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Teachers' Perception Regarding Inclusion of Agricultural Education at Secondary Level in Khyber Pakhtunkhwa

Dr. Muhammad Faheem Khan
Instructor, Regional Professional Development Center, Dera Ismail Khan, Khyber Pakhtunkhwa, Pakistan.
E-mail: faheemk2213@gmail.com

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ABSTRACT:

The current study was aimed to investigate the views of teachers regarding the inclusion of agricultural education at secondary school level in Khyber Pakhtunkhwa. Therefore, descriptive research method was used. The study was conducted in two universities District Dera Ismail Khan (DIKhan) including University of Agriculture (UOA) and Gomal University (GU). A sample 125 (50%) teachers sample was chosen out of 250 teachers using proportionate stratified sampling method. A self-developed questionnaire was used for data collection. Content Validity Index (CVI) was used for the content validation purpose while Cronbach's Alpha was used to measure the internal consistency of the instrument. Independent sample t-test and Analysis of Variance (ANOVA) was used to assess the response of agriculture teachers regarding the inclusion of agricultural education at secondary level. The result indicates that all teachers agreed upon agriculture curriculum included at secondary school level. Therefore, agriculture curriculum may be design under the experts for secondary school level.

Key words: Teachers' Perception, Agricultural Education, Secondary Level, Quantitative Research, Khyber Pakhtunkhwa.

Introduction

Pakistan is one of the countries whose economy is mostly based on agriculture, followed by trade and industry. Approximately 60% of Pakistan's population lives in rural areas. Of these, 42% of the labor force is involved in agriculture (Usman, 2016). In addition, we import various goods from neighboring nations and lack certain food staples. Increasing food yields, obtaining more labor, and producing higher farm income are essential for the growth of agriculture. Agriculture provides a subsidy to labor force revenue, GDP (gross domestic product), and income from external commerce. The backbone of the country and the source of the majority of everyday necessities as well as the labor force needed to grow the services sector is agriculture. An understanding of financial development cannot be achieved without considering the widespread and prolonged expansion of agriculture (Qadir & Nawab, 2022).

The government recovered agricultural productivity by taking a number of measures. In addition to these measures, agriculturalists must receive training in order to lessen the challenges and issues they face related to low efficiency. Agriculture research needs to be increased now more than ever. Complete, continuous agricultural education in crop and universal production is necessary for the rural population to be aware of the agricultural labor force. However, the goal of agricultural education and training is to support the agricultural community's human resources in order to stimulate the economy. The main goal is to disseminate information through research and education in order to meet the demands of agricultural production, export, and native feeding in a highly competitive global trade environment. The social initiative's goal is to provide food security and income generation for smallholders and rural residents in the face of population growth and shrinking land. Thus, this is the speculative case in favor of funding agricultural human capital development (Akhtar *et al*., 2018). On the list of courses, agricultural education is just as important as other functional subjects are. For a nation with an agriculture-based economy, it is necessary at all times. Pakistan has well-equipped universities and agricultural institutions. They can generate competent agricultural workers who can conduct research to improve farm productivity and apply cutting-edge technologies. A number of public universities and colleges that are helping to develop the human resources in farms offers a diverse range of degrees in agricultural disciplines and their specialized areas, from bachelors to doctoral levels. Several chosen. The intermediate pre-agricultural program was offered by Pakistani agriculture universities in addition to undergraduate, graduate, and postgraduate studies. However, there is still a void at the secondary level (IX–X), and agriculture education is a good way to close this gap (Masood, 2012).

At the high school level, agricultural education is ineffective. In 1972, the National Education Policy established an Agro-tech stream of agricultural courses, which began at the middle school level. It was one of the subjects given under the "Y" list of secondary subjects. Because of the political setup, some obstacles eventually developed and prevented it from becoming operational. Nevertheless, it continued to change from its original appellation in the structure of literature reviews. Afterwards, moving this topic to the matric technical stream was encouraged by the 1998 National Education Policy. However, the program was limited to technical education within the purview of technical examination boards. Government of Pakistan (GoP, 2009) white paper and educational policy 2009 state that the agriculture education subject is included in the humanities group of the newly constructed secondary school certificate study plan, but it is not yet operational at the secondary level. Nonetheless, there is a need to emphasize agricultural education at the school level in a wider variety of secondary schools due to the growing awareness of the nation's economies dependence on agriculture (Akhtar *et al*., 2018). Pakistan's agriculture education curriculum is under flux. The purpose of this study is to track the decline of agricultural education in schools because of political commitments shown in national five-year development plans; national educational policies created by the education ministry, and associated provincial government administrative initiatives. The study would offer a significant amount of documentation proof regarding the commitment and implementation-related efforts. Examining its necessity for additional instruction is also important (Dorward *et al*., 2004). The current research paper focuses to explore the views of teachers regarding the inclusion of agricultural education at secondary school level in Khyber Pakhtunkhwa. Following were the key objectives of the study.

1. To explore the teachers' views regarding the inclusion of agricultural education at secondary level in Khyber Pakhtunkhwa.
2. To compare the teachers' perception regarding the inclusion of agricultural education at secondary level in perspective different demographic attributes (Designation, qualification and experience).

Method

The current study was aimed to investigate the views of teachers regarding the inclusion of agricultural education at secondary school level in Khyber Pakhtunkhwa. Therefore, descriptive research method was used. Descriptive research is cautious while attempting to understand "What is." It involves gathering information to verify hypotheses or react to questions about the perspectives of research study participants. Gay *et al.* (2009) asserts that the descriptive method is useful for examining a wide range of issues in education.

Population and Sampling of the Study

The study was conducted in two universities District Dera Ismail Khan (DIKhan) including University of Agriculture (UOA) and Gomal University (GU). Experts in agricultural subjects from university agriculture and Agricultural department of Gomal University was constituted the population. A sample 125 (50%) teachers sample was chosen out of 250 teachers using proportionate stratified sampling method. According to Gay *et al*. (2009) fifty percent sample is suitable if population less than 500 and exceed than 100.

Research Instrument

Researcher used a self-developed questionnaire for data collection. Questionnaire contained two parts. First part of questionnaire contained demographic information of agriculture teachers such as designation (lecturer, assistant professor, associate professors and professors), qualification and experience. The second part of the questionnaire contained 27 items related inclusion agricultural education at secondary education.

Validity and Reliability of Questionnaire

Researcher used Content Validity Index (CVI) was used for the content validation purpose while Cronbach's Alpha was used to measure the internal consistency of the instrument. Table 1 shows the CVI score and Cronbach's Alpha score.

Table 1

CVI and Internal consistency Score

Instrument	No. of item	CVI score	Cronbach Alpha
Questionnaire	27	.50-.90	.839

Data Collection and Analysis

Researcher personally administered the questionnaire and received 100% response rate. Researcher followed all ethics and rules while collecting data. Independent sample t-test and Analysis of Variance (ANOVA) was used to assess the response of agriculture teachers regarding the inclusion of agricultural education at secondary level.

Results and Discussion

Table 2

Teachers' views regarding the inclusion of agricultural education at secondary level in perspective of university

Group	n	Mean	SD	Sig
UOA, DIK	43	3.7796	.63277	.873
GU, DIK	82	3.7505	.67715	

Table 2 indicates the teachers' views regarding the inclusion of agricultural education at secondary level. The Mean score of teachers of University of Agriculture (UOA) and Gomal University (GU) Dera Ismail Khan was estimated 3.77 and 3.75 respectively, which reveals that teachers agreed upon the inclusion of agricultural education at secondary level. The value of p=.873>.05 which indicates that no significant difference in the agricultural teachers' views regarding the inclusion of agricultural education at secondary level

Table 3

Teachers' views regarding the inclusion of agricultural education at secondary level in perspective of Designation

Designation	n	Mean	Std. Deviation	F	Sig.
Lecturers	48	3.7384	.66187		
Assistant Professors	49	3.8227	.61062	.266	.850
Associate Professors	17	3.6910	.84771		
Professors	11	3.6874	.60358		

Table 3 shows the Teachers' views regarding the inclusion of agricultural education at secondary level in perspective of Designation. The Mean values shows that teachers with different designation agreed upon the inclusion of agricultural education at secondary level. The value of F=.266 with p=.850>.05 which indicates that no significant difference in the agricultural teachers' views regarding the inclusion of agricultural education at secondary level in perspective of designation.

Table 4

Teachers' views regarding the inclusion of agricultural education at secondary level in perspective of qualification

Qualification	n	Mean	Std. Deviation	F	Sig.
MSC (Agri)	29	3.7563	.75114		
MPHIL (Agri)	37	3.7925	.57270	.065	.937
PhD (Agri)	59	3.7425	.67362		

Table 4 shows the Teachers' views regarding the inclusion of agricultural education at secondary level in perspective of qualification. The Mean values shows that teachers having different qualification agreed upon the inclusion of agricultural education at secondary level. The value of F=.065 with p=.937>.05 which indicates that no significant difference in the agricultural teachers' views regarding the inclusion of agricultural education at secondary level in perspective of qualification.

Table 5

Teachers' views regarding the inclusion of agricultural education at secondary level with respect to experience

Experience	n	Mean	Std. Deviation	F	Sig.
1-10 YEARS	50	3.7675	.66514		
11-20 YEARS	52	3.7419	.65894	.042	.959
More than 20 years	23	3.7874	.67829		

Table 5 shows the Teachers' views regarding the inclusion of agricultural education at secondary level in perspective of qualification. The Mean values show that teachers different teaching experience agreed upon the inclusion of agricultural education at secondary level. The value of F=.042 with p=.959>.05 which indicates that no significant difference in the agricultural teachers' views regarding the inclusion of agricultural education at secondary level in perspective of experience.

Discussion

The current study was aimed to investigate the views of teachers regarding the inclusion of agricultural education at secondary school level in Khyber Pakhtunkhwa. The study was conducted in two universities District Dera Ismail Khan (DIKhan) including University of Agriculture (UOA) and Gomal University (GU). The result of the study indicates teachers were agreed upon the inclusion of agricultural education at secondary school level. In other words, agricultural teachers (experts) have similar views regarding the inclusion of agricultural education at secondary school level. The result of the study is in line with Akhtar *et al*. (2018). They found that Pakistan needs secondary education in agriculture since it is taught at other levels, particularly for F. Sc. pre-agriculture, and since Pakistan is an agricultural nation, students may need to learn about this topic. It may also be helpful for those who drop out after matriculation.

Conclusion and Recommendations

On the basis of statistical results, the study concluded that experts deemed that the placement of agriculture education in the science group as an elective, since agriculture is fundamental and applied science, to be the main or most important proposal. Others speculate that, unlike computers, it might be a component of biology rather than going against it. The expert's second proposal was that, similar to the Science and Humanities group as described in the National Educational Policy of 1972, there might be a distinct stream of agricultural studies. The third suggestion was to incorporate certain ideas or themes from agriculture education into other required and elective courses. The fourth option received a lower weighting from experts in order to be included in the humanities category of subjects. The study recommended that policy might be developed for the inclusion of agricultural education at secondary level. For this purpose, agriculture curriculum may be design under the experts for secondary school level.

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Declaration of Interest: The author declares that there is no clash of interests.

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