

TEMPLATE FOR THE GOOD PRACTICE

What is a good practice?

A good practice is not only a practice that is good, but a practice that has been proven to work well and produce good results, and is therefore recommended as a model. It is a successful experience, which has been tested and validated, in the broad sense, which has been repeated and deserves to be shared so that a greater number of people can adopt it.

Please follow the instructions included to fill in the template. You can replace the guiding questions for each element with your description.

Mandatory fields are defined by *

Element	Description
Title*	<i>Development of Green Skills in VET through Sustainable Forestry Practices and Vegetative Plant Propagation</i>
Name of the VET Provider	<i>State professional-technical educational institution "Snovsk high vocational school of forestry"</i>
Thematic domain	<p>What is the thematic domain covered by this good practice? More than one domain can be indicated</p> <ul style="list-style-type: none"> • Innovation • Digital • <u>Green</u> • Inclusion • Entrepreneurial • Career guidance • Lifelong learning • Creating partnerships/skills ecosystems
Introduction*	<p><i>Snovsk High Vocational School of Forestry (Chernihiv region, Ukraine) is located in a border area significantly affected by the consequences of the full-scale war, including environmental degradation, damage to forest ecosystems, and destruction of protective forest belts.</i></p> <p><i>Before the introduction of this practice, vocational training for foresters, gamekeepers, and landscaping specialists was mainly based on traditional</i></p>

seed propagation systems. This approach did not ensure sufficient capacity for rapid restoration of ecosystems after fires, logging, or war-related damage.

A key challenge was the lack of practical skills in vegetative plant propagation, including green cuttings, grafting, and plant division. These methods are essential for fast production of planting material, preservation of genetic characteristics of plants, and conservation of biodiversity.

The implementation of this green skills development practice at Snovsk Higher Vocational School of Forestry has generated important pedagogical and methodological insights into effective training in sustainable forestry.

In response to these challenges, teaching staff introduced a comprehensive and practice-oriented approach to green skills development, fully integrated into forestry training programmes.

Stakeholders and Partners

The beneficiaries of the practice include:

- *students in Forestry, Gamekeeping, and Landscaping programmes;*
- *adult learners undergoing reskilling and upskilling;*
- *internally displaced persons (IDPs);*
- *veterans;*
- *unemployed citizens;*
- *local communities involved in ecological restoration.*

Direct users are teachers and workshop instructors responsible for implementing practical training.

Key partners include:

- *State enterprise “Snovskraiahrolisgosp”;*
- *State enterprise “Horodnyaraiahrolisgosp”;*
- *Koriukivka Forestry Branch;*
- *Northern Forestry Office of the State Enterprise “Forests of Ukraine”.*

Partners contribute to curriculum development, practical workshops, provision of plant material, and monitoring of training outcomes and plant survival rates.

Impact*

The practice has delivered significant educational, environmental, and socio-economic impacts.

Learners have acquired full-cycle competencies in vegetative plant propagation, including:

- *collection and preparation of green cuttings;*
- *use of natural rooting stimulants;*

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- *rooting in nursery beds;*
 - *grafting of ornamental and forestry species;*
 - *propagation of perennial plants through division.*

A strong focus is placed on biodiversity conservation, including propagation of local and rare plant species, contributing to their preservation and restoration in natural ecosystems.

Over the past three years:

- *more than 3,000 seedlings (pine, juniper, spirea, forsythia, hydrangea) have been produced through green cutting propagation;*
- *over 500 ornamental trees have been grafted with an average survival rate of approximately 85%;*
- *more than 1,000 shrubs (hosta, spirea, erica, lavender, and others) have been propagated through division.*

Part of the produced planting material is used for restoration of forest belts and green spaces damaged by military actions, supporting regional ecological recovery.

Innovation and Success Factors *

The main innovation lies in integrating vegetative propagation as a cross-cutting element across all forestry training modules rather than treating it as a separate topic.

Key innovative elements include:

- *integration of green skills into theoretical, laboratory, and practical training;*
- *use of vegetative propagation as a core learning and production tool;*
- *establishment of a biodiversity conservation plot as a living training laboratory;*
- *use of affordable natural alternatives instead of expensive industrial stimulants;*
- *combination of education with real ecological restoration activities.*

Success factors include:

- *availability of mother plants within the institution and partner enterprises;*
 - *qualified workshop instructors;*
 - *cooperation with forestry enterprises;*
 - *adequate basic material and technical resources;*
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- *flexible learning pathways, including for adult learners (veterans, IDPs, unemployed persons).*

Constraints*

Main challenges during implementation included:

- *initial skepticism among learners regarding vegetative propagation methods;*
- *difficulties in maintaining optimal substrate quality;*
- *losses of cuttings due to fungal diseases and pests;*
- *graft incompatibility issues;*
- *restrictions on outdoor practical activities due to the security situation in the border region.*

Despite these constraints, continuous improvement of methods and accumulated practical experience significantly increased the effectiveness of the practice.

Lessons learned *

1. *Vegetative plant propagation is an accessible and effective method for developing practical green skills in sustainable forestry.*
2. *Learning is most effective when students can observe the full plant lifecycle from propagation to mature planting material used in real environmental restoration.*
3. *Errors in propagation processes are an essential part of learning, contributing to the development of critical thinking and professional responsibility.*
4. *Integrating biodiversity conservation into practical training strengthens environmental awareness and fosters a sense of contribution to ecosystem restoration.*

Replicability and/or up-

The practice is highly replicable in other vocational education institutions with basic conditions such as:

- *a small training plot;*
- *a few mother plants or trees;*
- *simple propagation facilities (greenhouse or frames);*
- *basic grafting and cutting tools;*
- *trained instructors.*

At national level, it is recommended to develop a standard training module:

“Vegetative Plant Propagation and Biodiversity Conservation in Forestry and Landscape Management” (60 hours / 2 ECTS credits)

A methodological guide for teachers would further support scaling and implementation.

At international level, the model can be adapted to local species and climatic conditions, making it relevant for post-crisis and environmentally affected regions.

Contact details

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URL of the practice

Information about the practice is available on the official website of the institution. Additional materials and documentation are available upon request.

https://drive.google.com/drive/folders/1GRd3Fw4dJ9BIRoAZQgS8u2UaVpORs_u

Related resources that have been developed

Related Resources Developed

- *methodological materials on vegetative propagation*
- *safety instructions for practical training*
- *video tutorials and demonstration materials*
- *teaching guidelines for workshop instructors*
- *photographic documentation of propagation processes*