BSAG
Baltic Sea Action Group

CARBON ACTION

Uudistaja
– a farm development tool

Guidance materials for area-specific development

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TO THE READER

This document contains instructions and examples of how to use *Uudistaja – a farm development tool*. By filling in Uudistaja, you will develop your operations towards regenerative farming that improves the soil's health in a planned and holistic way.

Uudistaja is divided into eight sub-areas according to BSAG's regenerative farming criteria. By developing these areas, the farm can move towards regenerative practices in a systematic and efficient way. The development work is initially carried out one area at a time. Ultimately, a situation can be reached where a farm develops and maintains regenerative practices in all eight areas.

This material contains the general user guide for *Uudistaja*, and area-specific support materials for the preparation and monitoring of the area-specific plan. The plan will be drawn up on a separate Uudistaja worksheet. The support material goes through the eight questions of the worksheet and gives advice on how to answer them. In addition to these materials, BSAG has a lot of good support material available that you should familiarize yourself with.

At the end of each area-specific instruction, you will find the first page of the worksheet pre-filled. The examples are partly based on plans made by the farmers who developed the tool. As you can see from the examples, the plan does not always have to be very complex. What matters is the direction of change and its determined implementation. Regenerative farming requires familiarity with your own fields. For the greatest benefit, find the right solutions for your specific situation.

Good luck, this could be the start of a change that will make farming more inspiring, profitable and environmentally sustainable.

INTRODUCTION

Uudistaja – a farm development tool developed by the Baltic Sea Action Group allows the principles of regenerative farming to be taken into account in all decision-making and activities on the farm.

Regenerative farming is a situational and holistic farming practice that applies proven, science-based methods with a positive impact on profitability, yield security and the environment. At the heart of it all is the continuous improvement of soil health. As soil health improves, field productivity increases and input efficiency improves. At the same time, the farm's yield security and ability to adapt to changing weather conditions is strengthened. In regenerative farming, the starting point is results that can be defined, measured and verified, not predefined methods. A farming system is regenerative if economic and environmental performance improves over time, also considering exceptional circumstances.

Uudistaja – a farm development tool is based on the principle of continuous improvement. First you plan, then you implement. Implementation is monitored and evaluated, and efforts are made to measure the results. Based on the results achieved, the plan will be developed again for the following season.

The tool is based on the general principles of regenerative agriculture developed by BSAG. The starting point is that the pursuit of regeneration is a learning path. Once the change is further advanced, the farmer can achieve the same yield with lower inputs, thus improving the profitability of the crop (***EARA study***). The benefits may be seen quickly, but initially they are more modest. Five to ten years of determined effort already yields tangible benefits for the farmer, security of supply, and the environment.

The aim of a regenerative farmer is to continuously improve his or her operations. By systematically using *Uudistaja*, a farm can demonstrate that it takes the principles of regenerative farming into account in its operations.

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USER MANUAL FOR UUDISTAJA

1. At the heart of *Uudistaja* is a worksheet where the farmer records the farm's development plan towards regenerative farming. The worksheet is printed on two pages (2 x A4) to make it easy to print on standard printers.

2. The worksheet contains eight (8) questions and a space to record your answers. Five (5) of the questions are completed before the growing season and the remaining three (3) during the growing season. If you run out of space, you can compile the answers in a word file or on a new sheet of paper.

3. *Uudistaja* can be used to develop 1 to 8 areas within regenerative farming. The areas are the same as BSAG's criteria for Regenerative farming. Initially, you should choose 1–3 criteria to develop systematically. If you are new to regenerative farming, you should initially focus only on area 1 – skills development. If you are already well advanced in regenerative farming, you can systematically improve the regenerative practices of your farm in up to eight areas at the same time.

4. Once you have chosen which areas you are going to develop, fill in a separate worksheet for each area you want to develop for questions 1 to 5.

    - You should first set aside a short period of time to read the questions and the area-specific supporting materials for questions 1 to 5.

    - With the help of the tool's instructions, record the information about your farm and think about what you can do to get from the current situation to the objective. Finally, estimate how much money, time or other limited resources you think you will need to achieve the objective.

5. Start the steps you planned in the previous section. As implementation can be a lengthy process, it is good to keep the completed worksheets available. The key is to stick to the plan, and to adjust it along the way if necessary.

6. Follow the progress of the plan as soon as you start taking action. Use the indicators you have defined and record your progress in section 6 of the worksheet.

7. At the end of the growing season, compare the results achieved, the monitoring data accumulated along the way and the plan. Be honest about what worked and what didn't, while still being compassionate toward yourself. Find ways to learn and develop. Whatever the outcome, there are many lessons to be learned when you stop to reflect on what has happened.

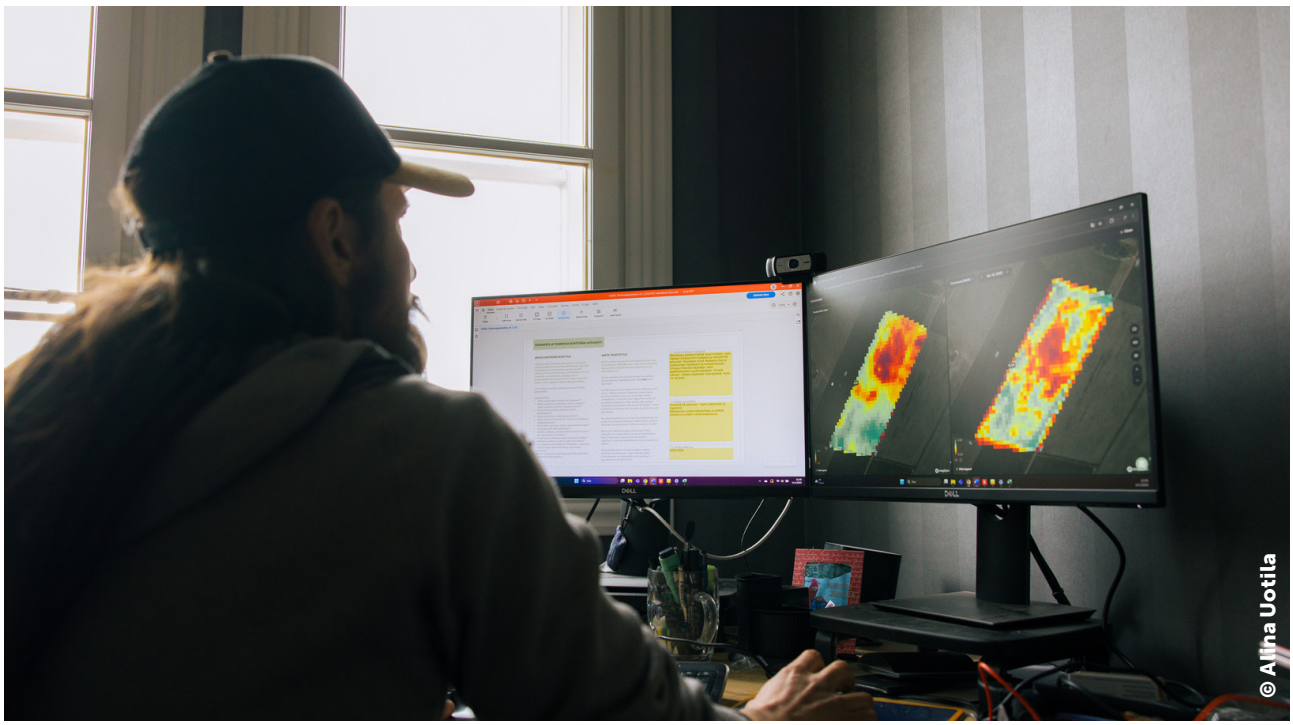
8. Set next steps and make plans for the next growing season. Think about whether it would be possible to introduce new areas and how to do better at what you have already practiced. Is there any area where it is sufficient to maintain the achieved status?

AREA 1

Continuous development of competencies and operations

Skills development is often the first and most important area of developing your farm towards regenerative practices. If you are new to the subject, focus only on this area for the first year. If you already know the basics, you can take on 1–2 other areas. **Strong skills underpin all other development.**

Learning never stops. Maintain this area in the development process every year. The following instructions will help you to proceed in a systematic way.



1 ASSESS THE CURRENT STATE OF SKILLS
What is the starting point?

Write honestly about what you currently know about regenerative agriculture.
Don't think about what you should know – focus on what you do know

You can use the following support questions to help you:

- Do you know the condition of your soil on a field-by-field basis? Do you carry out a sensory assessment of the soil structure using shovel tests or other observations?
- Do you make a written farming plan and budget? Do you analyze the results?
- Do you measure the impact of crop choices on your farm?
- Do you understand the impact of regenerative agriculture on your farm?
- Have you completed any courses in regenerative agriculture?
- Do you participate in discussions on regenerative agriculture or in regenerative agriculture networks?
- Do you already know how to apply regenerative practices on your fields?
- Do you share information or experiences with other farmers?
- Are you involved in projects or pilots?

2 SET AN OBJECTIVEASETA TAVOITE
What do you want to achieve?

What is your objective? **What kind of change do you want to achieve?** The clearer you can define the objective, the better. A good objective is ambitious and motivating, but achievable.

How can you measure the success of your objective? Indicators help to observe whether the measures are having an impact, and whether they are sufficient. **Formulate the objective in a measurable form**. If the timeframe is longer than one year/growing season, you should ensure that the objective can be broken down into easily trackable milestones.

In skills development, the objective can be e.g.:

- A better understanding of the conditions on your own farm, for example in relation to soil or water management.
- Increasing theoretical knowledge, for example through courses or lectures.
- Adopting and applying a new farming solution.
- The ability to share what you have learned with others or to act as an example.

Make the objective clear, measurable and personal. For example: 'I will do a shovel test on all fields before the end of August.'

Also consider:

- Does the objective motivate you?
- How do you measure success?

If the objective doesn't motivate you or feel important, it's too light. Raise the bar.

3 SET A TIME LIMIT
By when should the objective be achieved?

Set a deadline by which the results must be achieved. Allow enough time to make it possible to achieve the objective.

From the point of view of your objective, think about an ambitious but feasible timeframe. A lot can be achieved in a year in the development of skills. It is good to set milestones for the objective, for example, on a monthly basis.

4 DRAW UP A PLAN FOR SKILLS DEVELOPMENT
What actions will you take?

Draw up a plan to help you achieve your objective. Consider what is necessary and possible, taking into account the resources available. Consider whether you need outside help to make the change you are planning happen. Do you need advice? Where can you get the help you need in the easiest and most cost-effective way?

Planning is an important part of change. Of course, the most important thing is implementation, but if you have a good plan, you will save a lot of time, money and effort.

First, ask what needs to change and what is making it difficult or impossible to change? List the obstacles and bottlenecks, and think about how you can overcome the difficulties you have identified. It is crucial to find the most effective solutions for your farm.

Your plan is not set in stone. When the plan changes, stick to the objective and find a better way to achieve it.

List the concrete measures. Consider:

- **What should I study?**
  (e.g. online course, articles, lectures)
- **How should I study?**
  (write down, keep a learning diary, discuss with others)
- **When and where should I study?**
  (time, place, practical arrangements)
- **Do I need help?**
  (network, projects, experts)
- **Are there barriers to learning?**
  (time, resources, old habits) – and how do I overcome them?

Measures can be, e.g.:

- I will do shovel tests and look for drainage outlets in each field.
- I will attend two field-side days and one lecture.
- I will record what I learn every week in a notebook or digitally. A good plan is clear, realistic and enables success.

Support material

BSAG Courses
– Crash Course in regenerative farming

5 SET A BUDGET
What resources will you allocate to the activity??

Jos et varaa aikaa ja resursseja etukäteen, ne katoavat arjen kiireisiin.

Mieti		Esimerkiksi
Time	How many hours per week/month will you set aside for activities?	2 hours a week for study.
Money	How much money is needed for course fees, travel, equipment and other expenses?	Approx. €100 for course fees
Surface Area	Are you using a test area or field for experiments?	Experiment with one field.

6 MONITORING
How is the work progressing, are you getting results?

Good planning makes it easier to succeed. Yet **results only come from doing**. No plan can predict either external pressures or the results of one's own actions. It is therefore **important to keep a record of what was done and how the work progresses**. Corrections are easier to make when work is documented, and only documented work allows for a well-founded analysis of its outcomes.

Examples of monitoring methods:

- Monthly update:
  what I did, what I learned, what I didn't finish.
- Monitoring the progress of the online course.
- Documentation of measures taken on the fields (place, time, results).
- Monitoring of weather and conditions (if necessary, on a field-by-field basis).

Practices to support monitoring:

- Keep the active plan, i.e. the area worksheets, in one place, such as a folder on your computer or printed out on paper.
- Put the worksheets in a visible place.
- Set reminders on your phone, for example.
- Record any delays and failures too, so you can learn how to improve your plans. No ambitious plan will succeed every time.
- Make a habit of monitoring so that it doesn't feel forced.

7 ANALYSIS
What results did you achieve, did anything change?

Don't just list what you did
– reflect on what happened as a result.

- Did your skills change? How?
- Did you put something new into practice?
- Were there any insights or new questions?
- What worked – why?
- What didn't work – why?

Remember that failure is not something to be ashamed about, but a valuable opportunity to learn. When we stop to honestly consider why something didn't work, we save time, money and nerves in the future. However, if we continue the same path without learning, we are likely to encounter the same pitfalls again. With Uudistaja, development work is carried out in a planned way, learning from past mistakes.

8 DOCUMENT WHAT YOU'VE LEARNED
What will be done next?

Now that you have assessed what you learned and how you did, plan what you will do in the next growing season:

- Do you now know enough to move on to a new area?
- What do the lessons learned mean for other areas of development?
- Will you continue to study the same area in more depth?

Print or open new worksheets and make a plan for the next growing season based on the observations made in the analysis.

What area does the plan cover?

Skills development

Date

15.8.2025

1. What is the current situation in this area?

Currently, work is not carried out in the traditional manner; rather, new approaches and methods are continuously explored.

We monitor other similar farms, participate in projects, and build networks.

A variety of indicators are used. For example, using satellite data to calculate 'green weeks' and taking larger soil samples, including from a depth of 1 meter.

2. What do you want to achieve?

Leading by example – shared learning and inspiration.

More systematic measurement and clear results and their comparability.

3. By when should the objective be reached?

By the end of 2027.

4. What actions will you take?

I will set aside about an hour every week to study and gather information.

I will start to write regularly about what I've learned and my own thoughts, at least in the farmers' group and later also on social media.

5. What resources will you allocate to this activity?

For knowledge acquisition and study, approx. 1h/week (50 h/year).

To collect and write down observations on your own farm, approx. 1.5 h/week (75 h/year). Approx. €500 for travel and other expenses

AREA 2

Purposefully improving and maintaining soil health

Soil is a farmer's most important asset. A large proportion of Finnish fields suffer from problems of crop condition, such as compaction, water management problems or low soil fertility. As every farmer knows, arable land is not like any other means of production. Soil is living nature, which, properly managed, can be much more than just a platform for plants and nutrients.

Regenerative farming is a long-term effort to improve soil health and build sustainability in production. Focus on eliminating the causes of problems with plant health instead of treating the symptoms. Combine different methods of analysis and observation to get an overall picture of the development of soil health. Pay particular attention to field drainage and soil compaction risks.

1 SSESS THE CURRENT STATE OF FIELD SOIL HEALTH
What is the starting point?

To manage soil health, you need to know the current condition of your fields. Make an honest assessment of the current condition of your fields. Problems with soil health can be found on almost every farm. Don't downplay them – we are assessing the baseline.

Supporting questions for evaluation:

- Have you explored your fields? Have you assessed the soil health of your fields with your own observations?
- Do you have a soil management plan? If soil health is good, how do you maintain it?
- How well do you know the drainage of your field? Do you know where the drainage outlets are located? Have you made sure that water can flow through them unhindered?
- Have you checked the tire pressures? What about the tires on the machines?
- Do you plan your field work to avoid soil compaction?
- Are there areas of the field where water accumulates or otherwise dries slowly?
- Have you improved your basic drying?
- Do you use tools to observe soil health?
- Are you aware of the pH of the fields and the need for liming?

If these things are unfamiliar, go back to area *Area 1: Continuous development of skills*.

2 SET AN OBJECTIVE
What do you want to achieve?

What is your objective? **What kind of change do you want to achieve?** The clearer you can define the objective, the better. A good objective is ambitious and motivating, but achievable.

How can you measure the success of your objective? Indicators help to observe whether the measures are having an impact, and whether they are sufficient. **Formulate the objective in a measurable form.**

If the timeframe is longer than one year/growing season, you should ensure that the objective can be broken down into easily trackable milestones.

What kind of change are you aiming for on the fields you cultivate? For improving field soil health, the objective can be e.g.:

- A more comprehensive assessment of the current state of soil structure on the farm's cultivated fields.
- Identifying the fields that will benefit most from improvement measures.
- The application of two or more crop improvement measures on fields that are as similar as possible in terms of soil type and soil health.
- Systematic monitoring of the experiment to find the most appropriate measures for your farm.

Write down your objective clearly and unambiguously and commit to achieving it. **Make the objective relevant to your farm.** It is good to look for the best way to promote overall field soil health.

3 SET A TIME LIMIT
By when should the objective be achieved?

Clear results in improving soil health **will not be visible in one year**, but some improvements can already be achieved in the first year. Set a time limit by which you aim to achieve your objective.

From the point of view of your objective, **think about an ambitious but feasible timeframe**. Set milestones if necessary.

4 DRAW UP A PLAN FOR SOIL HEALTH DEVELOPMENT
What actions will you take?

Draw up a plan to help you achieve your objective. Consider what is necessary and possible, taking into account the resources available. Consider whether you need the help of an external expert or colleague. Where can you get the help you need in the easiest and most cost-effective way? What are you going to do and in what order?

For example:

- I will carry out a sensory assessment of the soil structure.
- I will make observations regarding water management – paying particular attention to areas of standing water.
- I will plan field work to avoid soil compaction risks.
- I will adjust the tire pressures and check the tires.
- I will implement a management plan on two fields next summer.

Everything may not go according to plan, and the plan may be updated along the way. You can stick to your goal, but change your route.

5 SET A BUDGET
What resources will you allocate to the activity?

When planning, also consider how much **time, money, land area** and other resources you can realistically allocate to achieving the goal. Improving soil health may require investment, but **low-yielding land will be more expensive in the long run**. Well-managed soil produces more consistently over the long term, as the efficiency of inputs and yield reliability improve. Consider the following:

Time: How much time do you need per week/month/year to carry out your plan?

Money: Do the measures cost anything? Will an investment in machinery, drainage maintenance or improvement be necessary? Is it possible to apply for investment aid, e.g. for a drainage project?

Surface area: Will you try it on a moderate area first and expand if it works? Or are you already ready to implement the measures on most of the fields?

6 MONITORING
How is the work progressing, are you getting results?

Good planning makes it easier to succeed. Yet results only come from doing. No plan can predict either external pressures or the results of one's own actions. **It is therefore important to keep a record of what was done** and how the work progresses. Corrections are easier to make when work is documented, and only documented work allows for a well-founded analysis of its outcomes.

Examples of monitoring methods:

- Monitor how the measures affect soil health.
- Check the results of a sensory assessment of soil structure.

Practices to support monitoring:

- Keep the active plan, i.e. the area worksheets, in one place, such as a folder on your computer or printed out on paper.
- Put the worksheets in a visible place.
- Set reminders on your phone, for example.
- Record any delays and failures too, so you can learn how to improve your plans. No ambitious plan will succeed every time.
- Make a habit of monitoring so that it doesn't feel forced.

A large part of the benefits of Uudistaja come from systematic planning, practical implementation and evaluation of the work done.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7 ANALYSIS
What results did you achieve, did anything change?

Have the measures been genuinely useful, were more measures needed? Try to understand where the change will occur in the longer term. Soil health is gradually strengthened by planned and long-term work. Without careful evaluation, results can be modest and the same mistakes repeated year after year.

It could be that a measure that worked elsewhere is not working at your farm, or that another measure would work better.

At this stage, it is important to record what was achieved by the actions taken. Which achievements were intended, which were accidentally useful, and which should be avoided in the future.

Don't just list what you did,
– reflect on what happened as a result.

- Did you notice any changes on the field?
- For example, are the effects visible in the improved water retention capacity of the field?
- Have compactions been removed?
- Has crop reliability improved?
- What didn't work? How will you avoid making the same mistake in the future?

In development work, analyzing the results is important. It doesn't matter if something went wrong. You just have to try to spot it in time and correct the trend.

8 DOCUMENT WHAT YOU'VE LEARNED
What will be done next?

This step will determine whether all the work was worth it. If successful, can you extend the measure to other fields? If a measure was not successful, do you change it or continue the experiment with an improved design? Improving soil health is an ongoing process. The bottom line is that:

- You know what you have done.
- You know why it works or doesn't work.
- You are prepared to change direction.

Print or open new worksheets and make a plan for the next growing season based on the observations made in the analysis.

Remember, this is not about building paper reports, but about building a productive, sustainable and sensible farm. Good soil condition is the farmer's most important asset, and its value can be seen when it is nurtured over the long term.

What area does the plan cover?

Improving soil health

Date

15.8.2025

1. What is the current situation in this area?

The status of the fields is well understood.

Focus on monitoring and planning.

Soil health issues are considered in the long term, in line with the crop rotation

2. What do you want to achieve?

Observations of field soil health are systematic, and they are used to assist in decision-making.

I will make a field-by-field management plan for at least two fields.

Controlled drainage in one field.

3. By when should the objective be reached?

By the end of 2027.

4. What actions will you take?

Draw up a land management plan for fields X.

I will start to record all observations related to soil health.

I will implement a controlled drainage system for one field:

- I will look at the options for controlled drainage.
- I will put contractors out to tender and estimate the costs.
- I will explore the possibility of using investment aid.
- I will schedule the drainage project and agree on the division of labor.

5. What resources will you allocate to this activity?

Time: during the growing season, 1 hour per week for observation and recording; soil management plan, 5 hours per field for observations and recording.

Money: Controlled drainage approx. €4,500/ha, investment aid max. 40%.

AREA 3

Biodiversity above and below ground is systematically reinforced

For the regenerative farmer, biodiversity is first and foremost a tool to improve the economy, future, and environment of the farm. Agricultural practices affect local biodiversity. Biodiversity, in turn, affects crop yields, the need for plant protection, carbon sequestration and the improvement of soil health. Once you understand this, you can start a good cycle.

1 ASSESS THE CURRENT STATE OF BIODIVERSITY
What is the starting point?

Start by assessing the current impact of the farm's activities on biodiversity. Improving biodiversity is beneficial to the farm in many ways, and there are many opportunities to improve it. Often, the most valuable biodiversity in an agro-ecosystem is found below ground. Aboveground biodiversity supports belowground biodiversity and can be useful in areas such as plant disease control.

Below you will find eight questions to help you assess your baseline.

- Can you identify actions in your own farming practices that enhance biodiversity? And what undermines it?
- Are there any valuable biotopes on your farm? Have they been mapped, or is there a management plan for them?
- Could the habitats of different species on your farm be diversified?
- How could you enhance the diversity of soil organisms on your fields?
- Does crop rotation support biodiversity? Which actions support it and which undermine it?
- Do plant selections take into account the genetic diversity of varieties?
- Do grazing systems support biodiversity?
- Can you take action on your farm to support the conservation of indigenous breeds?

2 SET AN OBJECTIVE
What do you want to achieve?

What is your objective? **What kind of change do you want to achieve?** The clearer you can define the objective, the better. A good objective is ambitious and motivating, but achievable.

How can you measure the success of your objective? Indicators help to observe whether the measures are having an impact, and whether they are sufficient. **Formulate the objective in a measurable form.**

If the timeframe is longer than one year/growing season, you should ensure that the objective can be broken down into easily trackable milestones.

An objective can be e.g.:

- Increasing habitats for different species.
- Diversification of plant species grown on the farm.
- Reducing the disturbance of soil organisms.
- Reducing the use of pesticides.

Make the objective clear and measurable. For example: *'I will increase habitats on the farm for different species by creating biodiversity strips'.*

3 SET A TIMELIMIT
By when should the objective be achieved?

Set a deadline by which the results must be achieved. Allow enough time to make it possible to achieve the objective. **From the point of view of your objective, think about an ambitious but feasible timeframe.**

4 PLAN HOW YOU WILL IMPROVE BIODIVERSITY
What actions will you take?

Draw up a plan to help you achieve your objective. Consider what is necessary and possible, taking into account the resources available. Consider whether you need the help of an external expert or colleague. Where can you get the help you need in the easiest and most cost-effective way? What are you going to do and in what order?

For example:

- **Developing habitats**
  wildlife banks, pollinator strips, buffer zones, shrub or tree groups, wetlands, retaining stone clusters.
- **Crop diversification**
  multi-species catch crop and grass mixtures and increasing autumn crop emphasis, adding flowering crops to the rotation.
- **Enhancing belowground life**
  minimizing tillage, organic matter enrichment (animal by-products, compost, biogas plant digestate), continuous vegetation cover (below and above ground biomass), nitrogenous crops as part of crop rotation.
- **IPM practices**
  minimizing the use of pesticides, monitoring vegetation, solutions that favor predatory insects such as diversity strips.
- **Grazing practices**
  the use of rotational grazing to increase the biodiversity of arable land.

Everything may not go according to plan, and the plan may be updated along the way. You can stick to your goal, but change your route.

5 SET A BUDGET
What resources will you allocate to the activity?

When planning, also consider how much **time, money, land area** and other resources you can realistically allocate to achieving the goal.

The land area used to enhance biodiversity is often a significant resource that should be used consciously.

6 MONITORING
How is the work progressing, are you getting results?

Good planning makes it easier to succeed. Yet **results only come from doing**. No plan can predict either external pressures or the results of one's own actions. **It is therefore important to keep a record of what was done** and how the work progresses. Corrections are easier to make when work is documented, and only documented work allows for a well-founded analysis of its outcomes.

Examples of monitoring methods:

- Observe the number of flying insects in different fields.
- Observe the number of farmland birds.
- Do an earthworm test and see how many earthworms there are in a spadeful of soil.
- Monitor the effect of diversity strips on pest pressure on crop plants.

Practices to support monitoring:

- Keep the active plan, i.e. the area worksheets, in one place, such as a folder on your computer or printed out on paper.
- Put the worksheets in a visible place.
- Set reminders on your phone, for example.
- Record any delays and failures too, so you can learn how to improve your plans. No ambitious plan will succeed every time.
- Make a habit of monitoring so that it doesn't feel forced.


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7 ANALYS
What results did you achieve, did anything change?

Biodiversity is important for the environment, but in regenerative farming it also has productive expectations. The impact on the need to use plant protection products or on crop quality may be felt with a delay. However, try to assess whether the actions have been genuinely useful, and whether more action is needed. Try to understand where the change will occur in the longer term.

Because changes can be small, monitoring must be systematic and analysis must be honest. It could be that a measure that worked elsewhere is not working at your farm, or that another measure would work better.

Don't just list what you did,
– reflect on what happened as a result.

- What changed on the field?
- What has changed in the agricultural environment?
- Have the measures reduced disease or pest pressure on plants?
- Have you been able to reduce your use of plant protection products?
- What didn't work? How will you avoid making the same mistake in the future?

In development work, analyzing the results is important. It doesn't matter if something went wrong. You just have to try to spot it in time and correct the trend.

8 DOCUMENT WHAT YOU'VE LEARNED
What will be done next?

This step will determine whether all the work was worth it. If successful, can you extend the measure to other fields? If a measure was not successful, do you change it or continue the experiment with an improved design?

Enhancing biodiversity is an ongoing process. The bottom line is that:

- You know what you have done.
- You know why it works or doesn't work.
- You are prepared to change direction.

Print or open new worksheets and plan for the next growing season based on the observations made in the analysis.

What area does the plan cover?

Improving diversity

Date

15.8.2025

1. What is the current situation in this area?

Crop rotation is designed to maintain biodiversity.

Diversity strips have been experimented with, and flowering plants are rotated where possible.

Multi-species mixtures of nitrogenous crops are used in grassland.

2. What do you want to achieve?

Biodiversity strips make up 1–3% of the total area each year.

The aim is to regenerate pollinator populations and to see if biodiversity strips have an impact on disease or pest pressure.

3. By when should the objective be reached?

By the end of 2027

4. What actions will you take?

I will increase the number of diversity strips in line with the objective, and design their seed mixes so that flowering continues in the strip for as long as possible.

I will design biodiversity strips so that the increased number of pollinators and other benefits have the widest possible impact.

I will compare the incidence of plant diseases and pests on crops near and far from the diversity strip.

5. What resources will you allocate to this activity?

Surface area: 1–3% of the total area, using support from the ecosystem scheme for biodiversity crop measures.

Money: seed mix approx. €80/ha Time: 30 h/growing season.

AREA 4

A diverse crop rotation

A varied rotation of crops includes a variety of cereals, oilseeds and oilseed crops, multi-species grasses and a range of cover and catch crops. The crop rotation aims to maximise winter living vegetation cover. Plant choices will also take into account the benefits to the soil of different rootstocks. The aim is better soil condition, less disease and pest pressure and more efficient nutrient cycling. Winter living vegetation cover maximises plant photosynthesis, i.e. the number of green weeks, even outside the growing season.

1 ATE THE CURRENT SITUATION OF CROP ROTATION
What is the starting point?

Let's start by assessing the current diversity of the farm's crop rotation.

Below you will find eight questions to help you assess your baseline.

- Do you have a written crop rotation plan? Have you carried out a field division?
- Do you know your fields and the appropriate crop rotation for them?
- Have you compared crop rotations with a crop rotation calculator?
- Evaluate the benefits of your current crop rotation in terms of soil health, nutrient cycling, weed, disease and pest management.
- Which crops are used to supplement the current crop rotation?
- What are the constraints to crop rotation diversification on the farm? Consider farm conditions, demand, economics, your own know-how, CAP support and organic requirements.
- Have you tried new crops? What do you have in the trial? What would you like to try?
- What kind of crop rotations are in use on the farm?

2 SET AN OBJECTIVE
What do you want to achieve?

What is your objective? **What kind of change do you want to achieve?** The clearer you can define the objective, the better. A good objective is ambitious and motivating, but achievable.

How can you measure the success of your objective? Indicators help to observe whether the measures are having an impact, and whether they are sufficient. **Formulate the objective in a measurable form.**

If the timeframe is longer than one year/growing season, you should ensure that the objective can be broken down into easily trackable milestones.

Choose one to three concrete, measurable objectives. Note that the benefits of diversifying crop rotation are also reflected in soil health (Area 2), biodiversity (Area 3), nutrient cycling (Area 7), and plant protection (Area 8).

An objective can be e.g.:

- Adding autumn-sown crops to the crop rotation to balance the risks of the harvest season and spread out the stresses of threshing.
  This will also reduce the risk of field compaction in spring and increase winter vegetation cover.
- Adding green manure leys to the crop rotation. Including grassy herbaceous plants and nitrogen-fixing crops in the mix to maximise biological nitrogen fixation.
- Increasing the use of soil improvement crops and/or catch crops.
- Introducing a new crop into the rotation, such as broad beans, caraway or oilseeds.

Make the objective clear and measurable. For example: *'Incorporating autumn-sown crops into the crop rotation'*.

3 SET A TIME LIMIT
By when should the objective be achieved?

Prepare or update a **3–5-year** crop rotation plan and update it annually. Set annual **milestones**.

4 PLAN HOW YOU WILL DEVELOP CROP ROTATION
What actions will you take?

Draw up a plan to help you achieve your objective. Consider what is necessary and possible, taking into account the resources available. Consider whether you need the help of an external expert or colleague. Where can you get the help you need in the easiest and most cost-effective way? What are you going to do and in what order?

For example:

- I will plan a more varied crop rotation with an advisor and include autumn crops.
- I will diversify the grass mixtures to include more deep-rooted species.
- I will record my observations on the performance of grass mixtures in different fields.
- I will sow catch crops under the main crop.

Everything may not go according to plan, and the plan may be updated along the way. You can stick to your goal but change your route.

5 SET A BUDGET
What resources will you allocate to the activity?

When planning, also consider how much **time, money, land area** and other resources you can realistically allocate to achieving the goal. Crop rotation planning is a key part of farm business planning, and requires budgeting..

6 MONITORING
How is the work progressing, are you getting results?

Good planning makes it easier to succeed. Yet **results only come from doing**. No plan can predict either external pressures or the results of one's own actions. **It is therefore important to keep a record of what was done** and how the work progresses. Corrections are easier to make when work is documented, and only documented work allows for a well-founded analysis of its outcomes.

Examples of monitoring methods:

- Record any challenges or successes encountered in implementing the actions.
- Observe the effects of plant root systems on soil structure.
- Do an earthworm test and see how many earthworms there are in a spadeful of soil.
- Observe the crops and try to determine whether a more diverse crop rotation has reduced pest pressure on the crop.

Practices to support monitoring:

- Keep the active plan, i.e. the area worksheets, in one place, such as a folder on your computer or printed out on paper.
- Put the worksheets in a visible place.
- Set reminders on your phone, for example.
- Record any delays and failures too, so you can learn how to improve your plans. No ambitious plan will succeed every time.
- Make a habit of monitoring so that it doesn't feel forced.


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7 ANALYSIS
What results did you achieve, did anything change?

Depending on the baseline, diversification of the crop rotation may require years of long-term work. **Have the measures been genuinely useful**, were more measures needed? Try to understand where the change will occur in the longer term.

Because changes can be small, monitoring must be systematic and analysis must be honest. It could be that a measure that worked elsewhere is not working at your farm, or that another measure would work better.

At this stage, it is important to record what was achieved by the actions taken. Which achievements were intended, which were accidentally useful, and which should be avoided in the future.

Don't just list what you did – **consider the outcomes**.

- Did the farm diversify its crop rotation and what impact did this have?
- How did the measures affect soil health?
- What didn't work? How will you avoid making the same mistake in the future?

In development work, analyzing the results is important. It doesn't matter if something went wrong. You just have to try to spot it in time and correct the trend.

8 DOCUMENT WHAT YOU'VE LEARNED
What will be done next?

This step will determine whether all the work was worth it. If successful, can you extend the measure to other fields? If a measure was not successful, do you change it or continue the experiment with an improved design?

Diversification of the crop rotation is an ongoing process. The bottom line is that:

- You know what you have done.
- You know why it works or doesn't work.
- You are prepared to change direction.

Print or open new worksheets and make a plan for the next growing season based on the observations made in the analysis.

What area does the plan cover?

Diversification of the crop rotation

Date

15.8.2025

1. What is the current situation in this area?

The crop rotation includes grass, wheat and barley. The most common crop rotation on nearby fields is 3 years of grass followed by 2–3 years of cereals.

Grasslands are renewed every 3 years and are established with a cover crop. The grass mixture consists of 75% timothy and 25% meadow fescue.

No separate catch crops have been sown on the cereal fields that will not be grassed in that year.

The current crop rotation is varied and includes annuals, perennials and different genera.

2. What do you want to achieve?

Autumn-sown plants are also included in the rotation.

The current grassland mix includes deep rooted species.

A variety of catch and cover crops for experimentation.

3. By when should the objective be reached?

By the end of 2026.

4. What actions will you take?

Compile an easy-to-update field-specific plan, including the catch and cover crops that support the rotation and are suitable for the field, and the benefits expected from the rotation.

The grass mixture will be diversified with nitrogen-fixing crops, and the performance of the mixture will be monitored in the coming years.

Experiment and get to know the crops during the growing season. Observations are recorded and a preliminary crop rotation plan for the next growing season is already made in the previous autumn.

5. What resources will you allocate to this activity?

The plan covers 90–100% of the fields.

Seed costs for experiments max. €800.

Time for planning etc. 5 h/month.

AREA 5

All-year-round, living vegetation cover is maximised

In regenerative agriculture, **the goal is to maintain living vegetation cover on at least 90%** of the field area throughout the year. The means are **perennial grasslands, autumn-sown crops** and catch and cover crops left untilled over the winter. The crops can be established during or after the tillage – the important thing is that **photosynthesis is maintained for as long as possible**.

1 ASSESS THE CURRENT STATE OF VEGETATION COVER
What is the starting point?

Start with a baseline assessment. What is the amount of winter vegetation cover on your farm? How much of it is living and photosynthesizing vegetation?

Below you will find seven questions to help you assess your baseline.

- On how much area do you have continuous, living vegetation cover?
- Have you been monitoring the number of green weeks on your farm?
- Can you increase the number or area of green weeks?
- What are the ways you try to maximise photosynthesis outside the growing season?
- Have you tried cover crops?
- For example, do you have perennial grasses, autumn-sown crops and catch plants that are stored over winter?
- What else can you do to promote year-round living vegetation cover during or after tillage?

2 SET AN OBJECTIVE
What do you want to achieve?

What is your objective? **What kind of change do you want to achieve?** The clearer you can define the objective, the better. A good objective is ambitious and motivating, but achievable.

How can you measure the success of your objective? Indicators help to observe whether the measures are having an impact, and whether they are sufficient. **Formulate the objective in a measurable form.**

If the timeframe is longer than one year/growing season, you should ensure that the objective can be broken down into easily trackable milestones.

An objective can be e.g.:

- The winter living vegetation cover is 90% of the surface area.
- Catch and cover crops are incorporated in the crop rotation.
- The number of green weeks is increased.

Make the objective clear and measurable.
For example: *90% winter living vegetation cover by switching to spring tillage and including winter cereals and catch crops in the crop rotation.'*

3 SET A TIME LIMIT
By when should the objective be achieved?

Set a deadline by which the results must be achieved. Allow enough time to make it possible to achieve the objective. **From the point of view of your objective, think about an ambitious but feasible timeframe**.

4 PLAN HOW YOU WILL INCREASE PLANT COVERAGE
What actions will you take?

Draw up a plan to help you achieve your objective. Consider what is necessary and possible, taking into account the resources available. Consider whether you need the help of an external expert or colleague. Where can you get the help you need in the easiest and most cost-effective way? What are you going to do and in what order?

First, ask what needs to change and what is making it difficult or impossible to change? List the obstacles and bottlenecks and think about how you can overcome the difficulties you have identified. It is crucial to find the most effective solutions for your farm. **The important thing to remember is that you are adding live winter cover for the benefit of your farm, so think about what works for your farm.**

For example:

- I will plan a more varied crop rotation with an advisor and include autumn crops.
- I will sow perennial grasses to increase the green weeks.
- I will record my observations on the performance of grass mixtures in different fields.
- I will sow catch crops under the main crop.

Everything may not go according to plan, and the plan may be updated along the way. You can stick to your goal but change your route..

5 SET A BUDGET
What resources will you allocate to the activity?

When making a plan, also consider how much **time, money, land area** and other resources you can realistically allocate to achieving the goal.

6 MONITORING
How is the work progressing, are you getting results?

Good planning makes it easier to succeed. Yet **results only come from doing**. No plan can predict either external pressures or the results of one's own actions. **It is therefore important to keep a record of what was done** and how the work progresses. Corrections are easier to make when work is documented, and only documented work allows for a well-founded analysis of its outcomes.

Examples of monitoring methods:

- Record any challenges or successes encountered in implementing the actions.
- Observe the effects of vegetation cover on soil structure.
- Do an earthworm test and see how many earthworms there are in a spadeful of soil. Will their number change as the number of green weeks increases?

Practices to support monitoring:

- Keep the active plan, i.e. the area worksheets, in one place, such as a folder on your computer or printed out on paper.
- Put the worksheets in a visible place.
- Set reminders on your phone, for example.
- Record any delays and failures too, so you can learn how to improve your plans. No ambitious plan will succeed every time.
- Make a habit of monitoring so that it doesn't feel forced.


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7 ANALYSIS
What results did you achieve, did anything change?

At this stage, it is important to record what was achieved by the actions taken. Which achievements were intended, which were accidentally useful, and which should be avoided in the future? When you can add to the above an understanding of what caused the success or failure, you have succeeded in your analysis.

Because changes can be small, monitoring must be systematic and analysis must be honest. It could be that a measure that worked elsewhere is not working at your farm, or that another measure would work better.

Don't just list what you did,
– reflect on what happened as a result.

- What changed on the fields?
- Was there an increase in green weeks, and what was the impact?
- Did you find the right catch crops for your farm?
- What didn't work? How will you avoid making the same mistake in the future?

In development work, analyzing the results is important. It doesn't matter if something went wrong. You just have to try to spot it in time and correct the trend.

8 DOCUMENT WHAT YOU'VE LEARNED
What will be done next?

This step will determine whether all the work was worth it. If successful, can you extend the measure to other fields? If a measure was not successful, do you change it or continue the experiment with an improved design? Maximizing living vegetation cover is an ongoing process. The bottom line is that:

- You know what you have done.
- You know why it works or doesn't work.
- You are prepared to change direction.

Print or open new worksheets and make a plan for the next growing season based on the observations made in the analysis.

What area does the plan cover?

Maximizing living vegetation cover

Date

15.8.2025

1. What is the current situation in this area?

There are perennial grasses, autumn crops and catch crops that can be kept over the winter.

Living vegetation cover is around 70–80%.

2. What do you want to achieve?

I will develop ways to establish grasslands and collector catch crops.

I want to find the best method for sowing a catch crop in the autumn.

3. By when should the objective be reached?

By the end of 2026.

4. What actions will you take?

I will study different methods for establishing grasslands and catch crops and select 2–3 alternative methods to try on different types of fields.

I will at least test the establishment of a catch crop for autumn cereals as a direct sowing in early spring.

5. What resources will you allocate to this activity?

Design and practical implementation 20 h work.

Seed costs approx. €75/ha.

Other expenses €800.

AREA 6

Minimised tillage

Tillage always disturbs the soil and reduces the protection that soil provides for microbes. Improper or poorly timed tillage causes compaction and increases erosion. No general rule can be set for the appropriate amount of tillage. How much tillage is needed depends on factors such as soil type, weed conditions, frost and soil biota. So, it's worth weighing up tillage carefully. For example, thoughtful and well-timed tillage can go a long way.

Minimizing tillage means that tillage is only carried out when needed and at the right time. Where possible, tillage is limited to the surface layer of soil and timed so that a new vegetation cover can be established soon after tillage.

1 ASSESS THE TILLAGE PRACTICES
What is the starting point?

Use the guiding questions to consider what your farm's tillage practices are like at present.
The assessment should be done on a field-by-field basis.

Below you will find eight questions to help you assess your baseline.

- Do you have a tillage plan?
- Is the tilling routine or do you plan it as needed?
- Have you explored alternatives and new solutions, e.g. on another farm?
- Do you use IPM plant protection for weed control?
- How is tillage timed?
- Have you identified how the timing of tillage affects compaction risks?
- Have you tried different tilling depths?
- Are you aware of the intensity of tillage within the crop rotation (frequency, intensity, and depth)?

2 SET AN OBJECTIVE
What do you want to achieve?

How do you go about minimizing tillage on your arable fields? Are the fields in a condition that allows a significant reduction in tillage, or should we take small steps forward?

What kinds of changes might minimizing tillage require to the machinery currently used on the farm? What do you want to achieve, and how quickly do you want to move away from more intensive tillage? Why is it useful for you and your farm?

What is your objective? **What kind of change do you want to achieve?** The clearer you can define the objective, the better. A good objective is ambitious and motivating, but achievable.

How can you measure the success of your objective? Indicators help to observe whether the measures are having an impact, and whether they are sufficient. **Formulate the objective in a measurable form.**

If the timeframe is longer than one year/growing season, you should ensure that the objective can be broken down into easily trackable milestones.

An objective can be e.g.:

- Reduce ploughing and adopt lighter tillage.
- Timing the tillage so that the aim is always to sow a crop afterwards.
- Acquiring a direct seeder and moving to direct seeding.

Make the objective clear and measurable.
For example: *'Reduce ploughing and finish one grassland plot with a cultivator in late summer'*

3 SET A TIME LIMIT
By when should the objective be achieved?

Set a deadline by which the results must be achieved. Allow enough time to make it possible to achieve the objective. **From the point of view of your objective, think about an ambitious but feasible timeframe.**

4 PLAN HOW TO MINIMISE TILLAGE
What actions will you take?

Draw up a plan to help you achieve your objective. Consider what is necessary and possible, taking into account the resources available. Consider whether you need the help of an external expert or colleague. Where can you get the help you need in the easiest and most cost-effective way? What are you going to do and in what order?

For example:

- I will draw up a new tillage plan, where I will try to time the tillage to minimise the risk of compaction.
- I will explore whether minimizing tillage will require new machinery purchases.
- I will explore solutions for minimizing tillage on a colleague's farm.

Everything may not go according to plan, and the plan may be updated along the way. You can stick to your goal but change your route.

5 SET A BUDGET
What resources will you allocate to the activity?

When planning, also consider how much **time, money, land area** and other possible resources you can realistically allocate to achieving the goal.

6 MONITORING
How is the work progressing, are you getting results?

Good planning makes it easier to succeed. Yet results **only come from doing.** No plan can predict either external pressures or the results of one's own actions. It is **therefore important to keep a record of what was done** and how the work progresses. Corrections are easier to make when work is documented, and only documented work allows for a well-founded analysis of its outcomes.

Examples of monitoring methods:

- Record any challenges or successes encountered in implementing the actions.
- Observe the effects of minimizing tillage on soil health.
- Monitor whether the actions affect the amount of work or fuel consumption.
- Do an earthworm test and see how many earthworms there are in a spadeful of soil. Will their number change as tillage is lightened?

Practices to support monitoring:

- Keep the active plan, i.e. the area worksheets, in one place, such as a folder on your computer or printed out on paper.
- Put the worksheets in a visible place.
- Set reminders on your phone, for example.
- Record any delays and failures too, so you can learn how to improve your plans. No ambitious plan will succeed every time.
- Make a habit of monitoring so that it doesn't feel forced.

7 ANALYSIS
What results did you achieve, did anything change?

At this stage, it is important to record what was achieved by the actions taken. Which achievements were intended, which were accidentally useful, and which should be avoided in the future? When you can add to the above an understanding of what caused the success or failure, you have succeeded in your analysis.

Look at changes in labor rates, fuel consumption, soil, yield and economy.

- Did you reduce fuel consumption? What about the workload?
- Did soil aggregate structure, water infiltration and water-holding capacity, or improved load-bearing capacity?
- Did the yield at least remain unchanged or did the variation between years level off?
- Did the weed profile of the field change, or did the need for plant protection change?
- Did you see an improvement in nutrient efficiency (e.g. better N response)?
- Savings vs. extra costs (contracting, investments) – which one won?

An honest analysis saves money and time. If a method does not work on your field, do not repeat it.

8 DOCUMENT WHAT YOU'VE LEARNED
What will be done next?

This step will determine whether all the work was worth it. If successful, can you extend the measure to other fields? If a measure was not successful, do you change it or continue the experiment with an improved design? Minimizing land preparation is an ongoing process. The bottom line is that:

- You know what you have done.
- You know why it works or doesn't work.
- You are prepared to change direction.

Print or open new worksheets and make a plan for the next growing season based on the observations made in the analysis.

What area does the plan cover?

Minimizing tillage

Date

15.8.2025

1. What is the current situation in this area?

The current tilling is planned, with varying tillage methods and depths.

If vegetation fails, the weed pressure increases and requires further tillage.

Successful crops are a prerequisite for minimum/no tillage.

Water management and soil structure are not good enough in all areas.

2. What do you want to achieve?

A field-by-field understanding of the barriers to non-tillage, ways to address the challenges and a timetable for change in the coming years.

In addition to my own farm, I will explore the tillage solutions on other farms.

3. By when should the objective be reached?

A plan should be ready by the end of June 2026.

4. What actions will you take?

I will map the problem areas of the fields and record my findings on compaction, water management problems and other obstacles to light tillage.

I will discuss with at least three more advanced regenerating farmers about their tillage solutions.

I will prepare a plan to reduce tillage on my farm for the years 2026–2028.

5. What resources will you allocate to this activity?

I will set aside 5 h/month for planning, observations and discussion.

AREA 7

Nutrient use is based on plant needs and relies on organic fertilizers and biological nitrogen fixation

In regenerative farming, nutrient use is based on plant needs and relies on organic fertilizers and biological nitrogen fixation. In developing this area, you will take soil samples carefully and systematically. Precision fertilization is also a good tool for developing this area.

1 NUTRIENT USE ON YOUR FARM
What is the starting point?

Reflect on your current fertilization practices.
What is your current fertilization plan and how well do your crops use nutrients?

Below you will find seven questions to help you assess your baseline.

- Is plant fertilization based on measured needs, such as soil and plant analyses?
- Do you interpret the results of the analysis carefully and draw up a plan based on it?
- How much organic fertilizer do you use? What about chemical fertilizers?
- Do you fertilize according to a realistic yield target?
- If you use soluble nutrients, do you apply only the amount that meets the crop's immediate nutrient needs?
- Have you identified alternative sources of nutrients available in your area? Have you introduced them?
- To what extent do you fertilize just out of habit?

2 SET AN OBJECTIVE
What do you want to achieve?

What is your objective? **What kind of change do you want to achieve?** The clearer you can define the objective, the better. A good objective is ambitious and motivating, but achievable.

How can you measure the success of your objective? Indicators help to observe whether the measures are having an impact, and whether they are sufficient. **Formulate the objective in a measurable form.**

If the timeframe is longer than one year/growing season, you should ensure that the objective can be broken down into easily trackable milestones.

An objective can be e.g.:

- Increasing the use of organic fertilizers.
- Increasing the use of nitrogen-fixing crops and green manure leys.
- Better use of technology to improve nutrient use efficiency.
- Use of distributed fertilization according to the situation.

Make the objective clear and measurable.
For example: *'I will increase the proportion of nitrogen-fixing crops (e.g. clover) in the crop rotation and the use of organic fertilizers.'*

3 SET A TIMELINE
By when should the objective be achieved?

Set a time limit by which you aim to achieve your objective. From the point of view of your objective, **think about a realistic but ambitious timeframe. Set milestones if necessary.**

4 PLAN HOW TO MINIMISE TILLAGE
What actions will you take??

Draw up a plan to help you achieve your objective. Consider what is necessary and possible, taking into account the resources available. Consider whether you need the help of an external expert or colleague. Where can you get the help you need in the easiest and most cost-effective way? What are you going to do and in what order?

For example:

- I will find out what organic fertilizer products are available in the local area.
- I will explore the possibility of acquiring precision farming equipment and finding out which equipment could be eligible for investment aid.
- I will plan the crop rotation to include green manure leys.
- I will increase the use of catch crops to minimise the risk of nutrient leaching.

Everything may not go according to plan, and the plan may be updated along the way. You can stick to your goal but change your route.

5 SET A BUDGET
What resources will you allocate to the activity??

When making a plan, also consider how much **time, money, land area** and other possible resources you can realistically allocate to achieving the goal.

6 MONITORING
How is the work progressing, are you getting results?

Good planning makes it easier to succeed. Yet **results only come from doing.** No plan can predict either external pressures or the results of one's own actions. It is **therefore important to keep a record of what was done** and how the work progresses. Corrections are easier to make when work is documented, and only documented work allows for a well-founded analysis of its outcomes. Monitor your actions against your set objectives:

- Has the soil's organic matter content improved after increasing the use of organic fertilizers?
- Monitor what type of green manure ley is suitable for the fields on the farm, and what benefits different grass mixtures bring in relation to the farm's objectives.

Practices to support monitoring:

- Keep the active plan, i.e. the area worksheets, in one place, such as a folder on your computer or printed out on paper.
- Put the worksheets in a visible place.
- Set reminders on your phone, for example.
- Record any delays and failures too, so you can learn how to improve your plans. No ambitious plan will succeed every time.
- Make a habit of monitoring so that it doesn't feel forced.

A large part of the benefits of Uudistaja come from systematic planning, practical implementation and evaluation of the work done.

7 ANALYSIS
What results did you achieve, did anything change?

Don't just list what you did,
– reflect on what happened as a result.

- Did the soil organic matter content change in the field?
- Did the increase in organic fertilizers have an impact on the workload?
- Have fertilizer costs decreased?
- Has crop reliability improved?
- What didn't work? How will you avoid making the same mistakes in the future?

In development work, analyzing the results is important. It doesn't matter if something went wrong. You just have to try to spot it in time and correct the trend.

8 DOCUMENT WHAT YOU'VE LEARNED
What will be done next?

This step will determine whether all the work was worth it. If successful, can you extend the measure to other fields? If a measure was not successful, do you change it or continue the experiment with an improved design?

Change in nutrient use is a continuous process. The bottom line is that:

- You know what you have done.
- You know why it works or doesn't work.
- You are prepared to change direction.

Print or open new worksheets and make a plan for the next growing season based on the observations made in the analysis..

What area does the plan cover?

Use of nutrients

Date

15.8.2025

1. What is the current situation in this area?

Dry sheep manure is used for part of the area and mineral fertilizers are applied.

The proportion of mineral fertilizers in grassland is too high.

2. What do you want to achieve?

Save on fertilizer costs by improving the use of sheep manure and increasing the use of nitrogen-fixing plants and organic fertilizers. At the same time, I will improve the soil's organic matter content.

3. By when should the objective be reached?

By the end of 2028

4. What actions will you take?

Reduce mineral fertilization of grassland by diversifying mixtures with nitrogen-fixing crops. Improve on-farm nutrient cycling.

Identify which recycled fertilizers are available and can be introduced.

Trial the use of a contractor's precision application equipment for manure spreading.

5. What resources will you allocate to this activity?

Time use approx. 10 h to explore fertilization options, etc. The time and cost plan is refined when it is known which fertilizers will be used in the future, and with which equipment they will be applied. Increase in seed costs for grasses approx. €40/ha.

AREA 8

The use of plant protection products is minimised

The use of plant protection products is minimised. Priority will be given to using mechanical and biological means to control weeds. Pesticides are used to control insect pests and plant diseases only when a need has been identified.

1 ASSESS THE CURRENT STATUS OF PLANT PROTECTION MEASURES
What is the starting point?

Start by assessing the current plant protection measures on the farm.
Is plant protection optimized? Is it based on chemical, biological or mechanical solutions??

Below you will find seven questions to help you assess your baseline.

- Are you familiar with your legal obligations and the principles of Integrated Pest Management (IPM)?
- What means do you use to achieve a good and high quality harvest?
- Do you aim to reduce the use of plant protection products? What means do you have at your disposal?
- Do you identify actions in your own farming practices that support the minimization of pesticide use? And what measures limit it?
- Does crop rotation help you with plant protection? Which actions support it and which undermine it?
- What biological means have you used to control weeds and pests?
- What mechanical means do you use to control weeds?

2 SET AN OBJECTIVE
What do you want to achieve?

What is your objective? **What kind of change do you want to achieve?** The clearer you can define the objective, the better. A good objective is ambitious and motivating, but achievable.

How can you measure the success of your objective? Indicators help to observe whether the measures are having an impact, and whether they are sufficient. **Formulate the objective in a measurable form.**

If the timeframe is longer than one year/growing season, you should ensure that the objective can be broken down into easily trackable milestones.

An objective can be e.g.:

- Diversify crop rotation to reduce disease pressure
- Aim to reduce plant protection costs.
- Aim to increase the use of biological and mechanical control methods to replace chemical ones.

Make the objective clear and measurable. For example: *'New crops are added to the rotation so that the same crop is not sown in the same plot in successive years, and the risk of plant diseases is reduced.'*

3 SET A TIME LIMIT
By when should the objective be achieved?

Set a deadline by which the results must be achieved. Develop a 2–3-year roadmap and break it down into interim milestones.

4 PLAN HOW YOU WILL DEVELOP CROP ROTATION
What actions will you take?

Draw up a plan to help you achieve your objective. Consider what is necessary and possible, taking into account the resources available. Consider whether you need the help of an external expert or colleague. Where can you get the help you need in the easiest and most cost-effective way? What are you going to do and in what order?

For example:

- I will find out about minimizing the use of pesticides on a colleague's farm.
- I will try mechanical or biological control on a small area and monitor the effects.
- I will plan the timing of mechanical control carefully.
- I will plan a varied crop rotation together with an adviser.

Everything may not go according to plan, and the plan may be updated along the way. You can stick to your goal but change your route.

5 SET A BUDGET
What resources will you allocate to the activity?

When planning, also consider how much **time, money, land area** and other possible resources you can realisticall yallocate to achieving the goal. Note that the biggest impacts are often savings..

6 MONITORING
How is the work progressing, are you getting results?

Good planning makes it easier to succeed. Yet results only come from doing. No plan can predict either external pressures or the results of one's own actions.

It is therefore important to keep a record of what was done and how the work progresses. Corrections are easier to make when work is documented, and only documented work allows for a well-founded analysis of its outcomes.

Examples of monitoring methods:

- Record any challenges or successes encountered in implementing the actions.
- Observe the prevalence of plant diseases.
- Observe the weeds – will the number or species change?
- Monitor whether the actions affect the amount of work or the purchase of external inputs.

Practices to support monitoring:

- Keep the active plan, i.e. the area worksheets, in one place, such as a folder on your computer or printed out on paper.
- Put the worksheets in a visible place.
- Set reminders on your phone, for example.
- Record any delays and failures too, so you can learn how to improve your plans. No ambitious plan will succeed every time.
- Make a habit of monitoring so that it doesn't feel forced.

7 ANALYSIS
What results did you achieve, did anything change?

What were the consequences of reducing the use of plant protection products? Did new problems emerge for which new solutions are needed? And did the pollinator situation change?

Have the measures been genuinely useful, or were more measures needed? Try to understand where the change will occur in the longer term.

Don't just list what you did,
– reflect on what happened as a result.

- Have you been able to reduce your use of plant protection products?
- Did the quantity or quality of the harvest change?
- Did you save money?
- What has changed in the agricultural environment?
- What didn't work? How will you avoid making the same mistake in the future?

In development work, analyzing the results is important. It doesn't matter if something went wrong. You just have to try to spot it in time, and correct the trend.

8 WHAT YOU'VE LEARNED
What will be done next?

The measures have now been taken and the impact assessed. It is useful to assess whether you have already reached your long-term goal, that is, whether to move on to maintenance activities or continue with change measures. Based on this analysis, consider further action on a measure-by-measure basis.

If the measure:

- **Worked:**
  extend good practices to plots; establish monitoring and control routines.
- **Didn't work:**
  change the crop rotation, sowing time, and timing of mechanical operations; test again on a small area.

Once this phase is completed, it is time to print/open new worksheets and start planning the next growing season.

What area does the plan cover?

The use of plant protection products is minimised

Date

15.8.2025

1. What is the current situation in this area?

All cereals are sprayed for weeds, and usually one fungicide application is carried out. Growth regulators are used infrequently. Cereal seeds are treated.

Glyphosate is used as needed to control blackgrass.

Approximately €6,000 per year is spent on pesticides, plus tractor work.

2. What do you want to achieve?

The goal is to reduce plant protection costs by at least 30%, and potentially even more as the crop rotation becomes more diverse.

I also want to test the effects of reducing the use of plant protection products on the quality and quantity of the crop. I want to find alternatives to the use of glyphosate.

3. By when should the objective be reached?

30% reduction in costs by the end of 2027

4. What actions will you take?

In the winter of 2025-2026, I will interview local farmers practicing regenerative methods about the solutions that work for them and refine my plan based on that information.

In the 2026 growing season, I will test untreated seed on 50% of the oat area.

I will introduce thresholds for leaf spot diseases and only spray when the threshold is exceeded. If I spray, I will leave a spraying window to assess the benefit of disease control.

Starting in 2026, I will begin diversifying the crop rotation so that I can expand my trials to minimise disease control in cereals.

5. What resources will you allocate to this activity?

Interviewing other farmers 5h, observations 2h/week during the growing season, planning 10 h/year.

There should be no additional costs, but savings in both working time and purchases.

BSAG
Baltic Sea Action Group

CARBON ACTION

CAF America

General Mills

Uudistaja
– a farm development tool

Guidance materials for
area-specific development

More information
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