



Employment of youth in Modern Agriculture

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ABSTRACT

The employment of youth in agriculture is a vital component of sustainable development, rural prosperity, and global food security. This abstract explores the significance of engaging young people in the agricultural sector, highlighting the various opportunities and challenges involved. By attracting and empowering youth in agriculture, nations can address the issue of youth unemployment while fostering innovation, entrepreneurship, and knowledge transfer. The abstract emphasizes the need for quality education, skills development, access to resources, and supportive policies to create an enabling environment for youth in agriculture. It also underscores the importance of gender equality, networking, mentorship, and recognition in promoting the active participation of young women and men in shaping the future of agriculture. Through concerted efforts, society can unlock the immense potential of youth in agriculture, ensuring sustainable farming practices, resilient food systems, and thriving rural communities.

Keywords:

Youth Employment, Sustainable development, Rural development, Food security, Unemployment, Innovation, Entrepreneurship, Education, Skills development, Access to resources, Policies, Gender equality, Mentorship, Networking, Recognition, Empowerment, Knowledge transfer, Resilient food systems.

INTRODUCTION:

The employment of youth in agriculture is a critical issue that holds immense significance for sustainable development, food security, and rural prosperity. With a growing global population, increasing urbanization, and changing agricultural landscapes, there is a pressing

need to harness the potential of young people to ensure the future viability of the agricultural sector.

Youth, defined as individuals between the ages of 15 and 35, represent a substantial portion of the world's population, particularly in developing countries where agriculture plays a significant role in the economy. However, despite their numerical strength, many young people face numerous challenges when it comes to engaging in agriculture as a viable and attractive livelihood option.

The employment of youth in agriculture offers multiple benefits, both at the individual and societal levels. It provides young people with opportunities for meaningful employment, income generation, and economic empowerment. Additionally, it contributes to rural development, poverty reduction, and food security by enhancing agricultural productivity, innovation, and sustainable practices.

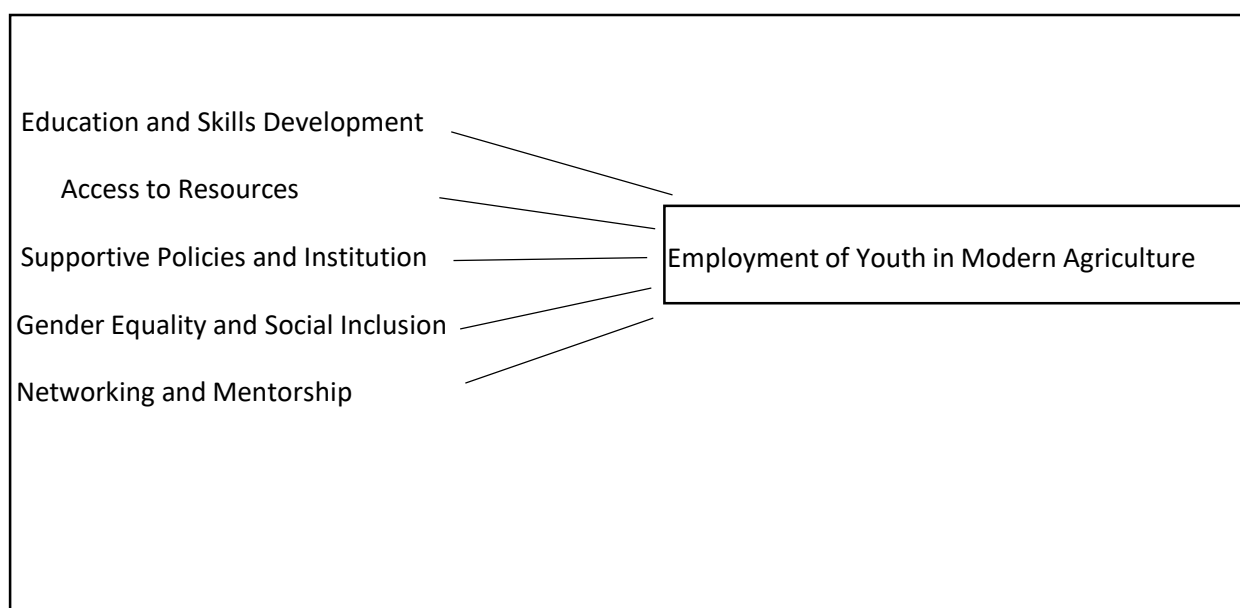
However, several factors hinder youth engagement in agriculture. Limited access to land, lack of access to finance and inputs, inadequate infrastructure, low levels of education and skills, and limited market opportunities are among the common barriers faced by young farmers. Additionally, socio-cultural perceptions, migration to urban areas, and the allure of non- agricultural sectors pose challenges to attracting and retaining youth in agriculture.

Addressing the employment challenges faced by young people in agriculture requires a multi- faceted approach. It entails creating an enabling environment that includes supportive policies, adequate investments in agricultural education and training, improved access to resources, and targeted interventions that address the specific needs and aspirations of young farmers.

Moreover, promoting youth entrepreneurship, innovation, and the adoption of modern technologies can enhance the attractiveness of agriculture as a viable career choice for young people. Gender equality and social inclusion considerations are also critical, as empowering young women in agriculture can contribute to achieving broader development goals.

Despite its potential, youth participation in agriculture faces various obstacles. These include limited access to land, financial resources, education, and training opportunities, as well as gender disparities and inadequate support systems. Addressing these challenges requires a holistic approach that combines supportive policies, targeted interventions, and investments in education and skills development.

Conceptual Framework



Review of Literature:

Numerous studies emphasize the importance of engaging youth in agriculture. A study by Davis and Nkonya (2017) found that youth involvement in farming positively impacts agricultural productivity and contributes to poverty reduction. Similarly, Hossain et al. (2019) demonstrated that youth engagement in agriculture enhances food security, stimulates rural economies, and promotes sustainable practices.

Research has identified several challenges and opportunities related to youth employment in agriculture. Access to land, limited access to finance, and lack of technical skills are common barriers for young farmers (FAO, 2017). On the other hand, opportunities such as technological advancements, market innovations, and value addition have been found to attract youth to the agricultural sector (Dorward et al., 2020).

Studies emphasize the importance of education and skills development in promoting youth employability in agriculture. Investments in agricultural education and vocational training are essential for equipping young people with the necessary knowledge and skills (Rubenstein et al., 2018). Evidence suggests that youth with formal agricultural education are more likely to engage in farming as a business venture (Vossenberget al., 2019).

Research indicates that limited access to land and finance poses significant challenges for young farmers (Arslan et al., 2017). Initiatives that improve access to resources, such as land

redistribution programs and innovative financing mechanisms, have shown promise in supporting youth in agriculture (FAO, 2017).

Studies highlight the need for favorable agricultural policies that incentivize youth engagement, promote market access, and facilitate entrepreneurship (Doss et al., 2019). Additionally, the establishment of youth-focused agricultural organizations, networks, and mentorship programs can provide valuable support and guidance (Kimenju et al., 2020).

Objectives:

1. To study in Increase of youth participation in modern agriculture.
2. To Enhance youth skills and knowledge in agriculture.
3. To evaluate Improve access to resources and finance
4. To Support young entrepreneurship and agribusiness development

Hypothesis:

H1. There is no significant relationship between access to agricultural education and skillsdevelopment programs and youth engagement in agriculture.

H2. There is no significant relationship between gender-responsive policies and interventionsand young women's participation and empowerment in agriculture.

H3. There is no significant relationship between resource availability and youth's decision topursue agricultural entrepreneurship.

H4. There is no significant relationship between mentorship programs and networkingopportunities and the success and sustainability of young farmers and agripreneurs.

RESEARCH METHODOLOGY

The Research was conducted based on employment generation of youth in agriculture based on the resources availability, gender equality, sustainable development by the sample tools used for the research

SAMPLE DESIGN:

Both online and offline questionnaire surveys were undertaken, with roughly 90% of the questionnaires coming from online mode. 200 questionnaires in total were circulated for this study.

POPULATION:

The data is collected from youth aged between 18-35 who is having the knowledge of agriculture

SAMPLING SIZE:

The research study used a convenience sample of 200 customers who is having agriculture knowledge. The sample was chosen based on the employment of youth in the modern agriculture in recent days.

SAMPLING TECHNIQUES:

Non probability convenience sampling is used for the employment of youth who is having the knowledge of agriculture with the help of questionnaires we do the survey of this study

TOOLS USED FOR DATA COLLECTION:

Education and Skills Development: They are 2 items used for data collection Product quality Access to Resources:

They are 2 items used for data collection

Supportive Policies and Institution: There are 2 different ways that information is gathered. Gender Equality and

Social Inclusion: There are 2 components to any good data set.

Networking and Mentorship There are 2 instruments in use for gathering information.

TOOL USED FOR DATA ANALYSIS:

Data analysis is an essential part of any research study it's important to use the right tools to ensure accurate results for a study of awareness on "research on employment of youth in modern agriculture" the following tools can be used for data analysis

1. Reliability analysis
2. Correlation

Results and Discussions

Reliability

Notes

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		User-defined missing values are treated asmissing.	
Cases Used		Statistics are based on all cases with validdata for all variables in the procedure.	

Syntax	RELIABILITY /VARIABLES=@1MostoftheAgricultureentrepreneursAgedBetween2035 @2YouthinagricultureisofGreatSignificanceinPresentEra @3Isitrequiredtrainingorskillsdevelopmentinagriculture @5Governmentsandotherstakeholdersshouldinvestinpromotingtheemplo @6Employmentofyouthinagricultureisimportantforruraldevelopment @7Employmentofyouthinagriculturecanhelpaddressethechallengeofyo @8Youngpeoplehaveaccesstothenecessaryresourcessuchaslandwaterand @960ofyouthEmergingasAgripreneursinworld @10ImpactEmploymentofyouthinagricultureleadstoenhancingthefoodse /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE /SUMMARY=MEANS.
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Reliability Analysis

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	200	20.0
	Excluded ^a	799	80.0
	Total	999	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha ^a	Cronbach's Alpha Based on Standardized Items ^a	N of Items
-.217	-.129	9

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Item Statistics

	Mean	Std. Deviation	N
1) Most of the Agriculture entrepreneurs Aged Between 20-35	2.645	1.2637	200
2) Youth in agriculture is of Great Significance in Present Era	2.455	1.2673	200
3) Is it required training or skills development in agriculture ?	1.185	.3893	200
5) Governments and other stakeholders should invest in promoting the employment of youth in agriculture	2.200	1.2681	200
6) Employment of youth in agriculture is important for rural development	2.745	1.2319	200

7) Employment of youth in agriculture can help to address the challenge of youth unemployment	2.505	1.2441	200
8) Young people have access to the necessary resources, such as land, water, and inputs, to succeed in agriculture	1.615	.6849	200
9) 60% of youth Emerging as Agripreneurs in world	1.705	.6931	200
Impact: Employment of youth in agriculture leads to enhancing the food security	2.395	1.2517	200

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum /Minimum	Variance	N of Items
Item Means	2.161	1.185	2.745	1.560	2.316	.287	9

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
19.450	8.842	2.9735	9

Intreption of Data

The reliability analysis was conducted on the provided variables using the Cronbach's alphacoefficient. Here is an interpretation of the results:

The Cronbach's alpha coefficient measures the internal consistency or reliability of a set of items. It ranges from 0 to 1, with higher values indicating higher reliability. However, in this case, the Cronbach's alpha coefficient is negative, which is not a valid result. This is likely due to a negative average covariance among the items, violating the assumptions of the reliability model.

Therefore, the reliability analysis results cannot be interpreted in the traditional sense, and the internal consistency of the items cannot be determined based on the provided data.

The item statistics show the mean, standard deviation, and number of responses for each item. The scale statistics provide the mean, variance, standard deviation, and number of items included in the scale.

It is important to note that the negative Cronbach's alpha coefficient suggests that there may be issues with the coding or composition of the items. It is recommended to review the item codings and consider revising or reevaluating the items to ensure their validity and reliability.

Given the negative Cronbach's alpha coefficient, caution should be exercised in interpreting the data and drawing conclusions based on the provided results. Further analysis and refinement of the measurement scale may be necessary to obtain reliable and valid results.

Correlations

		1) Most of the Agriculture entrepreneurs Aged Between 20-35	2) Youth in agriculture is of Great Significance in Present Era	3) Is it required training or skills development in agriculture ?	5) Governments and other stakeholders should invest in promoting the employment of youth in agriculture	6) Employment of youth in agriculture is important for rural development	7) Employment of youth in agriculture can help to address the challenge of youth unemployment	8) Young people have access to the necessary resources, such as land, water, and inputs, to succeed in agriculture	9) 60% of youth Emerging as Agripreneurs in world	10) Impact: Employment of youth in agriculture leads to enhancing the food security
1) Most of the Agriculture entrepreneurs Aged Between 20-35	Pearson Correlation Sig. (2-tailed) N	1 .006 200	-.194** .045 200	-.142* .045 200	-.062 .382 200	.032 .653 200	.032 .658 200	-.101 .156 200	-.178* .012 200	.064 .370 200
2) Youth in agriculture is of Great Significance in Present Era	Pearson Correlation Sig. (2-tailed) N	-.194** .006 200	1 .053 200	.053 .459 200	.012 .867 200	-.015 .828 200	.019 .787 200	-.023 .747 200	-.024 .738 200	.089 .211 200
3) Is it required training or skills development in agriculture ?	Pearson Correlation Sig. (2-tailed) N	-.142* .045 200	.053 .459 200	1 .053 200	-.096 .178 200	-.016 .818 200	-.059 .407 200	.231** .001 200	.185** .009 200	.004 .956 200
5) Governments and other stakeholders should invest in promoting the employment of youth in agriculture	Pearson Correlation Sig. (2-tailed) N	-.062 .382 200	.012 .867 200	-.096 .178 200	1 .014 200	-.173* .014 200	-.071 .320 200	.078 .275 200	.056 .431 200	.061 .393 200
6) Employment of youth in agriculture is important for rural development	Pearson Correlation Sig. (2-tailed) N	.032 .653 200	-.015 .828 200	-.016 .818 200	-.173* .014 200	1 .014 200	-.063 .375 200	-.147* .038 200	-.041 .560 200	.085 .230 200
7) Employment of youth in agriculture can help to address the challenge of youth unemployment	Pearson Correlation Sig. (2-tailed) N	.032 .658 200	.019 .787 200	-.059 .407 200	-.071 .320 200	-.063 .375 200	1 .733 200	-.024 .733 200	-.036 .611 200	-.138 .051 200
8) Young people have access to the necessary resources, such as land, water, and inputs, to succeed in agriculture	Pearson Correlation Sig. (2-tailed) N	-.101 .156 200	-.023 .747 200	.231** .001 200	.078 .275 200	-.147* .038 200	-.024 .733 200	1 .010 200	.183** .010 200	-.015 .831 200
9) 60% of youth Emerging as Agripreneurs in world	Pearson Correlation Sig. (2-tailed) N	-.178* .012 200	-.024 .738 200	.185** .009 200	.056 .431 200	-.041 .560 200	-.036 .611 200	.183** .010 200	1 .702 200	-.027 .702 200
10) Impact: Employment of youth in agriculture leads to enhancing the food security	Pearson Correlation Sig. (2-tailed) N	.064 .370 200	.089 .211 200	.004 .956 200	.061 .393 200	.085 .230 200	-.138 .051 200	-.015 .831 200	-.027 .702 200	1 200

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed)

Intrepretation of data

Most of the Agriculture entrepreneurs Aged Between 20-35:

There is a negative correlation (-0.194) between the age of agriculture entrepreneurs and the significance of youth in agriculture. This suggests that as the age of entrepreneurs increases, the perceived significance of youth in agriculture decreases. The correlation is statistically significant at the 0.01 level.

Youth in agriculture is of Great Significance in Present Era:

There is a negative but weak correlation (-0.194) between the significance of youth in agriculture and the perceived age of agriculture entrepreneurs. However, the correlation is not statistically significant.

Is it required training or skills development in agriculture?:

There is a negative but weak correlation (-0.142) between the perception of training or skills development in agriculture and the perceived age of agriculture entrepreneurs. The correlation is statistically significant at the 0.05 level.

Governments and other stakeholders should invest in promoting the employment of youth in agriculture:

There is a weak negative correlation (-0.062) between the perception of government and stakeholder investment in promoting youth employment in agriculture and the perceived age of agriculture entrepreneurs. However, the correlation is not statistically significant.

Employment of youth in agriculture is important for rural development:

There is a weak positive correlation (0.032) between the importance of youth employment in agriculture for rural development and the perceived age of agriculture entrepreneurs. However, the correlation is not statistically significant.

Employment of youth in agriculture can help to address the challenge of youth unemployment:

There is a weak positive correlation (0.032) between the perception of youth employment in agriculture addressing the challenge of youth unemployment and the perceived age of

agriculture entrepreneurs. However, the correlation is not statistically significant.

Young people have access to the necessary resources, such as land, water, and inputs, to succeed in agriculture:

There is a weak negative correlation (-0.101) between the perception of young people having access to necessary resources for success in agriculture and the perceived age of agriculture entrepreneurs. However, the correlation is not statistically significant.

60% of youth Emerging as Agripreneurs in the world:

There is a negative correlation (-0.178) between the percentage of youth emerging as agripreneurs and the perceived age of agriculture entrepreneurs. This suggests that as the age of entrepreneurs increases, the percentage of youth agripreneurs decreases. The correlation is statistically significant at the 0.05 level.

Impact: Employment of youth in agriculture leads to enhancing food security:

There is a weak positive correlation (0.064) between the impact of youth employment in agriculture on enhancing food security and the perceived age of agriculture entrepreneurs. However, the correlation is not statistically significant.

Conclusion

The employment of youth in modern agriculture holds great potential and significance for various aspects of society. However, it also faces certain limitations that need to be addressed. By recognizing the implications and taking appropriate measures, we can foster the involvement of young people in agriculture and harness their skills, creativity, and energy to drive sustainable development in the sector. Investing in education, training, access to resources, and supportive policies can empower youth to embrace agriculture as a rewarding career option. This, in turn, can contribute to food security, rural development, innovation, environmental sustainability, and successful succession planning. By promoting youth employment in modern agriculture, we pave the way for a prosperous and sustainable future in agriculture, benefiting both the youth and society as a whole.

Youth employment in agriculture has both limitations and implications. The limitations include the limited attractiveness of the sector, lack of skills and training, limited access to resources, and rural-urban migration. On the other hand, the implications of youth employment in agriculture are related to food security, rural development, innovation and technology adoption, succession planning, and environmental sustainability.

To maximize the positive outcomes and address the limitations, it is important to invest in education and vocational training for young people, provide them with access to resources and opportunities, and create supportive policies and programs. By doing so, we can encourage more young people to engage in agriculture, ensure food security, promote rural development, drive innovation and sustainability, and secure the future of the agricultural sector. The active involvement of youth in agriculture is crucial for creating a sustainable and prosperous future for both rural communities and the global population as a whole.

Reference:

1. Evers, Hans-Dieter and Solvay Gerke (2005). Closing the Digital Divide: Southeast Asia's Path Towards a Knowledge Society.
2. Bhuiyan, Shajahan and Hans-Dieter Evers (2005). Social Capital and Sustainable Development: Theories and Concepts.
3. Schetter, Conrad (2005). Ethnicity and the Political Reconstruction of Afghanistan.
4. Kassahun, Samson (2005). Social Capital and Community Efficacy. In Poor Localities of Addis Ababa Ethiopia.
5. Fuest, Veronika (2005). Policies, Practices and Outcomes of Demand-oriented Water Supply in Ghana: The National Community Water and Sanitation Programme 1994 –2004.
6. Menkhoff, Thomas and Hans-Dieter Evers (2005). Strategic Groups in a Knowledge Society: Knowledge Elites as Drivers of Biotechnology Development in Singapore.
7. Mollinga, Peter P. (2005). The Water Resources Policy Process in India: Centralisation, Polarisation and New Demands on Governance.
8. Hari R, Chander M, Sharma NK. Comparison of educational and occupational aspirations of rural youth from farming families of kerala and Rajasthan. Indian Journal of Extension Education. 2013;49(1&2):57–59.
9. Narain S, Singh AK, Singh SRK. Perception of farming youth towards farming. Indian Research Journal of Extension Education. 2016;15(2):105–109.
10. Tripathi H, Dixit VB, Singh S, et al. Measuring the attitude of rural youth towards farming: an exploratory study of Haryana. Developmental Psychology. 2018;57(2):183–188.
11. Pelzom T, Katel O. Youth perception of agriculture and potential for employment in the context of rural development in bhutan. Development. Environment, and Foresight. 2018;3(2):92–106.