

FACTORS THAT INFLUENCE ENROLMENT IN AGRICULTURE AND RELATED SCIENCES IN PUBLIC HIGHER INSTITUTIONS OF LEARNING

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Outline

- ▶ Short introduction and justification of the study
- ▶ Objective of the study
- ▶ Procedure
- ▶ Results and Discussion
- ▶ Conclusions



Objective of the study

Objective:

To identify the factors influencing potential undergraduate students in their choice to study or not to study agriculture.



Procedure

- ▶ Sampled public universities in Kenya, namely; Egerton University, University of Nairobi and Jomo Kenyatta University of Agriculture & Technology.
- ▶ A sample of 496 out of 4960 was obtained through systematic random sampling of a captive audience.
- ▶ A self administered questionnaire
- ▶ The questionnaire had both open and close ended questions
- ▶ Two (2) Focus Group Discussions (FGDs) involving 28 participants were conducted



Sources of agricultural information

- ▶ How much do undergraduate students interact with stakeholders in agriculture?
- ▶ There is minimal interaction with farmers who are key on issues of agriculture

Source of information	%
Researchers	53.4
Press	41.4
Extension service personnel-	15.3
NGOs	14.4
Farmers	7.9
Others	2..5

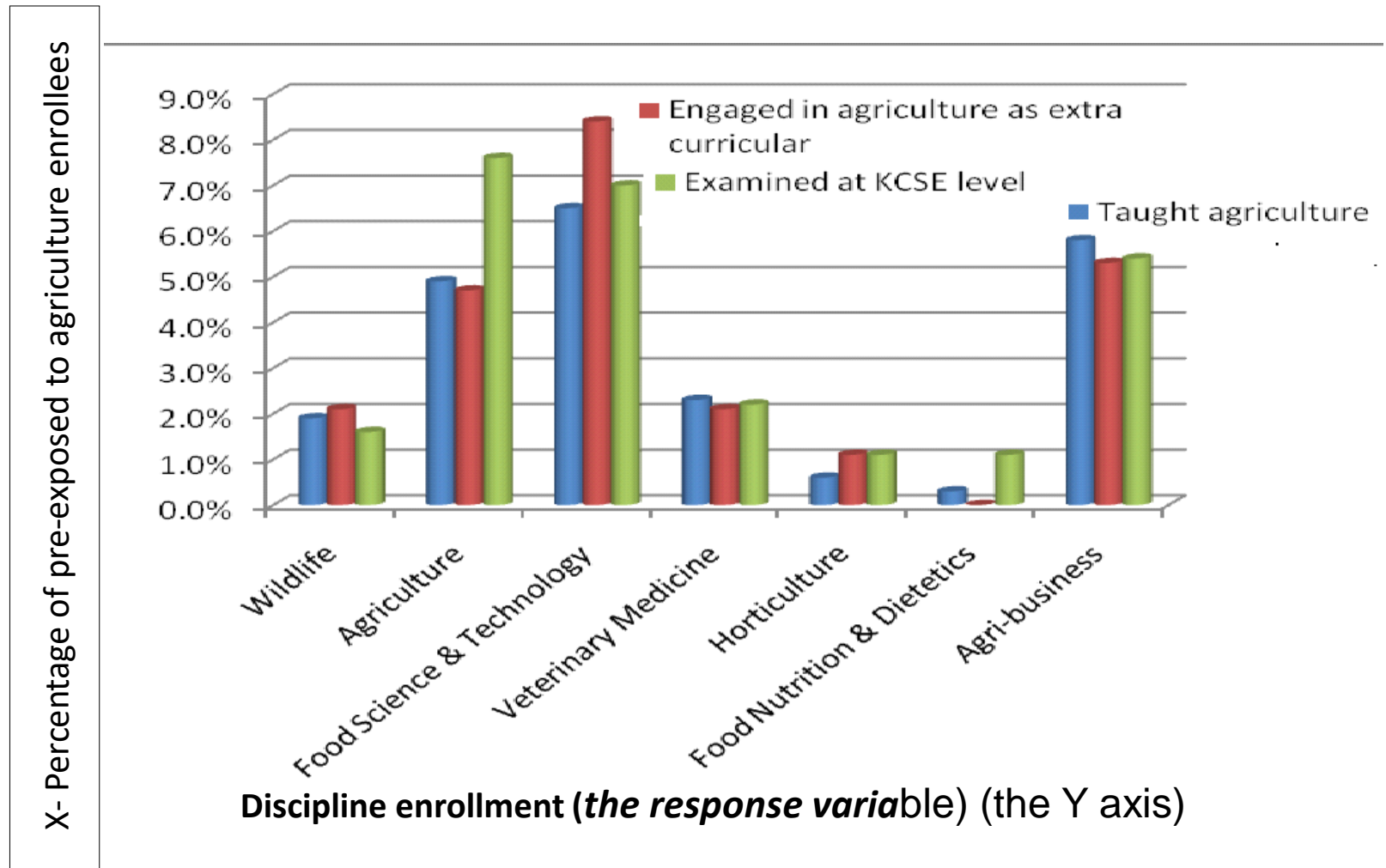
Results and Discussion

▶ **Figure 1: Pre-University Exposure to Agriculture**

Taught as a subject	Percentage
Yes	64.4
No	39.6



Pre-University exposure and enrolment in Agriculture and related courses



Discipline enrollment (*the response variable*) (the Y axis)

Figure 1: Pre university exposure and enrolment in agriculture and related sciences

Results and Discussion

- ▶ Analysis showed that there is a high significance relationship between pre-university exposure and the choice to study agriculture and related sciences in the university



Table 2: Factors perceived to influence enrolment in agriculture and related sciences

Role model influences	Frequency	
	Very much influence (5) %	No influence (1) %
Graduates of universities that offer agriculture and related sciences		15.5
A student enrolled in agriculture and related sciences		18.3
A fellow student		25.9
A teacher in secondary school		18.0
Career master		15.8
Parent(s)		14.4
Guardian		20.2
Past agricultural experience		15.8
Occupational/employment opportunities	16.9	
Farming background		14.4
Interest in agriculture as a subject in secondary school		15.5
Fun in agriculture in an interesting agricultural course		14.7
Personal interest	20.2	
A friend		21.5
A male relative		24.3
A female relative		27.2
Agricultural club e.g., 4KClub		20.2
Agricultural shows		15.5
Local agricultural officers		24.0

Results and Discussion (Cont)

- ▶ Occupation/Employment opportunities and personal interest tended to be the most frequently response on the factors that influence undergraduate choice to study agriculture and related science in public university



Table 3: Cross-tabulation of Degree chosen and KCSE aggregate mean grade

Degree chosen	KCSE MEAN AGGREGATE					
	A	A-	B+	B	B-	C+
	%	%	%	%	%	%
Wildlife		0.9	2.0	2.9		
Agriculture	25.0	1.7	6.5	11.4		20.0
Food Science & Technology		5.2	7.0	5.7		20.0
Veterinary Medicine		4.3	1.5	2.9	20.0	
Horticulture			0.5			20.0
Food Nutrition & Dietetics			1.0			
Agri-business		1.7	7.0			

Analysis showed that enrollment into agriculture and related sciences was dependent on KCSE mean grade obtained



Table 4: Undergraduate students' perception of agriculture

1 st , 2 nd , 3 rd , 4 th and 5 th Year students' Perception of Agriculture	%				
	Impression	Strongly agree (5)	Agree (4)	Disagree (2)	Strongly disagree (1)
Agriculture is rural in nature	Negative			91.8	
Associated with physical work	Positive		92.3		
Has opportunities	Positive	94.2			
Has career advancement	Positive	91.8			
Associated with subsistence farmers	Positive	92.9			
Has relaxation and recreational activities	Positive		92.6		
Jobs are not salaried	Negative				92.6
negative high school experiences	Negative				92
Used as a form of punishment	Negative				92.6

Results and Discussion (Cont)

- ▶ Most students strongly agreed with the impressions that agriculture had opportunities and career advancement
- ▶ Agriculture as a discipline and/or enrolment into it was not immediately accounted for by the negative impressions as indicated in the table



Results and Discussion (Cont)

- ▶ Table 5: Ranked claims perceived to discourage/encourage enrolment in agriculture and related sciences

Claims	%		
	1	2	3
Lack of information about agriculture and related sciences	100		
The profile given to agriculture and related sciences in university career forms			99
There is nothing new to learn about agriculture			99
Policy makers pay lip-service to agriculture and related sciences			99
Students of agriculture and related sciences do not find jobs after graduation		99	



Results and Discussion (Cont)

- ▶ Analysis showed that majority of the students (99%) felt that the information and agriculture and related sciences in the university career forms was not sufficient to entice them to enroll in agriculture and related sciences
- ▶ 99% of students felt that there was nothing new to learn about agriculture
- ▶ 99% of students felt that graduates of agriculture and related sciences do not find jobs after graduation



Results and Discussion (Cont)

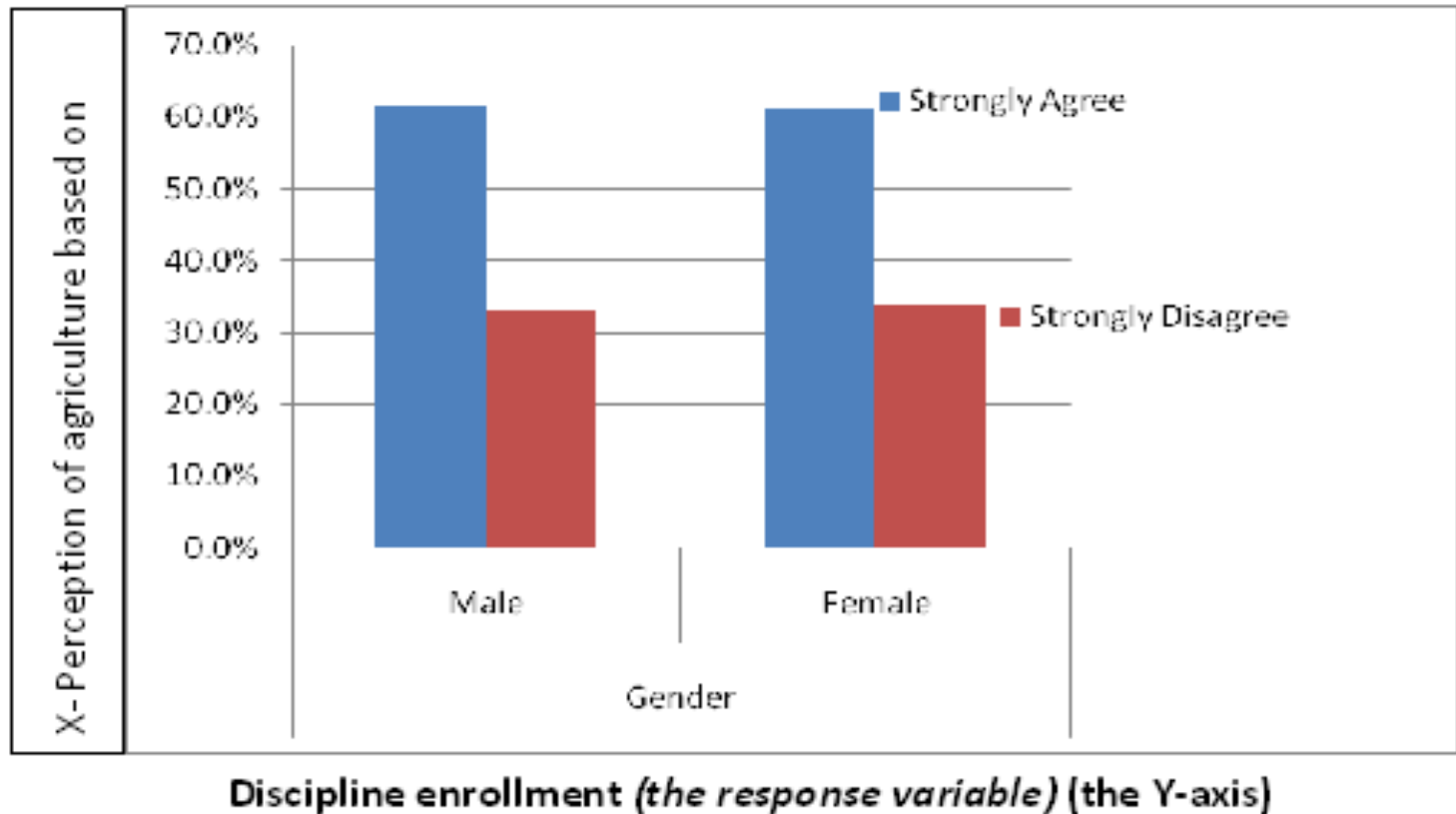


Figure 2: Crosstabulation of gender and perception

Results and Discussion (Cont)

- ▶ There is no difference between male and female students in their perception of agriculture and related science



Results and Discussion from FGDs

- ▶ Participants reported that they perceived “shame” and “anxiety” when they had to explain to their respective communities that they “were at the university studying agriculture!”
- ▶ Participants were of the opinion of the undergraduate students that agriculture needed to be appreciated as an agricultural science that led to successful business.



Results and Discussion (Cont)

- ▶ Participants expressed views that initially agriculture had been an occupation of “a farmer with low level income or middle income crop and livestock, marginalized and associated with rural people – ‘*maskini*’ (meaning the poor), livestock keepers associated with North Eastern and Eastern provinces”
- ▶ Participants expressed their newly acquired passion for agriculture and related sciences; and reiterated the need for it to be viewed as a profession like other professions



Conclusions

- ▶ Exposure of students to agricultural information influences their choice of agriculture in their future career choices
- ▶ Exposure to agricultural industry by the time they are at the pre-university affects their attitudes and career choices at the university
- ▶ Occupational/employment opportunities highly influence enrolment in agriculture and related sciences
- ▶ Agriculture has career advancement and opportunities(94.2%) but highly associated with subsistence farming(92.9%)



Recommendations

