

EDITORIAL

Beefing up the agricultural industry with science

Publisher: Botswana College of Agriculture, Gaborone,

This is my second editorial as the Scientific Editor of BOJAAS. When I was first nominated for this position, I was not enthusiastic in taking it up. I still wanted to push my research ideas and BOJAAS would take much of my time. Yes, it has. I have piles of data waiting to be analysed and papers to be written. However, due to my fervor for science, I felt I would be doing a good service to Botswana science and in particular the agriculture industry. My main goal was not only to improve the quality of articles published in BOJAAS but also to give space and opportunity to work which would otherwise not be accepted in the so-called reputable and international journals. This did not mean compromising on quality, but rather walking an extra mile in helping the up and coming authors in improving their papers before they could publish them in BOJAAS.

When a colleague (Dr E. M. Chimbombi) suggested that BOJAAS should have an editorial, I jumped at the idea. This is because, for a while I have been bothered by the deafening silence of Botswana scientists in debates of national importance. For instance, there is currently a raging national debate on Botswana Meat Commission (BMC), but the voices of animal and veterinary scientists cannot be heard. It is not that I expect my colleagues to dive into the discussion of mismanagement and fraud that has taken the centre stage of the debate, but there are issues of product quality, hygiene and sanitation, foot and mouth disease and traceability which actually sparked the current probe into the workings of BMC in the first place. These are issues of scientific discourse that begs learned minds to engage in. Scientific solutions to these would rescue our beef industry and steer it onto a future path for global competitiveness. Engaging the public and communicating our work is important and it is well articulated by physicist Professor Brian Cox of Aberdeen University in Scotland when he says **“Public engagement is vitally important now more than ever before as it becomes increasingly recognized that academics and researchers, wherever they are in their career, have a responsibility to explain their work, to inspire young minds and to generate and maintain the support of the public”**

Can we use science to beef up the agricultural industry? The answer is yes and in countries with highly developed agricultural sector, agriculture and food production

benefited immensely from scientific advancement. I love this statement by one of our new readers of BOJAAS **“If only more African countries realized the importance of feeding their people through investing in Agriculture in various ways, e.g. relevant research and effective technology transfer programs. A country that cares for its agriculture, cares for its people”** by. Dr. Johann Erasmus of Department of Agriculture in South Africa.

This statement by Dr Erasmus sums up what I am trying to say in this editorial.

The work presented in the current issue of BOJAAS contributes in a small way in providing information needed by producers and extension officers. In this Volume 9 Issue 1 of BOJAAS, two papers discuss product quality. One article by Akinwumi and colleagues (page 3-8) investigated meat quality of spent layers in Nigeria. As is the case in Nigeria and most other African countries, poultry (indigenous and commercial) in Botswana provide a cheap source of protein to many households. However, one potential type of poultry meat that has not caught the attention of processors and meat scientists is that from spent layers. In Botswana this meat enters the food chain disguised as indigenous chicken meat. Consumers may not be aware because meat from both spent layers and indigenous chickens is tough but has accepted flavor and taste. However, spent chicken has more fat while indigenous chicken are lean. So the research by Akinwumi and colleagues is relevant. The second work on product quality deals with flowers (by Hutchinson and colleagues in Kenya; page 9-20). Flowers, being a cash crop in some African countries like Kenya and Ethiopia are a source of foreign income. Hence it is important to find ways of preserving the quality of the product for both local and international markets.

Increased performance in biological processes does not always mean there would be an increase in income or profitability. Therefore, it is always important to carry out profitability studies as is the case with a study on cashew production in Ghana by Wongnaa and colleagues in page 21-31. Monamodi and colleagues (page 32-44) are reporting on some good science of breeding tomatoes under Botswana conditions. Their research reveals that fruit number and single fruit weight are relevant

components to use as the selection criteria for improving tomato yield.

Paying attention to welfare of animals is pertinent these days, both in research and at farm level. This involves handling and housing of animals. In this issue of BOJAAS Waugh and colleagues (page 45-53) compared effects of housing ostrich on soil and concrete floors and concluded that concrete floors should be avoided.

Poverty reduction and youth empowerment are currently major policy issues of governments. Agriculture and associated industries have a better chance of achieving these objectives, however a balance should be strike between harnessing child labour and child abuse. Fasina (page 54-59) investigated the involvement of school youth in fishing as a business vocation and found out that the youth are able to combine fishing enterprise with schooling without compromising their educational activities.

Botswana is a desert country with very little rain. However, it is endowed with cattle and this resource drives the livelihood of rural communities. Research on the best methods of managing natural grazing is a must. Lessons drawn out of Tshireletso and colleagues' work from the USA that appears in this issue (page 60-74) showed that loss of plant density and basal cover occurred on both grazed and non-grazed areas suggesting that drought was the primarily driver of plant changes than grazing. This implies that farmers should always be prepared for drought as it has more impact on vegetation than grazing.

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