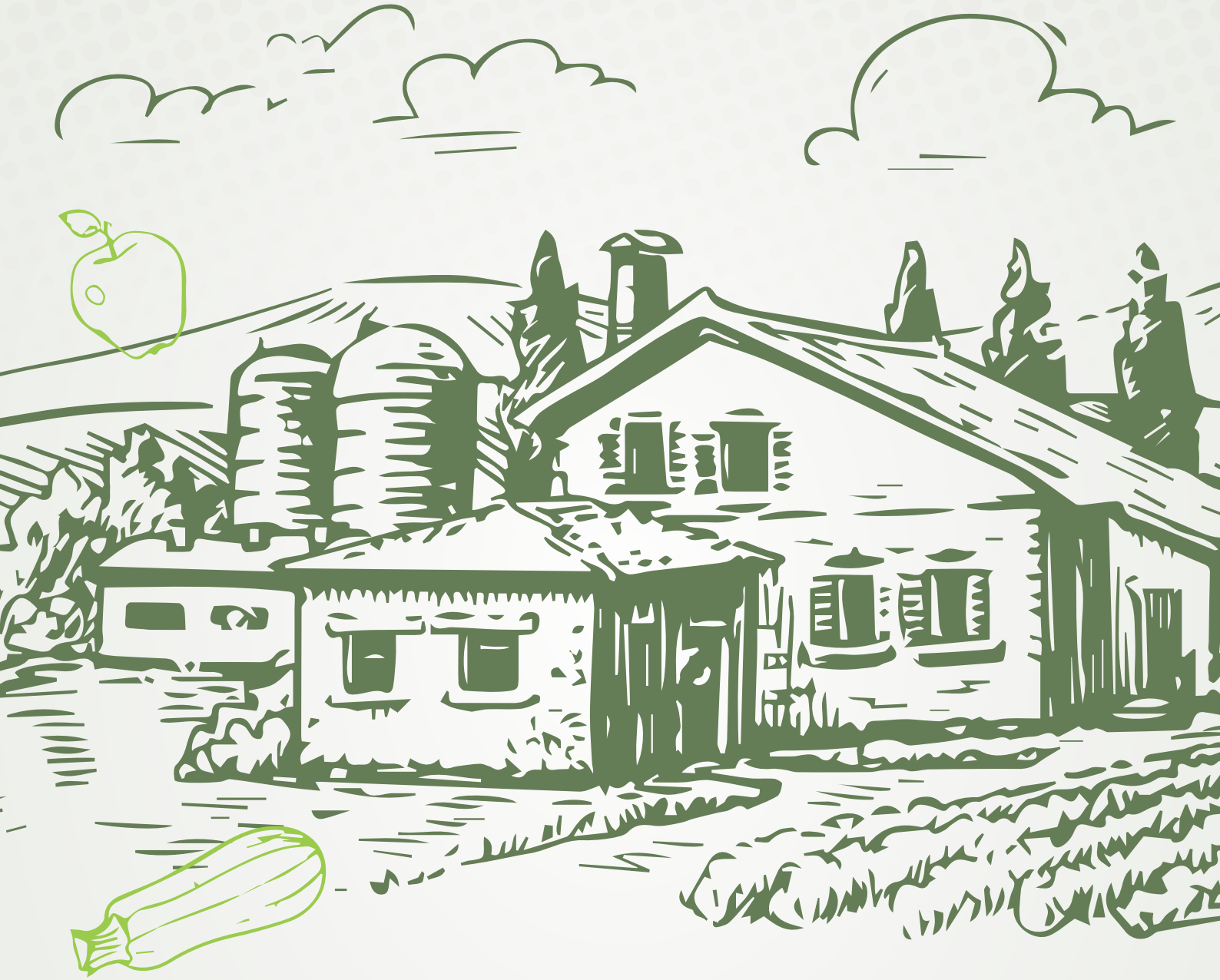

TRAINING PROGRAMME ON WASTE PREVENTION

IN THE PRIMARY PRODUCTION SECTOR

2019

Interreg CENTRAL EUROPE
European Union
European Regional Development Fund

STREFOWA

Title: Training programme on waste prevention in the Primary Production sector 2019

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TAKING **COOPERATION** FORWARD

ABOUT THE PROJECT

STREFOWA – Strategies to Reduce and Manage Food Waste in Central Europe is a three-year project in Central Europe to find and design new ideas dealing with food waste. Our aim is to reduce food waste or to treat it in a better, more useful way, along the whole supply chain.

>>> reducefoodwaste.eu

CONTENT

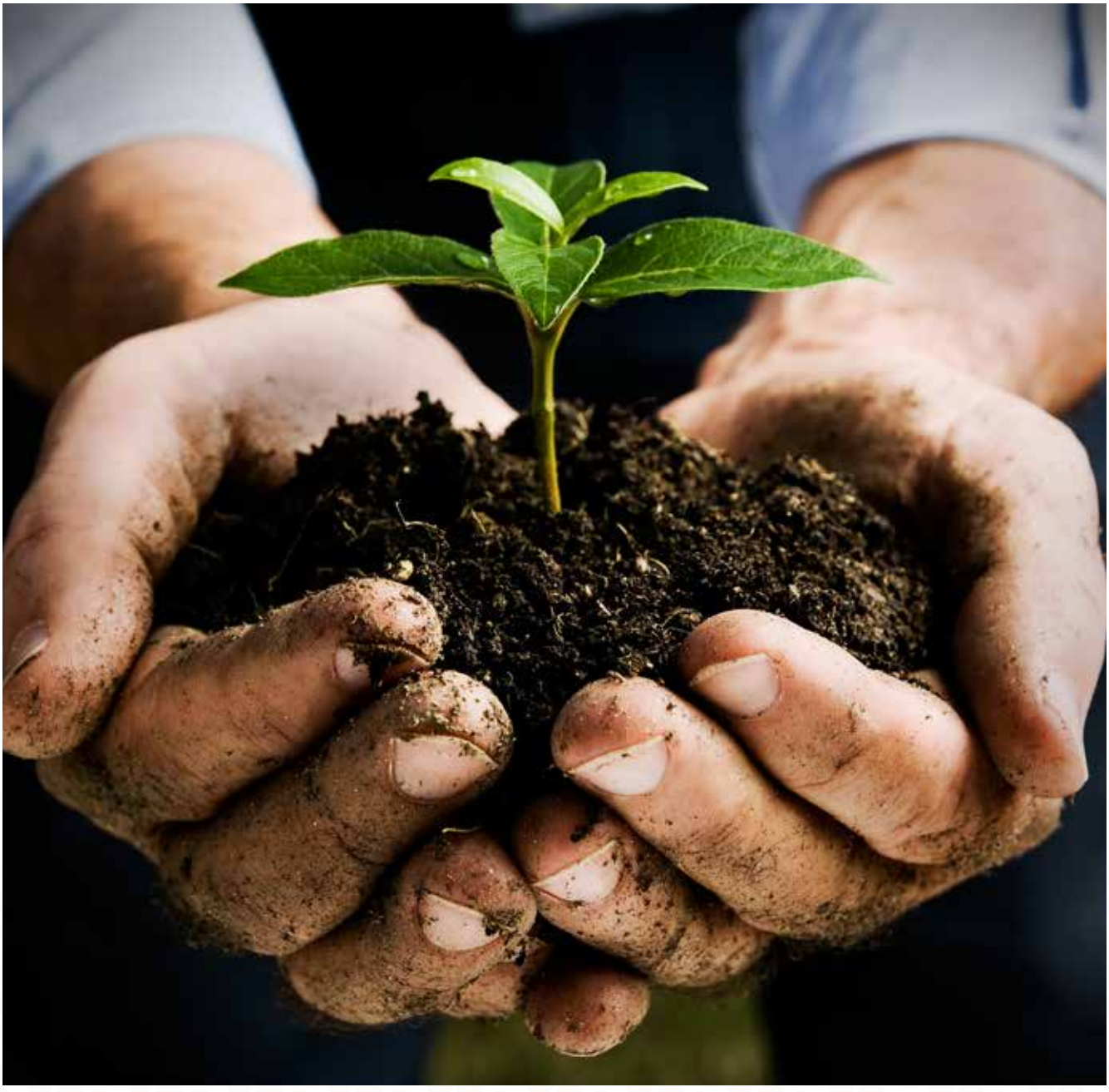
TRAINING PROGRAMME FOR THE PRIMARY PRODUCTION SECTOR

TRAINING PROGRAMME FOR RETAILERS

INTRODUCTION

Quantifying the exact amount of discarded food originating from primary production is not possible based on current knowledge. Recent assumptions can range from 25 % to 30 % of the total food production (FAO, 2013) or from 10 % to 50 % of the production of one specific food item (Mutter Erde, 2017). A significant part of this waste would have been appropriate for human consumption – this part is categorised as avoidable food waste and important for the further discussion.

The discarded crops have different levels of quality, including class I and class II crops, crops which don't meet marketing standards because of size, shape or colour, and crops affected by pests or diseases. On the farm level, the number of discarded crops varies significantly and can range from "hardly any" to almost 100 % of the crop yield. The predominant cause for this variability is the unpredictability of surplus crops, influenced by variables which can be only partially controlled, such as the seasonality of weather, outbreaks of pests and diseases, market constraints, etc.



FRAMEWORK

OBJECTIVES

Understand food waste / unused food: kind, origin, reasons, quantities and associated consequences – considered across the entire value chain

Reflection of own farm, collection and recording of individual circumstances: potential problem areas and possible suggestions for improvement

Introduction to various approaches to tackle food waste

TARGET GROUP

active and future fruit and vegetable farmers

FORMAT OF TRAINING

educational lesson

Age:

- 16–99 years

Number of Participants:

- 15–20 participants

Duration:

- 2,5 hours

Setting

- Room for at least 20 persons
- Tables, which can be moved around
- Projector and laptop

Material

- Presentation "*TP_STREFOWA_PrimProd_presentation_en*"
- Self-Survey "*TP_STREFOWA_PrimProd_self_survey_en*" – 1 sheet / participant
- Printed pictures and papers – "*TP_STREFOWA_PrimProd_print_materials_en*"
- Box of mixed vegetables with 1–2 spoiled ones

SCHEDULE & IMPLEMENTATION

WELCOME & INTRODUCTION - 10 MIN

Introduction of trainers & basic information about the course

To tackle food waste, awareness is necessary. Awareness doesn´t mean intense specific knowledge of agriculture. It means observation, analysis, reflection of problems and open minds to figure out specific solutions to improve one's situation.

Various solutions customized on one´s farm can bring improvement.

Combining this awareness with agricultural knowledge is even better.

Short introduction of STREFOWA

Introduction of Participants

Each participant is asked to shortly introduce himself and his/her farm:

share the type of farm, size, products, marketing channels, motives & expectations of this course

Short introduction of agenda

FOOD WASTE IN GENERAL - 15 MIN

Aim/Summary:

- Definition of food waste
- Classification of food / food waste is quite difficult and dependent on the setting
- Each sector of the food supply chain is affected, involved and able to change the situation

Task:

- Printed pictures of food and categories "eatable / food" – "uneatable / food waste" are put on a table.
- All participants:
  - pictures should be allocated to the category they fit to
- Trainer:
  - Reviews all pictures
  - Asks/explains reasons of classification
  - Allocates the pictures to the relevant sector

Presentation:

- Graphic Fusion: Estimation of European food waste levels, page 4

Material:

- *TP_STREFOWA_PrimProd_print_materials_en*: page 2–15

ECONOMICAL & ECOLOGICAL PROBLEMS & BENEFITS - 15 MIN

Aim/Summary:

- ntroduction of the ecological and economic background of food waste
- Introduction of the extent of food waste worldwide

Presentation:

- Page 5–8

Background Information:

Data Situation / Assumption of Food Waste:

- ¼ – 1/3 of food produced will be thrown away (FAO 2011, FAO 2013)
- Still no final data on food losses in agriculture, but quite accurate assumptions
- Ecological and economic impact not only applies to one region >> if the regional products are not fully utilized, others must be imported to substitute the difference
- Effects are caused in all regions wherever food is grown, processed and transported

Ecological Impact

- **Climate:** climate-relevant gases are released during production, by unnecessary transport and rotting
- **Resources:** production, transportation: all utilized resources are used for nothing
- **Soil use:** soil loss through cultivation techniques, GHG emissions through land use change; land use conflict – soil issues do not necessarily have to be negative – farming techniques can also be beneficial to the soil condition
- **Diseases & Pests:** in case of incorrect handling of food waste (no harvesting, plowing under) – depending on the amount, location and type of waste
- **Groundwater:** over-fertilization and rotting can affect groundwater
- **Loss of Biodiversity:** land use & cultivation techniques are serious reasons for loss of biodiversity

Economic Impact

- **Directly:** Economic loss due to unsold goods
- **Indirectly:** Climate damage, ecological and health consequential costs are intertwined
  - Climate damage: GHG emissions such as CO^2, N^2O
  - Ecological consequential damages: loss of biodiversity, soil loss
  - Health consequential damages: air, noise, pollutants

FOOD WASTE IN AGRICULTURE: VEGETABLES - 10 MIN

Aim / Summary:

- Vegetables become food waste if no marketing is possible or if they are harmful for human consumption
- Almost all vegetables are saleable if the right marketing channel can be set up

Task:

A box of mixed vegetables is put on a table (with 1–2 spoiled vegetables).

- **Task 1:** Allocate the vegetables to the categories “sellable” – “non-sellable”.

  >>> this task can´t be finished without further information

- **Task 2:** Define marketing channels for each vegetable within the group:

  Farm-gate sales, delivery, farmers market, retail, gastronomy, processing, etc.

Material:

- box of mixed vegetables with 1–2 spoiled
- *TP_STREFOWA_PrimProd_print_materials_en*: page 16

SELF-SURVEY - 30 MIN

Aim

- Analysis of each participants situation (no full analysis is needed! Just a first approach).

Task:

- Each participant gets a survey-sheet to reflect on one of his products.
- Open discussion on the gathered information.

Material:

- *TP_STREFOWA_PrimProd_Self_Survey_en*

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break 15 min

GET TO KNOW DIFFERENT IMPLEMENTED IDEAS - 45 MIN

Aim:

- Possible improvements are quite individual, but each person can improve the situation
- Open up a discussion and spread ideas about various solutions

Presentation:

- page 10–50

This collection of projects, initiatives and businesses is mainly from German-speaking countries. Please feel free to complete it with others as well.

REFERENCES

FAO, 2013: Food wastage footprint: Impacts on natural resources: Summary Report

MUTTER ERDE, 2017: https://www.muttererde.at/fakten/, 2.5.2018

https://www.interreg-central.eu/STREFOWA