BENEFITS OF HARVESTING GROUPS

Introduction

As a general rule, growers in a particular area should start harvesting at the same time and finish at the same time. However, this is impractical for small scale growers because they would have to make daily cane deliveries in very small quantities, a practice which is not economical for both the growers and the miller. It is not economical for the small scale growers because they would have to stretch harvesting operations within a field over a very long period hence presenting logistical challenges and delays in carrying on with post-harvest operations. For the miller, it is uneconomical because it would have to provide many scales to weigh the small quantities of cane to maintain the crush rate. Under such an arrangement, the mill would have to deal with a huge amount of data i.e. weight, quality, payments etc., on daily basis. A more practical solution to this problem is that growers should form harvesting groups.

Harvesting groups

Growers are encouraged to form harvesting groups from which a group harvesting schedule is made rather than a n individual grower harvesting schedule. A harvesting group is a group of geographically related growers who have come together for the purpose of harvesting their cane as a single unit throughout the milling season in the process maintaining the same rateable.

Agreements

A harvesting group is not a legal entity; however, growers may choose to register it as a legal entity for purposes of entering into formal contractual agreements with harvesting contractors. The harvesting group engages a contractor(s) to do the harvesting operations on their behalf, and then the harvesting group or an individual grower within the group signs a contractual agreement with the contractor(s). Generally, there is no limit on the number of growers per harvesting group. Growers are encouraged to form sufficiently larger harvesting groups to benefit from economies of scale. In any particular milling season, growers are strongly advised to stick to one harvesting group.

Benefits

For effective administration, members of a harvesting group should elect a chairperson and a secretary. It is the harvesting group's responsibility to ensure that cane is harvested and delivered to the mill every day. This kind of grouping has brought a lot of benefits to the growers. The benefits include the timely delivery of good quality cane at the mill. This is realised from reduced burn to crush delays, and subsequently improves milling operations. There is also improved capacity utilisation of loading and haulage equipment. When a grower faces a challenge such as a runaway fire, the burnt cane can be harvested much quicker due to the relatively higher rateable. It is also beneficial to the growers because it is easy to manoeuvre within the group and harvest the best cane within the group rather than being compelled to harvest immature cane in a bid to meet rateable as it happens with some growers outside harvesting groups.

Coordination

To run harvesting operations smoothly in a harvesting group, good coordination is important. This ensures that each grower performs what is required i.e. dry-off, chemical ripening etc., at the proper time. To achieve this, the growers in the group should nominate someone (or elect a management committee) to coordinate all the harvesting operations. These harvesting operations include cane burning, cutting, loading (and gleaning) and transportation to the mill.

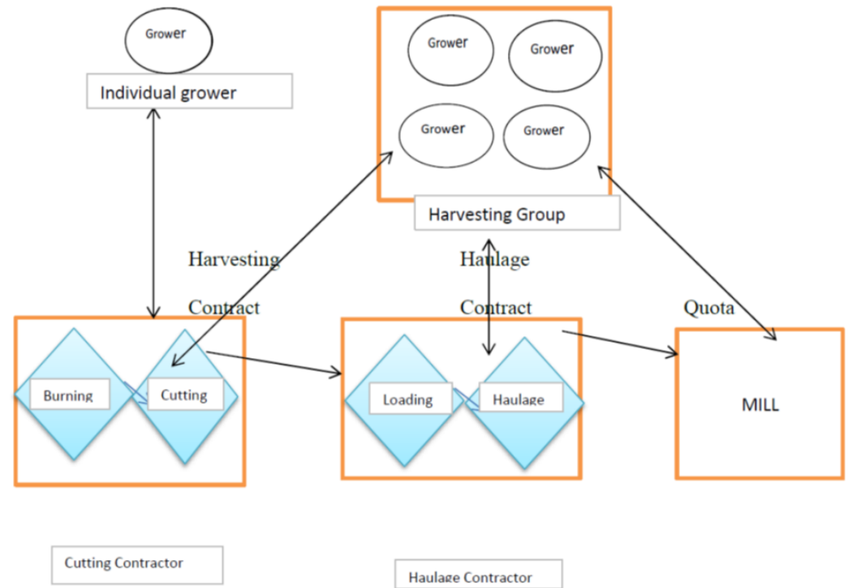

Figure 5: An illustration of sugarcane supply chain from individual grower and growers in a harvesting group

By Mfanzile Mabila (Extension Officer - South)

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SWAZILAND SUGAR ASSOCIATION TECHNICAL SERVICES

EXTENSION NEWSLETTER

Number 66 4th Quarter 2016/17

INSIDE THIS ISSUE:

Please report any suspicious pest on your cane fields to Technical Services at Simunye

Water outlook in the 2016/17 season

"Growers are advised to use water judiciously so that it is spread over a longer period in hope that substantial rainfall will be received in the next summer season"

Chemical control of cynodon

"...about 95% of the targeted cynodon responded positively to the glyphosate spray."

Benefits of harvesting groups

"The benefits include the timely delivery of good quality cane at the mill"

WATER OUTLOOK IN THE 2016/17 SEASON

How was the 2015/16 season?

The 2015/16 season was characterized by drought effects due to the El Nino impact. Very low rainfall was received, hence the river flows and dam levels dropped drastically. There was inadequate water for normal irrigation in the spring to early summer. In the warmer season, maximum temperatures in the Lowveld frequently reached the 40°C mark. The excessive heat also contributed to the poor growth and dying-back of the sugarcane.

Any improvement in water levels in the 2016/17 season?

There has been a significant improvement in rainfall received this season when compared with the previous two seasons (Figure 1). The improved rainfall received in the 2016/17 summer season has also resulted in substantial improvement in river flows (Figure 2) and dam levels (Figure 3) used by the sugar industry. While water flows in all the rivers benefiting the sugar industry improved in the 2016/17 season, the increase at Ngwavuma River was minimal. Water levels in all the major dams used by the sugar industry are currently above the 50% mark. Mnjoli dam, the most affected in 2016, improved to 55.2% from the lowest average level of 4.5% same period in 2016. Lubovane dam was near full capacity. These figures were all recorded in February 2017.

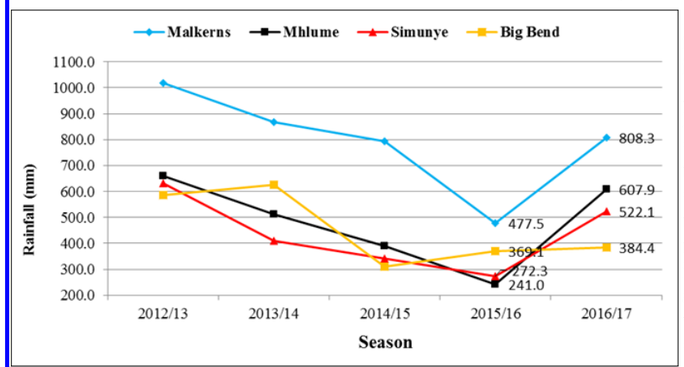

Figure 1: The sugar industry rainfall for the past five seasons

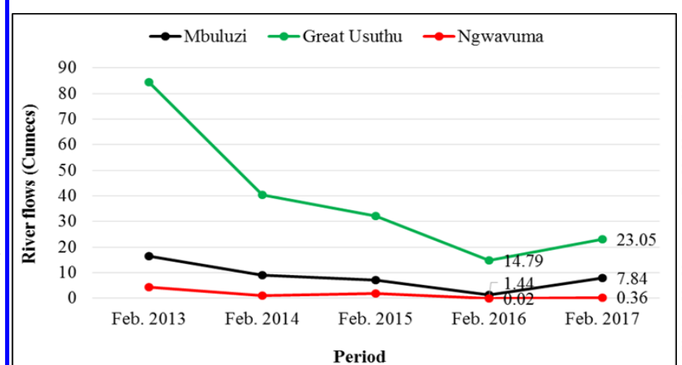

Figure 2: River flows in Februarys for the past five years

Is water enough for a full swing irrigation?

Although the 2016/17 season situation is better than the previous season, the water is not yet enough to resume full scale irrigation. Growers are advised to use water judiciously so that it is spread over a longer period in hope that substantial rainfall will be received in the next summer season. Strict adherence to irrigation scheduling is strongly advised. Growers should make use of available irrigation scheduling tools such as Profit and loss, Canesched, and Canepro.

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WATER OUTLOOK IN THE 2016/17 SEASON CONT.

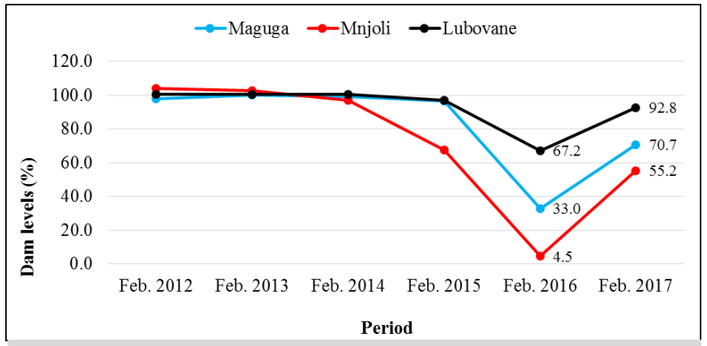

Figure 3: Industry dam levels in Februarys for the past five years

Growers who need Canesched to be installed in their computers should contact the Irrigation Section at SSA Technical Services at Simunye. The installation, training and troubleshooting of the Canesched irrigation scheduling programme is available to growers at no cost. If irrigation scheduling is done properly, substantial water savings can be made and the available water can be used across an extended period of time.

What about the water saving strategy?

The water saving strategies should remain in force in spite of the improvements in water levels (refer to the SSA Extension Newsletter Number 60). The long-term climate forecast looks unfavourable, and a decline in water levels in future is inevitable. Growers are encouraged to continuously follow the water saving strategies at all times in order to save water.

Is there still a hope for more rains?

According to weather experts, there is still hope of receiving some rain in March 2017. The January – February –March (JFM) 2017 period is forecasted to receive normal to below-normal rainfall in a larger part of the country (Figure 4). The western part of the country referred to as Zone I in Figure 4, rainfall is predicted to be normal to above-normal during the JFM period.

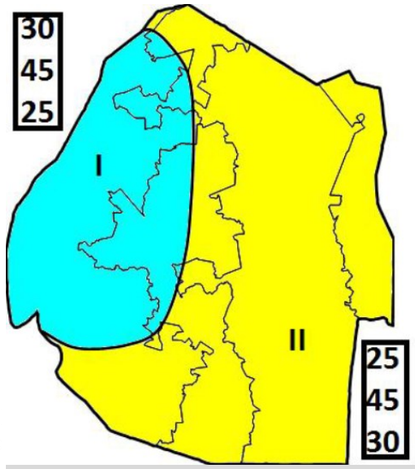

Figure 4: Rainfall forecast for January-March 2017

Zone II where the sugar industry is located (central and eastern part of the country) is forecasted to have a chance of normal to below-normal rainfall during this period. With this forecast, there is still a hope for some increase in the water levels. Such an improvement should bring relief to sugarcane growers when the situation is compared with the previous season around the same time.

Conclusion

In conclusion, water levels in both dams and rivers have improved in the 2016/17 rain season when compared with the 2015/16 season. However, this is no permission for growers to start irrigating and or using water inappropriately. The already stored water should be used prudently to meet the crop water requirement. This would call for growers to properly schedule their irrigation and also follow the water saving strategies.

By Patrick Mkhaliphi (Irrigation Officer)

CHEMICAL CONTROL OF CYNODON

Introduction

Cynodon is one of the troublesome sugar cane weeds that are difficult to control. This weed is a major problem in the weak sandy soils (B and W series) that are found on the banks of the Komati River. Cynodon is difficult to control mechanically because the cut runners regrow readily. At present, there are only two chemical products that are known to effectively kill cynodon, and these are Glyphosate and Basta. When used, extreme precautionary measures need to be followed since these chemicals are non-selective, they can kill the cane crop as well.

Having noticed that the cynodon problem is widespread in all grower farms in the KDDP extension sub area, a cynodon chemical control demonstration was organized by the area's Extension Officers. Invitations to the demonstration were sent to all the KDDP farm managers, supervisors and representatives of their respective herbiciding teams. For this purpose, two fields with actively growing cynodon were selected and sprayed with Glyphosate. The fields were located at Ayandza Emadvodza Farmers Association and Vuka Sidvwashini Farmers Association. The demonstrations were held on

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CHEMICAL CONTROL OF CYNODON CONT.

25 October 2016 and 01 November 2016 for Ayandza Emadvodza and Vuka Sidvwashini, respectively. A total of 30 growers attended the demonstration at Vuka Sidvwashini and 16 at Ayandza Emadvodza Farmers Association.

Procedure

1. At both sites, fields with young cane heavily infested with cynodon were identified the day prior to the demonstration day.
2. An area of 0.1 ha was marked, and the cane was cut at ground level. Care was taken not to cut the cynodon itself.
3. The cut cane leaves were removed from the marked area to ensure that the cynodon was well exposed.
4. On the day of the demonstration, the above steps were explained to the growers. The growers were also trained on safe handling of herbicides (in general) and glyphosate (in particular) in the field. Emphasis was made on proper interpretation of a chemical label.
5. Clean water was used and a full cover spray was performed. The application rate used for glyphosate was 6.0 litres per ha (600 ml in a 20 litre knapsack sprayer).
6. Upon completion of the spraying operation, the host grower was encouraged to monitor the response of the cynodon and manage accordingly the new cane shoots that will grow.
7. The spraying equipment was washed accordingly.

Follow-up demonstration

A follow-up demonstration was held 3 months after spraying. The purpose of the demonstration was to evaluate the results of the first demonstration. It was discovered that about 95% of the targeted cynodon responded positively (i.e. died) to the glyphosate spray. It was also discovered that after effectively controlling the cynodon, other weeds such as cyperus (watergrass) and broadleaf weeds started to grow in the demonstration plot. It was also observed that the cut cane produced new shoots. The host grower was advised to gap-fill the sprayed portion of the field to ensure a good population of cane and to stop weeds from growing in the gaps where the cynodon had out-competed the cane.

Conclusion

Farmers were encouraged to control cynodon before it reaches the stage where the cutback method becomes the only viable option. This can be done by controlling cynodon on field edges and sprinkler paths. Field sanitation is always important i.e. cleaning farm implements such as cultivators before moving to other fields. Problem areas within the farm should be identified and be treated appropriately. Each farm should have a good cynodon control programme and a well-trained herbiciding team. It is advisable that growers have spray shields so that cynodon spraying on interrows is safely done without killing cane on rows. Where the cynodon infestation is already out of hand, ploughing-out is advisable. However, to successfully establish a new crop, the cynodon should be eradicated first.

Grower briefing by Extension Officer

Cynodon spraying with glyphosate

Two weeks after cynodon spraying

Cane regrowth three months later

By Sive Sikhondze & Machawe Dlamini (Extension Officers - North)