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Exploring Agriculture Students' Insights towards Sustainable Livelihood

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Abstract— *This research investigates the socio-demographic and institutional factors affecting students' perceptions toward sustainable livelihood. Within the framework of the Sustainable Livelihood Approach, education becomes vital for developing the human capital needed in agriculture. Purposive sampling was carried out with 202 B.Sc. and M.Sc. agriculture students from a university in Lucknow District, using a quantitative, descriptive survey design. The researcher himself developed the instrument for collecting responses through the "Perception Scale of Agriculture Students Towards Sustainable Livelihood" (PSASSL). To conduct the statistical analysis, the Mann-Whitney U-test was used. Perception differences were significant with respect to gender, locale, parental occupation, and type of institutions, with no perception differences on the basis of socioeconomic status. The perceptions of the students on sustainable livelihood were influenced highly through their own exposure, agricultural tradition, and the standard of the institution's infrastructure. The results provide greater emphasis on the need for a more equitable curriculum process as well as an entry into experiential learning, most especially in government institutions. In this regard, the results are consistent with the thrust of the National Education Policy (NEP) 2020 objectives and promoting integrated skill-based as well as sustainability-oriented education. This research strengthens the argument regarding sustainability in agricultural education, showing how different cohorts of students conceptualize sustainability, thus making a case for recommendations that should be made for educators, agencies, and policymakers wishing to promote sustainable development and livelihood preparation among prospective agricultural professionals.*

Keywords— ***Sustainable Livelihood, Agricultural Education, Student Perceptions, Livelihood Strategies, Agricultural Curriculum, Higher Education.***

I. INTRODUCTION

The "Sustainable livelihood" has been defined as the ability of individuals to maintain, preserve and oppose outside tremors in a long time. Its fundamental objective is to enhance life-supporting capacity, resources, and activities without weakening the environmental, social, or economic structures from which human beings derive (Krantz, 2001).

According to the Sustainable Livelihood Framework of 1999 developed by the Department for International Development, the five assets that a livelihood should comprise of would be human, natural, physical, social, and financial capital. Efficient asset management enables an individual or a community to combat stresses from economic crises, environmental degradation, and political disturbances (Scoones, 1998). An important aspect of

livelihood sustainability is human capital-often referred to as education. From this, a person acquires knowledge, self-confidence, and some usable skills. It is, therefore, linked to increased productivity, reduction of risks, and adoption of new techniques (Chambers & Conway, 1992). According to Mavhungu (2023), rural communities that have undergone agricultural instruction have a higher tendency of adopting conservation farming techniques and making improvements in their productivity. Rural populations that have received agricultural education are more likely to embrace conservation farming methods and productivity enhancement.

Another fundamental value of sustainable living is concern for the environment. Although more than 60% of Indians are working in agriculture, most of the industry is still dependent on the monsoon rains (Patel & Sharma, 2021). Integrated pest management, organic farming, and soil conservation are examples of sustainable practices that help to preserve the ecosystem and reduce the need for outside inputs (Singh, 2020).

Inclusive development is also guaranteed by access to training and education. For instance, when agricultural training covers the general range of learning capabilities and is gender-responsive, the marginalized and the women benefit (UNESCO, 2017). Educated women manage the family finance more effectively, improve the well-being of the family, and participate in family community decisions (World Bank, 2012). Agricultural education provides the sustainable livelihood best by bridging academic learning with the practical training for the conservation of the environment, production of crops, testing the soil, and irrigation of waters (FAO, 2017). As per Rivera and Qamar (2003) Comprehension of the local and the scientific systems of knowledge prepares the students best for the real-life agronomical challenges.

Agricultural usability of technology, such as GIS, drones, and sensors, boosts livelihood activities. As Mavhungu (2023) noted, the technology makes resources more efficient and cheaper due to the facilitation of more information-based as well as sustainable agriculture. Owing to this connection, innovation as well as productivity correlates highly with sustainability. The sustainable living must be social as well as adaptable, and it must continually change. Market forces, migration, as well as change induced by the climate, dictate how the approach evolves (Scoones, 1998). Enterprise, innovation, as well as environmental protection plans, ensure the today's livelihood does not risk the tomorrow's livelihood (Morse & McNamara, 2013).

II. REVIEW OF RELATED LITERATURE

This evaluation of global studies provides an observation of the relationship between agricultural education and sustainable lifestyle. By highlighting the students' approaches, institutional responsibilities, course intervals and livelihood approaches, it emphasizes how the stability of education and local development is integrated into different situations. Hussein and Nelson (1998) have investigated on permanent livelihoods and diversification strategies between the African and Asian population in the countryside. The purpose is to find out how institutional structures affect enteritis and livelihood, the most important strategy for livelihood is the most important strategy. Brocklesby and Fisher (2003) present sustainable livelihoods approaches, including the increase and uptake within organizations. These authors argue that community development thinking has been largely absent from such approaches because of the local nature of the former and the technocratic impetus of sustainable livelihoods intervention, conflicting with its principles. The sustainable livelihoods strategy was suggested by Adato and Meinzen-Dick (2002) as the approach by which the effect of agricultural research on poverty may be measured. Their transdisciplinary method addresses how technologies are aligned with various household strategies, including social and cultural considerations in addition to economic ones. Apine et al. (2019) comments on the sustainable livelihoods approach as applied to small-scale mud crab fisheries in Southwest India. This emphasizes how frameworks establish societal characteristics, risk, impressive institutions and appropriate management strategies, given how framework uncertainty and socio -economic factors, in view of uncertainty and socio -economic factors. Serrat, O. (2017) It structures drivers of livelihood opportunity and helps plan and evaluate development action. The article also emphasizes grasping institutions for policy appraisal on a contextual basis. McDowell and de Haan (1997) analyze critically sustainable livelihoods and migration. Migration is then more of a rule than an exception, and according to them, it is usually household livelihood strategy often practiced together with others and two-way processes keeping ties with origins stressing the complicated institutional factors. Allison and Horemans (2006) show how the SLA can be utilized in developing fisheries in West Africa. The SLA thus showed the way to align fisheries policy and poverty reduction objectives, as well as approaches to lower poverty without increasing pressure on already over-exploited fish stocks. Researching how sustainable development is understood in Ghana by agricultural students, Quansah et al. (2024) reported that their subjects were predominantly rural dwellers who would like to practice farming but do not have access to starting funds. The study recommends establishing

government incentives that encourage students to pursue agriculture after graduation. Alam (2023) study was on how universities handle the issue of sustainability as a fallout of globalization and commercialization. It uses qualitative measures such as case studies and interviews across the nations to reveal that there is a policy-practice gap where institutions are more profit-oriented than that actual sustainable development. Schulz et al. (2019) An analysis of 374 students in 21 Latin American countries found a significant relationship between knowledge and approach to permanent agriculture. Most placed a very positive attitude, but their knowledge was more moderate and weaker correlated. Education should be practical and sustainability-oriented. Of students in agriculture, Agumagu et al. (2018) from Nigeria's Rivers State found that 73% would engage in farming for income, but fewer wanted government or private sector employment. Major issues included high equipment costs, limited access to land, and insufficient resources. Government and NGO incentives and interventions were suggested. Sitienei and Morrish (2014) It was found that students at American College registered in agricultural programs did not have a high level of knowledge related to permanent agriculture, which reveals large knowledge intervals in important principles and practice. He suggested changing the course to include extensive content addressing of stability. Fröhlich et al. (2013) described how students at the age of 24 in Germany see agricultural responsibilities differently. While older students attached importance to plants and animals, younger students tended to point out agriculture and processing. In general, agricultural education did not focus much on contemporary practice and the environment. Entrapped in student farms, experiential learning was researched on sustainable US agriculture by Parr and Trexler (2011). Using qualitative focus groups, they were able to conclude that all which involved effective community of practice in complementing classroom teaching with fieldwork did transfer knowledge by actual experience and collective work. Borsari and Vidrine (2005) surveyed the degree of sustainability in the undergraduate curricula of institutions involved in agriculture. The surveys of faculty indicated that courses continued to be traditional with very limited emphasis on sustainability. The study recommended changes in the curriculum to include sustainable agriculture towards effective agricultural education. Agbaje et al. (2001) assessed the impact of sustainable agriculture on secondary agricultural education programs and teachers in the U.S North Central region. Findings indicated a fairly moderate use of sustainable agriculture; terms were mostly neutral on such usage, suggesting space for more incorporated teaching materials. Alonge and Martin (1995) analyzed farmer perceptions on sustainable agriculture practices in the U.S. Farmers find the practices fit and profitable, with certain negative elements. Such findings recommend research alterations to improve capability and profitability for wider use of sustainable techniques.

RESEARCH QUESTIONS

What factors influence the insights of Agriculture Students towards Sustainable Livelihood (e.g. Gender, Locale, Parental Occupation, Social Category and Type of institutions (Central and State)?

RESEARCH OBJECTIVES

To identify the factors that influence the insights of Agriculture Students towards Sustainable Livelihood (e.g. Gender, Locale, Parental Occupation, Social Category and Type of institutions).

RESEARCH HYPOTHESIS

H_1: Gender significantly influences agriculture students' insights towards sustainable livelihood.

H_2: Locale significantly influences agriculture students' insights towards sustainable livelihood.

H_3: Parental occupation significantly influences agriculture students' insights towards sustainable livelihood.

H_4: Social category significantly influences agriculture students' insights towards sustainable livelihood.

H_5: Type of institution significantly influences agriculture students' insights towards sustainable livelihood.

III. METHODOLOGY

Research Method

The researcher used a quantitative method to explore the insights of agriculture students towards Sustainable Livelihood.

Research Design

The Descriptive Research Design has been used in this study. This design helped in systematically studying the trends and influencing factors such as gender, locale, parental occupation, social category, and type of institutions.

Study of the Population

The study population comprises B.Sc. and M.Sc. Agriculture students' who are enrolled in different universities in Lucknow District.

Sample size

The present study comprised 202 agriculture students (B.Sc. and M.Sc.) from 2 different universities in Lucknow District.

Sampling

The present study used purposive sampling to select agriculture students actively enrolled in accredited B.Sc. and M.Sc. agricultural programs. This method ensured that the participants had direct experience and knowledge relevant to Sustainable Livelihood.

Process of Data Collection

The Perception Scale of Agriculture Students towards Sustainable Livelihood (PSASSL) have been self-constructed by the investigators to gather data on students' insights and attitudes towards Sustainable Livelihood.

IV. ANALYSIS AND DISCUSSION

This shall illuminate the factors affecting agricultural students' perception of sustainable livelihood through exhaustive statistical data analysis and interpretation. Five main factors-Gender, Locale, Parental Occupation, Social Category, and Type of Institutions will direct this study in relation to its research aim and hypotheses. Student perceptions of different institutional and demographic variables will be tested using the Mann-Whitney U-test. Results will then be discussed in relation to relevant empirical research and theoretical frameworks identified in the literature review. There are some conclusions that arise out of the mixing of both contextual and numerical data where the exact nature and direction of these discrepancies are afforded insight. By means of this methodology, the study would make an effort to connect the theoretical concepts informing sustainable livelihoods with the actual learning experience of agriculture education students. This could, ultimately, amount to a more holistic, practical, and policy-relevant understanding of sustainability in agricultural education.

Analysis 1:

Objective-1: To identify the influence of Gender on insights of Agricultural Students towards Sustainable Livelihood

Ho 1: There is no significant difference in the insights of Agriculture Students towards Sustainable Livelihood with reference to Gender.

Table 1: Ranks

Ranks				
	Gender	**N**	**Mean Rank**	**Sum of Ranks**
Student Sustainable Livelihood	Male	105	109.48	11495.00
	Female	97	92.87	9008.00
	Total	**202**		

Table 2: Test Statistics

	Student Sustainable Livelihood
Mann-Whitney U	4255.000
Wilcoxon W	9008.000
Z	-2.020
Asymp. Sig. (2-tailed)	0.043

Table 3: Gender-wise Mean Ranks, N and Mann-Whitney U-values of Student Sustainable Livelihood

Variable	**Gender**	**Mean Ranks**	**N**	**Mann-Whitney U-values**	**Remark**
Student Sustainable Livelihood	Male	109.48	105	4255.000	P<0.05
	Female	92.87	97		

Table-3 shows that statistically, utilizing the Mann-Whitney U-test, it is possible to determine whether gender influences the agricultural students' perspectives towards sustainable livelihood by analyzing 105 male and 97 female students. The results indicate that males had a higher mean rank of 109.48 compared to females with 92.87. U = 4255.000, Z =

-2.020, and p = 0.043 (two-tailed). The result is significant since p < 0.05; therefore, it can be concluded that male and female students have significantly different views on sustainable livelihood, rejecting the null hypothesis. This reinforces the need to support gender-sensitive program designs with equal opportunities and practical exposure to all students, thus ensuring a balanced understanding of sustainability in agriculture. The findings suggest, possibly due to differential exposure to practical aspects of sustainable livelihood, that male students appear to have more favorable or informed views, possibly owing to differential exposure to field practices, livelihood planning, or sociocultural roles that favor engagement within agriculture.

Discussion

The perceptions of agricultural students regarding sustainable livelihood were found to be statistically significantly different; male students held more positive opinions (U = 4255.000, p = 0.043). Such results echo with previous. The present research lends credence to the argument that sociocultural roles and differences in experiences shape sustainability perceptions and aligns with Alam's (2023) call for inclusive and indispensable sustainability education, especially among higher education. Such findings emphasize building gender-sensitive pedagogies and equitable learning atmospheres for offering equal opportunities for male and female students to contemplate theoretical and practical pursuits of sustainable living.

Analysis 2:

Obcective-2: To identify the influence of locale on insights of Agriculture Students towards Sustainable Livelihood

Ho 2: There is no significant difference in the insights of Agriculture Students towards Sustainable Livelihood with reference to Locale.

Table 4: Ranks

Ranks				
	Locale	**N**	**Mean Rank**	**Sum of Ranks**
Student Sustainable Livelihood	Rural	116	117.35	13612.50
	Urban	86	80.12	6890.50
	Total	**202**		

Table 5: Test Statistics

	Student Sustainable Livelihood
Mann-Whitney U	3149.500
Wilcoxon W	6890.500
Z	-4.480
Asymp. Sig. (2-tailed)	<.001

Table 6: Locale-wise Mean Ranks, N and Mann-Whitney U--values of Student Sustainable Livelihood

Variable	**Locale**	**Mean Ranks**	**N**	**Mann – Whitney U-values**	**Remark**
Student Sustainable Livelihood	Rural	117.35	116	3149.500	P<0.05
	Urban	80.12	86		

Table-6 shows that The Mann-Whitney U-test assessed whether students' location is influential to the perception of sustainable livelihood. The sample included 86 students from urban areas and 116 students from rural areas. The analysis shows that mean rank of urban students was 80.12 while mean rank of rural students was 117.35. Asymptotic significance (two-tailed) computed at less than 0.001 value of U was 3149.500, Z was -4.480. Since p<0.05, the outcome is statistically significant. The null hypothesis is therefore rejected, and this confirms students think about sustainable livelihood differently depending on their location. Rural students generally had a more favorable and knowledgeable attitude toward sustainable livelihoods since this attitude is grounded in their practical knowledge of rural lifestyles, family involvement in farming, and direct exposure to agricultural practices. The findings highlight the

importance of experiential and contextual learning but equally highlight the need to narrow the perception gap by implementing targeted programs to enhance urban students' understanding of sustainable rural livelihoods.

Discussion

There is a statistically significant difference in rural students' perceptions of sustainable livelihoods categorized by location (U = 3149.500, Z = -4.480, p < 0.001) .McDowell and de Haan (1997) did recognize as important that local experience contributes to the making of livelihood strategies, inexcusably for rural areas; the more familiar rural students would be with agricultural challenges and sustainability practices, then the more favorable perception would be; however, Apine et al. (2019) showed local knowledge and community assets to be essential for planning sustainable livelihoods while urban students would not be equally exposed, reinforcing the case for contextualized education. Therefore, these findings entail the necessity of an experiential learning approach such as field trips and rural immersion programs to close the perception gap between the two areas, wherein urban students would be able to relate the academic concepts to the practical realities of agriculture, thus contributing to more equitable and balanced educational outcomes.

Analysis 3:

Objective 3-: To identify the influence of Parental Occupation on insights of Agriculture Students towards Sustainable Livelihood.

Ho 3: There is no significant difference in the insights of Agriculture Students towards Sustainable Livelihood with reference to Parental Occupation.

Table 7: Ranks

Ranks				
	Parental Occupation	**N**	**Mean Rank**	**Sum of Ranks**
Student Sustainable Livelihood	Farming	114	109.61	12496.00
	Non-farming	88	90.99	8007.00
	Total	**201**		

Table 8: Test Statistics

	Student Sustainable Livelihood
Mann-Whitney U	4091.000
Wilcoxon W	8007.000
Z	-2.248
Asymp. Sig. (2-tailed)	0.025

Table 9: Parental Occupation-wise Mean Ranks, N and Mann-Whitney U--values of Student Sustainable Livelihood

Variable	**Parental Occupation**	**Mean Ranks**	**N**	**Mann-Whitney U-values**	**Remark**
Student Sustainable Livelihood	Farming	109.61	114	4091.000	P<0.05
	Non-farming	90.99	88		

Table-9 shows that The Mann-Whitney test was used to analyze if the occupation of the parents would bring about differences on agricultural students' perceptions about sustainable livelihoods. The two groups of respondents consisted of 114 students from farmer families and 88 students coming from non-farming households. The mean ranks for the former group were 109.61, while the latter carried a mean rank of 90.99. The Mann-Whitney U-value obtained was 4091.000, Z-score (-2.248), and a two-tailed significance value of 0.025. Since the p-value less than 0.05, it implies that the difference is significant which means that the perceptions can be significant between both groups or is

rejected to assume with the null hypothesis. Results show that students who were brought up by farmers had a more positive and deeper understanding of sustainable livelihood than their counterparts, which could be attributed to the exposure they received while growing up, as well as experiencing practical agricultural practices and the challenges that accompany them. The results demonstrated that parental occupation strongly influenced the attitude and comprehension of students, thus indicating the need for more work-based learning in agricultural education to sensitize students to non-farming households.

Discussion

There was very significant statistical evidence of difference in students' perception towards sustainable livelihood according to parental occupation (U = 4091.000, Z = -2.248, p = 0.025), with students from farming households having an evident higher mean rank (109.61) compared to those from non-farming homes (mean rank of 90.99). Direct engagement with farming sometimes enhances understanding and perception of sustainability. According to Adato and Meinzen-Dick (2002), coupled to the fact that sustainability education is important in household strategies, it also needs to be placed within diverse social and cultural contexts. Quansah et al. (2024) discovered that students from rural farming Ghana were better disposed to adopt sustainable farming but encountered financial barriers that prevented them from adopting such farming practices. The inferences from these findings imply experiential gaps among non-farming students, and thereby, introducing hands-on fieldwork learning in agricultural education can help close the gap in understanding sustainability. This will thus make agricultural education more far-reaching and equitable in experience.

Analysis 4:

Objective-4: To identify the influence of Social Categories on insights of Agriculture Students towards Sustainable Livelihood.

Ho 4: There is no significant difference in the insights of agriculture students towards Sustainable Livelihood with reference to Social Categories.

Table 10: Ranks

Ranks				
	Social Category	**N**	**Mean Rank**	**Sum of Ranks**
Student Sustainable Livelihood	Reserved	116	108.26	12558.00
	Unreserved	86	92.38	7945.00
	Total	**202**		

Table 11: Test Statistics

	Student Sustainable Livelihood
Mann-Whitney U	4204.000
Wilcoxon W	7945.000
Z	-1.910
Asymp. Sig. (2-tailed)	0.056

Table 12: Social Category-wise Mean Ranks, N and Mann-Whitney U--values of Student Sustainable Livelihood

Variable	**Social Category**	**Mean Ranks**	**N**	**Mann-Whitney U-values**	**Remark**
Student Sustainable Livelihood	Reserved	108.26	116	4204.000	P>0.05
	Unreserved	92.38	86		

Table-12 shows that there were 86 unreserved students and 116 reserved students in the sample. Mean rank for unreserved students stands at 92.38, while, for reserved category students, it stands at 108.26. The Mann-Whitney U-value is 4204.000, with a two-tailed p-value of 0.056 and z-equivalent score of -1.910. Given that p is more than 0.05,

the result can therefore not be considered significant. Therefore, we cannot reject the null hypothesis. That social category had a non-significant effect on the perceptions of students on sustainable livelihood. Such results imply that students share approximately similar attitudes and understandings towards sustainable livelihood irrespective of social category. Such similarities may have arisen from the positive results from inclusive practices of effective curricula and equal exposure through agricultural education programs.

Discussion

Results indicate that there is no significant difference statistically between the students' perceptions of sustainable livelihood based on social category (U = 4204.000, Z = -1.910, p = 0.056). The reservation category students do have a slightly higher mean rank (108.26) compared to unreserved students (92.38); however, this difference does not provide enough evidence to reject the null hypothesis. This implies that most of the students regard the sustainable livelihood scenario quite similarly, irrespective of their social category. The findings may be reflective of a more inclusive approach being adopted in agricultural education programs while providing equal exposure for different sections. Alam (2023) Told that while educational policy emphasizes stability, practice varies. However, institutions making an effort to embed sustainability fairly across populations of students can help bridge social divides. Likewise, Adato and Meinzen-Dick (2002) advocated for social context to be introduced into educational and livelihood strategies. In that light, the data suggest that equal access to sustainability education, curriculum content, and field experiences may be leveling the playing field for students across social categories.

Analysis 5:

Objective-5: To identify the influence of Type of Institutions on insights of Agriculture Students towards Sustainable Livelihood.

Null Hypothesis 5: There is no significant difference in the insights of Agriculture Students towards Sustainable Livelihood with reference to Type of Institutions.

Table 13: Ranks

Ranks				
	Type of Institutions	**N**	**Mean Rank**	**Sum of Ranks**
Student Sustainable Livelihood	Central	69	137.11	460.50
	State	133	83.03	11042.50
	Total	**202**		

Table 14: Test Statistics

	Student Sustainable Livelihood
Mann-Whitney U	2131.500
Wilcoxon W	11042.500
Z	-6.242
Asymp. Sig. (2-tailed)	<.001

Table 15: Type of Institutions-wise Mean Ranks, N and Mann-Whitney U--values of Student Sustainable Livelihood

Variable	**Type of Institutions**	**Mean Ranks**	**N**	**Mann Whitney U-values**	**Remark**
Student Sustainable Livelihood	Central	137.11	69	2131.500	P<0.05
	State	83.03	133		

Table-15 shows that the Mann-Whitney U-test was utilized to identify whether pupils' perceptions of sustainable livelihood differed with regard to the type of institutions. A sample of 69 students from central institutions and 133 from state institutions was taken. A statistical difference was indicated with the mean ranks for central institution students at 137.11 and state institution students at 83.03. The p-value of the two-tailed test was found to be <0.001, Z=-6.242, and

U=2131.500; thus, considering $p<0.05$, the difference now considered statistically significant with rejection of the null hypothesis, suggesting that the type of institution considerably influences students' conceptualizations of sustainable living. Central institutions appear to endorse their students to acknowledge or be knowledgeable from exposure to academia with access to modern facilities and hands-on learning experiences. Hence state institutions must keep on with the improvements on the human resources and quality of education delivered in order to promote more equitable learning outcomes.

Discussion

The results reveal a statistically significant association between institutions type and students' conception of a sustainable lifestyle (U=2131.500, Z=-6.242, $p<0.001$). Undoubtedly, the results indicate that mean ranks for Central institution students (137.11) far exceed those of state students (83.03), demonstrating that they are indeed determined by a different kind of institution. Alam (2023) further brought to the fore the contradiction between institutional policy and practice where market-driven paths inhibit real sustainability education. Such could hinder access to the state universities as far as modern pedagogical materials and experiential learning are concerned. Meaning that, based on the above findings, immediate improvement of facilities and quality of teaching will have to be undertaken by the state institutions so as to enhance fairer and effective sustainability education across all types of institutions.

V. FINDING

The research conducted, socio-demographic factors and institutional influences have effects on agricultural students' views on sustainable livelihood. As stated in the findings, one of the significant aspects that shaped perceptions among students was the gender of the students, as the male students were found to show more positive inclination towards it. This may be because they have experienced field work and planning for a livelihood more than their female counterparts. Locale was important as well, where rural students cut across the understanding of sustainable livelihoods better than urban students, indicating that exposure to actual world situations in rural areas enhanced attitudes. Another independent variable was the parental occupation; children from farming backgrounds had a better understanding of sustainability because of their experience in farming operations and related issues. The variable socioeconomic category bore no statistically significant difference, implying that equal exposure to curriculum and policies might fill perception gaps across reserved and unreserved categories. The difference was, however, mostly explained by the type of institutions: the students from central universities understood principles of sustainable lifestyles much better than their state-university counterparts.

VI. CONCLUSION

Sustainable livelihood was perceived differently by agricultural students on the basis of gender, Locale, parental occupation, and institutional type; socioeconomic classes seem to have very little bearing on these perceptions. Male students from rural and farming backgrounds seemed to develop somewhat enhanced perceptions of sustainable development due to their exposure through large-scale and practically oriented experiences. Central University was evaluated as being superior on the understanding aspect, thereby inferring that within the system there were differences of access or otherwise to learning opportunities and resources. These perceptual gaps could then be filled by providing greater visibility of field-based learning, reforming the curriculum, and improving the facilities among the institutions, especially public ones. This project strives to empower the students with theoretical knowledge and practical skills towards advancing sustainable rural development, environmental sustainability, and livelihoods security by educational institutions under the Sustainable Livelihoods and NEP 2020 framework.

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