

Research Application Summary

**Stakeholder involvement in university curriculum development: A case study of horticulture programme in Public Universities in Kenya**

Atikiya, R.,<sup>1</sup> Martin, M.,<sup>2</sup> Renate, W.<sup>2</sup> & Elegwa, M.<sup>1</sup>

<sup>1</sup>Jomo Kenyatta University of Agriculture and Technology, P.O. Box 62000 -00200, Nairobi, Kenya

<sup>2</sup>Wageningen University and Research Centre, P.O Box 8130 (bode 68), 6700 EW Wageningen, Netherlands

**Corresponding Author:** [atikiyar@gmail.com](mailto:atikiyar@gmail.com)

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**Abstract**

The purpose of this study was to explore the perception of horticulture sub-sector stakeholders on their involvement in horticulture curriculum development in public universities in Kenya. For this purpose, an exploratory research design utilizing both quantitative and qualitative approaches was employed. A sample of 43 horticulture stakeholders were selected using a simple random sampling technique. A questionnaire was used to collect data. The questionnaire was divided into two sections. The first part of the questionnaire required the respondents to provide responses on their perceived level of involvement in curriculum development while the second part required them to give suggestions on how the horticulture curriculum offered by public universities in Kenya can be improved. The findings of the study revealed that generally, the horticulture industry players were not involved in curriculum development. Consequently, the universities have ended up producing graduates not well prepared for the job market. It was further revealed that incorporating strategies such as stakeholders' involvement in curriculum development, instilling a research culture, making the curriculum more practical, enhancing farm visits, and offering internship opportunities to students can tremendously improve the quality of the horticulture curriculum offered by public universities in Kenya. Based on the study findings it is recommended that Universities should endeavor to involve stakeholders in curriculum development and orient their curriculum to be more practical in order to produce graduates that can demonstrate professional attributes required by the job market and be able to contribute to the development of the horticulture sub-sector in Kenya.

**Keywords:** Curriculum, horticulture, industry, Kenya universities, stakeholder

**Résumé**

L'objectif de cette étude était d'explorer la perception des parties prenantes du sous-secteur de l'horticulture sur leur implication dans le développement des programmes d'études en horticulture dans les universités publiques du Kenya. Pour ce faire, un modèle de recherche exploratoire utilisant des approches quantitatives et qualitatives a été utilisé. Un échantillon de 43 acteurs de l'horticulture a été sélectionné en utilisant une technique

d'échantillonnage aléatoire simple. Un questionnaire a été utilisé pour collecter les données. Le questionnaire était divisé en deux parties. La première partie du questionnaire demandait aux répondants de fournir des informations sur leur niveau d'implication dans le développement du programme d'études, tandis que la seconde partie leur demandait de faire des suggestions sur la manière dont le programme d'études en horticulture proposé par les universités publiques du Kenya peut être amélioré. Les résultats de l'étude ont révélé qu'en général, les acteurs de l'industrie horticole n'étaient pas impliqués dans le développement des programmes d'études. Par conséquent, les universités ont fini par produire des diplômés mal préparés au marché du travail. L'étude a également révélé que l'incorporation de stratégies telles que la participation des acteurs du secteur à l'élaboration du programme, la promotion de la recherche, la mise en place d'un programme plus pratique, la multiplication des visites d'exploitations agricoles et l'offre de stages aux étudiants peuvent améliorer considérablement la qualité du programme d'horticulture proposé par les universités publiques du Kenya. Sur la base des résultats de l'étude, il est recommandé que les universités s'efforcent d'impliquer les parties prenantes dans le développement des programmes d'études et de les rendre plus pratiques afin de former des diplômés capables de démontrer les qualités professionnelles requises sur le marché du travail et de contribuer au développement du sous-secteur de l'horticulture au Kenya.

**Mots clés:** Programme d'études, horticulture, industrie, universités du Kenya, parties prenantes.

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## Introduction

The issue of collaboration in curriculum development between universities and industry is a central factor in the success of educational institutions. As such, in order to produce properly equipped and professionally skilled manpower that could fit the demands of the 21st century, great emphasis has to be placed on stakeholder involvement in curriculum development. Campbell and Rozsnyai (2002) define stakeholders as individuals or institutions that are interested in the school curriculum. For the purpose of this study, the scope of stakeholder is limited to horticulture industry players. UNESCO (2009) urge that curriculum development process must involve public discussions and consultations with a variety of stakeholders. This implies that stakeholders' views are a required ingredient for a good curriculum. Many scholars have echoed the need for collaboration between institutions of higher learning and industries. Predrag (2014) indicated that industry is a key stakeholder and their inclusion in the realization of activities in all phases of curriculum design offer opportunities for successful cooperation with a university. Coll and Chapman (2000) also pointed out that companies form an integral part of the educational triangle and their continued support is critical to the long-term success of any academic program. Coordination between a university and industry is also critical for skills development and resultant employability of graduates.

Universities in Kenya and all over the world were founded to advance knowledge through research and teaching. Though this fundamental concept still holds true, there is heightened demand from the twenty-first-century employers who are confronted by many challenges. One such pressing challenge is the mismatch between the employers' demands and skills possessed by graduates from higher education institutions (Joseph, 2016). According to

Harry (2012) this is reflected in the development and implementation of education and training curricula that do not meet the expectations of the industry. Similarly, education and training are critical in promoting the political, social and economic development of any country. Therefore, the provision of meaningful and adequate education and training is fundamental to Kenya's overall development strategy (Vision, 2030). Unfortunately, one of the emerging issues in the education sector in Kenya is the existence of weak university-industry linkage according to a Ministry of Education sector report (MOE, 2016). The report pointed out inadequate industry participation in the formulation of the university curriculum and therefore universities train graduates who are deemed not relevant to the labour market.

Currently there is an outcry from industry players that they are getting 'half-baked' graduates. They argue that students who are products of Kenya's formal education are not able to develop and use original, inventive, innovative and entrepreneurial competencies (Mwirigi, 2011). The Ministry of Education report (2016) relates this to the existence of limited linkages between employers and training institutions hence the mismatch between education, training, and labor market requirements. A survey undertaken by Jomo Kenyatta University of Agriculture and Technology supported by Wageningen University on horticulture labour market needs revealed that horticulture graduates had adequate theoretical knowledge training but lacked practical skills, well less informed or emerging issues, lacked managerial, entrepreneurship and soft skills, among others. The aim of this study was therefore to investigate the extent to which industry was involved in horticulture curriculum development offered by public universities in Kenya and how the quality of horticulture curriculum could be improved. Specifically, the study examined: a) the extent to which public universities in Kenya involved labor market actors in their curriculum development process; b) sought suggestions from industry on how the quality of Horticultural academic programs offered in public universities in Kenya can be improved.

## **Materials and Methods**

The study utilized exploratory research using both qualitative and quantitative research approaches. Descriptive statistics were used to summarize the quantitative data generated from the questionnaire regarding the degree of agreement or disagreement with various questionnaire items relating to the level of stakeholder involvement in curriculum development. One open-ended question was included to probe the respondents on their suggestions for improving the quality of the horticulture curriculum. For this section of the questionnaire, the responses were grouped and summarized according to similar themes that merged.

The researcher made prior contacts to horticulture sector stakeholders ranging from industries, research institutions to institutions managing horticulture sub-sector in Kenya. A request was made through email and telephone calls to the participants to seek their consent to participate in the study. This correspondence introduced the researcher and explained the nature, purpose, and significance of the study. A questionnaire detailing both closed and open-ended questions was sent via email to randomly selected 58 participants to fill online and return. The participants were asked to indicate to what extent they agreed

with different questionnaire items relating to their level of involvement in curriculum development and review process namely; stage at which they are consulted in curriculum development, whether their input fed into the curriculum, frequency with which they were invited for curriculum review meetings, whether the curriculum prepared the graduate for labor market, among others. They could score 1 'strongly disagree' to 5 'strongly agree'. One open-ended question were included to probe the respondents to give suggestions for improving the quality of horticulture curriculum in public universities. The use of an open-ended questions provided a rich source of participant information though it did have some limitation as comments could be biased depending on the role of different players in the industry. Nevertheless, this observation provided valuable insight into what was perceived as deficiencies in the horticulture curriculum. A total of 43 participants representing 74.14% of the respondents responded positively and provided significant responses to the research questions.

## Results and Discussion

**Respondents demographics.** The majority (67.4%) of the respondents were male compared to females (32.6%). This implies that the horticulture sub-sector offers employment opportunity to both genders through the numbers of the male were more than that of the female gender. Also, 42.9% of the respondents indicated that they had worked in their firms for a period of up to five years. Further, 26.2% of the respondents had worked for between six and ten years. Cumulatively, this represents 69.1% of the respondents. The implication of this for the study is that the respondents had stayed long enough in the industry to be able to know whether the industry had involved them in the curriculum development process or not. A number of the respondents (14.3%) were supervisors and production managers. This implies that they served at managerial level and therefore had information on the study issues.

**Level of involvement of stakeholders in horticulture curriculum development.** The study sought to establish the level of involvement of industry players in the horticulture curriculum development process at public universities in Kenya. This was done by use of closed-ended questions that sought their level of agreement with statements related to different items in curriculum development. A majority (53.5%) of the employers indicated that they were not consulted at all in the curriculum development process. Those who indicated that they were consulted after the curriculum was developed include 18.6% of the respondents while 14% stated that they are consulted before the curriculum was developed and similarly 14% said they were consulted mid-course. This finding concurs with the Ministry of Education sector report that there is inadequate industry participation in the formulation of university curricula and as such universities train graduates who are deemed not relevant to the labour market (MOE, 2016). This finding also supports the work of Coll and Chapman (2000) who established that companies form an integral part of educational triangle and their continued support is critical to the long-term success of any academic program. Further the work of Predrag *et al.* (2014), also indicated that inclusion of industry in the realization of activities in all phases of curriculum design creates possibilities for a more successful operation with the university. These findings are presented in Table 1.

**Table 1. Stage of consultation**

Consultation stage	Frequency
After the curriculum is developed	18.60%
Before the curriculum is developed	13.95%
Midcourse	13.95%
Not at all	53.49%

One respondent noted;

*“I am not sure if any stakeholders are consulted but I have not seen any consultation in the 20 years I have been in the industry. I can not speak for others though. The program only prepares the students for a basic management knowledge, but nothing practical on what the industry is about..... any student of any management discipline should be as equipped to work in the horticulture sector as one who specializes in the field if not better... the difference is that for other management disciplines the specialization equips the students better in the specific fields they choose. Sadly horticulture does not.....”*

Regarding whether their inputs fed into the horticulture curriculum developed, 51.2% agreed that their input fed into the curriculum developed. However, 25.6% disagreed while 23.3% remained neutral. The respondents were also asked to indicate whether they were invited for curriculum development or review meetings. A majority (55.8%) of the respondents indicated that they were not invited for curriculum review. However 44.2% indicated participation.

When asked whether the horticulture program offered by public universities in Kenya fully prepared the graduates, majority of the respondents indicated that this was not the case with 35.3% agreeing that the program prepared the graduates well. The respondents were also required to state whether the horticulture curriculum is prepared jointly by sector players. The respondents indicated that the horticulture curriculum was not developed in consultation with the sector players.

**Suggestions for improvement of horticulture program in Kenya universities.** The respondents’ opinions were sought on ways to improve the quality of horticultural program offered in public universities in Kenya. The findings of the study revealed the need to have the program incorporate more practical skills as horticulture programs were more orientated towards theoretical knowledge and lacked practical skills and knowledge when working in the industry. Further, respondents expressed the need for universities to work in collaboration with the industry where the industry players would help in reviewing the program in order to incorporate needed competencies by the industry. According to the respondents, the industry can also help students in gaining practical experiences by providing hands-on training during farm visits as well as providing attachment placement for students to expose the students to the real world of work. The findings of the study further revealed the need to have graduates who are all rounded not only in scientific principles but on the social and human aspect of the industry. The need to inculcate research culture through the involvement of students in ongoing projects and breeding research to allow the students to build a good knowledge base was also expressed.

## Conclusions

Based on the findings of the study, it is evident that stakeholders were hardly involved in the curriculum development process despite the key role their contribution plays in the curriculum development. Secondly, from the findings, it was apparent that the horticulture curriculum offered in public universities did not fully prepare the graduates for the place of work. The industry players considered the graduates to be too theoretical and lacked practical application of the knowledge.

Empirical evidence suggests that workforce training need to be closely aligned with the skills and competencies required for employment. For this to be realized, universities in Kenya need to work closely with stakeholders especially in the horticulture sub-sector in order to develop curricula that incorporate the skills and competencies required by the labour market. It is also important to continuously review the curriculum to make it relevant and able to serve the needs of the society. The Government may also seek to improve the quality of university education by fostering stronger collaboration between universities and industry by ensuring that key stakeholders voices are considered in curriculum development, and implementation. The Government should also fund students attachments to industry. Also university programs should better respond to industry needs.

Finally, the current study had a number of limitations. First, the data were collected only from the horticulture sub-sector. The findings of this study, therefore, cannot be generalized to other sectors of the economy. Future research should expand the sample by including representatives from other sectors. Secondly, the study also suffers from subjectivity since the data were self-reported. Future research should utilize other objective methods. The scope of the present study was also limited to establishing the involvement of stakeholders and ways of improving quality of horticulture curriculum without due consideration to how the stakeholder involvement will be enhanced. Future research should, therefore, look at ways of ensuring that the universities involve stakeholders curriculum development in Public Universities in Kenya.

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