

GOOD HOUSEKEEPING IN THE WORKPLACE

Introduction

Workplace housekeeping can be defined as work activities undertaken to create and maintain an orderly, clean, tidy and safe working environment. It also entails keeping good farm records.

Benefits

Good housekeeping reduces illness and injuries, and promotes positive behavior and attitude. Effective house keeping prevents slips, trips and falls; eliminates fire hazards; reduces dust; prevents falling objects; and, ensures use of correct protective equipment, tools and good record keeping. In short, it eliminates workplace hazards and gets work to be done safely and properly in accordance with a procedure.

Poor housekeeping

Poor housekeeping has negative consequences in production. For example, when highly toxic chemicals are placed at the wrong place, they can easily fall and spill causing harm to humans, the environment and loss to the business. Highly flammable substances can cause fires leading to loss of life or valuable property. Poorly maintained farming tools and equipment get worn out quickly hence needing frequent replacement. This escalates business farming costs unnecessarily.

5S principle

Components of good house keeping are organization, neatness, cleanness, standardization, and discipline (Figure 3). There are many systems or methodologies that can be employed to keep up with the principles

of good housekeeping. These include the 5S principle. The 5S methodology helps a workplace in that it:

- Removes items that are no longer needed (sort),
- Organizes the items to optimize efficiency and flow (straighten),
- Cleans the area to easily identify problems (shine),
- Implements colour coding and labels to stay consistent with other areas (standardize), and

- Develops behaviours that keep the workplace organized over the long term (sustain).

Compliance

Adopting good housekeeping will ensure compliance to health and safety standards a grower may opt to adopt without any extra effort or workload. Growers are encouraged to develop procedures as vehicles to attain good housekeeping. The procedures should be in line with the country laws such as Employment act and Occupational Health

and Safety act.

Conclusion

To assist in keeping up with the current production standards, growers should ensure they adopt a good workplace housekeeping methodology. If there is inadequate capacity, they should consider hiring competent staff and invest in credible information management systems.



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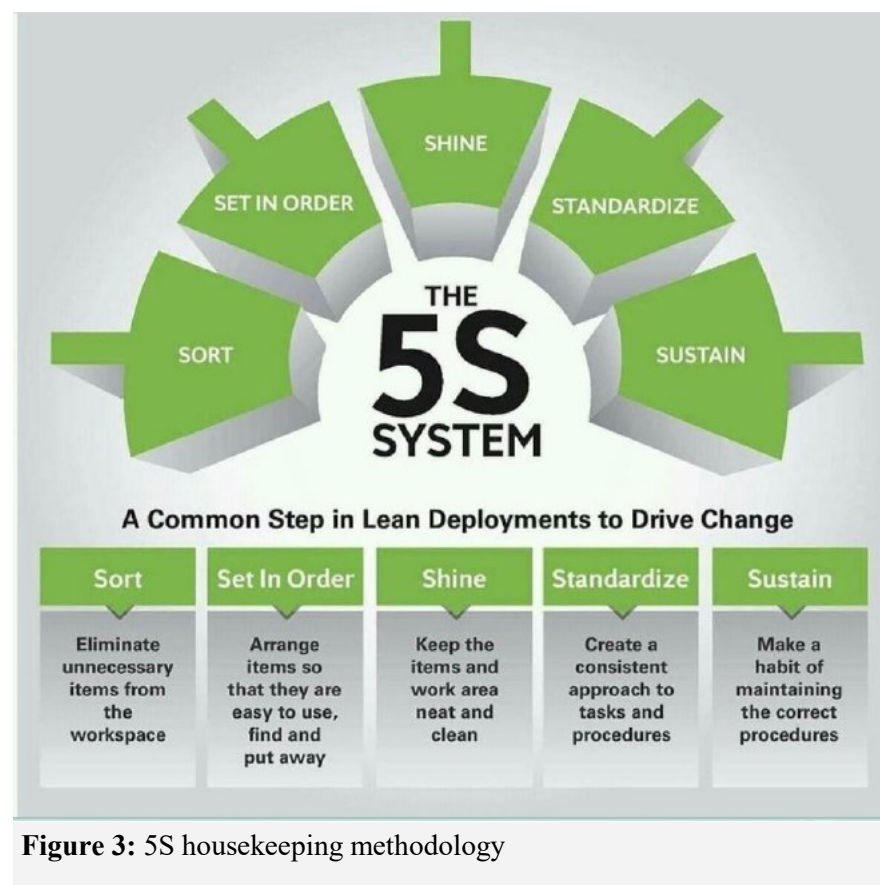


Figure 3: 5S housekeeping methodology



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Use water wisely

El Nino

... is a climate pattern that naturally occurs every two to seven years when the Pacific Ocean surface temperatures are warm

Guidelines for hiring contractors for irrigation & drainage projects

Price alone is not always an ideal way to decide on a service provider as experience has proven that "cheap can be expensive" in the long run

Good housekeeping in the workplace

Poor housekeeping has negative consequences in production

EL NINO WEATHER PATTERN, WILL IT DEVELOP THIS SUMMER?

Introduction

El Nino and La Nina are climate conditions in the Pacific Ocean that affect weather patterns worldwide. El Nino results to warm and dry conditions, while La Nina develops into cool and wet conditions. Both El Nino and La Nina cause global changes in temperature and rainfall patterns. The El Nino Southern Oscillation (ENSO) was in a neutral condition (neither El Nino nor La Nina) by May 2023, but was forecasted to move to El Nino condition in later months of the year.

Is La Nina possibility phasing out?

La Nina pattern encountered the past three years producing record-breaking rains and flooding in many areas has been weakening over the previous months. Hence, most weather forecasting models suggest that it would come to an end before the next rain season. Weather experts state that it is very unlikely that a fourth consecutive La Nina event would develop in 2023. History has it that four years back-to-back La Nina events have never been recorded before, and currently no forecast models are predicting another

La Nina condition this year. That leaves either a neutral condition (neither El Nino nor La Nina) or El Nino in 2023.

What is the consensus?

There is consensus from several weather forecast models that the ENSO would return to a neutral phase by the end of this year's Southern Hemisphere's summer (Northern Hemisphere's winter), and transits into El Nino later in the year. One of the main drivers of El Nino is warmer Pacific Ocean, and meteorologists concur that the Pacific Ocean water is warm thus increasing the chances of El Nino development (Figure 1).

Effects of El Nino

El Nino is a climate pattern that naturally occurs every two to seven years when the Pacific Ocean surface temperatures are warm. The last time an El Nino event occurred was in 2016. That year gives good reference on what may happen during an El Nino year. El Nino years are warmer than normal, and they are characterised by

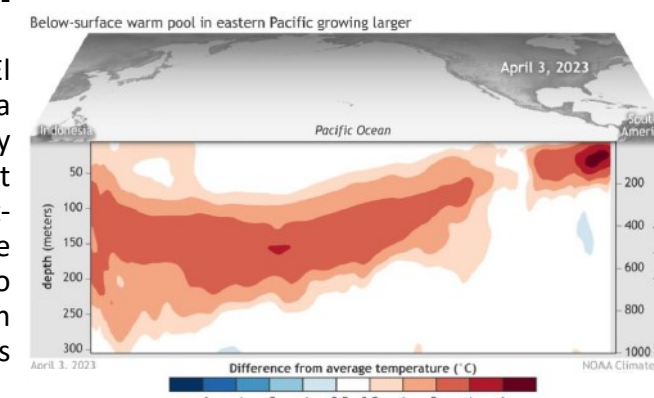


Figure 1: Water temperatures in the top 300 meters of the tropical Pacific Ocean compared to the 1991-2020 average in April 2023 (NOAA Climate.gov)

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EL NINO WEATHER PATTERN, WILL IT DEVELOP THIS SUMMER? *CONT...*

unusual weather patterns around the world. Observations from previous El Nino events show that impacts associated with such events largely depend on the time of the year. However, there is no guarantee that these events and impacts (e.g., drought) will occur. El Nino results to less rain, high temperatures, and increased fire risks, especially during winter and spring in the southern hemisphere. As the globe heats up, some regions warm faster than others. Thus, growers are warned that the underlying influence of climate change could lead to extreme effects of an El Nino if it occurs in the coming summer.

Conclusion

Several climate models show a range of possibilities which most of them favour El Nino development later this year. The next review and update of the ENSO condition is expected in July 2023. Therefore, it is very important for growers to get regular updates on the El Nino development from weather experts so that mitigation actions are taken on time. ESA would also provide updates on the El Nino development and strategies to circumvent it.



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GUIDELINES FOR HIRING A CONTRACTOR FOR IRRIGATION AND DRAINAGE PROJECTS

Introduction

The winter season is the ideal time when irrigation and drainage systems construction work is mostly carried out owing to less occurrence of rainfall events which disturb machinery operations. As growers plan their new irrigation and drainage installation or rehabilitation projects, choosing the right service provider (contractor) is a critical step in the planning process. These projects are costly to growers and often involve getting a loan from financiers. Therefore, growers must make sure they vet the quality of their work in advance; indicate in writing the work they want to be performed; agree on the scope of the project; and inquire whether the contractor is licensed and insured in case something goes wrong.

This article provides a simple checklist growers should use when selecting a reputable contractor(s) for their irrigation and drainage projects:

Get an engineer's estimate

Growers are encouraged to involve the irrigation section of Eswatini Sugar Association (ESA) to assist in their irrigation and drainage projects. The Irrigation Engineer will assess on the nature of the work required; carry out either preliminary or detailed designs; prepare the list and quantities of required materials; provide a cost estimate for the project;

and prepare a Request For Proposal (RFP) document. The engineer's estimate usually reflects a fair and reasonable cost of the project to be incurred by the grower, and allows an effective review and comparison of the bids received. Growers must therefore not release the estimate to the public as it will be used to compare bidders.

Get multiple potential contractors.

Growers are advised to contact the irrigation section of ESA Technical Services department for a vendor list from which to select service providers for these projects. At least three contractors should be selected and be given the RFP document. These suppliers should each provide written quotations. The RFP document ensures that the grower receives quotations that are comparable. Bidders are to submit at a prescribed time and place where their bids are opened, and prices read at the hearing of everyone.

Evaluate the bidders' submission.

Price alone is not always an ideal way to decide on a service provider as experience has proven that "cheap can be expensive" in the long run. Growers are to evaluate service providers on the basis of the following:

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GUIDELINES FOR HIRING A CONTRACTOR FOR IRRIGATION AND DRAINAGE PROJECTS *CONT...*

Compliance with government requirements: check whether the submission is complete and is responsive to the basic instructions and requirements of the RFP document, and whether the service providers fulfil the country's legal requirements including tax clearance certificate, a valid trading license etc.

Technical capacity: check the service providers capacity to carry out the work as described in the document including understanding the work; their experience with similar contract; qualifications and experience of their personnel; submission of references from recent clients; and, the contractor's financial stability. Examine the construction materials, work methods, timelines and other relevant factors.

Economic value: finally, check whether the price offer is reasonable and comparable to the engineer's estimate. Be cautious of prices that are too high or too low.

Hire local, licensed contractors

Give first preference to local contractors where possible. Local contractors are easier to contact if problems develop with the work in the future, and they are more likely to be familiar with construction codes of the country.

Get everything in writing

Secure a comprehensive contract before work begins. Get everything in writing, and make sure the contract is clear and well written. The contract should include:

- A detailed description of the work to be completed and the price of each item.
- A payment schedule – for example: one-half down payment and one-third when work is partially completed, and the balance due upon completion of work.
- Estimated start date and completion date especially for larger projects.
- Any applicable guarantees, which should be written into the contract and clearly state what is guaranteed, who is responsible for the guarantee, and how long the guarantee is valid.
- Signatures from both parties. **Never sign a contract containing blank sections.**

Changes to the contract should be acknowledged by all parties in writing.

Understand your right to cancel the contract

If you decide to cancel a signed contract, you should follow the contract's cancellation clause. Written notification of the cancellation should be sent by registered mail to ensure you have proof of the cancellation.

Don't pay up-front

Growers should avoid paying for the entire project before it is completed. However, for bigger projects, it is standard practice to pay one-third of the estimated costs as an initial payment. Payment should be made directly to a company not an individual. Also avoid paying in cash where possible. Keep records of payment.

Anticipate delays

In construction, delays happen and may not be the fault of the contractor. In spite of the timeline outlined in your contract, circumstances such as weather may prevent the work from remaining on schedule. Be realistic and prepare to adjust your plans accordingly.

Keep a project file

Keep your contract and all the supporting documents in one folder. Your file should also contain plans and specifications, bills and invoices, any changes made, certificates of insurance and any notes, and correspondences with the contractor.

Conclusion

Selection of a contractor should be a balanced judgment with many factors taken into account. A contractor who works well and meets the grower's requirements regarding the quality and timeliness of the work is also likely to have a better than average performance. The industry's extension departments keeps a list of vendors for the different agricultural service provision categories including irrigation and drainage engineering works. Growers are advised to contact their area extension officers for more details.



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Figure 2: Centre pivot installation at Siphofaneni area