Short-programme

At 3pm the group got a bus to the National Museum of Country Life. The group walked into the main area and enjoyed a talk on the history of the Museum. After this the group had an hour to enjoy the inside of the National History Museum of Country life. After this the group had a discussion on the Greenway Walk/Bicycle route

Description

Visiting the National Museum of Ireland - Country Life in Turlough provides an enriching field trip experience for participants of the GoGreen project, focusing on communication, facilitation, and conflict resolution. Guided by Ed from Leave No Trace Ireland, participants explore exhibitions showcasing rural Irish life from the late 19th to mid-20th centuries. Ed facilitates discussions that encourage reflection on the cultural and social dynamics of rural communities, including topics such as societal changes, economic challenges, and traditional practices. Interactive exhibits and workshops further enhance the learning experience by offering hands-on opportunities to explore traditional crafts and skills. These activities not only deepen participants' understanding of Ireland's rural heritage but also foster skills in active listening, effective communication, and constructive conflict resolution. Such skills are crucial for participants as they navigate diverse perspectives and contribute to sustainability initiatives within their own communities as part of the GoGreen project.

Additionally, the field trip includes a visit to the Greenway walk and cycle track, which now extends from Achill to Castlebar, ending at the Museum, providing a safe route for walking and cycling enthusiasts. Here, the group learns about the history of the Greenway and the challenges that arose between landowners and state bodies to facilitate its creation. This discussion sheds light on the complexities of balancing environmental conservation, community interests, and public infrastructure development, further enriching the participants' understanding of sustainable development practices.

At the Museum, the group also enjoys a dedicated section for questions and discussion. This opportunity allows them to delve into topics such as how to effectively communicate with landowners in their local areas, drawing from insights gained during the field trip. Discussions focus on building constructive relationships, understanding differing perspectives, and fostering collaborative approaches to environmental initiatives. Participants exchange ideas and strategies, preparing them to engage proactively with stakeholders and communities in their own regions as they continue their involvement in the GoGreen project.

Discussions and main conclusions

The field trip, organised as part of the GoGreen project, offers a comprehensive exploration of the cultural, social, and environmental dynamics shaping rural Irish communities. Through a blend of historical insights, practical workshops, and strategic discussions, participants are equipped with essential skills and knowledge to support sustainable development initiatives

1. Cultural and Social Dynamics of Rural Communities:

- *Societal Changes: Examination of how rural Irish communities evolved from the late 19th to mid-20th centuries.*
- *Economic Challenges: Discussion on the economic difficulties faced by rural populations and their adaptive strategies.*
- *Traditional Practices: Exploration of traditional crafts and skills, highlighting the importance of preserving cultural heritage.*

2. Communication and Facilitation:

- *Active Listening and Effective Communication: Participants engage in exercises to improve these skills, essential for community engagement.*
- *Constructive Conflict Resolution: Strategies for resolving conflicts in a constructive manner, crucial for sustainability projects.*

3. Sustainable Development and Environmental Conservation:

- *Greenway Development: The history of the Greenway walk and cycle track, including the challenges of balancing environmental conservation, community interests, and public infrastructure.*
- *Stakeholder Engagement: Techniques for effective communication with landowners and other stakeholders, emphasizing the importance of building constructive relationships.*

4. Interactive Learning:

- *Hands-on Workshops: Participation in activities that provide practical experience in traditional crafts, reinforcing the cultural context of rural Irish life.*
- *Group Discussions: Facilitated by Ed from Leave No Trace Ireland, these discussions encourage participants to reflect on their learning and share insights.*

Main Conclusions:

1. Enhanced Understanding of Rural Heritage:

- Participants gain a deeper appreciation of Ireland's rural heritage, which informs their perspectives on cultural preservation and sustainability.

2. Improved Communication and Facilitation Skills:

- Through guided discussions and interactive activities, participants develop key skills in active listening, effective communication, and conflict resolution, which are vital for their roles in the GoGreen project.

3. Insights into Sustainable Development Practices:

- Learning about the Greenway project provides practical examples of the complexities involved in sustainable development, including stakeholder negotiation and environmental conservation.

4. Practical Strategies for Community Engagement:

- Discussions on how to communicate effectively with landowners and other stakeholders equip participants with strategies to build collaborative relationships and foster community support for environmental initiatives.

5. Preparation for Local Initiatives:

- The field trip prepares participants to apply their newly acquired skills and knowledge to their local contexts, enhancing their capacity to contribute to sustainability projects within their communities.

Overall, the field trip is an enriching experience that combines cultural education with practical skill development, preparing GoGreen project participants to effectively engage with diverse stakeholders and promote sustainability in their local areas.

References

Country Life Museum

<https://www.museum.ie/en-IE/Museums/Country-Life>

Castlebar to Turlough Green way

<https://www.mayo.ie/attractions/castlebar-turlough-greenway>

Module 1

Conflict resolution, effective communication and active listening

Ivana Connor

Visit Details

Institution

Leave No Trace Ireland

Contact

Karina Dingerkus: karina@giorria.com

Type of Participants

Go Green participants

Date

28/05/2024

Location

Castlebar, Co Mayo, Ireland

Report

Goals of the visit

The primary goals for Lough Lannagh are to promote sustainable and harmonious use of the area for all visitors, ensure safety and accessibility, and enhance the natural environment. Balancing the interests of various user groups such as water users, fishermen, dog walkers, kids playing, joggers, and walkers is crucial. Encouraging respectful behaviour and adherence to rules among all visitors is essential for minimising conflicts and preserving the site's beauty and functionality. During this field trip the group will see an example of a functioning community space that has overcome conflict between stakeholders and community groups. Throughout this workshop the group recreates scenarios that can occur in different areas of the lake and understand each group's point of view on conflict and why there may be different opinions in relation to the functions of a space. Why creating group role plays opens up different forms of communication and allows peer learning? While Karina facilitated the workshop, she included everyone in the learning experience. Below are different forms of conflict that can be found. This is then broken down into how the goal of this is to show how to engage with stakeholders, different methods of doing this and different forms of communications.

Short-Programme

At 2 PM, we first visited the Community Park. Following this, we explored the Outdoor Symposium Area, walked along the Designated Walkway for the Community, checked out the Amenities Developed for Community Use, and finally, we visited the Outdoor Sport Facilities.

Description

Dr Karina Dingerkus led the group around Lough Lannagh, facilitating an informal talk focused on developing active listening, effective communication, and conflict resolution skills. As they walked, she encouraged participants to engage in thoughtful discussions, prompting them to reflect on the diverse needs and perspectives of the various user groups who frequent the area.

The group participated in outdoor role-playing exercises, applying the skills they had developed during the morning sessions. These exercises were designed to simulate real-life scenarios, helping participants to practise handling conflicts that might arise in a community setting. Lough Lannagh experiences high foot traffic daily, with each visitor creating a unique experience while enjoying the natural environment. This field trip provided participants with an immersive experience, exposing them to the everyday challenges faced by the Castlebar community.

Through these activities, the group practised various communication strategies. They first role-played as community members encountering common issues such as dog waste left on paths, youths playing loud music, and unmarked tracks. Participants acted out discovering these problems and expressing their frustration. This exercise aimed to highlight the emotional responses that such issues can provoke and the importance of addressing them constructively.

Next, participants assumed the roles of stakeholders, such as local authorities and community leaders, exploring ways to address these issues through regulated communication and active listening. They discussed potential solutions like installing more waste bins, creating designated quiet zones, and improving signage for pathways. This aspect of the field trip emphasised the importance of engaging with the community, fostering open dialogue, and collaboratively finding solutions to maintain harmony in shared public spaces.

An open discussion was held on how to engage the community effectively through public meetings, social media, and on-site questionnaires. The group explored various methods of communication and engagement to ensure broad community involvement. As a practical exercise, they re-created an on-site questionnaire tailored for Lough Lannagh. This questionnaire served as an example, allowing the group to practise formulating questions that would gather valuable feedback from the community about their experiences and concerns while using the area.

By running through these activities, the group was able to practise different areas of communication, enhancing their ability to empathise with others and develop practical solutions. Dr Dingerkus underscored the importance of these skills not only in managing conflicts but also in building a more inclusive and cooperative community environment.

Discussions and main conclusions

From the experience led by Dr. Karina Dingerkus around Lough Lannagh, several key learnings can be identified:

- 1. Active Listening: Participants engaged in activities that emphasised the importance of active listening. Through thoughtful discussions and role-playing exercises, they practised listening to diverse perspectives and understanding the needs of various user groups in the community.*
- 2. Effective Communication: The field trip highlighted the essential role of effective communication in resolving conflicts and addressing community concerns. Participants practised expressing their viewpoints constructively and explored communication strategies suitable for different stakeholders, such as community members, local authorities, and leaders.*
- 3. Conflict Resolution Skills: Outdoor role-playing exercises simulated real-life scenarios, allowing participants to practise handling conflicts that commonly arise in community settings. This practical experience equipped them with skills to manage and resolve conflicts, fostering a more harmonious environment at Lough Lannagh.*
- 4. Community Engagement: The group discussed and practised methods for engaging the community effectively, including public meetings, social media outreach, and on-site questionnaires. They learned the importance of broad community involvement in decision-making processes and gathering feedback to improve public spaces.*
- 5. Empathy and Collaboration: By assuming different roles and perspectives during the role-playing exercises, participants developed empathy towards others and gained insights into collaborative problem-solving. They explored solutions collaboratively, such as installing waste bins or creating quiet zones, which are essential for maintaining community harmony.*
- 6. Practical Application: The on-site questionnaire exercise provided practical experience in formulating questions to gather community feedback effectively. This hands-on approach allowed participants to apply their learning directly to the context of Lough Lannagh, ensuring the relevance and applicability of their communication and engagement skills.*
- 7. Building Inclusive Communities: Dr. Dingerkus emphasised that these skills not only manage conflicts but also contribute to building inclusive and cooperative community environments. Understanding diverse perspectives and engaging with empathy are crucial for creating spaces where all community members feel valued and heard.*

Overall, the field trip facilitated by Dr. Karina Dingerkus provided participants with a comprehensive learning experience in active listening, effective communication, conflict resolution, community engagement, empathy, and collaborative problem-solving. These skills are essential for fostering a supportive and inclusive community environment at Lough Lannagh and beyond.

References

Lough Lannagh. (n.d.). MayoCoCo. <https://www.mayo.ie/en-ie/living-in-mayo/look-for-local/lough-lannagh>

Things to do Lough Lannagh, Activity Breaks Castlebar. (2014, October 30). Lough Lannagh. <http://www.loughlannagh.ie/things-to-do/onsite>

Module 3:

Natural Capital and Cultural Heritage

SYNTHESIS Center for Research & Education

Visit Details

Institution

Home4Cooperation & Association for Historical Dialogue and Research (AHDR)

Contact

- Home4Cooperatoin:

- ❖ Phone: +357 22 44 57 40 / +90 548 834 5740
- ❖ Email: admin@home4cooperation.info
- ❖ Address: 28 Marcou Dracou Street, Nicosia, 1102, Cyprus

- Association for Historical Dialogue and Research

- ❖ Phone: +357 22 44 57 40
- ❖ Email: ahdr@ahdr.info

Address: 28 Marcou Dracou Street, Nicosia, 1102, Cyprus

Type of participants

- ❖ Public officers/technicians
- ❖ Councillors
- ❖ Enviromental project or department coordinators
- ❖ Enviromental advisors
- ❖ Consultants who work for/advise local governance

Date

Monday, 24th April 2023

Location

Nicosia, Cyprus

Report

Goals of the visit

Nicosia's Buffer Zone, Medieval Venetian Walls of Nicosia, Paphos Gate, Panagia Faneromeni Square, Ledra Street Crossing Point, Buyuk Han, The Samanbahce Quarter

Description

During the course of our excursion to Nicosia, we were given the chance to gain firsthand exposure to the city's rich heritage and distinctive way of life. We went to a variety of locations, each of which provided a fresh viewpoint on the history and development of the city.

The space that is being used by Home4Cooperation and the Association for Historical Dialogue and Research was our first destination. This location, which is situated in the middle of the buffer zone, acts as a focal point for activities that are concerned with the preservation of cultural heritage and the promotion of sustainable development. We were given the opportunity to gain insight into the work that the organisation does and how it seeks to foster mutual understanding and cooperation among different communities.

Following that, we went on an excursion into the buffer zone itself, which is a demilitarised region that divides the Greek and Turkish Cypriot communities on the island. We observed the division first-hand, which served as a stark reminder of the ongoing political tensions in the region.

After that, we went to see the Mediaeval Venetian Walls of Nicosia, which are a relic of the city's long and illustrious past. The city's defences relied on these walls, which were constructed in the 16th century and served in that capacity for the city. The walls, which are an important landmark in the city's cultural heritage, impressed us with their grandeur and craftsmanship. These walls are an important landmark.

Our next destination was Paphos Gate, which was originally constructed as one of the city's entrances. We gained an understanding of the historical significance of the gate as well as the function it served in the city's overall defensive strategy.

We found Panagia Faneromeni Square to be a lively and active public space that is well-liked by both the people who live in the area and those who are just passing through. Because the square is home to a number of cafes and restaurants, visitors are able to get a taste of some of the more traditional dishes that are served in Cyprus.

One of the most memorable parts of the tour was when we crossed the buffer zone through the Ledra Street Crossing Point. We were made aware of the ongoing political tensions in the region by the stringent security measures and passport checks that were in place when we visited the area.

Our next stop was at Buyuk Han, a stunning Ottoman caravanserai dating back to the 16th century that has been beautifully restored and transformed into a cultural centre. During our time there, we were given the opportunity to explore the courtyard and learn about the history of the building, which during the Ottoman era was a centre for the trading of goods as well as cultural traditions.

We concluded our tour of Nicosia by going to the Samanbahce Quarter, which is one of the city's oldest neighbourhoods. In order to gain a better understanding of the history of the city, we ventured through the congested streets and analysed the region's historically significant buildings.

The time we spent in the field in Nicosia was, all in all, a memorable and enlightening experience. We were given the opportunity to gain knowledge about both the city's illustrious cultural history and the ongoing political tensions that continue to drive a wedge between the community. The trip served as a useful reminder of the significance of fostering mutual understanding and cooperation among communities, as well as the significant role that cultural exchange plays in fostering both peace and the development of sustainable practises.

Discussions and main conclusions

Several discussions and observations emerged during our visit to Nicosia, shedding light on the connection between biodiversity, the political and social context, and the intertwining of nature and cultural heritage. These discussions provided useful insights into the city's current state, challenges, and opportunities for positive change.

The role of the green line in fostering biodiversity was one significant aspect that emerged from the discussions. Because of political division, the buffer zone inadvertently became a haven for flora and fauna. Nature flourished in the absence of human interference, and the green line served as a unique corridor for wildlife, promoting biodiversity in the region.

Regardless of the political or social context, people on both sides of the divide desired interaction and connection. Different cultural landscapes, as well as a shared appreciation for nature and cultural heritage, served as a common ground for community building. River use and tree reforestation projects brought people together, emphasising the value of collaboration and collective action in environmental conservation.

The COVID-19 pandemic's burst of nature was a topic of discussion, emphasising the positive impact of reduced human activity on the environment. The vibrant display of flora and fauna served as a powerful reminder of how humans and nature are inextricably linked. It sparked discussions about environmentally friendly practises and the importance of protecting and preserving the natural environment for future generations.

The discussions also touched on the role of trees as catalysts for discussion about best practises. Partners in reforestation projects were inspired by successful initiatives in other countries. Learning from global experiences and adapting them to the local context became clear as essential for promoting environmental sustainability.

During the discussions, one significant point was raised about the historical use of exotic species for water control, which had unintended consequences. Corrective measures were acknowledged as being required to address the ecological imbalances caused by the introduction of these species. This emphasised the importance of making informed decisions while keeping long-term ecological implications in mind, as well as the need for ecological restoration and native species conservation in mind.

Education and community engagement emerged as critical components for building bridges and promoting a shared vision. Concerns were raised during the discussions about changes to school curricula that occurred without adequate consultation from the government. Education was viewed as a powerful tool for fostering mutual understanding, empathy, and a shared sense of responsibility for the environment and cultural heritage.

Community housing was also a major topic of discussion. It became clear that community-led initiatives could be critical in promoting inclusive and sustainable development. Nicosia could foster social cohesion and create spaces that reflect the diverse needs and aspirations of its residents by involving local communities in decision-making processes and by providing affordable housing solutions.

The discussions also provided a reality check in terms of other European countries' awareness of the Nicosia conflict and its unique challenges. The lack of understanding of the complex political and social context highlighted the importance of sharing experiences and encouraging dialogue to raise awareness and support for peaceful resolutions.

The visit sparked debate about the country's history and its relevance today. Historical structures have been seen undergoing transformations, changing uses and adapting to changing needs. Some buildings emphasised tourism, while others emphasised business, and still others embraced cultural initiatives. These adaptive reuse projects demonstrated cultural heritage's resilience and ability to evolve while maintaining historical significance.

Youth activism, particularly in the buffer zone, served as a powerful inspiration. Young activists' determination and enthusiasm for bridging divides and promoting dialogue was evident. Their initiatives emphasised the importance of empowering and involving youth in shaping the city's future.

Finally, the discussions and observations made during the Nicosia visit provided valuable insights into the complex relationship between biodiversity, the political and social context, and the connection between nature and humans.

References

Association for Historical Dialogue and Research (AHDR). (2024, October 1).

Association for Historical Dialogue and Research (AHDR). <https://www.ahdr.info/>

Home for cooperation. (n.d.). <https://www.home4cooperation.info/>

Module 4:

Biodiversity conservation and ecosystem services

Claudia Vanessa Silva

Visit Details

Institution

Municipality of Lousada's Mata de Vilar forest

Contact

matadevilar@cm-lousada.pt, +351 939 752 535

Type of participants

Public officers/technicians, Councillors, Environmental project or department coordinators, Consultants who advise local governance

Dates

Wednesday, 21 February 2024

Location

Lousada, Portugal

Report

Goals of the visit

The goal of this visit was to demonstrate how a municipality can acquire a degraded space with significant ecological potential and cultural value, rehabilitate it through national funding and volunteer programs, and make it beneficial for the community. It is important not only to inspire but also to present practical, easily replicable nature conservation solutions and activities to engage with people, that the participants will not only see, but feel.

Short-Programme

Interpretive Trail of the Miradouro: Mata de Vilar's historical background; Initial actions and funding; Power of volunteerism and community engagement. Accessible trail, sensory trail, and forest school.

Tour of Biodiversity-Promoting Structures: Deadwood amphitheater, sound cone, ponds, nest boxes, deadwood fences, hibernaculum, sandarium, and insect hotels

Description

Mata de Vilar, located in the heart of the Sousa Superior Protected Landscape, is a 14-hectare forest managed by the Municipality of Lousada. It is the largest continuous native forest in Lousada, comprising oak, beech, and coniferous trees. Its uniqueness and the sustainable management model applied have earned it the international certificate of High Conservation Value Forest by FSC®.

The history of Mata de Vilar is closely tied to the Feijó family, a prominent family in the region. This forest played a significant role in the lives and histories of many generations from Lousada who worked in and witnessed its development. From 1923 onwards, Mata became a true family recreational space, while still contributing to the agricultural economy of the farm and the adjacent Casa de Vilar. However, around the 1950s, following the death of the sole heir, the forest was abandoned, its most valuable trees plundered. Over the following years, exotic species like pines and invasive acacias came to dominate the landscape.

Recognizing the importance of such a space in a fragmented, densely populated region dominated by intensive agriculture and forestry, the Municipality of Lousada acquired Mata de Vilar in 2008. After thorough biodiversity surveys and studies, the first major action took place in 2016 with the removal of 6 hectares of exotic species during an international work camp, supported by dedicated young European volunteers. In 2018, the Vilar Integra project was launched—Integrated Requalification of the Mata de Vilar: from Tourism to Sustainability—promoted by the Municipality of Lousada with support from Turismo de Portugal. This project is based on a series of integrated and innovative interventions aimed at enhancing the natural and cultural heritage of the region, diversifying and enriching tourism offerings, raising public awareness of nature conservation and sustainability, and promoting the value of the local social landscape.

Today, the forest is equipped with an Interpretation Center, laboratory, workshop, seed bank, and educational nurseries, catering to a wide range of audiences. There are several trails, including the country's first accessible forest trail and a sensory trail. A pilot project for a forest school is also underway. Mata de Vilar has its own environmental education program, offering schools, families, and the general public a choice of 52 activities and workshops covering topics such as literature, science, biodiversity, deadwood, ponds, water habitats, music, and arts. Visitors are encouraged to reconnect with nature through unique experiences, such as giant wooden sound cones placed in the forest, or amphitheatres that, aside from being ideal for photos, demonstrate the importance of deadwood for the ecosystem's decomposers.

The space is also used by the municipality's nature conservation team to experiment with more efficient pond-building techniques, the role of deadwood fences, and how to accelerate the regeneration of native forests while optimizing resources. A set of biodiversity-promoting structures, easily replicable at home or in schools, is also presented, including bat and bird nest boxes, hibernaculum, sandarium, insect hotels, and bird feeders.

The fauna list of Mata includes more than 70 species, with notable mentions of threatened bat species, the red squirrel, the honey buzzard, and the emerald dragonfly, a species protected at the European level. In terms of flora, 112 species have been catalogued, with highlights including legally protected species such as the cork oak, gilthead, daffodil, and holly

Discussions and main conclusions

The first topic raised among participants was the delay in utilizing the Mata after it was acquired. It was explained that the municipal administration was undergoing a transition period, and it took several internal discussions and battles before a plan was approved to designate the area primarily as a nature protection zone, an innovation at the time.

The voluntary effort that removed 6 hectares of invasive species was highly praised, prompting a discussion on active volunteer programs in participants' respective countries. However, there was also concern about how significant resources are often spent on removing invasive species, only for them to reestablish themselves. It was explained that it is more effective to focus on smaller areas and ensure ongoing follow-up actions, as was done in the Mata. Here, two staff members regularly remove the regrowth of invasive plants that previously dominated the area. This need is gradually decreasing as the native seed bank becomes more established, with trees now able to provide enough shade to prevent the return of invasives. In fact, only a few complementary shrub species were planted, as most of the flora was already present in the form of a seed bank. The main issue was that the invasive species, with their rapid growth, inhibited the native plants from establishing.

As they walked the trail, participants experienced the sense of peace and fulfilment that the forest exudes, while appreciating the diverse life forms surrounding them. Questions about visitors arose, leading to discussions on how to promote activities effectively, as well as the ongoing challenge of balancing nature tourism with the sustainability of the territory. It was also noted that managing visitor requests can be challenging, especially when considering habitat protection, as there is still a need to raise awareness about the delicate balance between leisure activities and nature conservation.

Upon reaching the biodiversity-promoting structures, the visitors were surprised by how simple they seemed to be to construct, sparking ideas for similar initiatives in their own communities. The low cost of materials was also highlighted, with many of the structures using bio-waste from municipal pruning activities. Many organisms critical to ecosystem balance require specific microhabitats to thrive—conditions often disrupted by human activity. By creating structures that replicate these natural niches, biodiversity can be enhanced, benefiting bats, birds, reptiles, amphibians, invertebrates, and fungi. The biologist guiding the tour also emphasized the potential for environmental education activities using these resources, from sampling sessions and construction workshops to simple observation of the ecology of the species present.

At the conclusion of the visit, the key takeaways were: the importance of having enough well-trained environmental education staff capable of facilitating activities for all types of audiences; the need to create multipurpose spaces rather than single-use areas; and the necessity of selecting technicians and professionals with knowledge of natural dynamics and practical experience when undertaking ecological restoration and infrastructure development

References

Mata de Vilar. (n.d.). <https://www.sousasuperior.pt/destinations/mata-vilar/>

Module 4:

Ecosystem services & Biodiverse Carbon Project

Claudia Vanessa Silva

Visit Details

Institution

VERDE - Association for the Integrated Conservation of Nature

Contact

geral@verde-associacao.pt , +351 934 405 804

Type of participants

Public officers/technicians, Councillors, Environmental project or department coordinators, Consultants who advise local governance

Date

Wednesday, 21 February 2024

Location

Lousada, Portugal

Report

Goals of the visit

The goal of this workshop was for participants to learn about ecosystem services, how to measure them, and their potential for nature conservation and the economic resilience of rural and/or natural territories. Additionally, the aim was also to introduce the history of VERDE, a local youth association founded with municipal support, which today runs an innovative project that values the ecosystem services of the municipality's large trees, protecting them

Short-programme

The importance of big old trees and their threats; Ecosystem services, what they are, how to measure them, and the challenges and opportunities involved; How the association was founded with municipal support; The scope and impact of the Carbono Biodiverso project.

Description

A "Green Giant" refers to large, old trees that are essential to ecosystems due to their immense environmental benefits. These trees provide crucial ecosystem services such as carbon sequestration, helping to mitigate climate change, and air purification, enhancing air quality. Moreover, they serve as vital habitats for numerous species, supporting biodiversity and maintaining ecosystem stability. Conserving these trees is not only key to preserving ecological balance but also to fostering community engagement in environmental protection efforts.

Through the Lousada Sustainable Environmental and Research Fund, the Municipality of Lousada financed the Green Giants project in 2017, with the goals of "Knowing, Engaging, and Valuing" these important trees. As part of the project, 7,400 of these giants were inventoried, with around half being fully characterized. Remarkably, the study revealed that these trees sequester an average of 50 kg of carbon per year and store over 1,500 kg of carbon.

However, the project also found that nearly 6% of these trees were being killed annually, primarily because they represented financial burdens with no direct return for their owners. The project founder was thus tasked with finding a solution to halt this deforestation.

At the time, the concept of ecosystem services was gaining popularity. Ecosystem services refer to the various benefits that humans derive from natural processes, encompassing both material goods and intangible services. The concept emerged from the need to quantify, evaluate, and assign value to these benefits. These services can be divided into three categories: Provisioning services (e.g., food and raw materials extracted from ecosystems), Regulating and maintenance services (e.g., climate regulation and water purification), and Cultural services (e.g., recreation and spiritual value). By establishing clear criteria and indicators, this methodology allows for the assignment of economic value to ecosystem services, which highlights their importance to both society and the economy

The initial idea to address the deforestation issue was through carbon trading markets, which allow landowners to sell carbon credits for forest preservation or reforestation. However, this system currently applies only to new forestation projects and does not account for the value of existing trees, despite their demonstrated importance

As a result, VERDE was founded to embark on the innovative task of developing a new carbon credit methodology, aimed specifically at valuing these ancient trees. While this process is time-consuming, to act more quickly, the association implemented the Payment for Ecosystem Services (PES) model. Through its Carbono Biodiverso initiative, VERDE collects funds from companies and individuals seeking to offset their carbon footprint and pays tree owners an annual fee, in exchange for their commitment to preserving the trees in good condition. The association also assists in managing the trees and revitalizing adjacent land, exploring agroforestry as a way to make forests profitable through non-timber products, thus maintaining their ecological value.

The Carbono Biodiverso project has been well-received by companies and funding entities and is beginning to overcome the skepticism of the first landowners signing contracts to protect trees. VERDE's young and multidisciplinary team has successfully attracted many volunteers to Lousada, supporting the municipality's environmental restoration efforts in exchange for equipment resources, creating a fruitful partnership for the common good.

Discussions and main conclusions

The participants collectively discussed how the founder of VERDE and other young scientists were attracted to Lousada from various parts of the country through the Lousada Sustainable Environmental and Research Fund, and how this initiative was a great idea. It was noted that the investment in funding versus the return in high-quality

data collected through the initiative is highly beneficial. Many of these young professionals eventually stay and secure green jobs within the municipality, renting homes, shopping locally, and contributing to the town's life. In fact, Lousada is one of the youngest municipalities in the country.

Many were also surprised by the lack of legislation in Portugal protecting large trees, while countries like Spain and Cyprus have recognized some of these gaps. Nevertheless, the municipality's effort to award the project was highly praised.

Several questions arose about ecosystem services and the current legislative state, all of which were promptly answered by the VERDE representative. The ingenuity of the Carbono Biodiverso solution was commended, though questions were raised regarding the approach to stakeholders. It was explained that companies with environmental concerns are already sensitive to carbon offsetting. Since most market solutions are based in the Americas or Africa, these companies are pleased to support national initiatives they can monitor more closely. Additionally, their financial contribution is offset by the marketing benefits they gain with clients who share similar values. Some companies even learn about VERDE's restoration initiatives and join the cause as volunteers.

However, with rural, elderly landowners, a more delicate and time-consuming approach was needed. Initially, they were suspicious of the monetary offer and co-management proposal, which simply aimed to preserve the trees rather than cut them down. The biologist explained that it was crucial to engage local influencers, such as parish presidents or priests, who vouched for the initiative and helped build trust among landowners. Once that trust was established, landowners were very satisfied with the support in maintaining and improving their lands and trees.

The main takeaways from this synergy were the importance of creating partnerships with local NGOs and attracting qualified professionals to rural regions. The interdisciplinary nature of the team was also a key success factor, as this innovative idea challenged everyone to think about how ecosystem services can bring value to their territories.

References

What is Biodiverse Carbon? | VERDE Associação. (n.d.). VERDE Associação.
<https://www.verde-associacao.pt/en/carbono-biodiverso>

Module 5:

Land water management and sustainable reuse of built heritage

Claudia Vanessa Silva

Visit Details

Institution

Molinological and Forest Park of Sousa

Contact

paisagemprotegida@cm-lousada.pt, +351 255 820 500

Type of participants

Public officers/technicians, Councillors, Environmental project or department coordinators, Consultants who advise local governance

Date

Tuesday, 20 February 2024

Location

Lousada, Portugal

Report

Goals of the visit

This visit aimed to showcase the strategic acquisition of land by the municipality, which is being developed to improve the region's ecological and energy efficiency, safeguard historical natural and cultural values, and mitigate climate change impacts.

Short-Programme

The municipality's sustainability strategy and land acquisition; River intervention; Restoration of historical buildings and renewable energy; Cultural values.

Description

Lousada's green revolution began quietly in 2014, when Manuel Nunes, an archaeologist and professor with a deep love for his homeland, was newly elected as the municipal councilor for the environment. He approached the University of Aveiro in search of academic expertise to develop something unprecedented in the country: Lousada's Municipal Sustainability Plan. Leading the initiative was Dr. Milene Matos, a biologist with a PhD and a background in marketing and digital communication. She based the plan on five key pillars: Research and Nature Conservation, Environmental Education and Scientific Literacy, Social Engagement, Infrastructure Efficiency, and Internal Sustainability. To her surprise, the first biodiversity survey revealed that the region housed critically endangered species, which was unexpected given the area's industrial-agricultural-rural landscape.

One of the key identified areas was a 6-hectare plot where the Sousa River crosses agricultural lands, encompassing seven mills, a hydraulic sawmill, a miller's house, and three dams, all bordered by a beautiful oak forest. The river regularly overflowed, causing significant damage. Therefore, the first action involved the renaturalization of the Sousa River and the creation of infiltration zones along its banks. The riverbanks were softened and reshaped naturally, and a large pond was built to control flooding. This pond acts as a "sponge," storing water during heavy rain, replenishing aquifers, and helping prevent soil erosion. The pond has also become a carbon sink, contributing to water purification and providing a habitat for amphibians and dragonflies, which are natural pest controllers.

Deadwood fences and amphitheaters were installed as environmental education tools and biodiversity-promoting structures. Additionally, the riparian galleries were restored, leading to an increase in wildlife diversity. Local residents were pleased, using the area for leisurely walks and picnics.

Despite these efforts, the vernacular heritage of the mills remained underutilized, as only one mill was operational. The municipality partnered with the local miller to open the mill to visitors. For the other mills, an innovative idea was born: the creation of the Pias Molinological Park. With a budget of about one million euros, the project is located within the Sousa Superior Local Protected Landscape, a region covering more than 20% of Lousada, another achievement of the current administration.

The Pias intervention aims to renovate the existing spaces, transforming them into innovative environmental, cultural, and educational facilities. The restored Moinhos de Pias complex will house educational spaces dedicated to the biodiversity of the Sousa River, the archaeology of flour production in Lousada, and the geology of the Sousa Valley. Additionally, the project will feature training in traditional arts related to milling and bread-making, including a Miller's Workshop, an Artisanal Grinding Factory, and a Traditional Bread Lab.

Finally, to ensure the project's energy neutrality, the Pias Molinological Park will be powered exclusively by microturbines installed in the foundations of the old water mills, generating clean energy.

Discussions and main conclusions

The group was initially struck by the impressive size of the implemented pond. It was explained that this larger project was only undertaken after the team had developed sufficient technical expertise from working on smaller, sealed ponds spread across the territory. This pond, however, required the use of heavy machinery and was deliberately left unsealed to perform its role as a natural "sponge," allowing excess water to infiltrate and recharge aquifers during periods of heavy rainfall. This design helps prevent downstream flooding by regulating the river's flow. Additionally, the team minimized disruption by introducing select aquatic plant species that quickly established themselves, facilitating natural colonization. Before long, amphibians, birds, and small mammals also began utilizing the habitat, showcasing the rapid ecological benefits of the pond.

The next point of interest was the landscape in which this park is situated, the Sousa Superior Local Protected Landscape. Participants remarked that typically, such protected areas are designated by higher levels of government, and they were curious how a municipality managed to create this tool for local land management. It was explained that because this designation involved some restrictions on land use, the municipality had to approach the issue delicately. Community engagement was crucial, so a series of participatory sessions were organized in all affected parishes. The regulation framework was developed in parallel with ongoing community consultations, ensuring that local residents understood the advantages of the initiative and supported its implementation. By involving the community from the start, the municipality succeeded in creating a management model that balanced ecological needs with local interests.

The participants also commended the innovative idea of repurposing the old mills for modern uses. They were enthusiastic about how this project would blend traditional values, art, native cereals, and cultural activities, effectively breathing new life into historical structures. The decision to install microturbines to harness water energy, even though the mills will no longer grind flour, was particularly praised. This ingenious solution not only honors the historical significance of the site but also aligns with contemporary sustainability goals. The group reflected on how, in their own regions, historical buildings have often been converted solely into museum-like spaces, which tend to lose community engagement over time. In contrast, they agreed that adapting such heritage sites to serve current community needs and interests—such as is planned for this project—ensures they remain relevant and actively utilized

Finally, the discussions reinforced the critical importance of having qualified professionals in the region to assess the value of natural spaces and assist in strategic decision-making. These experts play a key role in determining where to allocate funds and resources, ensuring that projects like this align with the three pillars of sustainable development: environmental protection, social inclusivity, and economic viability. Participants recognized that it is not just about conserving the past, but also about building a future where historical, cultural, and ecological assets can coexist in ways that support both the community and the environment. The need for interdisciplinary collaboration—between ecologists, architects, historians, and community leaders—was emphasized as essential for the long-term success of such initiatives.

This elaboration underscores the importance of community involvement, thoughtful land management, and the integration of historical and ecological sustainability in modern urban planning

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Module 5:

Organic and biodynamic agriculture

Claudia Vanessa Silva

Visit Details

Institution

Terra Com'Vida Farm

Contact

blandina.sousa1989@gmail.com, +351 917 002 800

Type of participants

Public officers/technicians, Councillors, Environmental project or department coordinators, Consultants who advise local governance

Date

Tuesday, 20 February 2024

Location

Lousada, Portugal

Report

Goals of the visit

The purpose of this visit was not only to showcase how a young couple, recently settled in the area, started a sustainable farming enterprise with the support of local rural development organizations, but also to highlight the innovative techniques they apply on their farm, which represent the future we should aspire to in our approach to food production.

Short-programme

How the project began; Challenges and Opportunities; Prove Basket Initiative; Best practices in sustainable farming; Community engagement and validation.

Description

Blandina and Pedro Sousa were a young urban couple with careers in the sports industry. When the time came to expand their family, the urban environment no longer felt suitable, and they sought a lifestyle that offered more peace and a closer connection to nature. The proximity to family led them to Lousada, where they made it their mission to provide people with organic, pure, and flavorful food, all while respecting nature and its surroundings.

With no prior experience in agriculture, they embarked on a journey of learning, not only through books but also by spending time with more experienced farmers who shared their philosophy. They exchanged ideas, as well as seeds from ancient varieties—often less perfect in terms of appearance and commercial value but far more nutritious and flavorful. The land they began working on had previously been used for monocultures, so their initial attempts, coupled with their lack of experience, were met with limited success. They had to experiment further, gradually enriching the soil with legume crops and organic manure, which they sourced from their neighbors. They even started a vermiculture project on their farm to help break down green waste and nourish the soil. Chickens also played a role, fertilizing, controlling pests, and aerating the soil in ingeniously designed mobile fences, rotating across different plots of land.

Thus, TERRA COM' VIDA was born in October 2020, from the perfect blend of family and land, combining Organic Farming, Biodynamics, and Permaculture principles.

Their initial idea was to sell directly to the local community, offering only seasonal products, freshly harvested to retain all their flavor and quality. However, because the area was rural, where even those without land had easy access to someone growing vegetables, and due to the unfamiliarity with organic and biodynamic farming practices, as well as the limited network of the newly arrived couple, customers were few and did not immediately see the added value of these products.

It was at this point that they connected with Ader-Sousa, the local Rural Development Association of the Sousa region, which managed the PROVE project locally. PROVE – Promoting and Selling is a methodology designed to help local producers distribute their goods by fostering close relationships between producers and consumers, establishing short supply chains. Using ICT tools, consumers can subscribe to weekly or biweekly baskets filled with a variety of high-quality, handpicked fruits and vegetables. Through this new platform, TERRA COM' VIDA gained more exposure and support from association experts, who provided soil analysis and consulting on how to diversify their product offerings, control pests, and increase production while staying true to their values.

Acquiring a greenhouse was a decisive step in reaching their goals, alongside improvements in their farming techniques. Over two years later, the couple is now independent of the PROVE project but has retained many valuable lessons and continues to use the basket method.

Participants of the visit had the pleasure of seeing permaculture techniques that assist in their organic and biodynamic farming, such as:

- ❖ *Companion Planting:* Growing different plants together to support each other by improving soil health, repelling pests, or providing shade. A traditional example is the "Three Sisters" system—corn, beans, and squash.
- ❖ *Polyculture:* Cultivating a variety of crops together, increasing biodiversity, improving soil fertility, and reducing vulnerability to pests and diseases.
- ❖ *No-till Farming:* Avoiding soil disturbance by not tilling, preserving soil structure, preventing erosion, and maintaining essential microbial life.
- ❖ *Keyline Design:* A land management technique that optimizes water distribution on sloped land, using the natural contours to direct water where it's most needed.

- ❖ *Food Forests: Mimicking natural forests by planting layers of vegetation, including trees, shrubs, herbs, and ground cover, creating a self-sustaining system for food and timber.*
- ❖ *Composting: Recycling organic waste into nutrient-rich compost, improving soil health and fertility.*
- ❖ *Mulching: Covering the soil with organic materials like straw or wood chips to reduce evaporation, suppress weeds, and add nutrients as it breaks down.*
- ❖ *Animal Integration: Incorporating animals like chickens, worms, and pigs into the farming system for pest control, fertilization, and land management.*

At the end, several participants were eager to purchase product baskets, which, as always, were freshly harvested on the spot and paid for directly, contributing to the local economy.

Discussions and main conclusions

The visit to Terra Com' Vida offered participants a firsthand look at how sustainable, biodynamic, and permaculture principles can reshape both a farm and a community's view on agriculture. Various discussions emerged throughout, one of the earliest revolving around Blandina and Pedro's decision to leave their urban lives and embark on farming in a rural setting. Participants admired their willingness to make such a drastic shift and pursue a more nature-connected lifestyle. This sparked discussions on the importance of reconnecting with nature and seeking balance in a world often driven by urbanization and fast-paced living.

A significant point of discussion was the value of learning from local farmers. Blandina and Pedro, despite having no prior agricultural experience, learned from experienced farmers in the area. The participants emphasized how these knowledge exchanges, particularly in sharing seeds and traditional techniques, were critical to preserving both biodiversity and sustainable practices. This connection with local farmers was seen as essential for fostering a community-oriented approach to agriculture

Another topic that generated interest was the couple's challenges in regenerating soil previously used for monoculture farming. Their journey of experimenting with organic manure, vermiculture, and crop rotation resonated with many, some of whom had faced similar obstacles in their own farming endeavors. The group discussed how soil health restoration takes time and persistence, and how organic methods, while slower, provide long-term ecological and economic benefits.

The introduction of the PROVE project, which connects small farmers to consumers through short supply chains, led to a discussion on how to strengthen direct relationships between producers and consumers. Many agreed that initiatives like PROVE help small farmers find their market while fostering community ties and promoting sustainable consumption. Participants also noted that community-based programs can offer valuable exposure for new farmers who need support in their early stages.

Participants were particularly impressed with the permaculture techniques on display, recognizing their potential for boosting productivity while maintaining ecological balance. They wondered if local workshops on the topic would promote this practice amongst other farmers.

The couple's investment in a greenhouse became another topic of reflection, as it allowed them to extend their growing season and diversify their product range. The group agreed that such infrastructure is crucial for small farms aiming to maintain productivity without compromising sustainability. Many noted that accessible funding for infrastructure is key to supporting small-scale farmers as they expand.

Toward the end of the visit, participants discussed the benefits of direct sales between Terra Com' Vida and its consumers, particularly through fresh produce baskets. The group appreciated how such direct relationships not only support the local economy but also foster a stronger connection between consumers and the source of their food. Some visitors were motivated to explore similar models in their own communities.

In conclusion, the visit to Terra Com' Vida provided a wealth of inspiration and learning. Participants left with a deeper understanding of the challenges and rewards of sustainable farming, the importance of community engagement, and the potential of permaculture to reshape agriculture. Many were inspired to implement similar practices and approaches in their own regions, recognizing that small-scale farming, when rooted in sustainability, can create a more resilient and connected future for rural areas.

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Module 6:

Public transportation in Belgium

Bart Van Santvliet & Tim Chabot

Visit Details

Institution

Vervoersregio Antwerpen en mobiliteit in Zoersel

Contact

MOW Flanders:

Filip Boelaert: filip.boelaert@mow.vlaanderen.be

Type of participants

Aldermen

Public officers/technicians

Mobility advisors

Mobility project or department coordinators

Consultants working for/advising the local government

Type of stakeholders that participated in the visit (mayors, water technicians,...)

Date

4 october 2023

Location

Belgium - Antwerpen - Zoersel

Report

Goals of the visit

During the training, mobility in Belgium was explained by the transport region of Antwerp. This framed the global strategy at the Flemish level, then the strategy of the transport region of Antwerp and then also the local strategy in Zoersel.

In Belgium, the system is relatively complex.

The local mobility plan of the municipality of Zoersel was also explained and how this was framed within the broader picture of the transport region and mobility at the Flemish level.

Short-programme

During the visit the car was not used for our transport. Each participant received a bicycle from the company 'Donkey Republic' and otherwise public transport was used. An electric sharing car was also at our disposal should we need to use it, but it was not necessary

Description

From the Flemish level and the various transport regions, efforts are being made to draw a number of red, major threads through the country, on which a smooth connection of public transport is centrally ensured. This can be done by train transport, buses or streetcars, for example.

This creates a smooth connection if you live near the major, red wires.

To encourage further mobility, efforts are made at the local level at hopping points along major routes. This results in a great mobility network if citizens are open to part-mobility and combine different modes of transportation

For the combination of transportation modes, the STOP principle is also considered.

Steps, Stairs, Public Transport, Private Transport.

This means that for those users who live close to a stop or other modes of transportation (public bus, streetcar, train) can move on foot to the stop.

If the distance is too great, they can use bicycles (stairs), and combine this with the bus.

For the relocation in Zoersel, Donkey Republic electric share bikes were used. In this way, either the electric shared bikes or public transport (the bus) was used for each visit.

Only for the visit to Camp C was a private bus used, as there was no easy connection to the site. This mobility was still the most sustainable solution, as all participants took one bus together.

A bicycle tour through the municipality of Zoersel was organized with the electric share bikes. Several sustainable, energy-efficient projects in the municipality were highlighted, and the local mobility strategy was explained.

Sustainable, energy-efficient projects:

- ❖ New residential district with emphasis on nature (green verges and squares), water (canals), solar panels, heat pumps*
- ❖ Old neighborhood in 'project Bloemenwijk'.*
- ❖ 't Boshuisje: Newly renovated building with historical value*

Mobility:

- ❖ School children riding bikes with fluorescent vest*
- ❖ Bicycle streets around schools: Bicycle is king*
- ❖ Slow roads as connecting roads and alternative routes for busier connecting roads within the municipality*
- ❖ Separate bike lanes off the road*
- ❖ Share cars at the town hall*

Discussions and main conclusions

In general, in Europe, the car is still king. Important conditions that emerged during the stay for using the stop principle are

Maintaining and creating good infrastructure that makes it easy to get around. Drafting a mobility plan is indispensable here, so that people can pull together with a clear vision from all different parties on the same sail.

Discourage the car: by taking away space for the car, people will use other means of transportation that are easier than the car.

For the implementation of the mobility plan, it is important to build support among citizens and politicians. There is no consensus on the best way to do this, but it is believed that through participatory processes in which citizens are given a say, support is increased. However, this process may encounter resistance from citizens, making implementation of the plan difficult.

Another way is to implement the plan and ask for feedback after citizens have experienced the effects. Because citizens are already experiencing the results, this usually gives better results.

Mobility is organized at different levels, coordination between these different levels is important. If one wants to commit to the use of different means of transportation (hop on hop off principle), it is necessary to coordinate the sharing options of different providers. In other words, one should not need 20 different apps for switching between different transportation options.

Cooperation between different service providers (De Lijn, NMBS, etc.) is also very important.

The transition of mobility is a change in mentality, therefore it is important to get children involved from an early age, for example, implementing some kind of driving test of children is important.

Bicycles are an expensive investment, children grow so bicycles need to be replaced on a regular basis. a bicycle library where children can borrow bicycles and change to a larger size can provide relief here.

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Module 7:

Energetic neighbourhood renovation

Bart Van Santvliet & Tim Chabot

Visit Details

Institution

Agfa Gevaert

Contact

Employée and volunteer from Energycitizens coöperative Zuidtrant:

Lenn Coussement: lenn.coussement@zuidtrant-w.be (employée)

Arnold Vanhove: arnold.vanhove@skynet.be (volunteer)

Type of participants

Aldermen

Public officers/technicians

Environmental advisors

Environmental project or department coordinators

Consultants working for/advising the local government

Type of stakeholders that participated in the visit (mayors, water technicians,...)

Dates

4 october 2023

Location

Mortsel - Agfa Gevaert and apartment building nearby one of the factories of Agfa Gevaert-, Belgium

Report

Goals of the visit

The purpose of the visit was to investigate and learn how a heat network can be established and how industry near a residential area can contribute to sustainable heating of buildings (citizens, companies, non-profit organizations, etc.) and reduce the CO2 emissions of an entire environment.

An entire residential neighborhood can benefit from the residual heat from Agfa Gevaert's furnaces, without extreme costs, and heat homes at a fixed rate, in an energy-efficient and sustainable manner.

All this has been realized thanks to the collaboration of several citizens' cooperatives (Ecopower and ZuidtrAnt-W), the technical experts from Kelvin Solutions and Agfa Gevaert.

Short-programme

During the visit we saw the heat exchangers on the Agfa Gevaert site, the heat exchangers in the basement of an apartment building, and the explanations were given on the outside of the Agfa Gevaert site by a guide.

Description

During the training, energy was one of the topics. The different ways to move towards energy efficiency were discussed, including heat networks, energy transition through different cooperatives, renovation to make homes more sustainable, solar panels, wind turbines,

To further explain the concept of a heat grid, the visit to Agfa Gevaert's heat grid was organized.

This gave the participants the opportunity to see a renewed project and to check what is necessary to build such a grid in their own area.

From this it could be concluded that the setup was fairly limited in size, but still a very large exchangeable heat could be recovered from the furnaces (residual heat) for the immediate surroundings. Also the necessary modifications to the heating systems of the apartment building, were found to be very limited.

After this explanation, the history of Agfa Gevaert in Mortsel was explained and how the company was created and what steps were taken to start the heat network. This required willingness from local residents, the municipality, Agfa Gevaert management, citizen cooperatives and technical experts. The nearby recycling store (Opnieuw & Co), is also heated via this heat network.

This project sensibly utilizes unused waste heat from chimneys by capturing and transporting it. In the future, this can be expanded to include waste heat from cooling towers.

This avoids the use of fossil fuels and focuses on sustainable heating.

Discussions and main conclusions

Impressive to see the heat grid in reality, and on such a large scale.

The size of the necessary constructions are not too bad, they do not take up so much enormous space.

Not immediately possible to provide such a heat grid of industry everywhere. Not everywhere there is residual heat from production processes near homes or other buildings that could benefit from it.

Alternative sources to build out a heat grid are usually known on a smaller scale, but not yet so well known on a large scale. For example: waste heat from a heat plant, a nearby company with a lot of waste heat, biomass, solar collectors, heat pumps.

New, innovative way of heating.

Many conditions are necessary, especially it may be useful before putting this into practice.

References

Warmte verzilverd. Het project Warmte Verzilverd. [Warmtenet | Warmte Verzilverd](#)

Module 7:

Sustainable energy

Tim Chabot, Elise Goorden & Tine Vermeiren

Visit Details

Institution

Kamp C

Contact

[*sarah.verbeeck@kampc.be*](mailto:sarah.verbeeck@kampc.be)

Type of participants

Aldermen

Public officers/technicians

Enviromental advisors

Environmental project or department coordinators

Consultants working for/advising the local government

Type of stakeholders that participated in the visit (mayors, water technicians,...)

Date

5 october 2023

Location

Britselaan 20, 2260 Westerlo, Belgium

Report

Goals of the visit

In the construction sector, a lot of CO₂ is still emitted through the use of materials and the heating of buildings. Camp C looks at different climate neutral solutions.

Short-programme

After we arrived, we visited an experimental house where that different occupation techniques to make the house emit less CO₃ in production, as the emission of Co² when heating the homes This was a temporary exhibition and a temporary cohert nstruction where all of that fell together.

Afterwards we were given a tour of the permanent building, here we saw more permanent solutions for use in the home. There is a lot of emphasis on circular use of materials and spaces.

Description

In The Exploded View Beyond Building saw 1/3 products of today (innovations already available), 1/3 products of tomorrow (in the certification phase), and 1/3 products of the future (conceptual ideas). For example, we saw the use of reeds and mycelum for soundproofing materials and insulating materials. as well as materials made from recycled materials for insulation. It also looked at the different functions present in the house like how to recycle water in a climate-neutral way.

The Exploded View is also showcasing the endless, potential material streams available that are not yet being used in the construction world. For example, material streams from food, textiles, sewage water, buildings, or even from our own living environment. Through this experimental design, we share our research towards materials that can keep the production circle as small and as efficient as possible.

Above all, The Exploded View is a 'live research' and 'storytelling' installation. It is a model of a detached house in which we display various biobased materials and circular methods side by side. Through both the model and the life-size blueprint, we show all that we have discovered, as well as the parts that we are still missing-

In 2019, Kamp C organised a circular procurement process in preparation for the construction of Belgium's first circular building: 't Centrum. This building will integrate as many pillars of circular building as possible.

By offering a broad view on circular building and constructing the first circular building itself, Kamp C wants to get this innovative and sustainable way of building off the ground in Flanders. The pilot project around 't Centrum provides insights into the obstacles and solutions.

Almost all the materials were circular in design, they were used materials or materials that could be reused. For example, a wall was made of windows from a demolished house. Rainwater is stored on the roof that provides water for the whole building. The foundations are built to have minimal impact on the area and the building can easily be demolished to be built into something new. Heat comes from an underground borehole that brings heat to the surface. For air purification, as well as the ziuvering of grey water, a green wall is used. In short, there are many examples of how to green the building industry

Discussions and main conclusions

The whole site breathes innovation, there are very many possibilities that need to be looked at on the spot to see if they are feasible. for example, in The Exploded View Beyond Building, cork was used to make an ecological flower pot. this is material that is in stock in portugal. building materials also need to be looked at in this way.

These were very innovative ideas and pricipes, but often there are even easier wins in other areas. For instance, in spain, people are setting up an energy cooperative for solar panels to bring down the energy consumption of the home in an ecological way.

But circular construction, which looks at the entire life cycle of the building, is an important principle that people can already start working with when designing new buildings.

References

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Kamp C. Exploded View Beyond Building. <https://www.kampc.be/explodedview>

Module 8:

Sustainable Water Management

Lawrence Sudlow and Ignacio Garcia

Visit Details

Institution

VTW and the Ayia Napa Municipality

Contact

n/a

Type of participants

Technical personnel from VTW

Civil servants from local administrations (partners)

Environmental specialists (partners)

Consultants working for/advising local government

Date

26th April 2023

Location

Ayia Napa, Cyprus

Report

Background

Ayia Napa sea port as well as Nissi beach was contaminated with TPH (Total Petroleum Hydrocarbons) and associated pathogen microorganisms. This was caused by the heavy movement of boats entering and exiting the port, and also motor and oil spills while refuelling their vessels, plus paints & solvents while the owners maintained their boats, as well as sewage contamination. It is safe to say that the high number of tourists during the summer periods also results in additional contamination caused by sewage contamination. The end result was a polluted port, with foggy waters, with increased toxic algae bloom and very little aquatic life. As for Nissi beach the water was filthier and full of seaweed which is repelling to the visitors.

Ayia Napa Municipality entrusted VTW to undertake both of these projects. Samples were collected at the weakest points with the least water circulation in the port plus at the surface water of the Nissi beach.

The results showed contamination of TPH and associated pathogen microorganisms. In just a period of 6 months VTW managed to achieve 99,48% reductions in the TPH levels, resulting in a significant drop of pollutants within the marine water column and restoration of aquatic life. As for Nissi beach the water became clear again and there were less seaweeds which made the beach attractive again for visitors.

Short-programme

Municipal water treatment plant built using public funding. It produces an annual average of about 2.2 million m³ recycled water. The total of all these quantities is available for irrigation. They mainly irrigate citrus, olive, potatoes, green areas and football fields. The water is stored in the tanks, which are mapped as one polygon. The biological value is classed as neutral. Recycled water is a resource which has been given an increased attention in recent years. The importance of this resource, which utilises great amounts of water which would otherwise be lost from the water balance, is particularly high. The supply of recycled water for irrigation via Governmental Water projects started in 1998, with a small amount of around 1.3 million m³. Today it reaches 12 million m³ for irrigation and 2.5 million m³ for enrichment. There is expected to be a big increase in the available quantities in the future.

Description

During the visit, the stakeholders in the group were very interested to see the board control room, the lab and the methodology used at the plant. It was interesting to discover that the company has achieved zero waste, using the recycled water for irrigation and the sludge as a fertiliser. A good example of circular economy (even the water is sold)

The system is cost efficient as the water goes up by pumping but irrigation is by using gravity. The company is aiming to be energy independent in the future. Worth noting that the design of the plant takes into consideration the volume of waste expected when at full capacity during the high season to prevent problems. Noted that they do good data keeping and that the treatment is only organic and mechanical (no additives).

The facility is public but management is private with a 5 yrs contract, so good investment of public money (using the Public-Private Partnerships system).

Discussions and main conclusions

There is an ongoing project to transform sludge into compost worth 15€ million. At this moment it is already used as fertiliser in other parts of the island. Treated water (high quality after the 3rd treatment) is used for irrigation of green spaces at 17 cents or for agriculture at 7 cents (so there is an economic advantage too).

The project is considered to be pioneering in building the sewage and irrigation system at the same time, pumping the sewage up to the plant but using gravity to lead irrigation. Plant is built to maximum capacity (August 150,000 people as compared to 25,000 during the winter).

Planning to install photovoltaic panels to gain energy independence.

Public facilities but run by a private company, new contract every 5 years.

For over 10 years they have only added organic material, bacteria, etc.

There are no factories or heavy industry, so the waste is very high quality.

This system uses 0.6w of electricity per cubic meter of affluent. That's 40% of the cost of using the membrane system.

The funding for the extension of the project came from the EU (2yrs ago, the thermoblowers that send air to the oxygenation tanks which allows the reaction of microorganisms. This represents~60% of their costs in electricity). The plant was built 22 years ago: the government paid for the irrigation system and tertiary treatment and the rest was from local taxes

First treatment is physical, mechanical. Second is the aerobic process in the sludge pools. Third is the sedimentation pools.

They analyse the quality of the water that comes in to check for pollutants, midway through the process, and the one that goes out. Some every day, some 3x a week , some 2x a week.

References

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Module 9:

Waste management

Lawrence Sudlow and Ignacio Garcia

Visit Details

Institution

Ayia Napa Municipality

Contact

Ayia Napa Municipality 25 Agias Mavris Str. P.C 30026, 5340 Ayia Napa

Type of participants

Representatives from the Ayia Napa Municipality

Civil servants from local administrations (partners)

Environmental specialists (partners)

Consultants working for/advising local government (partners)

Date

26th April 2023

Location

Ayia Napa, Cyprus

Report

Background

As mentioned in the Field Visit Report for Module 8, Ayia Napa has worked to reduce its waste contamination in the port and beach areas through a Comprehensive Water Treatment Project and that pollutants have been reduced considerably. The use of water and solids from the water treatment plant as irrigation and fertiliser have also helped to resolve some shortages of natural resources for farmers and gardeners across the island. However, other waste products (plastic, glass, paper, cans. etc.) need specific collection and processing systems that the municipality has to manage. Ayia Napa also has to manage the increased waste produced by the thousands of tourists that visit each year, especially in the summer months.

Short-programme

The Ayia Napa waste policy was explained by the vice-mayor.

Description

During the discussion with the Ayai Napa representatives, the stakeholders in the group asked about volumes and destinations of the different types of waste. The main challenge to the local authority is how to manage tourism in a sustainable way. Given the substantial increase in the population in the summer months, the management of waste in the municipality has to gear up to cope with the waste created by the thousands of tourists that visit the region every year. There is a recognition locally that tourism is positive for the economy but that it does pose a number of challenges. The representatives spoke about some initiatives to get the hotels and restaurants involved in the correct management of waste. They are even engaging with the major tour operators to get them on board, with incentives and regulations that will increase awareness and contribute to the overall management of waste. For example, the local authority has embarked on a programme of distributing compressors to hotels that will reduce the volume of waste (mostly plastics, cans and packaging), therefore reducing the transport of the material (time, workers and CO2 emissions).

The global trend to be “Greener” helps when it comes to asking people to get involved with the reduction, removal and recycling of waste. Activities such as Beach Cleaning have been relatively successful and other initiatives to involve visitors to be responsible with their waste. The local authority is also implementing charges to hotels and restaurants (and other establishments) that do not adhere to the town’s sustainable waste management plan. The question remains if some prefer to pay the charge rather than manage their waste correctly.

Discussions and main conclusions

The Ayia Napa representatives took questions from the group and expressed their desire to continue to improve their waste management policies. It appears that very little domestic composting is done and plastics and other residues that arrive by sea onto the beaches are a constant difficulty to manage.

References

n/a

Module 10:

Social participation, community bounding, environmental education

Jade Alves Gabiron

Visit Details

Institution

Westport Community Gardens

Contact

Website's form: <https://www.westportcommunitygardens.org/contact-info>

Type of participants

GoGreen LTTA4 participants

Community Gardens volunteers

Date

29/05/2024

Location

13 Hyde Lane, Westport Ct 06880, Ireland

Report

Goals of the visit

The purpose of the visit was to discover Westport's only community garden and to learn more about its initiatives as an example of grassroots organisation created by and for a local community. Themes such as social ethics, community boundary, community organisation and social organisation were touched upon, as well as biodiversity conservation, local knowledge transfer and environmental education. More than sensitising the participants, the visit aimed at spreading the struggle of the community gardens against the burgeoning industrialisation in Westport, and to stimulate debate and interest in ecological practices.

Short-programme

The visit started at 2.15am with an introduction to the Westport Community Gardens team. Gemma gave the GoGreen partners a tour of the garden and the solar oven, and let the partners explore the rest of the space on their own. Everyone then gathered in the greenhouse to observe the community's diverse plantations.

Description

The visit began with an introduction to the special status of the Westport Community Gardens. In fact, they and the Long Lots Preserve are threatened by the construction of a multi-purpose sports field. But they are one of Westport's last lungs, protecting the surrounding area from intense flooding, noise and traffic. In addition, the gardens are ideally located close to Long Lots Primary School and are intended to improve the school while developing more educational activities with the pupils.

It could be argued that the Community Gardens were not only a community garden, but also a symbol of the earth's resistance to war. By bringing together different generations, different social backgrounds and different genders through this struggle, the Community Gardens have become a unique space in the local landscape.

Gemma then led the participants through the different parts of the garden. We stopped first at a solar oven, handmade by the garden community. Gemma patiently explained the intricate construction of what looks like a simple artefact. In fact, the community's first attempt collapsed because the materials were not adapted to the climatic conditions. Following this event, they re-evaluated the requirements of the stove, rebuilt it and are now able to use it regularly.

Following this presentation, Gemma gave several examples of repair and construction techniques that the community has developed over the years. One of these was an electric bicycle, made entirely from used materials, that works without a lithium battery. This was an intergenerational collaboration between people who have known how to build and repair bikes for years and younger engineers who rethought the battery system. This project also involved the wider community, as the Westport Garden's Community did not originally have access to all the materials needed for such a design. Gemma's colleague then explained the ecological management of the site. The gardens are located in a natural area that the community tries to keep as wild as possible. As such, the site is mainly made up of fallow land to maintain the natural biodiversity and fertility of the soil. It allows natural species to coexist, creating a unique environment close to the heart of the city. This brief explanation allowed us to take a closer look at the rich biodiversity that surrounded us as we enjoyed a free time in the garden.

After a ten minute exploration, we all gathered around the greenhouse to hear Gemma and another colleague talk about seasonal farming. In the tiny greenhouse, the community gardens grow many different types of fruit and vegetables, which are later used by the volunteers, but also by the neighbours who used to collect their food there. As part of this activity, the community also offers gardening tips to visitors and a fair list of local recipes on their website to encourage local food consumption.

Discussions and main conclusions

Westport Community Gardens' visit gave the partners an opportunity to discuss several topics.

1. Social inclusion

Although social inclusion is increasingly overlooked in ecological projects, its implementation can remain confusing for some. At Westport Community Gardens it is part of the identity of the place. All ages, cultures, ethnicities and abilities are welcome. The philosophy of the place, as Gemma explained to us, is to build a community from the resources available to it, including its members. The gardens are feminist, ecological and intersectional. The partners noted the originality of the place, but wondered how all these people could work together in harmony on some activities. As our hosts demonstrated during the visit, this place only exists today.

because it has been built by many hands, all with the same desire to create something together. All the volunteers come from different backgrounds and share their knowledge and experience. In this way, physical disabilities, language barriers and so on are overcome by the same common will to be part of this diverse community

2. Knowledge transmission and sharing

During the visit, the discussion paused for a moment on the importance and ways of sharing knowledge. There are many. Gemma referred to the gardening books that the community uses both to grow their own garden and to share with visitors, as well as the websites and YouTube videos they used to build their electric bike from scratch. She also highlighted the intergenerational initiatives that Westport Community Gardens is developing to preserve ancestral knowledge that would otherwise be lost. Participants reflected on the need to mix traditional and modern knowledge, formal and informal sources, but even more on the need to experiment and learn from unsuccessful attempts in order to find a collaborative and sustainable solution.

3. Maintenance of communitarian eco sites

On a more practical note, the conversation turned to the maintenance of the site and, more importantly, the natural spaces it contains. Indeed, the Gardens include not only a garden, a greenhouse and various indoor and outdoor workshops, but also a large area of wild land. This is to protect the natural ecosystems that the community sees as 'Westport's last natural lung'. Its members have chosen to preserve as much natural land as possible to allow natural cycles to fertilise the soil and preserve this carbon sink as close to the city as possible.

4. Local resistance against capitalistic projects

The last issue discussed by the participants is closely related to the previous one. Indeed, the Westport Community Gardens are threatened by the aforementioned industrial constructions. The very existence and perseverance of the community embodies the refusal to see concrete take over the earth. It is an act of resistance. However, these concerns remain rather niche for the majority of Westport residents. The community is struggling to be heard by the local authorities who have an economic interest in transforming the area, by the neighbours of the gardens themselves who would rather have access to a modern commodity than a natural

space, and even more so by the stakeholders of the industrial project itself. This is not an isolated case, however, as many local projects like this one are threatened and face the same opposition... their own opposition

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Presentation of Westport Tidy Towns Program

Jade Alves Gabiron

Visit Details

Institution

Westport Tidy Towns

Contact

Facebook page: <https://www.facebook.com/westporttidytowns/>

Type of participants

GoGreen LLTA4 participants

Date

29/05/2024

Location

Westport, Co. Mayo, Ireland

Report

Goals of the visit

The 'main objectives' of this visit were to show a successful example of local and sustainable community involvement in the wake of a national initiative. As a result, this field visit addressed aspects such as: local adaptation of national strategies; stimulating and sustaining local community engagement; organising large and diverse groups of volunteers; and the conditions necessary to maintain a safe and clean living environment. Participants in the visit had the opportunity to observe a successful example of such practices, but also to question the local dynamics that promote social participation in Westport.

Short-programme

The visit took place outside Westport House, where LTTA4 participants met volunteer and coordinator Eithne Larkin. She spent an hour introducing the organisation, the programmes and answering questions from the participants.

Description

As the visit was static, it will be described by its content. We met Eithne Larkin in front of Westport House, where participants formed a semicircle around Eithne, who proudly displayed the organisation's awards since 2001 on the yellow vest she was wearing.

Our host began by explaining the formation of the national initiative and its aims. The main focus of TidyTowns was to encourage communities to improve their local environment and make their area a better place to live, work and visit. It quickly took the form of a competition to develop a stimulating rivalry that would encourage more and more people and towns to get involved. Eithne later explained that the initiative had gained momentum in Ireland and attributed it to a desire to make the city more attractive to tourists, especially as Galway and the west coast already concentrated most of the tourist activity. She also highlighted the strong sense of Irish community in a city where, far from folkloric interpretations, living conditions are not always optimal. Whether it is the fickle weather or the economic hardships highlighted earlier in this training at the Irish Life Museum, community building has been shown to help people overcome the difficulties of daily life.

Westport also won the 2001, 2006 and 2008 editions of the competition. On the one hand, Eithne explained that the volunteers felt that the time they put in had a double impact on their living environment: it was visibly cleaner and their work was recognised by their peers. On the other hand, the volunteers' work is rewarded beyond their local community, and the time spent maintaining Westport has an indirect impact on the rest of Ireland. Volunteers not only gained pride in their work, but also a sense that they could do more, better, with more people. This is how the Westport organisation grew.

Later, Eithne explained how she and her colleagues manage a growing team of volunteers with diverse availability, skills and motivations. By May 2024, the organisation had gathered 500 volunteers. They are all allocated a time slot, a location and a team to work with on a regular basis.

Finally, TidyTowns addressed the question of community engagement. To date, TidyTowns has mainly used traditional social media platforms to communicate with its team and the local community. They share recent clean-ups, partner initiatives, local best practice and national updates.

The field trip ended with a brief tour of the area by Ivana Connor from Leave No Trace.

Discussions and main conclusions

This field visit allowed partners to exchange about the following topics:

1. Creating community engagement.

TidyTowns is an interesting example because it started at a very local level and then spread to the rest of Ireland. The GoGreen partners wondered what techniques and methods had been used to mobilise such an important community around waste management and urban cleanliness over time. Both the reward system and the very tangible results of the volunteers' work are key factors, according to our host. It touches directly on the motivations at the heart of individual commitment to the community. By taking part in the TidyTowns initiative, residents receive real recognition from both their local and wider communities. This not only reinforces their sense of usefulness and togetherness, but also helps them to participate in the dynamics of their local community. The national competition then rewards their work in a more objective way. Moreover, by cleaning their city, the volunteers are both the initiators and the beneficiaries of their action, creating complementary reward circuits.

2. Sustaining community engagement.

This second question is directly related to the first. How have TidyTowns managed not only to maintain, but also to build on the community engagement that they initially created? The discussion built on our host's previous conclusion. This complex and multiple reward system, she said, is able to foster a will to progress, to develop, to do more, thanks to the very local and communitarian results of the volunteers' actions. TidyTowns have been able to create different local communities on social media, to publicly value the work of their volunteers, but also to create local partnerships with other communities. This strengthens their base as they grow.

3. Articulating the national and local levels.

So far we have been discussing the example of Westport, but the discussion also touched on the structure of TidyTowns. Indeed, like many organisations, they have to engage in the complex gymnastics of articulating local activities at a national level. They have done this by giving a great deal of autonomy to the local branches of the organisation, while regulating the rules of competition at the national level. In this way, each local group can act according to the specifics of its territory and community, while remaining under the umbrella of the national organisation. In fact, Eithne explained that the local communities do not need to communicate with each other, which allows them to focus on developing local initiatives while the national umbrella co-ordinates them when needed.

4. The right to a safe and clean environment.

Participants in the visit also addressed a fundamental issue at the heart of TidyTowns' existence: access to a clean, healthy and sustainable environment for all. Recognised as a human right by the United Nations General Assembly in July 2022, what may be a given for some is far from a reality for others. The discussion drew a comparison between the favourable situation of most of Ireland and places where families struggle every day to access it. TidyTowns is therefore a reminder that you can and must give life to the fundamental rights you enjoy on a daily basis.

5. Nature conservation vs city conservation.

On a lighter note, the discussion touched on the differences between nature conservation and urban conservation, which is much less commonly addressed. This may be due to an anthropic, albeit ecologist, vision of nature as a defenceless being that humanity must protect, whereas cities would be their opposite: an artefact created

for and by humans whose survival depends on it. Beyond this philosophical consideration, it must also be noted that both technical and legal mechanisms aimed at preserving these (eco)systems are radically different in nature and means, and sometimes incompatible.

In summary, this encounter with Westport Tidy Towns allowed participants to address issues ranging from community engagement and organisational issues to nature conservation and human rights. These issues can be seen as reflecting the transversal nature of successful and sustainable community projects.

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