

# SASTA Presidential address

TJMURRAY

Good morning ladies and gentlemen, a special welcome to you all to this Congress. May I extend a special welcome to our invited speakers Ms Bongi Njobe Director General of the National Department of Agriculture and Dr Colin Ryan Chief Executive Officer of the BSES in Brisbane Australia.

In my role as President of SASTA I wish to remind you all of the messages we have been given during the past few years by our invited guests, if you recall when James Fry of LMC in Oxford England spoke his bottom line was that in order for us to keep standing still in the world of sugar, where the world value of sugar is taking a long term decline at 2% pa, we will need to improve productivity at that 2% or start to decline. In addition to that requirement we do need to improve wages in real terms and one can therefore add an additional 1% to that figure so that we will need to improve by at least 3% pa.

The current move by the industry to a cane payment formula based on the recoverable value of a growers cane as opposed to paying for the sucrose content only, is expected to yield a 3% productivity improvement. That will see us right for one or two years, then what?

This Industries ability to "price" its self out of trouble has gone! Where as in the past we were able to sit in our SASA council chamber and decide what the local price of sugar would be FOR in Durban. Today we have a US Dollar based reference pricing system that will rely on Trevor Manuel, Minister of finance and Allan Greenspan of the US treasury to manipulate the relative inflation of the ZAR compared to the US\$ to bring about any change to the sugar price the milling companies are able to charge for sugar in the local market.

So now more than ever we need to look to the College of Technology to provide the mechanisms for improved productivity and more importantly to look at our own ability to transfer that information to where it is required so that it can be utilised.

I am tempted to use this platform to debate the GMO issue but will not do so because SASA has the debate well in hand and is well supported by good policy and action. I do however wish to comment that it is my opinion that the food requirements of Southern Africa will not be met in the long term by an expansion in cultivated land but will have to be met by an improvement in productivity of use of both land and Water. The new frontier is the GM frontier and I believe productivity improvements will come from the various GM projects currently under way.

I wish to deal in particular with Information Technology and the opportunities that provides us. James Fry told us, that of the two sections in this industry, the Milling section enjoys a much better world ranking than does the Agricultural sector does. This is partly because the Mills crush for relatively long sea-

sons and therefore make very good use of the available milling capacity. Conversely the growing sector suffers the negative effect of cutting cane over an extended season where the quality of the cane is worse at each end of the season. Ironically in this situation we put in place a cane payment system that moves the burden of the poor quality cane at season start and end out of the millers hands and into the Growers hands, He who has no capacity to influence the season length. It was for this reason that we introduced the concept of a "single business entity" type of solution to try and reach a compromise on the debate on season length. Maybe if the agricultural production were to be compared on a geographic potential production basis this industry's Growing section would not look as bad on an international scale as has been reported to date. But even if that were to be done it would not change the fact that it is primarily the agricultural sector that has the greatest room for productivity improvements and therefore should be the target for the development and implementation of new technology.

In this Industry we only have 2 and 1/15 sugar milling companies (or so it would seem if current merger/ take over plans work). Communication and information transfer between them and the Mills under their control should be very simple and efficient. All the companies have internet communication with each other and with the SMRI, the technology generator in their section, so there should be no restraints to implementation of new technology outside of the financial and or the IP issues. May be this is in part why the SA milling section is so technologically competent. As an aside I believe our Milling colleagues are under estimating the cost of maintaining the leading position they have. I say that because I notice a very real decline in contributions to SASTA by the milling groups and a noticeable demise of, in the past, the very strong Technical divisions, I guess when push comes to shove as has been the case in some milling companies then economies are made where the short term gains are evident, the cost of catching up technically once skills have been lost is far greater than any short term budget gain may appear.

## What about the Agricultural section?

Let me digress at this point to say I have just been in the UK and saw a strange phenomenon. Where as in the past one saw all the yuppies standing at the street corners and in the elevators and restaurants with their Cell Phones glued to their ears, what you now see is these same guys and dolls looking at their phones and not listening to some conversation. What is going on? Are they all trying to figure out how their phone should work? They are all utilising the new WAP capability of the integration of the Internet and Cellular phone technology WAP means wireless application protocol. Could this be the

ultimate technology transfer tool? If so what impact will this have on the way we do business?

Now let me get back to what I was trying to say.

Traditionally the research requirements for the Agricultural section have been determined at a local level in consultation with the Local Grower Council ( a body consisting of 24 growers 12 of whom are small scale farmers ) through the Extension and Research Committees then on to SASEX and finally to a programme of work meeting of the SASEX committee. I am very satisfied that the research programme is well suited to address the needs of all growers and all the "hard science" issues are well catered for.

The transfer of information and technology arising out of the research programme in the Agricultural section has been achieved very simply and effectively I may add. In general the method of transfer has been by word of mouth, Extension Officer to grower. We have in this Industry some 40000 growers some are small scale growers farming on small farms less than a hectare, those small scale growers receive their information from newsletters and mainly from the State-funded Extension staff assisted by means of a Joint Venture that exists between the SASA Experiment Station and the DoA The Joint Venture provides support in the form of training and exposure to the current and new technology but again is in the form of newsletters and word of mouth. The recipients then spread the gospel by word of mouth one on one and a group basis using very simple posters and visual aids.

Other large scale growers can subscribe to a user pays Extension service run by the Experiment Station . Likewise this service relies on person to person and group contact to transfer information. Recently, for those who have computers and are computer literate and who have Internet connection ( which is a fairly small group, although growing ,excuse the pun) have access to some Decision Support Software over the internet whereby "Jo Grower " can access the data directly without the cost of somebody telling him. The task to transfer information in this method is becoming more and more complex and Extension officers now have to be computer literate and be able to come on to a growers farm , armed with his laptop and run some software to advise the growers.

Now let me get back to what I saw in London ,with these yuppies looking at their phones , is that really yuppie stuff or is that real information technology?

I believe that the WAP technology presents us with a really useful and simple and cheap access to information but it does require data to be presented in a web site in WAP friendly format. The user of WAP information does not have to own a computer or have electricity or to be computer literate all one requires is a WAP accessible phone, and you can get them free with a contract now days.

Just imagine if the custodians of information made the information available in a suitable format then "Jo Grower" could look up his FAF balance , check on his cane quality , look up on the contractors availability and price and place an order for the delivery of his 150 t of cane , he could order his fertiliser and even transfer funds from his bank account to the local herbi-

cide vendor or tyre merchant. In the same manner the contractor could look up and see who has booked his available capacity and plan accordingly. And he could do all of that from the hill top from which he currently gets his cellular communication . There are many more growers with cell phones than there are with computers. But it requires the decision makers to embrace the available technology and make relevant data available. Just imagine how much more cost effective it would be for a small scale grower to do his business from where he is rather than have to face the transport and access problems they currently experience every day trying to conduct their business. All that would be required as I have said is for the data to be made available and the grower to have a WAP phone and a suitable number in the address list to contact the various web sites, he or she does not have to know a thing about computers, the internet or how the thing works.

Now I was dramatising a bit when I said I had seen the Yuppies in London , I did , but the technology is available in RSA and has been for a while , I don't have a WAP phone yet because nobody that I communicate with has developed a WAP site because most of the users are computer users and have little use for the WAP access .In the context of communication with growers I believe the technology is very appropriate and presents some real opportunities .

I believe that a great deal of the potential of our industries capacity to match the required productivity improvement is going to depend on how effectively we all use the Information Technology available to us .I know there are many company executives who are very disillusioned with IT because in many instances IT systems have been installed for the wrong reasons and Bill Gates will ensure that your IT costs remain recurrent .We need to transfer information and we need to do it more cost effectively than we are at present .

Another technology issue I believe presents some great opportunities is the current round of discussions in the industry about the various mapping requirements in each region. Most regions are opting for a digital mapping system. Research done by the ARC published last year at SASTA, on low level multispectral videography showed that nutrition and disease problems can be identified from the air. This ,once refined, presents Growers and P&D committees with a fantastic resource. One can even order five or six images during the growing season from the French Spot Multispectral satellite for your farm that will show variations in growth patterns that may well be very valuable information in improving production and this at a cost of only R2.50 per hectare.

These are just some of the technological developments we are going to have to make use of to develop our Agricultural section. These and similar developments will allow us to compete on the world market and to compete for the last disposable Rand our customers may have in their pockets here in South Africa.

Ladies and gentlemen I said at the start that we need to improve productive use of both land and water and I have been making reference to the economic issues up to now. I am happy that all the "hard science" issues are being dealt with by the Experiment Station, the Universities and the SMRI but I am concerned

that some of the ,may I say “Soft Science” issues are not being dealt with with enough vigour in our technologists’ minds. To make productive use, and to sustain even enhance the productivity of our environment should be our ultimate goal. Are we devoting enough time as technologists to the issues of water conservation, in terms of both quantity and quality , the availability of water in our regions is going to be one of the major challenges for the next millennium and I am not convinced we are devoting enough resources to the environment . I was interested in the presentation THS made a while ago about some of the long term problems arising from the old methods of fly ash disposal and that led me to believe that as sugar technologists we need to devote far more effort to environmental issues. I know we have a good record of surface water management and research that has been done over a long time in the industry testifies to that, but the issues in the environment are far more deep than just surface water and smoke. What are we doing about the riparian zones being full of unwanted vegetation consuming water and causing seed pollution? What are we doing about chemical pollution and disposal of used containers ? What are we doing about the people who live in our constituency? What are we doing about Aids and what are we doing about school facilities? What do we know about the sciences associated with these issues, very little I believe. As Sugar Technologists I believe we need to bring to bear the science required to conserve our environment in the long term ,not reactively but proactively, as we are doing very successfully in the “hard sciences”.

There appears to be an attitude that says “somebody else is responsible” for these issues especially environmental issues. Our Industry needs to take the responsibility for the stewardship of our own constituency and to take a broad view of not only considering the immediate but also taking a view of the long term as the THS example illustrated Fly ash dumped 80 years ago presents a serious problem today. The issues of monoculture and biodiversity will be of great importance in due course. Where have the grass eating birds gone? And where have the Oribi gone? Why are monkeys and bush pigs becoming a problem? What are the long term consequences of our actions? We do need to use the science available to us to evaluate where we will be in the future and I believe as Technologists we need to start developing the technology for these applications as well as the “hard science” we are currently so good at.

We will require more investment in research in the future to address all the issues relating to improving productivity and we need to invest wisely in Information Technology so as to make sure all the research results are transferred rapidly and effectively.

Ladies and Gentlemen there are some SASTA business issues that I need to tell you all about but I will keep you in suspense until the AGM this afternoon and will conclude this address by wishing you all well and trust that you will find this Congress a worth while event

Thank you very much .