Farm and Financial Management

- Farm management plan FSA9
- Financial stability FSA4, 5, 6, 7
- Land use assessment FSA8
- Crop rotations FSA12
- Training and technical support FSA10
- Equipment maintenance FSA11

FSA FARM SUSTAINABILITY ASSESSMENT BY SAI PLATFORM

Compiled by : NIAB

Farm Management Plan

Best practice :

An up-to-date documented management plan is available.

Where possible the plan has definite and measurable targets.

The plan is reviewed annually or whenever new crops or farming techniques are adopted.

FSA9 Do you have an up-to-date farm management plan that addresses all relevant farming risks and opportunities?

Farm Management Plan

The objective of a farm management plan is to allow objective decision making and aid the systematic review of farm practices to determine if they are suitable, for long term financial health of the farm, protection of the environment and people (workers, local communities etc.).

Economic performance

- Promoting high productivity with low environmental impact.
- Delivering tangible financial benefits.
- Preparing for future challenges and changes in legislation.
- Reducing food safety risks.

Environmental impact

- Reducing the impact of farming activities on the environment.
- Maintaining and enhancing natural habitats.
- Reducing the risk of pollution and environmental degradation.
- Monitoring and demonstrating improvements in the quality of soil, water, air, wildlife habitats and landscape.

Community values

- Reaching out and connecting with the community, suppliers, customers and the wider agricultural industry.
- Clear policies to improve workers welfare and competence.
- Promoting actions to minimise the impact on the community of on farm activities

All of these subjects are covered in more detail elsewhere in the FSA.

Farm Management Plan

There is no specific template for a farm management plan, as it should respond to the specifics of the farm business. However, as a general rule it will help to identify opportunities, optimise current production and reduce risk. The important thing is that something is written to aid in objective decision making. The plan should cover relevant on farm activities, such as:

Relevant farming risks and opportunities:

- Legal requirements
- Food safety risks
- Worker welfare and health & safety
- Soil management
- Water management
- Pesticide drift
- Air pollution, including fire and smoke
- Water pollution (soil, leakage or run-off from storing or applying nutrients and pesticides and from fuel or waste storage/disposal)
- Potential off-site contaminants (e.g. pollutants or invasive species; protection against off-site contaminants can be managed through buffer zones)
- Natural habitat degradation and destruction
- Rare and endangered species (including hunting and wild collection by farm workers and visitors)
- Farm animal welfare

The listed items are covered in more detail elsewhere in the training material.

The management plan is not a static document and it is important to aim for continuous improvement to drive progress towards more sustainable agricultural practices.

How to answer YES

Have a robust farm management plan covering relevant risks and opportunities (FSA9).

Be able to show that the plan is updated at least annually, and whenever new crops or farming techniques are adopted (FSA9).

Planning is a consistent theme throughout the FSA, and other questions request plans or written actions, e.g. biodiversity (FSA64), waste management (FSA52), nutrient management (FSA24), integrated pest management (FSA31), crop protection products (FSA35-39), water (FSA54,55), soil (FSA19-22) and business plan (FSA6). It is acceptable for these items to be included in an overall farm management plan (FSA9), or in separate documents.

FSA FARM SUSTAINABILITY ASSESSMENT BY SAI PLATFORM

Farm Management Plan

Strengths, weaknesses, opportunities and threats (SWOT) analysis indicates a framework for helping identify and prioritise the business goals and to further identify strategies for achieving them.

STRENGTH

- What does your farm do well?
- What is your farm's main focus?
- What have been your most notable achievements?
- What are your major sources of profit?
- Why do your customers buy from you?
- What sets you and your farm apart from others?
- What resources do you have available?
- What is your greatest asset?

WEAKNESSES

- What does your farm not do well?
- What are your least profitable enterprises?
- What is your biggest expense?
- What resources does the farm need?
- What might other farmers see as your farm's weaknesses?
- What should you avoid?

OPPORTUNITY

- Can technology help lower costs/improve marketing?
- Can the farm have more predictable cash flows?
- Can profitability be improved? How?
- What market trends have you observed?
- What new relationships can the farm develop?
- What is happening in your community that could be advantageous?
- Are there industry events that you can take part in?

THREAT

- Have there been any significant changes to the industry?
- Do you have competitors reducing the farm's market share?
- What are the obstacles to your farming operation?
- Does your financial position threaten the business?
- Could any of the farm's weaknesses seriously threaten the operation?

Further reading and examples:

- Oregon State University, USA: Growing Farms: Successful Whole Farm Management Planning Book Think It! Write It!
- Ohio State University, USA: Conducting a SWOT Analysis of Your Agricultural Business
- Victoria State Government, Australia: How to prepare a farm plan
- Echo Community:
  - ECHO farm plan
  - Agriculture Risk Management Planning and Scoring
  - Implementing Your Agricultural Project / Farm Plan: Farm Management Principles
- Feed the future, United States Agency for International Development: Creating a Strategic Plan for Your Organization

Financial Stability

Best practice :

Maintain records to show cash flow to help justify and explain your economic decisions.

Implement measures which contribute to the long-term economic viability of the farm.

Have a written business plan available to demonstrate knowledge of risks, financial planning, planned and future yields, market forecasting etc.

Be able to justify and explain economic decisions based on consideration of risks.

FSA4 Do you plan your activities to support the long-term economic viability of your farm?

FSA7 Do you keep records of yields, costs, income and profitability of your farm?

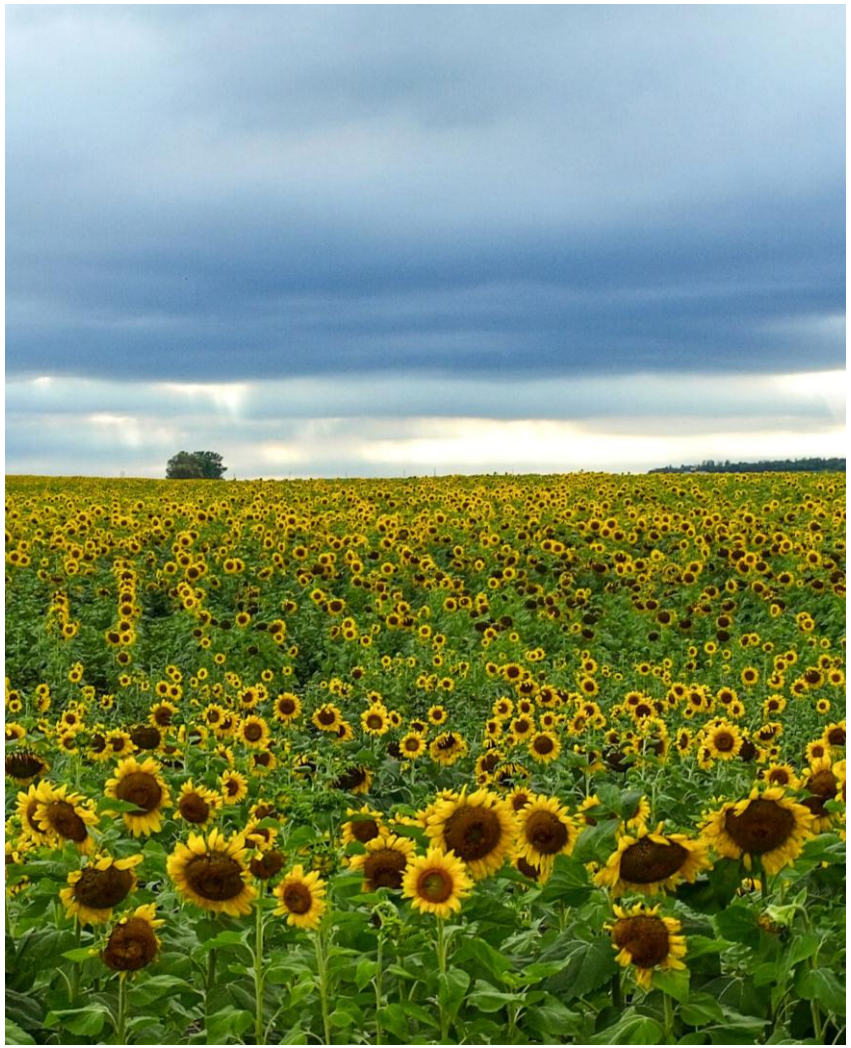
FSA5 If you only have one source of income, have you considered the risks to your farm business?

FSA6 Do you have a business plan to optimize the long-term economic viability of the farm?

Financial Stability

Financial stability is the businesses capacity to sustain itself financially in the long term. A good business plan gives a forward looking view to your farm, and to your skills as a farm owner or manager to maintain a viable business. A good farm business plan will highlight weaknesses in your operations and in how you run your farm, providing helpful insight for continual improvements.

Before writing a business plan, you will need to research the sectors that you are currently working in - or plan to work in - including any future economic prospects for these sectors and relevant regulations that apply to your area of business. Using this research data, your farm's unique characteristics (e.g. soil type and location) and farm records of inputs, yields, costs, income and profitability it is possible to develop a sustainable business plan that can contribute to the long-term economic viability of the farm.



Financial Stability

Ensure your accounts and records are transparent and reliable for financial, regulatory and other reporting purposes:

- Truthfully, accurately and completely reflect exactly what occurred. Never hide or overstate transactions or alter documents or records
- Retain records and any supporting documentation in a manner and for as long as statutory or internal rules require. Never destroy records that are relevant to a threatened or pending investigation or legal proceeding
- Use clear and concise language when communicating to reduce the likelihood that the content is misinterpreted, misused or taken out of context

Maintain crop production records and yield per unit area, so you can track your productivity each year and identify how to improve. You can also compare costs and benefits under different circumstances, such as varying inputs or practices.

Efficient harvest processes will decrease labour input and time while maintaining the same yield which will lead to overall profitability gains.

Maximise production efficiency by selecting the best varieties for your area (FSA 13, 14, 17,18), providing the right amount of nutrients (FSA 23-29), looking after your soil (FSA 19-22) and proper planning (FSA 4-12).

How to answer YES

Keep full and accurate records of business activities and financial transactions to provide a fair and complete picture of operations, assets and financial condition (FSA7).

Show you have measures in place for the longer term sustainable management of your farm including economic, environmental and social sustainability (FSA4, 6).

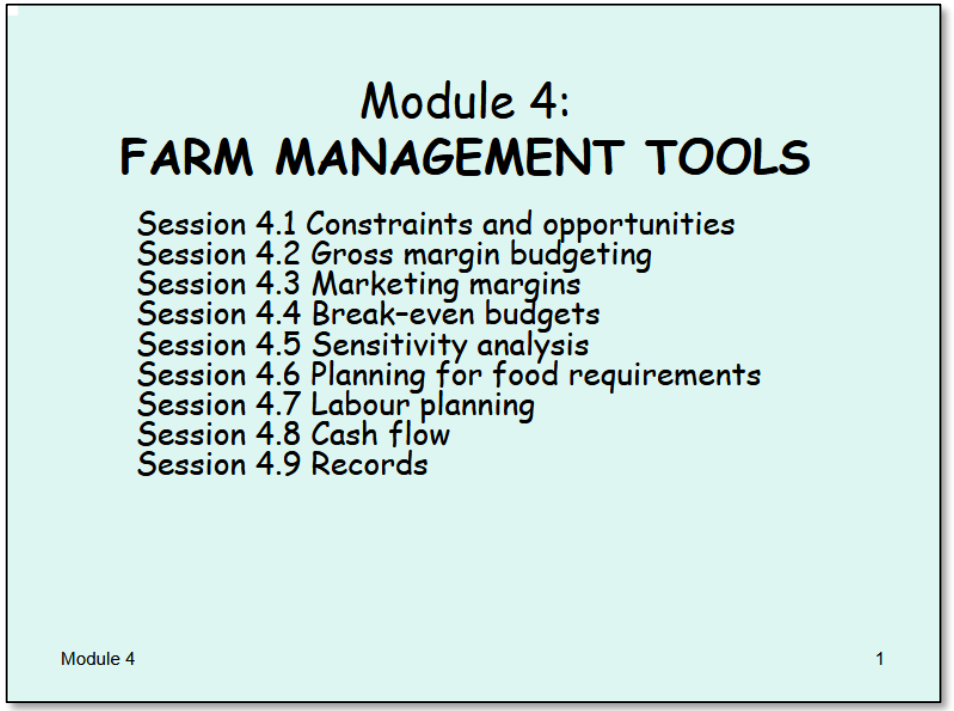
Be able to demonstrate the long-term economic viability of the farm through some of the following activities: training, succession planning, market forecasting, planned investments, operating cost accounting, cost reductions, applying efficiency measures, collecting information provided by journals or newsletters, business consulting, developing other income sources (FSA4, 6).

Show that you comply with relevant financial reporting and accounting standards and principles, as well as tax laws and regulations (FSA7).

Develop a written business plan to show the resilience of your business, demonstrating knowledge of risks, financial planning, farm activity planning, planned and future yields, market forecasting etc. (FSA6).

Be able to explain economic decisions based on consideration of the risks. (e.g. If only growing one crop what are you going to do in the event of a crop failure due to disease or the weather? (FSA5).

Financial Stability



FAO: Farm management tools

Land Use

Best practice :

Have a completed documented land use assessment covering previous and current land use and the impact of activities on the environment and communities.

FSA4 Did you make an assessment of the suitability of all your land for its current or planned use?

Land Use

The function of land use planning is to guide decisions in such a way that the resources of the environment are put to the most beneficial use whilst at the same time conserving those resources for the future.

As your business is part of the natural landscape and your management decisions have economic, environmental, social and cultural impacts beyond the farm it is important to identify and protect the most important environmental features and as such you must make an assessment of land use suitability to determine if agricultural production is the best use of the land.

The assessment of land use suitability involves determining if any of the six High Conservation Values (HCV) categories (below) are relevant in the area of interest or in the wider landscape which may be negatively impacted by your activities.

1. Species diversity: Concentrations of biological diversity including rare and endangered species.
2. Landscape level ecosystems: Large areas of significant ecological importance, such as intact forest landscapes and wetlands.
3. Ecosystems and habitats: Natural habitats and wildlife corridors.
4. Ecosystem services: Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.
5. Community needs: Sites and resources fundamental for satisfying the needs of local communities etc.
6. Cultural values: Sites of cultural, historical or archaeological importance or of significant cultural/ religious importance.

FSA FARM SUSTAINABILITY ASSESSMENT BY SAI PLATFORM

Land Use

When selecting suitable growing areas a land use assessment takes into consideration:

- Characteristics of the land and adjacent land
- Previous use
- Potential impact on neighbouring activities, land and waterbodies
- Respect the rights of communities regarding access to natural resources
- Choosing planting locations to avoid cross-infestation
- Crops planted in unsuitable areas grow badly and are more susceptible to pests, disease leading to more soil, and fertiliser loss.

All land conversion activities must be legal and all the required authorisations must be in place from local, regional and national authorities. Free, Prior and Informed Consent FPIC) has been acknowledged to honour a zero land grabbing policy (FSA110).

How to answer YES

Have a written land use assessment to support your on farm decision making processes (FSA8).

Minimise the impact on the local environment such as:
preventing degradation and destruction of natural habitats and sites of specific cultural and historic importance (FSA8).

Be able to show that you:

- Prevent the introduction of invasive species
- Protect rare and endangered species
- Reduce water consumption
- Reduce/ prevent water contamination with:
    - Soil from erosion
    - Leakage or run-off from storing or applying nutrients and pesticides
    - Fuel or waste storage/disposal (FSA8).

Land Use

UNDP-SWoCK Project: Integrated Community Based Land Use Planning, Solomon Islands

HCV: HCV and HCS for consumer goods companies

High Conservation Value Areas (HCVAs)

Further reading and examples:

Biodiversity a-z: High Conservation Value Areas (HCVA)

HCV resource network

FAO : Land resource planning toolbox

FSA FARM SUSTAINABILITY ASSESSMENT BY SAI PLATFORM

Land Use

There are six main types of Values used to define High Conservation Value Areas (HCVAs). These are outlined in the High Conservation Value Resource Network (HCVRN) Charter.

HCV1 Species diversity

Concentrations of biological diversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels. e.g. The presence of several globally threatened bird species.

HCV2 Landscape level ecosystems

Large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance. e.g. A large tract of Mesoamerican flooded grasslands and gallery forests with healthy populations of Hyacinth Macaw, Jaguar, Maned Wolf, and Giant Otter, as well as most smaller species.

HCV3 Ecosystems and habitats

Rare, threatened, or endangered ecosystems, habitats or refugia. e.g. Patches of a regionally rare type of freshwater swamp.

HCV4 Ecosystem services

Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes. e.g. Forest on steep slopes with avalanche risk above a town.

HCV5 Community needs

Sites and resources fundamental for satisfying the necessities of local communities or indigenous peoples (for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or indigenous peoples. e.g. Key hunting areas for communities living at subsistence level.

HCV6 Cultural values

Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or indigenous peoples, identified through engagement with these local communities or indigenous peoples. e.g. Sacred burial grounds within a forest management area or new agricultural plantation.

From : Common guidance for the Identification of high conversion value

Crop Rotations

Best practice :

Show, where applicable, that crop rotations are used on the farm.

Have a clear plan of crop rotation to introduce break crops into your crop production system.

Maintain records of growing material used in a particular field as part of your comprehensive recording system.

FSA12 Do you use crop rotation where applicable?

Crop Rotations

Crop rotation is the practice of growing a series of dissimilar or different types of crops in the same area in sequenced seasons.

Using a monoculture (growing the same crop season after season in the same place) can result in:

- Increase in pests and disease
- Proliferation of certain weeds
- Reduction in yield
- Reduction in biological diversity
- Greater economic risk

Crop rotation

- Replenishes soil nitrogen thorough the use of leguminous crops or cover crops that fix nitrogen
- Creates breaks in the cropping cycle to mitigate the build up of weeds, pathogens and pests as part of an integrated pest management (IPM) strategy (FSA31)
- Improves soil structure and fertility by alternating deep rooted and shallow rooted plants
- Reduces erosion by reducing soil disturbance and improving soil structure. The sequence of crops in a rotation should be planned to avoid leaving soils unprotected at times of maximum rainfall (FSA20)

It also diversifies your on farm activities giving more than one source of income increasing economic viability (FSA5) and may help spread the workload during the growing season.

Crop Rotations

- Carry out research and seek guidance to determine what crops are most suitable for use in a crop rotation on your farm and develop a plan for the long term use of crop rotations.
- Use a map of your farm to help identify fields and record what crops and varieties have been planted in your field records (FSA18). Over time this will develop into a comprehensive record of your use of field rotations.

How to answer YES

If appropriate, have a clear crop rotation plan in place (FSA12).

Be able to demonstrate the crops grown in a particular field, or part of a field, in previous years (FSA12).

Crop Rotations

An accurate and comprehensive recording system must cover all the relevant information and be simple to complete. Below is an example of the information that can be recorded for the activities that occur in a particular field over a season. This information will provide the details of the crops grown in a particular field and over time will develop a comprehensive record of your use of crop rotation.

Field name / No.				Crop			Fertiliser use				
Soil type				Variety			Date	Rate	N:P:K		
Area				Seed treatment							
Sowing date				Previous crop							
Date	Product name	Amount of product used	Trigger for spraying	Reason for treatment	water volume	Area sprayed	Spray time	Field re-entry interval	Harvest interval	Weather	Wind speed & direction

Further reading and examples:

- FAO: Green manure/cover crops and crop rotation in Conservation Agriculture on small farms
- FAO: Sustainable crop rotations
- FAO: What is the best cropping sequence for the farm?
- Sustainable Agriculture Research and Education, USA: Crop Rotation and Farm Management
- Farming First: Farmers Fostering Crop Rotation

Training and Technical Support

Best practice :

Implement a programme for keeping yourself and your workers up to date in all aspects of the farm business.

FSA10 Do you regularly seek advice, training and collaboration on more effective production, technologies and human resource management?

Training and Technical Support

Farming is a technical business covering a large number of skills, including technical crop knowledge, business planning, engineering and maintenance.

It is important to ensure that farmers and workers have sufficient training to:

- Abide by the law
- Ensure farmers and workers are able to comply with the farm code of conduct
- Ensure farmers and workers are able to keep themselves and others on the farm safe (e.g. the dangers of CPPs (pesticides) and how to protect themselves, their families, others on the farm and the environment)
- Ensure farmers and workers protect the environment
- Ensure farmers and workers maximise productivity of the crop

Training may be formal (e.g. a specific training course or workshop), or informal build up of skills (e.g. attending events, working with agronomists and extension agents).

Training and Technical Support

Be clear what training is compulsory to abide by any laws and regulations.

Sources of training can be:

- Advisory services
- Publications
- Internet sources and e-learning
- Collaboration
- Third party training programmes

Having a training plan for the farm which formalises the need for training and advice. It is important to consider:

- Proposed topics for training
- Timing and methods of delivery
- Any special arrangements necessary to accommodate particular groups of people (e.g. those with domestic responsibilities, farm location or no internet access)
- Training needs to be arranged so that all are able to attend - this usually means that training must take place during working hours, but may also mean that transport and/or childcare needs to be provided
- In some cultures, it may be necessary to provide separate training for women and men
- Where possible, concepts should be simplified in language with the use of relevant examples, to aid in understanding and interpretation
- Is there a need to supplement a group-training event with one-to-one training?

How to answer YES

Have a training plan, ensuring that all legally required training is kept up to date and that all relevant farmers and workers are trained in all relevant areas (FSA10).

All personnel in contact with CPPs, fertilisers or fuels have received and completed required training and guidance. This can be evidenced through certificates, evidence of participation (registration lists), and/or worker interviews (FSA10, 47, 50).

Maintain a training record (FSA10).

Training and Technical Support

Records of training undertaken should be maintained.
Below is a template of content to consider using in a training record for all staff on your farm.

Name					
Job Title					
Training subject	Date trained	Date for retraining	Comments	Employee's signature	Supervisor's signature

Further reading and examples:

AgLearn.net

Equipment Maintenance

Best practice :

Keep machines and equipment in good working condition.

Ensure service records and maintenance logs etc. are kept up to date.

FSA11 Do you maintain your equipment and machinery to ensure their proper, efficient functioning?

Equipment Maintenance

Most farmers are dependent on the equipment and plant they (or their contractors) have on farm. However breakdowns can strike at anytime and without warning and can have a major impact upon your on farm activities and have serious financial implications.

Having a good maintenance plan can help to keep the equipment in good working order and may help to avoid any major repairs. Not only does it cost less in the long term, it is also far easier to budget for small, regular expenses than a much more significant expense.

What's more, the regular maintenance and inspection of your farming equipment will allow you to identify signs of visible wear and damage before they cause a major issue.

Equipment Maintenance

General Preventative Maintenance

You should carry out maintenance regularly to ensure your machinery remains in optimum condition:

- Check all hoses, fittings, and seals are in good condition
- Check all fluids, such as the engine oil and coolant
- Check filters and replace if necessary
- Ensure all tyres and wheels are in good condition and inflated to the optimum pressure
- Inspect the battery for signs of corrosion
- Ensure all lights etc. are working properly

Dealing with Blockages is a key part of farm machinery maintenance, however, it can also be a high-risk task and every year people are killed or seriously injured.

To help prevent accidents whilst clearing blockages:

- Do you have the necessary skills and experience? If not, you should seek assistance
- Plan how you will tackle the job, have you got the necessary tools and equipment? Never use your hands or try to kick a blockage free
- Make sure each person working on the repair knows what the others are doing and all have the appropriate personal protective equipment (PPE)
- Secure anything that might fall on you. Keep in mind that the loss of power may cause parts of the machinery to fall or rotate freely
- Once you've removed the blockage, replace all guards before restarting the machine, even for a test run
- Before restarting the machine, make sure everyone is standing clear and in the eye line of the operator

How to answer YES

Keep machines and equipment in good working condition (FSA11).

Be able to demonstrate equipment and machinery are regularly serviced. Evidence may include up-to-date maintenance logs or schedules, date calibration certificate/ seals (FSA11).

Be able to demonstrate equipment and machinery are regularly serviced. Evidence may include up-to-date maintenance logs or schedules, date calibration certificate/ seals (FSA11).

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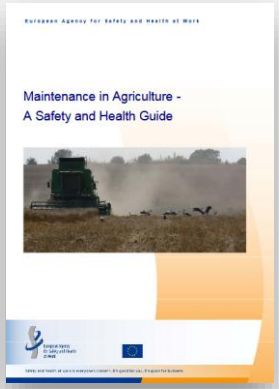
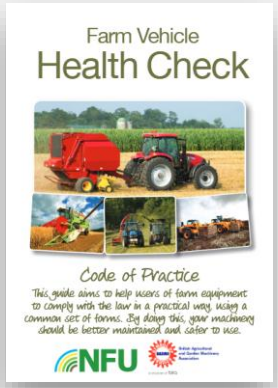
Equipment Maintenance



European Agency for Safety and Health: Maintenance in Agriculture - A Safety and Health Guide

North Dakota State University, USA: Farm Machine Safety: Fueling and Daily Maintenance Safety



National Farmers Union, UK: Farm Vehicle Health Check.

Includes a check sheet to help ensure that the relevant vehicle is correctly and safely maintained

Equipment maintenance: Fertiliser applicator

Further reading and examples:

Health and Safety Executive, UK: Safe maintenance

Equipment Maintenance

The example below is for equipment used for the application of fertilisers, although the same principle is applicable to other pieces of equipment you may use on your farm.

Maintenance

- Oil and grease equipment at least annually
- Store in dry location

Before applying fertiliser

- Check fertiliser pipes are clear
- Check settings are correct

During fertiliser application

- Start with a small area to check that the fertiliser is spreading evenly and in the correct quantity

Your machinery should be oiled and greased at least once per year and stored in a dry place. Before you start using application equipment (this may be part of your planter, seed drill), make sure the fertiliser pipes are clear from obstruction. If possible, conduct a trial on a small area, to check that the nutrients are being evenly spread. Once the optimal amount of nutrients has been identified, you should make sure that precisely this amount is being applied to increase yield and profitability. This can only be done if nutrient application machinery is well maintained, clean and properly calibrated.

FSA FARM SUSTAINABILITY ASSESSMENT BY SAI PLATFORM