GRAIN SA
GRAAN SA

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PULA IMVULA

Grain SA magazine for developing producers

Generate a good return on your investment

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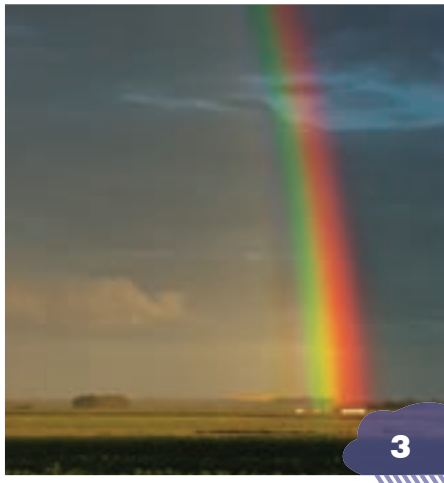

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WORKING THE LAND AND PRODUCING FOOD FOR THE NATION IS OUR TASK AND OUR PRIVILEGE AS FARMERS. HOWEVER, TILLING THE SOIL IS NOT EASY – IT REQUIRES ENERGY.

One of the most important aspects of grain production is the timeliness of all tillage operations – particularly in the summer rainfall areas where all the summer crops are produced (maize, sorghum, sunflowers and groundnuts) there is always an optimal time for operations (whether it be the first primary tillage operation, or seed bed preparation, or planting, or spraying).

In most areas, work starts in earnest once the first rains have fallen (although by this time the ripping or ploughing should have been completed). The timing of the crop is perhaps the most important of all – if you plant too late, you will not get a crop.

You will have noticed that every tractor has a kW rating (usually written on the tractor) – this is the measure of the strength of the tractor.

It is not always possible to know exactly how much tractor power is required on the farm. For our purposes, we feel that it is safe to say that you need ½ kW (0,5 kW) for every hectare that you plant. This means that if you have a 60kW tractor, you have sufficient tractor power to manage 120 hectare (in most seasons). Running a tractor is expensive and you need to use it optimally. It is therefore important to match the implement to the tractor. If the tractor is pulling an implement that is too small, you will not get the work done in time. And on the other hand, if you are pulling an implement that is too large, you will damage the tractor and not do a proper job. The matching of the tractor to the implement is crucial.

There are many farmers who only have access to small pieces of land. We feel that 100 hectare is the smallest area that can justify an own tractor and equipment.

Mme Jane says...

The early summer season has been very difficult and dry. Lands could not be prepared in time and so in most areas planting was late. The good news however is that the prices have been good – and after all, farmers are businessmen who want to make profits. With the maize stock being the lowest ever, we can stand proud as farmers and say that we indeed make a huge contribution to our country – we must face all the difficulties that present themselves so that our nation can have food.

There is always a lot in the news about land issues. Having worked with developing farmers for many years, we have experienced that getting land is only one small part of the whole – being a farmer is more than having land. Many people have access to land – much of this is communal land, while others hire private land, or commonage land.

Once you have access to land, other issues become the focus. The cost of tractors and implements is high. To be able to work 100 hectare effectively, you will need mechanisation to a value of approximately R600 000 (tractor, ripper, cultivator, planter and sprayer). This is a huge sum of money and we find that most people cannot access mechanisation. Another matter is that of production inputs. It costs more than R5 000 per hectare to plant a crop properly – to plant the 100 hectare that we mentioned, the farmer will have to raise R500 000. Now he has invested over R1 100 000 – more than a million rand!

The challenge to transformation is this – how are we going to assist farmers to get into full, optimal and economic production? All the land that is available to us must be in production as the world population is growing daily and everyone has to eat – food that is provided by farmers throughout the world.

Generate a good return on your investment

For 100 hectare you will need the following (as an example):

60 kW Tractor	R350 000 (new)
3 tine tipper	R50 000 (used)
Offset disc	R50 000 (used)
Cultivator (seed bed)	R40 000 (used)
4 row planter	R70 000 (used)
Boom sprayer	R35 000 (new)
Total	**R595 000**

If you are working less than 100 hectare, you could perhaps work with a few other farmers in a cooperative and share the equipment so as to justify the investment.

As you can see from the above, the investment in a tractor and machinery is almost R600 000. The inputs for the crop are in the region of R5 000 per hectare – this also totals R500 000 for the production inputs. The land has a value too – whether you bought it, or are hiring it, or have a PTO. Just for this discussion, let us say that you are paying R500 per hectare for the hire of the land – this then is an additional R50 000.

Tractors and machinery	R595 000
Production inputs	R500 000
Hire of land	R50 000
Total	**R1 145 000**

At R2 000 per ton for maize, you will have to average 2,75 tons/ha just to get back the cost of the inputs and rental. It is crucial that if you want to farm, you must be on the farm every day taking care of this huge investment.

The investment is huge and it is therefore so very important that you should farm well – do the right thing at the right time, using the right equipment and the right seed and fertiliser. Only then will you be able to generate a good return on your investment.

JANE MCPHERSON, PROGRAMME MANAGER OF THE GRAIN SA FARMER DEVELOPMENT PROGRAMME

Improve your production management

In previous articles the concept of farm management was discussed as well as the financial challenge of management. It is quite clear that a business need to make sustainable profits over a period of time. This can only be done by improving your management where management entails to plan, organise, implement and control.

In forthcoming articles the discussion will concentrate on ways to improve the management of the different areas to be managed on a farm such as production, marketing, finances, purchasing, human resource, assets and stock, and others.

The business of farming is to produce products that people need, at a profit by combining and converting the four production factors, namely land, capital, labour and management into useful products such as food and/or fibre. An example of this is the combination of land, seed, fertiliser, diesel, water, chemicals, feed, remedies, labour, vehicles, machinery and equipment to produce wheat, oats, maize, meat, wool, eggs, mohair and so forth. To maintain a sustainable profit the farmer as a production manager must always consider before, during and after a production cycle:

- What to produce? Should I not produce other or alternative products?
- How to produce? How can I improve my production process?
- How much to produce? What does the market demand?

What to produce?

The choice of an enterprise or more than one to be included in a farming business are influenced by many factors. Overall the following could be factors which will influence the choice of an enterprise:

- The farmer's preferences – preferably farm with what you prefer.
- The farmer's managerial capabilities and experience and personality characteristics.
- The farmer's attitude towards risk and uncertainty - livestock enterprises are normally less risky.
- Climatic considerations – if you consider crop production rainfall is a serious consideration.
- Properties of the soil – is the soil suitable for vegetable or other crops.
- Topographical properties – hilly areas limits the production of certain crops.
- The quantity and quality of water available for irrigation, for a processing plant, for a specific enterprise such as a dairy.
- Internal infrastructure on the farm - perhaps there is a store available that can be transformed to broiler housing.
- External infrastructure such as roads, electricity, communication, that could affect input costs adversely.
- Opportunities in the marketplace (larger markets, export).
- Availability of labour and level of training – sometimes you will need staff with specific skills.

Improve your production management

- Availability of inputs or services – readily available inputs and services reduces costs.
- Availability and/or acquisition of capital – is the necessary capital available. Pig production as an example, requires a high capital input.
- Cash flow position – some enterprises are favourable with regards to a regular cash flow such as a dairy.
- Opportunities that may occur – a nearby community may have specific needs, such as vegetables or meat.
- Relationship between enterprises – some enterprises compete for labour, machinery and capital whilst others complement each other.
- Specialisation and diversification – as a principle diversification is normally less risky. However be aware not to diversify in too many enterprises.
- Technological developments that could open up new possibilities.

The afore-mentioned factors each have variable degrees of importance on the choice of enterprises you could choose to farm with.

How much to produce?

It is possible to analyse and answer this question extremely technical. However specific properties of a farm: the size of the farm, the soil, the climate, water, labour and other assets available, already supplies an answer to this question. It is very important never to forget the market and a market analysis is most important to answer the question: "Do I have a market for my products?" This is a crucial question! Do not produce a product if you do not have a market.

How to produce?

How to produce concerns the technical aspects of how to produce maize, wheat, rear broilers, produce weaner calves, produce wool and so forth.

Once you have decided what you are going to produce, the challenge is to produce from year to year in such a way that sustainable profits are maintained. How can this be achieved? You must improve your management – planning, organising, implementation and control. New advancements in production processes, new technology and equipment, new cultivars, developments in the market place need to be considered continuously.

INFORMATION COMPILED FROM THE FARM MANAGEMENT FOR PROFITS MANUAL BY MARIUS GREYLING

To maintain sustainable profits it is important to improve your production management from year to year.

Maintaining your tractor

Your tractor or tractors are the most important single item on the farm – without a tractor you entire operation will be limited to the little work that you can do yourself, or using animal traction. The tractor is also the most expensive piece of equipment you have on the farm. It is therefore essential that you look after it.

To ensure economical, efficient and safe operation of the tractor it must be properly maintained and serviced. Costly repairs, premature wear, loss of field time and accidents can all be reduced by servicing and adjusting the tractor at specific intervals.

Maintenance is more than just "greasing a squeaking part". It includes greasing the part before it begins to squeak. If an operator always waits until a problem appears, the tractor will soon cause expensive repair bills. That is why maintenance is often called preventive maintenance. You spend a little money before something breaks – this saves you a large repair bill, as well as down-time. Remember also that one of the most important aspects of grain production is doing things at the right time. If your tractor breaks when you need it, this could cost you the crop.

Each new tractor comes with an operator's manual. Many people have old tractors and do not have the manuals. Please take the effort to find a copy of the manual for your tractor – other owners may have one, or otherwise ask the tractor agents as they might be able to make you a photocopy of the manual. Use the operator's manual for the machine to determine the specific maintenance intervals, location of service points and instructions for maintenance and service adjustments. All tractors are different, but we will discuss a few general points. Always study the operator's manual carefully to determine the type and the frequency of specific maintenance needed.

General maintenance

Follow these general practices to keep the tractor operating safely.

Keep the machine clean

Clean all field trash, mud and excess grease and oil from the machine either at the start or at the end of the day. Not only is this a good safety practice, it also helps the tractor to run more efficiently, prevents moisture accumulation that can rust metal parts and helps to cut down on time lost in the field for repairs. Remember also that if you have cleaned the tractor

Maintaining your tractor

daily, you will quickly see any new oil leaks or other problems. If the tractor is dirty, you are not able to pick up on new problems.

Make sure that nuts, cap screws, shields and sheet metal parts are tight

A loose shield can vibrate, producing an irritating noise and can cause machine failure if it falls into the path of moving parts. We often see tractors moving around "naked" – all the shields having been removed. These shields have a purpose and protect the tractor – please take care to keep you tractor in a good condition with all the parts attached. Some people remove parts and keep them in a shed – many things get lost this way.

Inspect the tractor before starting every day

A brief look at all areas of the tractor helps spot potential machine failures and safety hazards.

Keep maintenance records

A simple chart showing when lubrication and service adjustments were made can help insure that all needed maintenance has been performed. The operator's manual recommends specific service intervals by hours of operation. As a further help to performing timely maintenance, many tractors have an hour meter that shows hours of operation.

Don't abuse the tractor

Proper lubrication and adjustment is of little value if you abuse the machine. Follow the operator's manual, do not overload the tractor, operate it at speeds appropriate for field conditions and avoid operation under conditions that could damage the tractor. It is regrettable that so many drivers rush around on the tractor as if it were a car – a tractor is meant for working in the land and is not designed to drive around on roads at high speed.

Daily maintenance

Daily maintenance is more important than many operators believe. For example, if you fail to check and service the tractor daily, the following can occur:

1. The air cleaner can become clogged with dirt, causing increased fuel consumption and a loss of power.
2. The air cleaner can become perforated, allowing dirt to enter the engine, causing premature wear.
3. The crank case oil level can get too low. Resulting in extreme engine damage due to lack of adequate lubrication.
4. The oil in the crank case can become dirty, causing excessive wear on internal engine parts.
5. The cooling system can lose its coolant, causing the engine to overheat, which can seriously damage bearings, pistons and valves.
6. The fuel sediment bowl can become clogged with dirt and rust, causing the engine to run poorly, or even stop.
7. Loose parts or maladjusted parts can fail, fall off, or become damaged, making the tractor unsafe to operate.

Prevent this costly wear and damage by taking a few minutes each day before starting the tractor to perform the following maintenance on the tractor:

- Check and service the air cleaner.
- Check the crank case oil level.
- Check the cooling-system liquid level.
- Lubricate grease fittings.
- Check the fuel sediment bowl.

INFORMATION OBTAINED FROM THE GRAIN SA TRACTOR AND FARM IMPLEMENT MAINTENANCE COURSE

Daily maintenance of your tractor

In the article on page five we had a look at the general maintenance of your tractor. This article will cover the daily maintenance jobs that you need to do on your tractor in more detail.

Servicing the air cleaner

The air-cleaning system on modern tractors usually consists of a pre-cleaner and an air cleaner (either oil-bath or dry-type).

Servicing pre-cleaner

Check the pre-cleaner bowl. If dirt has built up to the "full" line, remove the bowl and empty it. If the unit has a pre-screener, blow or brush off any chaff or foreign matter.

Servicing oil-bath air cleaners

Follow these procedures for servicing the oil-bath air cleaner:

1. Loosen the oil cup and remove it from the air cleaner body.
2. Check the depth of sediment deposit in the outer chamber of the oil cup. If sediment has accumulated above the recommended depth, or if the oil has thickened, clean the oil cup. Replace the oil with fresh oil according to the specifications in the operator's manual.

Servicing dry-type air cleaner

Usually, the dry-type air cleaner doesn't require daily service. However, it should be checked daily for restrictions or accumulation of loose dust. Types of dry-type air cleaner units include:

1. **Units with a restriction indicator**
   Whenever the air-restriction indicator lamp glows or the mechanical indicator signals a restriction, the air cleaner element must be cleaned.
2. **Units with an automatic dust-unloading valve**
   Inspect the rubber dust valve. Squeeze the rubber end of the valve to make sure it is still open and free of clogging. Clean the valve, if necessary, and replace it if it is damaged.
3. **Units without an automatic dust-unloading valve**
   Remove the dust cap and empty it.

Checking crank case oil level

1. Check the oil level only when the engine is off. After the engine is stopped, allow several minutes for oil to drain down into the oil pan.
2. Remove the dipstick and wipe it dry with a clean cloth. Then insert the dipstick fully and withdraw it to check the oil level.
3. Look at the top and bottom marks, which may be labelled "full" "add" or "safe". If the oil level is down to the lower mark, add the recommended oil to fill the crank case to the upper mark on the dipstick.

Checking coolant level

When checking the coolant level, wait until the coolant temperature has cooled to well below the boiling point before removing the pressure cap.

1. Loosen the radiator cap only to the first stop to relieve pressure before removing the cap completely.
2. The coolant level should be 15 - 50 mm below the neck of the radiator tank, depending on the system. Do not overfill the system. A pressurised cooling system needs space for expansion of the coolant as its temperature increases.

Lubricating grease fittings

Follow the recommendations listed below to give bearings and shafts maximum service life.

1. Lubricate parts with recommended lubricant. Multipurpose grease is satisfactory for most applications.
2. Use clean lubricant. Store lubricants in clean, airtight containers.
3. Wipe off dirt and grease from fittings before attaching grease gun.
4. Hold grease gun directly in line with fitting while pumping slowly. Remove gun by moving it slightly to one side.
5. Dot not over lubricate bearings. Excessive grease can leak onto other parts – such as drive belts, brake linings and clutch linings – and damage them.

Daily maintenance of your tractor

6. Do not apply excess pressure or lubricant to bearings with seals. The seal may rupture allowing grease to escape and dirt and moisture to enter the bearing.
7. In cold weather, grease at the end of the day while the bearings are warm. They will accept grease more readily.
8. Grease the machine at the recommended intervals.

Checking fuel sediment bowl

Inspect the sediment bowl for dirt, rust and water deposits. If present, shut off the fuel supply and remove the sediment bowl and clean it.

Checking miscellaneous items

1. Look for loose or damaged parts, such as brake controls that make the tractor unsafe to operate.
2. Make sure all controls function properly. Check the brakes, clutch, transmission-gearshift lever and throttle.
3. Inspect for leaks in the engine cooling system, lubricating system, fuel system and around hydraulic lines and components. Examine the air-intake system for leaks.
4. When checking leaks in the diesel fuel system or the hydraulic system, use a piece of cardboard or piece of wood. The systems are under high pressure and even small invisible leaks may have enough force to penetrate the skin or your eye.
5. Check drive belts on the engine to see if they are worn or damaged. Inspect the tires for damage or low inflation.

Periodic maintenance and service

Tractors, of course, require more than the daily maintenance described. Most manufacturers recommend that additional maintenance procedures be performed at certain hourly intervals.

However, some tractors may be operated only 250 or 500 hours a year. Therefore, the yearly or twice-yearly services should be combined with the other intervals and performed at the same time.

The intervals of service are cumulative. For example: perform 10-hour maintenance every ten hours and also at the 50, 100, 200, 600 and 1 200-hour service intervals. The other service intervals are also cumulative.

A sample chart for periodic maintenance is shown below. Manufacturers may recommend different service intervals for their equipment. Because the intervals can also vary for a given machine, depending on how it is used, do not use this chart for actual maintenance. Instead, refer to the operator's manual for proper recommendations. A record of service performed can be kept on a chart similar to the one shown.

Sample periodic maintenance chart

As required

1. Check inflation and condition of tyres.
2. Adjust brakes.
3. Clean air filters in operator's enclosure.
4. Tighten any loose nuts or bolts (to proper torques).
5. Repair any worn or damaged parts.
6. Adjust headlights.

Each 10 hours of operation (daily)

See steps outlined earlier in this article (daily maintenance).

Each 50 hours of operation (weekly)

1. Check the electrolyte level in the battery.
2. Check the fluid level in the hydraulic system.
3. Check the lubricant level in the power train.
4. Clean the dry-type air cleaner.
5. Clean the crank case breather.
6. Perform 10-hour maintenance.

Each 100 hours of operation (every two weeks)

1. Change the crank case oil and filter.
2. Perform 10 and 50-hour maintenance.

Each 250 hours of operation (monthly)

1. Clean the battery.
2. Clean the fuel sediment bowl.
3. Adjust the clutch-pedal.
4. Check tension of drive belts.
5. Lubricate the clutch-release bearing.
6. Adjust steering free play on manual-steering equipped tractors.
7. Perform 10, 50-hour maintenance.

Each 500 hours of operation (every two months)

1. Service the starter and alternator.
2. Replace or clean diesel fuel filters.
3. Perform 10, 50, 100 and 250-hour maintenance.

Each 1 000 hours of operation (seasonally or yearly)

1. Service the oil-bath air cleaner.
2. Drain and refill the power train with lubricant.
3. Drain and refill the hydraulic system with hydraulic fluid.
4. Adjust the engine governor if recommended by manufacturer.
5. Clean and repack front wheel bearings.
6. Drain, clean and refill cooling system.
7. Check air-conditioning components.
8. Perform 10, 50, 100, 250 and 500-hour maintenance.

INFORMATION OBTAINED FROM THE GRAIN SA TRACTOR AND FARM IMPLEMENT MAINTENANCE COURSE

This special feature is made possible by the contribution of the Oil and Protein Seeds Development Trust.

A good planter is crucial in crop production

THE PURPOSE OF A PLANTER IS TO PLACE SEED AND FERTILISER IN THE GROUND AS ACCURATELY AS POSSIBLE SO AS ENSURE A GOOD GERMINATION OF THE OPTIMAL SEEDING RATE WITH THE CORRECT APPLICATION OF THE REQUIRED FERTILISER.

The following factors need to be considered:

- The distance between the rows;
- The distance between the seeds in the row;
- The depth, quantity and placement of the fertiliser;
- The depth and placement of the seed; and
- The contact between the seed and the moist soil.

A planter cuts into the soil, then opens the soil, places the seed into the opening, places soil over the seed and compresses the soil slightly in order to ensure good contact between the moist soil and the seed.

There are a number of different types of planters but basically the concept is the same – there is a unit that opens the soil, a method of placing the fertiliser and then a method of picking up the seed and dropping it at the desired rate.

Some important factors to remember

- The fertiliser is usually placed in the ground before the seed – this ensures that the seed and fertiliser do not touch each other as this has a negative effect on the germination.
- For the same reason, the fertiliser is placed below the seed. (The ground opening unit for the fertiliser is longer and cuts into the soil further. The seed unit is shorter and to one side and therefore drops the seed nearer the surface of the soil.)
- Some soil falls in over the seed after the planting action but there may still be some spaces left between the particles of the soil. In order to ensure that there is good contact between the soil and the seed (so as ensure that the seed can take up moisture and start growing), it may be necessary to apply some pressure to firm the soil. The wheels used for this purpose are called press wheels.

As you are preparing to plant your next crop – please pay attention to the preparation of your planter. A good planter is crucial to good crop production.

Preparing a row crop planter.

WILLIE KOTZÉ, TRAINING AND DEVELOPMENT MANAGER OF THE GRAIN SA FARMER DEVELOPMENT PROGRAMME

Tips for successful crop spraying

Spraying is a highly complicated operation these days that requires much detailed planning before and during the process. Also important is the monitoring of the resulting weed or insect kill after spraying.

The success thereof will be determined by how effective the result will be in eliminating weeds or pests in winter crops such as wheat and in summer crops such as maize, sunflowers and soy beans. If you have decided to buy or use your own equipment make sure that the equipment has been properly serviced and calibrated.

Other factors that are sometimes overlooked in a spraying operation can also play an import role in the effectiveness of the chemicals being applied and are highlighted below.

Water quality

The water quality should be tested regularly. As a general rule if water is suitable for drinking, it is likely to be at an acceptable quality for spraying. If you are going to use water from a main easily accessible source, such as a main borehole or dam on your farm it is prudent to send or take a samples so that a comprehensive test can be done. These samples can be sent to the Institute of Ground Water Studies in Bloemfontein or other testing laboratories in the country for a full analysis.

Some chemicals such as Trifluralin will not be affected by muddy water as it is taken up by the soil particles whereas Glufosinate will affect the effectiveness of the mixed chemicals.

pH

The term pH comes from the French word “Pouvoir Hydrogene” and means “hydrogen power”.The pH is a measure of the number or concentration of hydrogen ions in a solution. A high hydrogen concentration equals a low pH such as 1 and low hydrogen concentration equals a high pH value such as 14.

Pure water has a pH of 7 and other solutions are described in reference to this value. Acids are therefore defined as solutions having a pH of less than 7 and alakalis or bases have greater than 7. The pH levels of drinking water should be between 6,5 and 8,5 pH.

The optimum pH range for particular chemicals are shown on the labels. Modifying pH may involve the addition of Ph buffers to the water. A method of determing how much buffer to add is to gradually add buffer to a measured quantity of water in a test jar until the correctly desired pH is reached. The ratio of buffer required can then be worked out in order for a large tank to be mixed.

pH Measurement and testing

Litmus paper which changes colour to indicate a certain pH compared against a known colour chart can give a rough indication of pH. However a more accurate reading can be obtained by using a digital pH meter and electrode that has a hydrogen sensitive glass bulb or other material. A quality accurate meter with probe can be purchased for about R850 at a local market. This expense will quickly be made up with using the correct water pH and so go towards ensuring the effectiveness of the chemicals used.

Mixing the tank

The trend worldwide is to have a dedicated storage and chemical handling shed with a concrete floor, sump and wash down area. It is an advantage if this shed that is erected, be away from any other high activity area and away from livestock. The area can be fenced off as a further safety measure. The runoff from the equipment washing area should also be carefully designed so that the runoff is safely contained.

The particular mix that is to be sprayed on a crop is pre-mixed at the main chemical handling shed in a large trailed tank, driven to the lands being sprayed and decanted directly into the spray rig. This will save mixing in the lands.

Modern spray rigs used in Australia are designed so that the chemical concentrate is securely mounted on the rig. Several different chemicals can then be sprayed through double nozzle lines on the boom by direct injection into the buffered water as it is pumped out through the boom nozzles. Perhaps you can consider buying a spray rig in the future that can use this method of applying chemicals to crops.

The advantages are that the main tank only needs to hold buffered water which is convenient to fill and is safe and the potential compatibility problems of using several chemicals in a tank mix are eliminated.

Order of mixing water and chemicals

The generally accepted guideline for the correct order of mixing a tank is shown below. Proper mixing should take place after each stage.

1. Fill the main tank or spray unit with 60% - 80 % of the water required for that particular mix.
2. Add the water conditioners and acidifiers having tested for pH and worked out the correct volume of mixers to be added to the final fill required.
3. Add the chemicals that come in the form of a wetable or dispersible powder (WP's).
4. Add the chemicals that come in the form of water dispersible granules (Wag's).
5. Add the chemicals that come in the form of dry flowables or suspension concentrates (DF's).
6. Add the wetter required if using emulsifiable concentrates (EC's).
7. Add the emulsifiable concentrates.
8. Add the water soluble or aqueous concentrates.
9. Add any other adjuvants required.
10. Fill the tank to the required final volume of water.

As can be seen some detailed planning is required. This should be done together with your chemical consultant so that any change to the above order can be followed if required by a particular recommended combination of chemicals.

Once a land has been sprayed be sure to observe the effects of the chemicals on the weed or insect problems being targeted. The farmer can then be forewarned if the effectiveness is deemed to be too low. Any mistakes made in either the original recommendations, mixing or applied volume of spray can be corrected before the whole farm is sprayed. The next spray mixes can then be adjusted accordingly to get optimum results.

ARTICLE SUBMITTED BY A RETIRED FARMER

Run a successful production management programme

IT HAS BEEN EMPHASISED THAT TO SURVIVE IN AGRICULTURE IT IS NECESSARY FOR A FARMING BUSINESS TO MAINTAIN SUSTAINABLE PROFITS OVER THE LONG TERM. THIS CAN ONLY BE ACHIEVED IF THE MANAGEMENT OF THE BUSINESS IMPROVES CONTINUOUSLY BECAUSE OF THE FINANCIAL CHALLENGES DISCUSSED PREVIOUSLY. REMEMBER MANAGEMENT ENTAILS TO PLAN, ORGANISE, IMPLEMENT AND CONTROL.

We are now discussing the improving of the management of production on a farm. In the precious article the questions – What to produce?, How much to produce? and How to produce? were addressed. You have decided what you are going to produce. The question is now how can I improve the management of my enterprises?

One of the most basic and practical steps to take to improve the management of an enterprise is to compile a Production Management Programme for each and every enterprise you have.

What is a Production Management Programme?

A Production Management Programme is a written, step by step description of every step of the production process of a specific enterprise. It addresses the question "How to produce" in full. The written form can be in table form or any way you prefer.

How to compile a Production Management Programme?

First of all you need to gather all technical information from whatever source is available to you. The more sources you consult the better. Consult your agricultural business, seed companies, internet, extension officers, veterinary surgeons, neighbours, mentor and so on and combine all the information with your own knowledge and experience.

Decide what actions are applicable to your circumstances and write it down. It is of the utmost importance that you compile a programme as comprehensive as possible and as technically correct as possible. It will be worth your while to put in an effort. But note it takes time and your first effort will not be hundred percent successful. However once you have done it, it is available. Then it is a simple exercise to check your programmes thoroughly every year and revise them if need be to accommodate new information and/or new developments.

Take note to compile management programmes for the more intensified enterprises such as vegetables under irrigation, cut flower production, dairy, piggeries, broilers, is somewhat more difficult. As there are definite daily, and/or weekly and/or monthly actions these programmes are more comprehensive. Long term crops such as orchards and sugarcane even have programmes covering a number of years.

Do you really want to improve your production management? Compile a comprehensive and technically correct production management programme for each enterprise you have and use it.

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Our aim is to produce the best publication possible. Please direct any comments on the editorial content or presentation thereof, to Jane McPherson.

Run a successful production management programme

Advantages of Production Management Programmes

In terms of management, by compiling the programme you are attending to the planning phase in a detailed way – when to do what and where, how to do it and how much to do.

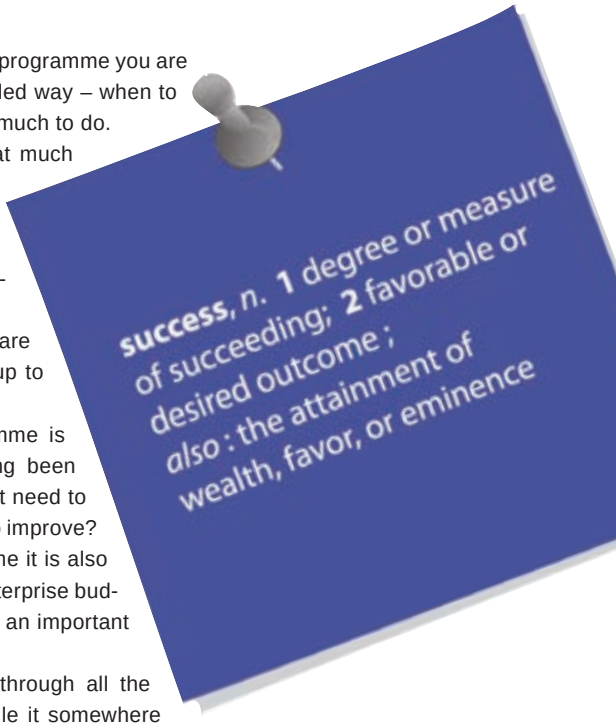
It makes the purchasing of inputs that much more accurate – you know how much to purchase and when. And you are forced to consider what resources you are going to use – employees, machinery and equipment and so on. It is all about organising.

When it comes to implementing you are reminded of what to do when. It is then up to you to do it on time and up to standard.

The production management programme is also your tool for control. Has everything been done on time and up to standard and what need to be done differently the next time in order to improve?

Without a proper production programme it is also virtually impossible to draw up a proper enterprise budget. Therefore a production programme is an important tool in financial management.

Lastly, remember if you have gone through all the trouble to compile a programme do not file it somewhere and never look at it again. Use it – portray the programme somewhere and in such a way where you can observe it every day – for instance as a placard on a notice board in your office. It must be your constant reminder and guide. It is really worthwhile, that is guarantee.



INFORMATION COMPILED FROM THE FARM MANAGEMENT FOR PROFITS MANUAL BY MARIUS GREYLING

On the radio

Do not miss these interesting programmes on radio, which covers issues of interest for developing farmers.

Radio	Week-day	Presented by	Time
Radio Qwaqwa	Thursday	Johan Kriel	19:00 - 20:00
Radio Mafikeng	Thursday	Tonie Loots	19:30
Zululand FM	Saturday	Jurie Mentz	06:10
Ligwalagwala FM	Thursday	Jerry Mthombothi	05:10
Umhlobo Wenene FM	Tuesday	Lawrence Luthango	04:30
Alfred Nzo FM	Monday	Ian Household	19:00 - 20:00