

# **The Image of Agriculture Education in Botswana**

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This thesis is presented for the degree of Doctor of Education.

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## **DECLARATION**

I declare that this thesis is my own account of research and contains work that has not been previously submitted for a degree at any university or any other tertiary educational institution.

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## ABSTRACT

This study examines agricultural education in Botswana among students and teachers. Since independence in 1966 to the present time, agricultural production has declined from about 40 percent to about 3 percent. Harsh climatic conditions and a general ignorance about agriculture contribute to the restricted perception of agriculture and careers in this field. Individual and focus group interviews were conducted with agricultural teachers who had resigned and former graduates in four secondary schools and three postsecondary educational institutions (Botswana College of Agriculture, University of Botswana, and Tonota College of Education). Negative, positive and mixed images emerged that revealed some similar and some contradictory perceptions of agriculture education. The attrition of teachers also attracted attention because of their working conditions and their images of agricultural teaching. However, the phenomenon of teacher attrition is not unique to agriculture.

Students and teachers had conflicting images concerning curriculum instruction. Teachers identified the inadequacy of practicals because students are unable to apply the theoretical knowledge they have acquired to satisfy the various skills required in their new jobs. On the other hand, students perceived practicals as misdirected intensive labour. Non-agricultural tertiary students demonstrated that they do not have a full understanding of the potential career opportunities that agriculture can provide. They often thought that agriculture was confined to ploughing and food production. Nevertheless, both agricultural students and non-agricultural students agreed that agriculture could be a good career that they might consider later in their lives.

Participants in the study suggested strategies to enhance the poor perception of agriculture education in educational institutions in Botswana. One strategy was for curriculum reform, such that agriculture teaching should reinforce practicals that are relevant to students' needs. Practical instruction should not be used as intensive manual labour but should be used to target specific skills that are needed in industry. Agriculture teaching should start at primary school so that pupils can develop a positive image towards agriculture education at a young age, at the age of seven students could be involved in simple experiments conducted in laboratories, then at eleven years students can start practicals in the garden, making sure not to overwork the pupils.

Through career guidance and counselling, agricultural teachers should broaden the limited perception that agriculture is simply food production and expand the field to its scientific and commercial careers, such as food processing and marketing. Even though the Ministry of Agriculture provides some incentives to farmers, they misappropriate the schemes. Access to loans has to be provided for students who have completed their studies and cannot find jobs so that they can also join the field of production.

Even though women are dominated by men in both agriculture and in education and food production in Botswana, this trend is changing; there are more female enrolments in agricultural educational institutions than males. The government is trying to create an equitable distribution of resources for women as well. The position of women in Botswana is better than what literature has revealed in sub Saharan Africa.

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## CONTENTS

Title page	i
Declaration	ii
Abstract	iii
List of Tables	viii
List of Figures	ix
Preamble	x
<b>Chapter 1 Introduction</b>	<b>1</b>
<b>Chapter 2 Literature Review</b>	<b>29</b>
<b>Chapter 3 Unfolding Images of Agriculture</b>	<b>63</b>
<b>Chapter 4 Enhancing the Image of Agriculture Education</b>	<b>98</b>
<b>Chapter 5 Secondary School Students' Career Objectives</b>	<b>122</b>
<b>Chapter 6 Emerging Themes about the Image of Agriculture</b>	<b>140</b>
<b>Chapter 7 A Way Forward</b>	<b>157</b>
References	172
Appendix I Consent form	180
Appendix II Interview Protocols	182

## **List of Tables**

1	Enrolments at BCA Showing Males and Females per Programme	8
2	Secondary school respondents	21
3	Tertiary institutions respondents	21
4	Retired/resigned teachers respondents	22
5	Former BCA (Graduates) respondents	22
6	Responses about agricultural education (Agricultural teachers)	64
7	Responses about agricultural education (Agricultural students)	65
8	Responses about agricultural education (Non-agricultural teachers)	65
9	Responses about agricultural education (Non-agriculture students)	65
10	Strategies to enhance agricultural education (Agriculture teachers)	99
11	Strategies to enhance agricultural education (Agriculture students)	100
12	Strategies to enhance agricultural education (Non-Agriculture students)	100
13	Strategies to enhance agricultural education (Non-Agriculture students)	101
14	Should agriculture be an elective? (Non agricultural students)	115
15	Should agriculture be an elective? (Agricultural teachers and lecturers)	115



16	Should agriculture be an elective? ( Agricultural students and graduates)	115
17	Secondary school students' subject choice	123
18	Secondary school students' subject choice	123
19	Agriculture education as a career	128
20	Importance of agriculture as subject	133
21	Characteristics of agricultural teachers who have resigned	142
22	Proportion of teachers in the Science field from 1997-2005	150
23	The Grant/loan scheme-broad categories	166

### **LIST OF FIGURES**

Figure 1	Botswana's GDP's contribution per sector since 1966 to 2000	4
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## **PREAMBLE**

My reading of the Bible in Daniel 2 has inspired the methodology for this study. In this story, King Nebuchadnezzar of Babylon had a terrible dream, which he could not later recall and was worried. He then summoned all the wise men of Babylon to come and tell him the dream and its interpretation. Even though what he asked for was not the right order for dream interpretation, he insisted that the wise men tell him what he dreamed about and the interpretation because they claimed to be wise. After failing to tell the king the dream and its interpretation, he pronounced the death sentence to all the wise men of Babylon and their families including some three Hebrew slaves working for the king. The three pleaded with the king to spare them all while they entreated their God for the dream and its interpretation. Nebuchadnezzar consented.

Then Daniel through the inspiration of God was able to tell the king what the dream was and its interpretation. It transpired that the king's dream was a statue with a head of pure gold, its chest and arms were made of silver, its stomach and thighs were made of bronze, its legs were made out of iron and its feet were made out of part iron and baked clay. This great image had frightened the king very much.

Daniel was able to tell the king the dream and its interpretation through divine revelation. In my study however, I started by asking the students to tell me what images they have of agriculture and then I interpreted the images. Students and teachers have their perceptions that I then interpreted. The images of agriculture were diverse and interpretations may vary depending on who is doing the job. My task is to meet the research participants for confirmation of the images of agriculture in Botswana.