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PROJECT LARD (LOOKING FOR ALTERNATIVE RESPONSIBLE DECISIONS) AS A WAY TO PRESENT SELECTED ELEMENTS OF SUSTAINABLE DEVELOPMENT

Abstract: *People need knowledge of how to integrate the concept of sustainable development into their daily lives. It is important for them to make informed decisions and responsibly choose solutions to the problems around them in order to reduce human impact and, consequently, generate environmental, social, and economic benefits.*

The aim of this article was to present the use of the original LARD project to develop awareness of the interconnections among the natural, social, and economic dimensions of sustainable development among Erasmus students in Poland. Using the LARD project concept, a Spanish student identified and discussed one of the key challenges: people's understanding of the value of mature trees' ecosystem services in the context of the links among natural, social, and economic outcomes.

Keywords: sustainable development, active education, LARD project, responsible decision-making, ecosystem services, biodiversity loss

PROJEKT LARD (POSZUKIWANIE ALTERNATYWNYCH I ODPOWIEDZIALNYCH DECYZJI) JAKO SPOSÓB NA PREZENTACJĘ WYBRANYCH ELEMENTÓW ZRÓWNOWAŻONEGO ROZWOJU

Abstrakt: *Ludzie potrzebują wiedzy jak zintegrować koncepcję zrównoważonego rozwoju z codziennym życiem. Ważne by świadomie podejmowali decyzje i odpowiedzialnie wybierali rozwiązania otaczających ich problemów z myślą o obniżaniu antropopresji i w konsekwencji o pojawiających się korzyściach przyrodniczych, społecznych i ekonomicznych.*

Celem niniejszego artykułu było przedstawienie wykorzystania autorskiego projektu LARD do rozwijania świadomości powiązań sfery przyrodniczej, społecznej i ekonomicznej zrównoważonego rozwoju wśród studentów programu Erasmus w Polsce. Wykorzystując koncepcję projektu LARD, hiszpańska studentka zidentyfikowała i omówiła jeden z ważnych problemów: zrozumienia przez ludzi użyteczności usług ekosystemowych dojrzałych drzew w kontekście powiązania efektów przyrodniczych, społecznych i ekonomicznych.

Słowa kluczowe: zrównoważony rozwój, aktywna edukacja, projekt LARD, odpowiedzialna decyzja, usługi ekosystemowe, utrata bioróżnorodności

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I. INTRODUCTION

People need sustainable development and the knowledge of how to integrate it into everyday life through conscious decision-making and the selection of responsible alternatives in areas such as consumption, food choices, mobility, waste management, the efficient use of energy and water, as well as community and civic participation. It is equally important to use the benefits of biodiversity in ecosystems responsibly (United Nations, 2015).

However, there remains a general lack of information, coherence, and innovation in understanding the vision of sustainable human development. Recent research highlights that achieving sustainable development requires balancing three interdependent pillars: economic growth, social inclusion, and environmental protection, which continue to be globally misaligned and insufficiently addressed by current policies (Sadiq et al., 2025).

This demonstrates the need to promote comprehensive approaches that connect individual decision-making with institutional strategies and regulatory frameworks capable of fostering responsible alternatives in the long term. Only through effective collaboration among citizens, businesses, and governments will it be possible to advance toward more sustainable, inclusive, and adaptive development models capable of responding to contemporary challenges (OECD, 2021).

A key element in the practical application of the principles of sustainable development is the recognition of ecosystem services, which are the benefits that human societies obtain from nature. These services include provisioning services, such as food, fresh water, timber, and medicinal resources; regulating services; cultural services; and supporting services. Ecosystem services are essential because they sustain life, support economic activities, and contribute directly to human well-being and social stability (TEEB, 2010).

For this reason, societies must protect ecosystems and manage natural resources responsibly. The degradation of forests, wetlands, oceans, and agricultural lands reduces the capacity of ecosystems to provide these services, generating serious environmental, economic, and social consequences. One of the greatest current threats is biodiversity loss, as the disappearance of species weakens ecological balance and leads to the progressive loss of ecosystem services. For example, the decline of pollinators affects food production, deforestation reduces carbon sequestration and climate regulation, and the destruction of wetlands increases the risk of flooding and water scarcity (FAO, 2022).

When seeking solutions to current problems, it is necessary to choose the least harmful alternatives and prioritize actions that minimize negative impacts on nature and society. This includes promoting renewable energy, sustainable agriculture, circular economy models, responsible consumption, ecosystem restoration, and conservation policies. Decision-making processes should consider long-term environmental costs and benefits, ensuring that present needs are met without compromising the ability of future generations to enjoy healthy ecosystems and a high quality of life (European Commission, 2020).

The aim of this article was to present the possibilities of using the LARD (Looking for Alternative Responsible Decisions) project to develop sustainability awareness among Erasmus students in Poland.

II. MATERIALS AND METHODS

The LARD project is an original concept developed by the authors to promote an understanding of sustainable development principles in everyday life. It is an adaptation of the case study method designed to seek solutions to broadly understood local problems in relation to natural, social, and economic dimensions. Its application is closely linked to active

learning. According to its general assumptions, a case study in the LARD project includes the following elements:

- a. a description of the situation (describing the circumstances and conditions of the problem under investigation),
- b. a clear definition of the issue or concern, i.e., naming the problem,
- c. several proposed solutions,
- d. an analysis of the consequences and impacts of implementing each solution, and
- e. the selection of the most constructive and beneficial solution, together with its justification.

The LARD project and the example problem to be solved were presented by the teacher to an Erasmus student from Spain (co-author of this article) and were then discussed and further developed during meetings held as part of the course *Chosen Aspects of Sustainable Development*. This form of active learning was consistent with the CLIL (Content and Language Integrated Learning) approach (Ruiz de Zarobe, 2025), which was used by the authors in classes with Erasmus students at the University of Rzeszów. The interpretation of the proposed solution was further expanded through discussion with another academic teacher interested in active education for sustainable development.

Using the LARD project concept, the student identified and discussed in greater depth the need for people to understand the value of the ecosystem services provided by mature trees.

III. RESULTS AND DISCUSSION

Below is a description of the practical application of the LARD project to the specific issue of preventing the loss of ecosystem services provided by mature trees through thoughtful decision-making.

a. Description of the situation: In a small neighborhood within a multifamily housing estate, a mature tree was growing near the windows of one of the apartment buildings. An elderly woman lived in the apartment facing the tree. Its large branches blocked some of the sunlight entering her home during the day. As a result, her apartment became darker, and she had to use artificial lighting more frequently. Dissatisfied with the tree's proximity to her window, she submitted a written complaint to the housing estate council requesting that the tree be cut down to improve her living conditions. No other residents expressed a similar request.

In response to her letter, some residents supported removing the tree, whereas others recognized the value of the ecosystem services it provided and wanted to preserve it because of its importance to the local community, other living organisms, and even the elderly resident herself. Consequently, the residents began to consider the most appropriate course of action. Which option would best satisfy the needs of all neighbors?

When selecting a solution to a problem, it is always worthwhile to consider alternative options. In this case, it is important to remember that mature trees are often located near residential buildings and public spaces. Some branches may become weak over time and pose a risk to people, vehicles, and buildings. At the same time, mature trees provide shade, improve air quality, and generate significant environmental, social, and economic benefits. They function as regulators, stabilizers, and organizers of biological life within urban ecosystems (One More Tree Foundation, 2025).

If a tree is felled, new trees should be planted to help maintain environmental balance (Ustawa o ochronie przyrody, 2004; Ley 42/2007, 2007). However, young trees cannot fully or immediately compensate for the ecosystem services lost when a mature tree is removed. Although young trees often grow more rapidly and absorb relatively more carbon dioxide per unit of biomass, mature trees possess much larger crowns and more extensive root systems, making them considerably more effective at air purification, shading, and water recycling (Lutz et al., 2022). This is further

supported by research showing that large, mature trees store disproportionately greater amounts of carbon and provide substantially greater ecological benefits than younger trees (Stephenson et al., 2014; Nowak et al., 2010).

According to the United Nations, sustainable development requires balancing environmental, social, and economic dimensions without compromising the ability of future generations to meet their own needs. The following analysis presents three possible solutions to the problem from this perspective. Tables 1–3 illustrate the potential environmental, social, and economic consequences for local residents resulting from each proposed decision.

b. A clear definition of the issue/concern: The case was titled "*To Fell or Not to Fell the Mature Tree.*"

c. Several proposed solutions: Three possible solutions to the situation were considered.

- **Solution 1:** Felling the tree.
- **Solution 2:** Pruning selected branches.
- **Solution 3:** Explaining to the resident who requested the removal of the tree the benefits of keeping the tree or pruning its selected branches and providing neighborly support to her.

d. An analysis of the consequences and impacts of implementing each proposed solution:

Solution 1: Felling the tree

Table 1 presents the potential benefits and challenges associated with this solution, as identified by the student from the perspective of sustainable development, including its environmental, social, and economic consequences. By implementing an appropriate educational campaign based on this specific case study, a broader educational impact can be achieved among local residents. Although compensatory tree planting provides long-term benefits, such as future ecosystem recovery and the creation of jobs related to planting and maintenance, it also results in a substantial temporary loss of ecosystem services. This loss is particularly evident at the environmental level, as young trees cannot immediately replace the functions of mature trees, and at the social level, where residents may experience a decline in their quality of life.

Table 1 – Tabela 1

Selected consequences of cutting down a mature tree and compensatory planting of a young one
Elementy konsekwencji wycięcia dojrzałego drzewa i kompensacyjnego posadzenia młodego

SD level <i>Poziom SD</i>	Potential benefits (opportunities) <i>Potencjalne korzyści (szanse)</i>	Potential limitations (challenges) <i>Potencjalne ograniczenia (wyzwania)</i>
Environmental level / <i>Poziom ekologiczny</i>	Restoring the functioning of the ecosystem of young trees in the vicinity of the block, improving air quality, reducing CO ₂ levels, protecting biodiversity / <i>Przywrócenie funkcjonowania ekosystemu młodych drzew w otoczeniu bloku, poprawa jakości powietrza, obniżenie poziomu CO₂, ochrona bioróżnorodności</i>	Trees need time to grow and regain the ecosystem services provided by older trees; young trees, for example, absorb significantly less carbon initially / <i>Drzewa potrzebują czasu, aby urosnąć i odzyskać usługi ekosystemowe zapewniane przez stare drzewa; młode drzewa absorbują na początku np. znacznie mniej węgla</i>
Social level <i>Poziom społeczny</i>	An opportunity to increase environmental awareness and residents' participation in creating a sustainable reality by analyzing the effects of cutting down a mature tree and taking further compensatory measures. Cutting down and maintaining new plantings creates employment opportunities for a specific group of people (jobs) / <i>Okazja do zwiększania świadomości ekologicznej i partycypacji mieszkańców w tworzeniu</i>	Requiring residents and law enforcement agencies to responsibly protect young trees and limiting the ecosystem services of mature trees will translate into a reduction in the quality of life and health of residents / <i>Wymaganie od mieszkańców i organów porządkowych odpowiedzialnego zabezpieczenia młodego drzewa, ograniczenie usług ekosystemowych dojrzałego drzewa przełoży się na obniżenie jakości życia i zdrowia mieszkańców</i>

	<i>zrównoważonej rzeczywistości przez analizę skutków wycięcia dojrzałego drzewa i podejmowania kolejnych działań kompensacyjnych. Wycięcie i prowadzenie pielęgnacji nowego nasadzenia umożliwi zatrudnienie określonej grupy ludzi (miejsca pracy)</i>	
Economic level <i>Poziom ekonomiczny</i>	After some time, the young tree will take on the economically valuable work of the technical infrastructure, e.g. in shading (reducing cooling costs in summer) or protection from the wind (reducing heating costs in winter) / <i>Po pewnym czasie młode drzewo podejmie wycenianą ekonomicznie pracę infrastruktury technicznej np. w zacienianiu (ograniczenie wydatków na chłodzenie latem) czy ochronie przed wiatrem (ograniczenie wydatków na ogrzewanie zimą)</i>	The costs of felling, planting and maintaining trees can be high, and the loss of ecosystem services provided by old trees can impact residents and the local economy / <i>Koszty wycięcia, sadzenia i pielęgnacji mogą być wysokie, a utrata usług ekosystemowych starego drzewa może mieć wpływ na życie mieszkańców i lokalną gospodarkę</i>

Solution 2: Pruning selected branches

Another possible solution to the problem is to respond to the elderly woman's request by preserving the tree while pruning the branches that obstruct her access to sunlight (Table 2). Instead of cutting down the entire tree and losing its ecosystem services, only the branches causing the problem would be removed.

Table 2 – Tabela 2

Selected consequences of pruning selected branches / *Elementy konsekwencji wycięcia jedynie części gałęzi*

SD level <i>Poziom SD</i>	Potential benefits (opportunities) <i>Potencjalne korzyści (szanse)</i>	Potential limitations (challenges) <i>Potencjalne ograniczenia (wyzwania)</i>
Environmental level / <i>Poziom ekologiczny</i>	This can help the tree grow healthier by removing dead or infected branches, preventing disease, improving sunlight and airflow, and reducing the risk of branches falling during a storm / <i>To może pomóc drzewu rosnąć zdrowiej, usuwa martwe lub zainfekowane gałęzie, zapobiega chorobom, poprawia nasłonecznienie i przepływ powietrza oraz zmniejsza ryzyko upadku gałęzi podczas burzy</i>	If these activities are carried out too frequently, they can damage the tree, restrict its growth, weaken its structure and affect the local habitats of birds, insects and other non-human creatures / <i>Jeśli działania te są przeprowadzane zbyt często, mogą uszkodzić drzewo, ograniczyć jego wzrost, osłabić jego strukturę i wpłynąć na lokalne siedliska ptaków, owadów i innych stworzeń pozaludzkich</i>
Social level <i>Poziom społeczny</i>	It can improve public safety by preventing old branches from falling, protecting children playing near power lines, and keeping public areas clean / <i>Może poprawić bezpieczeństwo publiczne poprzez zapobieganie spadaniu starych gałęzi, ochronę dzieci bawiących się w pobliżu, linii energetycznych i utrzymanie czystości w miejscach publicznych</i>	This may limit the amount of shade for many residents and users of the space, reduce natural beauty, cause temporary noise during maintenance work, and some people may object to the pruning of branches (conflicts) / <i>Może to ograniczyć rozmiar cienia dla wielu mieszkańców i użytkowników przestrzeni, ograniczyć naturalne piękno, powodować chwilowy hałas podczas prac konserwacyjnych, a niektórzy ludzie mogą sprzeciwiać się przycinaniu gałęzi (konflikty)</i>
Economic level <i>Poziom ekonomiczny</i>	Reduces future costs by preventing accidents or property damage, avoids expensive emergency repairs, and increases the value of safe and attractive areas; tree still performs economically valuable technical infrastructure functions, such as shading (reducing cooling costs in summer) or wind	Requires tools, trained workers, and possibly professional services; regular maintenance can create repeated costs over time. Reduced biodiversity, lower value of ecosystem of tree services / <i>Wymaga narzędzi, przeszkolonych pracowników i ewentualnie profesjonalnych usług;</i>

	protection (reducing heating costs in winter) <i>Zmniejsza to przyszłe koszty poprzez zapobieganie wypadkom lub uszkodzeniom mienia, pozwala uniknąć kosztownych napraw awaryjnych i zwiększa wartość bezpiecznych i atrakcyjnych obszarów; drzewa nadal pełnią ekonomiczne wartościowe funkcje infrastruktury technicznej, takie jak zacielenie (zmniejszanie kosztów chłodzenia latem) lub ochrona przed wiatrem (zmniejszanie kosztów ogrzewania zimą).</i>	regularna konserwacja może generować powtarzające się koszty w dłuższej perspektywie. Zmniejszona bioróżnorodność, przekłada się na niższą wartość usług ekosystemu drzewa
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Table 2 indicates that selective pruning represents a more balanced approach. It allows the preservation of most ecosystem services while improving residents' safety and comfort. However, improper or excessive pruning may damage the tree and reduce its ecological value.

Comparing the first two solutions, it is clear that complete removal of the tree provides an immediate solution to one resident's problem but leads to long-term environmental losses (and, consequently, to social and economic losses resulting from the loss of the tree's ecosystem services), whereas selective pruning offers a compromise between human needs and environmental protection.

Solution 3: Explaining to the resident who requested the removal of the tree the benefits of keeping the tree or pruning its selected branches and providing neighborly support to her

The third solution is the one that best reflects the environmental, social, and economic dimensions of sustainable development (Table 3).

Table 3 – Tabela 3

Selected consequences of pruning selected branches of a mature tree and providing care for an elderly resident
Elementy konsekwencji podcięcia niektórych gałęzi dojrzałego drzewa i podjęcia opieki nad starszą mieszkanką

SD level <i>Poziom SD</i>	Potential benefits (opportunities) <i>Potencjalne korzyści (szanse)</i>	Potential limitations (challenges) <i>Potencjalne ograniczenia (wyzwania)</i>
Environmental level / <i>Poziom ekologiczny</i>	Solution preserves biodiversity, improves air quality, and maintains the ecological value of the ecosystem services / <i>Rozwiązanie chroni różnorodność biologiczną, utrzymuje jakość powietrza i inne wartości ekologiczne usług ekosystemowych dojrzałego drzewa</i>	Cutting down too many branches can reduce ecosystem services* <i>Wycięcie zbyt wielu gałęzi może ograniczyć świadczenia ekosystemowe*</i>
Social level <i>Poziom społeczny</i>	Strengthens community awareness and environmental responsibility; preserves a natural landmark with cultural or emotional value. Great educational importance for young residents of the estate, an example of recreating social ties / <i>Wzmacnia świadomość społeczną i odpowiedzialność za środowisko; chroni "zabytek" przyrody o wartości kulturowej i emocjonalnej. Ma duże znaczenie edukacyjne dla młodych mieszkańców osiedla, stanowiąc przykład dbania o bioróżnorodność i odbudowy więzi społecznych</i>	It may be difficult to find volunteers to care for an elderly resident; there is a risk of a lack of consistency and responsibility in this activity* / <i>Może wiązać się z trudnością znalezienia wolontariuszy do opieki nad starszą mieszkanką; zagrożenie brakiem konsekwencji i odpowiedzialności w tym działaniu*</i>
Economic level <i>Poziom ekonomiczny</i>	Reduces long-term costs of removing and replacing trees; can increase the aesthetic and property value of the area. Leaving the tree's ecosystem benefits translates into money <i>Obniża długoterminowe konsekwencje i</i>	The ongoing costs of maintaining a tree in good condition, the costs of caring for an elderly resident* / <i>Bieżące koszty utrzymania drzewa w dobrej kondycji, koszty opieki nad starszą osobą*</i>

	koszty usuwania i zastępowania dojrzałego drzewa; może zwiększyć walory estetyczne i wartość nieruchomości na danym obszarze. Pozostawienie korzyści ekosystemowych jakie daje drzewo, przekłada się na różnorodne zyski finansowe	
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* The concept of caring for an elderly resident may encompass various forms of support, ranging from simple acts of neighborly kindness – such as asking how she is feeling, identifying what she needs to feel part of the local community, or sharing a freshly baked cake – to broader assistance provided by local authorities. Such institutional support could include financial compensation for higher electricity bills resulting from the need to use artificial lighting more frequently in a slightly shadier apartment (this concept is a good example of close connection of influences at environmental, social, and economic dimensions of sustainable development) / * *Koncepcja opieki nad starszą mieszkanką może obejmować różne formy wsparcia, od prostych aktów sąsiedzkiej życzliwości – takich jak pytanie o samopoczucie, wskazanie jej potrzeb, by poczuć się częścią lokalnej społeczności, czy podzielenie się świeżo upieczonym ciastem – po szerszą pomoc udzielaną przez władze lokalne. Takie wsparcie instytucjonalne może obejmować rekompensatę finansową za wyższe rachunki za prąd wynikające z konieczności częstszego używania sztucznego oświetlenia w nieco bardziej zacienionym mieszkaniu (ta koncepcja jest dobrym przykładem ścisłej łączności oddziaływania na poziomie przyrodniczym, społecznym i ekonomicznym zrównoważonego rozwoju)*

Refraining from cutting down a mature tree, preserving its full range of ecosystem services, helping the elderly woman understand its environmental and social value, and compensating her for the inconvenience of living in close proximity to the tree through appropriate care (e.g., regular assistance with daily activities, emotional and psychological support, help with transportation, shopping, medical appointments, household maintenance, and gardening, as well as ensuring her comfort and safety through community involvement, social services, regular health monitoring, and adaptation of her living environment to her needs while encouraging social interaction and reducing isolation through participation in local community and environmental activities) also serves the public interest and contributes to all three dimensions of sustainable development.

e. Selection of the most constructive and beneficial solution, together with its justification:

The third solution is based on protecting and caring for the mature tree rather than cutting it down. The objective is to preserve the tree for as long as possible through regular maintenance, including pruning, disease treatment, and continuous monitoring of its condition.

The information presented in Table 3 indicates that this solution offers the greatest environmental benefits by preserving the full ecological value of the tree. At the same time, it promotes social responsibility, environmental awareness, and community cohesion. However, its implementation requires long-term commitment and cooperation among residents, local authorities, and other stakeholders.

This approach also reflects the principles of environmental and social justice by ensuring that individual concerns are addressed without compromising collective environmental benefits. The present study identifies qualitative directions for analyzing this problem. Future research should complement this approach with quantitative analyses. For example, the consequences of the proposed solutions could be assessed using the Life Cycle Assessment (LCA) method, which is used to quantitatively assess the impact of products, processes and entire systems and can even be used to analyze social impacts (Schlör et al., 2018).

At this stage, the presented approach is intended primarily to demonstrate the importance of considering the consequences of decision-making in the context of creating a more sustainable future. Such reflection is easier to achieve through collaboration among people directly affected by a given situation and those interested in bringing about positive change. For students, this approach also represents an engaging form of active learning, encouraging them to develop a deeper understanding of complex sustainability challenges and to seek solutions that consider

the common good. Numerous educational projects can support this objective (Thoresen et al., 2008; Rozenbajger & Kostecka, 2012; Kostecka et al., 2015; Jégou et al., 2026).

Incorporating quantitative analysis is essential for a comprehensive assessment of different management scenarios. Beyond qualitative approaches, integrating tools such as LCA, carbon accounting models, and ecosystem valuation frameworks (Millennium Ecosystem Assessment, 2005) would enable more accurate comparisons of impacts on the broader environmental, social, and economic dimensions of sustainable development. For example, the removal or degradation of mature tree ecosystems could be quantified not only in terms of immediate carbon dioxide emissions but also by considering long-term losses in carbon sequestration capacity and biodiversity.

Several studies have demonstrated that primary and old-growth forests continue to accumulate carbon over extended periods and function as net carbon sinks (Luyssaert et al., 2008; Pan et al., 2011), challenging the assumption that such ecosystems are carbon neutral. This perspective is further supported by reports from the IPCC, which emphasize the critical role of these ecosystems in climate change mitigation.

Furthermore, incorporating biodiversity indicators into the analysis is crucial because species richness and functional diversity are closely linked to ecosystem resilience and stability (Hooper et al., 2005). The loss of key ecological structures, such as mature trees, may trigger cascading effects by reducing habitat availability and disrupting trophic interactions. In this regard, quantitative metrics, such as species abundance indices and habitat suitability models, could complement LCA results and provide a more comprehensive assessment.

From a decision-making perspective, combining these quantitative approaches with multi-criteria analysis would support more informed and responsible strategies (Huang et al., 2011). This is particularly relevant within sustainable development frameworks, where environmental, social, and economic dimensions must be balanced. Expanding the analysis in this direction would strengthen the study's conclusions and align it with current interdisciplinary approaches in the environmental assessment literature.

The considerations presented in this article highlight not only the interdependence of the environmental, social, and economic dimensions of sustainable development but also the importance of knowledge related to climate change, the mitigation of which is closely associated with the protection and proper management of trees. The IPCC (2023) recognizes the close interdependence of climate, ecosystems, biodiversity, and human societies. Therefore, a broader understanding of sustainable development principles has become an urgent social need (Sierra & Suárez-Collado, 2021; Long, 2024).

IV. CONCLUSIONS

Focusing on the ecosystem services provided by a mature tree offers a valuable context for research on the interpretation and practical implementation of sustainable development. Although the perspective presented in this study is intentionally general and qualitative, it demonstrates that the consequences of decision-making are closely interconnected across the environmental, social, and economic dimensions of sustainability. This is particularly important because most people do not evaluate their surroundings from such a holistic perspective.

The initiative presented in this article demonstrates the potential of the LARD project to connect active classroom learning with real-world sustainability challenges. It shows that students are able not only to identify important problems but also to propose realistic, context-specific, and responsible solutions.

A broader application of the LARD methodology could include the establishment of sustainability committees in schools and local communities. Such committees would provide a structured environment in which students, teachers, and other interested stakeholders could collaborate, exchange ideas, and implement sustainability-oriented initiatives. Implementing the activities proposed within the LARD project not only at different levels of education but also within local communities – including, for example, through dialogue with older residents and local authorities – could improve public understanding of the ecosystem services provided by mature trees and strengthen awareness of the interconnections among environmental, social, and economic outcomes.

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