Reshaping the Future of Agriculture: A Youth and Social Media Perspective

Discussion Paper 6

MANAGE-Centre for Agricultural Extension Innovations, Reforms, and Agripreneurship (CAEIRA)

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About the Publication

The research report is based on the research conducted by Mr. Mohit Kumar as MANAGE Intern under the MANAGE Internship Programme for Post Graduate students of Extension Education.

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Director General's Message

Smt. V. Usha Rani, IAS
Director General, MANAGE

I congratulate Mr. Mohit Kumar, MANAGE intern and Ph.D. Scholar, C. S. Azad University of Agriculture and Technology, Kanpur, for selecting relevant topic of the day "Reshaping the future of agriculture: A youth and social media perspective" and collecting good data from field and analysis.

This paper in detail analyses the impact of youth and social media in agriculture. It is well known fact that the youths are the backbone of the country. In India 2/3rd population are depend upon agriculture so we need more production but what actually happening at the ground level majority of young generation do not want involve in agriculture, reason behind that is parents thoughts that the agriculture is not a profit venture. But we need to change this mind makeup because youths having the potentiality to maximum use of the resources.

We all know that the old age farmers due the lack of education or awareness unable to adopt a new practice/ techniques, if the involvement of the youth will be increase then the present scenario definitely will be change. Youth can use the new techniques, practices and also social media easily. Other hand we need to train

Nowadays social media play a vital role in agriculture through the social media farmers can get any information (like, mandi rates, weather etc.). This study show that the there is lots of gap between farmers and social media farmers having disinterest to social media usage, reason behind that is they do not know how to use social media, there is need that government should take steps to fill this gap like, government can distribute the unused gram samaj land among the youths on rent it can be good way to attract youths in agriculture.

(V.Usha Rani)

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Abstract

Global population is projected to reach 9 billion by 2050 and the number of young people (aged 15 to 24) is also expected to increase to 1.3 billion, accounting for almost 14 percent of the projected global population. Most born in the developing countries of Africa and Asia, where more than half the population still live in rural areas. India is expected to have 34.33 per cent share of youth in the total population by 2020, which is a huge reserve of human resource and potential. In this backdrop, this study was conducted in Kanpur and Lucknow district of Uttar Pradesh State of India selected purposively. A total number of 80 respondents were selected through random sampling from eight sample village panchayats. Data was collected through personal interview with a semi-structured schedule from farming and non-farming youth. Percentage, cumulative frequency and rank were used for calculation and drawing the inferences. Present scenario shows that the agriculture needs that the young work force so involvement of the Youth in agriculture is must, reason behind that the majority of the farmers in Indian context are more than 35 years and they are not able to adopt new technologies and methods of practices due to lack of education and awareness. Most of the farmers preferred traditional methods of farming and were not aware of improved methods. The major problem faced by the farming youth were 'lack of training programme' and one another problem faced by the farming and non-farming youth were lack of timely guidance by the Rural Agricultural Extension Officer and Agriculture Development Officers and they suggested involvement of the youth in policy making. Majority (50%) of the farming youths agreed that social media is very helpful to getting new information related to farming, and it saves the time and money (32.50%). All the farming and non-farming youth were involved in religious groups. Majority of the farming youth (65%) and non-farming youth (22.50%) knew about Krishi Rin Mochan Yojna. Farming and non-farming youth's awareness level about the programme/ policy related to the youth and agriculture were very low; adoption of the policy or programme was also very low due to the lack of awareness and level of education. So there is need to improve the education level and awareness level of the youths through the training and educative programme. Majority (47.50%) of the farming youths were agreed with Social media is very helpful to getting new information related to farming.

Executive summery

India is an agricultural-oriented country, two third of the population here is dependent on agriculture. Youth are the backbone of the country, youth have ability to understand the new innovation and new practices related to the agriculture. Present scenario shows that the agriculture needs the involvement of the new generation. Social media play a vital role to disseminate the information related to the agriculture and new techniques. The use of the social media can be increased in the agriculture by the involvement of the youth because the young generation can easily use the proper use of the social media, our aged farmers don't want the increase of the social media in agriculture they think that the it's time consuming and also having some risks to use. So firstly we need to train them. In other hand lack of education is also a major problem due to this problem majority of the farmers were not interested in the use of social media in agriculture another reason behind that is they don't know proper use of the social media. Majority of the farmers using the traditional methods of the farming due to lack of awareness about the new practices and also they thoughts that the traditional method are easy to use then modern. India is losing more than 2,000 farmers every single day and since 1991, the overall number of farmers has dropped by 15 million. This has several implications for the future of Indian agriculture and India's food security. Young farmers can play an important role in ensuring food security if they are encouraged to get involved in farming and the challenges they face are addressed. Over the past few years, rural youth have been shying away from agriculture and globally there is an increasing interest in finding ways of engaging youth in agriculture.

This study also shows that in the favor of the social media usage in farming the majority (47.50%) of the farming youths were agreed with Social media is very helpful to getting new information related to farming, as followed by the Social media saves the time & money with (30%), respectively. Through the social media youth can get the essential information related to the agriculture commodities and save time and money. But in the research area there is need to train young generation about the social media usage, Govt. can make a policy or programme to train them, definitely it will very helpful for the young generation. Majority of the farming and non-farming youth generally engaged in the chatting, networking and only for the entertainment so it can be said that it is also a problem because they don't search any information related to agriculture.

In favor of the social media usage in the agriculture sometimes fake news dissemination makes a negative perception about the social media usage and it's also increase the gap in usage of social media in agriculture. Most of the farming and non- farming youth generally using the feature phone it's also be a reason behind that the usage of social media in agriculture, so firstly we need to train them how they can use the social media in agriculture. Amongst all the 6 categories of constraints Lack of training programme was perceived as a major constraints faced by the farming youths with top priority (rank 1st). Of the 37 suggestions made by farming youth, 'Youth's involvement in policy making' was overall ranked 1st, if the involvement of the youth will increase

in the policy making then the involvement of the youths will be increase and other youths will be motivated. Majority of the farming youth expressed the train extension officials on how to engage directly with young people online through social media were good start up for the involvation of the youth in the farming ranked first.

Introduction

> Youth below the age of 25 are the most powerful resources on the earth, under the earth and above the earth. We have to empower them through value-based education and leadership.
>
> **Dr. A.P.J. Abdul Kalam Azad**

Conventionally, the period from adolescence to middle age is termed as youth. Global population is projected to reach 9 billion by 2050. The number of young people (aged 15 to 24) is also expected to increase to 1.3 billion by 2050, accounting for almost 14 percent of the projected global population. Most were born in the developing countries of Africa and Asia, where more than half the population still live in rural areas (UNDESA, 2011). Rural youth continue to face challenges related to unemployment, underemployment and poverty. Despite the agricultural sector's ample potential to provide income-generating opportunities for rural youth, challenges related specifically to youth participation in this sector are more and importantly, options for overcoming them are not extensively documented. Furthermore, statistics on rural youth are often lacking, as data are rarely disaggregated by important factors such as age, sex and geographical location.

India accounts for a substantial share of the world population. By 2010, India accounted for 17.8 per cent of the world population, an increase of 2.7 per cent in its share since 1970. This growth is projected to continue even by 2030. India's share in the decennial addition to global population increased from 18.13 per cent during 1970-1980 to 22.87 per cent during 1990-2000 and is projected to decline to 18.69 per cent by 2020-2030.

The fertility pattern of the developed regions of the world, consisting of Europe and North America, has caused the age structure of the population to shift upward, putting pressure on these nations to be dependent on the youthful nations from other parts of the world for labor supply. This decline in youth in the age group of 15-34, is seen as prominent characteristic of developed regions, comprising of Europe and North America since 1980. The regularity and efficiency of census in India adds rigor to the measurement of youth in India. The decennial enumeration through population census throws up consistent estimate of the youth of India. As per India's Census 2011, youth population (15-24 years) in India constitutes one-fifth (19.1 per cent) of India's total population.

India is expected to have 34.33 per cent share of youth in the total population by 2020. The share reached its maximum of 35.11 per cent in the year 2010, according to the annual growth rate. China in contrast, is seen to have reached the highest share in the year 1990 at 38.28 per cent and is projected to have the share of youth force shrinking to 27.62 per cent by the year 2020, a situation which Japan has experienced in around 2000.

It is observed that India has the relative advantage at present over other countries in terms of distribution of youth population. India's advantage in young population is also evident when it

is compared with other Asian countries. India is seen to remain younger longer than China and Indonesia, the two major countries other than India which determine the demographic features of Asia. These three countries together accounted for 68 per cent of the population of Asia in the year 2010 and the share of Asia itself is about 60 per cent in world population.

The proportion of female in the youth age bracket, is generally lower, on account of better longitivity of female compared to male. The difference on account of gender is seen to be higher in developed region (UNESCO, 2017). In case of India, the gender differentials are less pronounced than in other countries. The shifts in age distribution of population to higher age groups results in lower share for the age group 15-34 years, which in itself is an indication of increasing longitivity. The widening differences on account of gender, characterizes such a situation, with the general population ageing and female doing more, so depicting still lower share of youth among the female. Coincidently, in case of India, the proximity of share of youth among male and female is indicative of prevalence of healthy fertility levels in the general population and net addition to the population pool.

It is widely documented that education is key to overcoming development challenges in rural areas. There is not only a direct link between food security and education of rural children, but it has also been shown that basic numeracy and literacy skills help improve farmers' livelihoods (FAO, 2007). Access to knowledge and information by the youth is crucial for addressing the main challenges they face in agriculture. In order for rural youth to shape agricultural policies affecting them directly, in terms of access to markets and finances, as well as green jobs and land, they need to receive appropriate information and education. While this is true in developed and developing countries alike, it is of particular concern in the latter, where young rural inhabitants may lack access to even the most rudimentary formal education and where educational institutions are often less developed. Formal primary and secondary education can provide young people with basic numeracy and literacy, managerial and business skills, and introduce youth to agriculture. Meanwhile, non-formal education (including vocational training and extension services) and tertiary agricultural education can offer youth more specific knowledge related to agriculture. In developing countries, access to information and education is often worse in rural areas than in urban areas and this discrepancy is observable as early as primary school. In many rural areas of developing countries, children are hungry and do not have the energy to attend school or to easily absorb the information provided. During seasonal peaks in the agricultural cycle, there can be labor shortage and parents may see no other option than letting their children contribute to household and agricultural activities instead of attending school. The physical infrastructure of rural schools is often bad and classroom materials are sometimes lacking. Schools can be far away from rural communities making access difficult for rural children (FAO, 2009).

India is losing more than 2,000 farmers every single day and since 1991, the overall number of farmers has dropped by 15 million (Sainath, 2013). This has several implications for the future of Indian agriculture and India's food security. Young farmers can play an important role in ensuring food security if they are encouraged to get involved in farming and the challenges they face are

addressed. Over the past few years, rural youth have been shying away from agriculture and globally there is an increasing interest in finding ways of engaging youth in agriculture (IFAD, 2012; Paisley, 2013).

Social media is all about people. It is a way to build relationships, share information and connect with diverse audience of people; you may never meet in real life. So interacting on social media, whether it is Twitter, Facebook, or Pinterest, allows you to develop a community and share your story in a way that was never possible before now. The general public still has faith in farmers and ranchers, but some are still wary of modern farm practices. It is important that agriculture unites and has a chance to tell its side of the story.

Social media is one way to make ours voice heard. Social media has the potential to reach farm families to educate them about children health and safety. It offers advantages over traditional approaches because of the shorter time between creation and distribution and because of the greater reach and engagement possible. Recommendations are provided for how government agencies and the private sector can learn about and use social media to promote health and safety for children, as a supplement to traditional approaches. Social media usage continues to grow around the world, with global penetration rates now in excess of 50 per cent. "Facebook continues to dominate the global landscape, accounting for almost 2 billion users and is still adding around half a million new user every day or almost 6 new user every second," informed Simon Kemp on We Are Social blog (Global Digital Statshot, 2017). Facebook, India's most popular social network has last reported to have more than 241 million (17.95%) monthly active users While, Facebook and WhatsApps keep dominating the space, the growth of Google+ is interesting at a time when it is dismantling itself. Globally mobile is driving Facebook's growth and revenues.

Uttar Pradesh is the most populous state in India as well as the most populous country subdivision in the world. The densely populated state, located in the northern region of the Indian subcontinent, has over 200 million inhabitants and youth population (15-24 years) is near about 41 million.

The social media sites essentially poses a virtual representation of a user, called a profile. This profile often features the user's basic information, such as age, location and sex, as well information regarding one's hobbies, such as favorite movies, musical artists and books. The most popular social networking services include MySpace, Facebook, and Twitter. Many youth begin and end their day by checking posts in these social media sites. Decisions about how youth identify themselves, the feedback received on these decisions and how they view their own profile in comparison to others' profiles are potential factors in individual identity. The hyper-personal model for computer-mediated communication, for example, posts that youth engage in selective self-presentations online; moreover, the feedback from these presentations may in turn alter individuals' self-perceptions (Walther, 2011). Also, the Internet makes it feasible for some youth to affiliate with other likeminded individuals online, when such opportunities may not be possible in face-to-face interactions. That is, youth can join "groups" reflecting aspects of their identity that they wish to explore or deepen and thereby foster a

group identity. The youth can explore and expand their ideas and interests into new arenas through the Internet, e.g., communicating with others from more diverse backgrounds and expanding into new intellectual, political and social networks that create opportunities for transnational and global connections (Markstrom,2011). Such connections can broaden as well as deepen self-identity, while at the same time enhance feelings of belongingness and affiliation. Participation of rural youth in all dimensions of developmental process is essential in order to bring change in socio-economic status and in improving the quality of life for every individual of the community. Hence, much attention is needed to mould the personality of rural youth.

Therefore the primary need of the day is to develop healthy and strong youth for the future welfare of the country. The rural youth comprising males and females are the active partners in performing various agricultural activities, and as an "Agent of Change", they can help in the dissemination and subsequent adoption' process of modem agricultural techniques and practices among rural people. Hence the present study, "Reshaping the future of agriculture: A youth and social media perspective'' was evaluated with the following objectives:

- Identification of thrust area and policy support in favour of youth in agriculture
- Analyse benefits of social media and perceptions of youths about extent of usage in farming.

Exploring Similar Research

Singh (1987) found that 15.3 per cent rural youth belonged to higher caste, 72.4 per cent backward caste and rest 12.4 per cent came under scheduled caste. Higher percentage of rural youth did not possess higher qualification because no facility is available for higher education in rural areas. Majority of rural youth (81.2%) were married, whereas 9.4 per cent married without gauna (tradition) higher percentage of the rural youth (88.8%) belonged to joint family, While 11.2 percent belonged to nuclear families. He also found that 62.3 per cent of the rural youth were belonging to medium size of family whereas 14.9 per cent were of small and 22.8 per cent were the member of very large families. About 8.2 percent rural youth have high qualification, 44.1 percent has medium and 47.6 percent had low qualification. Rural youth do not possess higher qualification because from sociological point of view, no facility is available in rural area.

The policies and programmes of Nigeria have not taken into the account, the constraints faced by the youths in development of agriculture, based on the fruitful information gathered (Anjani, 2015) from Nigeria. The Majority of agricultural policies and programmes formulated in Nigeria do not consider constraints confronting the youth involved in agricultural development. Major problems encountered by the youth in agriculture include lack of interest as a result of drudgery in farm operations, lack of competitive market for agricultural products, lack of start-up capital, inadequate labor saving technologies for ease of operations and inadequate finance/credit facilities, among others. In view of this, the Nigerian government has introduced several agricultural programmes such as Youth Employment in Agriculture Programme (YEAP) aimed at reducing poverty and vulnerability. However, efforts made in reviving agriculture through rural youth programmes have not given the

desired results. Governments at various levels are encouraged to promote youths in agriculture through creating awareness on YEAP to enable young people to participate actively for enhanced agricultural productivity, increased food security as well as empowering them economically.

Desai (1997) found that non availability of implements (45.94%) inadequate capital for the purchase of seeds and fertilizers (31.75%) and non-availability of improved seeds in time (31.75%) were the main constraints pertaining to the availability of resources. Other constraints were lack of knowledge about profitable crop rotation (26.35%) and labor shortage for performing timely operations (24.33%). It was also stated that respondent faces constraints like non availability of plant protection - pesticides/fungicides (22.97 %). Very few contact farmers (14.86 %) experienced. the constraints like non-availability of timely guidance and insufficient information about the agricultural technology communicated by VLWs (4.05 %).

Abbe (2015) provided an insight of youth participation in indigenous farm practices of vegetable production in Oyo State, Nigeria. The study specifically identified various indigenous farm practices that youth engaged in and their level of participation. There exists positive and significant correlation between level of participation and years of formal schooling, compatibility, cosmopoliteness, resources availability, and openness and user friendliness.

There also existed strong association between level of perception of youths towards organic farming practices for indigenous vegetables and gender, land acquisition and marital status. The study concluded that youth had been going through a process of socialization right from their early age for the skill acquisitions in some indigenous farm practices that are part of the farm operations in the study area. This could be further reinforced by formal education and farming experience in their latter age for a sustainable agricultural development. Another perspective of this concept is that there are various problems and constraints associated with the role of youth in agriculture.

The introduction of social media and web 2.0 applications have opened up a platform that agricultural extension officer's, farmers, agricultural institutions and non-governmental institutions utilize to disseminate and exchange agricultural information (Thomas, 2016). The objective of the study was to assess the use of social media as a source of agricultural information with reference to farmers in Kesses district. The study adopted a descriptive survey and the major data collection tools were interviews of farmers who use social media platforms.

Majority of farmers approach the use of social media in agricultural information seeking, with a positive attitude, pointing to the assumption that social media is largely beneficial and convenient as a source of agricultural information. Among the most common challenges faced are the poor network access, power outages and costly charges when accessing the internet. This study recommends that information centers can be established in Kesses district whereby farmers can obtain agricultural information online and that social media should be fully utilized to provide feedback, complement extension programs, access local and international markets, and complement communication campaigns whose goal is to bring about agricultural development.

The realization of agricultural transformation agenda in Nigeria could be hampered due to poor motivation, disposition and participation of youths in agriculture-based livelihoods (Nwaogwugwu and Obele, 2017). The study analyzed the factors limiting youth participation in agriculture-based livelihood activities in Eleme Local Government Area of the Niger Delta, Nigeria. The objectives of the study were to examine the socio-demographic characteristics of the youths, identify the predominant agriculture-based livelihood activities that youths participate in and analyze the factors limiting youth participation in agriculture-based livelihood activities in the study area.

Results of the above study showed that majority of the respondents are males (about 64%); about 39 per cent falls within the age of 26 and 30 years; about 54 per cent of them are single; while about 29 per cent had secondary education. The predominant agriculture-based livelihood activities identified in the study area includes: crop farming, livestock farming, fish farming, fuel wood gathering and sales, farm labor services, and agriculture product processing.

Factor analysis result showed 7 major factor loading that limit youth participation in agriculture-based livelihood activities in the study area and they are, inadequate social values, inadequate agricultural support services, environment related land degradation factors, inadequate agricultural policies, industrialization, inadequate arable land and poor health conditions. It is recommended that agricultural credit facilities should be made available to young people who want to venture into agriculture-based livelihood activities through banks and other micro-credit agencies.

However, another study reveals that, the assessment of youth involvement in agricultural production activities in Obi Local Government Area of Nasarawa State, Nigeria (Girei, 2016). Results showed that majority (52%) of the respondents had positive a perception towards agricultural production as they perceived that agriculture does not reduce one's status in the society, and agriculture is also practiced by school dropouts. Apart from output marketing (1.7%), goat rearing (1.7%) and swine production (1.7%), in which only a small per cent of the population is involved, while most of the respondents (52.2%) were involved in crop production and farm labor as a means of livelihood. It was also shown that most of the respondents (32%) have insufficient land, lack of incentive from government and lack of infrastructure in rural areas as major constraints.

The study recommended that the youth's knowledge of basic farming activities through establishment of Agricultural Training Centers should be enhanced and credit facilities for youths in agriculture should be provided through micro finance and commercial banks. Singh (1996) studied the problem perceived by rural youth with reference to agriculture in Guwahati (Assam) and reported that rural youth had expressed unemployment and unavailability of necessary inputs (Rank I), followed by lack of training, high risk in agriculture (Rank II), low educational status and lack of interest of A.E.O./ V.L.E.W.(Rank III), lack of leadership and non-recognition of problems in farming (Rank IV),and lack of innovativeness and communication facilities in the area (Rank V) as their major problems. In the context of the study, Lowal, 2009 analyzed the technical efficiency of the Youth-in-Agriculture Programme in Ondo State. Random sampling technique was used in selecting 110 respondents

distributed across 23 farm locations for the programme in the state. Stochastic frontier model was employed in the study. The study shows that efficiency differentials exist among the youths in the programme.

Furthermore, land, labor, herbicide and number of cassava cutting are the major factors that affect output of the youths' production in the programme. The technical efficiency of the youth ranges from 33 to 96 per cent with a mean of 85 per cent. The study also shows that household size, years of participation in youth-in-agriculture programme, usage of extension information and level of education, are significant factors ($p < 0.10$) that account for the observed variation in efficiency among the participants. To achieve increased efficiency of production by the participants, this study recommends the need for farm expansion, increased access to herbicides and improved cassava cuttings as well as effective training for the participants.

Another study on the empowerment of Youths in Rural Areas through Agricultural Development Programme observes implications for Poverty Reduction in Nigeria (Anjani, 2015). Majority of the agricultural policies and programmes formulated in Nigeria do not consider constraints confronting the youth involved in agricultural development. Major problems encountered by the youth in agriculture includes, lack of interest in agriculture as a result of drudgery in farm operations, lack of competitive market for agricultural products, lack of start-up capital, inadequate labor saving technologies for ease of operations, inadequate finance/credit facilities, etc., among others. As a result, they are faced with serious economic challenges which results in undue poverty and vulnerability. This has also made youth seek employment in other sectors of the economy in order to empower themselves economically, resulting in rural-urban migration and leaving the bulk of agricultural production in the hands of old people who often produce only at a subsistence level.

In view of this, the Nigerian government has introduced several agricultural programmes such as Youth Employment in Agriculture Programme (YEAP) aimed at reducing poverty and vulnerability. However, efforts made in reviving agriculture through rural youth programmes have not given the desired results. Governments at various levels are encouraged to promote youth in agriculture through creating awareness on YEAP to enable young people to know about the programme and participate actively for enhanced agricultural productivity, increased food security, as well as empowering them economically.

Social media is any website that allows for social interaction which includes social networking sites such as Facebook, MySpace and Twitter; gaming sites such as Club Penguin, Second Life and the Sims; and video sites such as YouTube and blogs (O'Keeffe, 2011). Social media acts as a communication tool that allows youth to join online conversation. It also allows youth to access different kinds of videos on web and play online game (Osterrieder, 2013).

In a world of technology, social media such as FaceBook, Twitter and LinkedIn are becoming more and more popular. Based on a research conducted by Arpan, Kumar and Rekha (2016), the use

of social networking sites among young adult internet users rises from 9 to 90 per cent between 2005 and 2013. Social media has become a part of the daily life for an increasing number of youth. According to Laird (2012), youth spent at least 10.6 billion minutes each day surfing the sites which do not include mobile usage. In addition, according to Bhavana (2014), 93 per cent teens spend a minimum of 6 hours per day on social media. These statistics show that social media plays an important role in the youth's daily life.

The research shows that social media has brought a lot of positive impact to the youth. For example, social media has brought youth from across the globe closer to one another and easier to stay connected (Siddiqui and Singh, 2016). Nonetheless, social media has also brought some negative impacts to youth and this paper will stress more on the study of negative impacts of youth in term of academic performance, social interaction, health, behavior standards, security, privacy and texting. Social media will decrease youth's academic performance. According to Barber (1997), 86 per cent of teachers, computer coordinators and librarians believe that the use of internet by youth does not increase their academic. Youth who are addicted to social media may spend immeasurable hours on social sites and it affects their concentration and focus in particular tasks (Bhavana, 2014). For example, the uses of social media such as MySpace, Twitter, YouTube, and Facebook may lead to distraction of students in class. Based on a survey conducted by McCoy (2013), out of 777 students in six U.S. universities, more than 80 per cent of the respondents indicated that using phone for non-class purposes such as social networking will make them pay less attention to the class and miss some instructions. Therefore, students will lack understanding about the topic delivered by the lecturers and it affects the students' academic performances. Nonetheless, it is also argued that by accessing social media, youth can easily communicate with each other to do homework and group projects (Palfrey, 2010) and to gather outside of class for the purpose of collaborating and exchanging ideas about assignments (O'Keeffe, 2011).

However, based on a survey conducted by Tayseer (2014), on 30 students, a vast majority of the respondents used social sites for social purposes, while only 18 per cent of them used these sites for academic purpose. This shows that social media does not really help in youth's academic tasks. As a result, social media has a huge amount of negative influence on the youth's academic performances. Social media sites (SMSs) are increasingly attracting the attention of academic and industry researchers intrigued by their affordances and reach. This special theme section of the Journal of Computer-Mediated Communication brings together scholarship on these emergent phenomena. The introductory article describes features of SMSs and proposes a comprehensive definition. The perspectives on the history of such sites are presented so as to discuss key changes and developments that have been recurring in the social media for ages. After briefly summarizing existing scholarships concerning SMSs, the articles are discussed in this special section and to conclude, topics for future research were considered (Boyd and Ellison, 2007). In this context, youth participation in agricultural programmes and other agriculture related activities depends upon the interest of the volunteers (Latopa, 2015).

Agriculture is core to every nation's development, especially in this 21st century; hence, the investment on it, by both developed and the developing countries (Naamwintome and Bagson, 2013). In a developing country like Ghana, more people are involved in agriculture, but attract limited investment. Youth participation in agriculture for its sustained contribution to a nation's development is crucial, but this is not ascertained in the study area. This paper discusses the findings of a study, which was a limited youth participation in agriculture. The survey was carried out in the Sissala area of Ghana, comprising of the Sissala East and Sissala West districts. Multi-stage sampling was employed at the district, area council and then community levels.

The study revealed that there is a movement away from farming, culminating to limited youth participation in agriculture as a result of limited youth control on resources or products even though farming is profitable. It is recommended on the basis of this, that an enabling environment be created, for instance, resources such as capital, land and products from farming should be controlled by the youth, since this will motivate and attract them to the profit thereof.

Statement of Oumar Ba, 31 year old cattle farmer from Namarel (Africa):

"I think that there are two reasons why many young Senegalese do not choose to work in agriculture: lack of practical training and negative perceptions. Many of those who learn how to farm mainly learn from their elders and family, and don't have access to trainings on modern agricultural techniques. This limits their abilities and yields, as well as their vision of what farming or raising livestock could be on a larger scale than a family farm. If you train young people in livestock farming and they managed their herds well with two live births per head per year, they could easily make a good living. I have a friend that moved back from Italy and started poultry farming and now he is making a good salary, owns a car and employs other youth.

John Njue is the field officer at the Maarifa Centre (tele-centre) in Kyuso, one of the driest parts of eastern Kenya, where the Centre acts as a referral point for people interested in developmental content. He is not directly involved in any agricultural enterprise. "I admire farming, but not the kind our forefathers practiced. The reason why I don't farm is because my parents and neighbors would not listen to my views about the need to practice more modern farming techniques and trying to farm as a business." According to him, most young people don't engage in agriculture because of a lack of support from people around them. He feels that it would be beneficial if the government employed young agricultural extension officers. This would make it easier to communicate to young farmers and help them start an agricultural business, rather than continuing to see and practice farming as a subsistence activity. He also observes that many extension officers do not use modern technologies in their training and thinks that this is a deterrent to youth participation (Mugo and Vermeulen, 2012).

Researching Youth Disinterest in Agriculture in Peninsular India: Evidences from VDSA Villages- A case study

By 2050, the projected global population will be over 9 billion. Can the Earth sustain itself with the current agricultural practices? The answer is no. The world faces issues of extreme poverty and the situation is becoming more serious and growing to more places globally. People are turning to technologies for answers. However, the answer can be found in this quote: "Cultivators of the earth are the most valuable citizens. They are the most vigorous, independent, virtuous and they are tied to their country." –Thomas Jefferson.

The world needs to invest more on farmers; especially focus on the youth. India is experiencing severe rises in average farmer age. But with the energy of youth and willingness to accept technologies, 9 billion isn't such an intimidating number.

The purpose of this study was to research why youth are still discouraged to venture into agriculture. The above study was done by the following methods such as quantitative analysis, village dynamic studies database, and qualitative analysis and group discussions. In this way, this study has shed light on some major reasons as to why the youth were not interested in agriculture and they are, youth migration to cities; lack of employment in agriculture, attraction of higher salaries and less risky jobs.

This study was also done to know the participation and decision making of youth in agriculture by Nashi (2011). Majority (80%) of the rural male youth participated in ploughing, while 100 per cent of the rural female youth self-participated in all activities. Majority (68.33%) of the youth needed training in 'identification of pests and diseases'. Majority (65%) of the rural youth expressed lack of awareness as their major problem (latest technology, varieties etc.). One third (34.17%) of the rural youth had education up to middle school. Majority (56.67% and 58.33%) of the rural male and female youth belonged to nuclear family. Both rural male (53.33%) and female (43.33%) youth had family size of 5 to 8 members. Majority (65%) of the respondents belonged to forward caste, medium experience in farming (70%), nearly half of the respondents had high annual income (49.17%) and was medium farm families (48.33%). Majority (94.17%) of the families of rural youth possessed television.

Among them 75.22 per cent viewed commercial programmes daily, 35 per cent of the respondents had medium innovativeness, 34.17 per cent of the respondents had high level of aspiration. The rural male youth are having higher innovativeness and more aspiration level than rural female youths. And study by Ahire, (2001) also studied the participation of youth involvement in farm practices and observed that participation of rural youth in farm activities was varying.

The activities in which youth 'always' participated were hoeing (93.42%), irrigation to crop (92.10%), spraying of crop (90.79%), supervision (89.47%), help in harvesting and carting agricultural produce (84.21%), sowing (80.26%), culture treatment to seed (77.63%), supervision of weeding (75%) and in selection of varieties of different crops (69.73%). The farm activities in which youth participation was 'sometimes' were mixing fertilizers (64.48%), threshing (38.16%), selection of hybrids (30.27%) and straight varieties of crops (27.63%),ploughing of land (23.68%), supervision of weeding (22.36%) and sowing (19.74%). The activities in which youths 'never' participated were scouting (92.10%), cleaning of land (52.63%), ploughing (47.37%), and spreading of compost (15.79%).

Moreover, Prashanthi (2013) observed that the mobile phone is considered to be one of the greatest and most important inventions of all times, because it enabled people to communicate without wires and connects people from all continents into one global community. Mobile phones have changed the life of people considerably, as it enables one to communicate any time and from any place. With the help of mobile phones, such spheres as business trade began to function more effectively and productively.

Mobile phones were introduced a decade ago in 1995-96 in India and since then, the increase in the number of mobile phones has been phenomenal in comparison to land lines. The Internet is a vital part of the education process; resources for learning and educating are implemented into lesson plans and homework every day. Students and teachers can access unlimited amounts of information to broaden their education. With Internet access in colleges, there is almost no limit to what students can learn. Traditional teaching methods might not be the norm anymore.

Internet usage in India

India has a population of 1.2 billion and 934.1 million (78%) have mobiles and 137 million (11%) are internet users. 60.5 million (5%) are on social networks. 56 percent are under the age of 30 and 30 percent are under the age of 15years.What this says about the future is that, 10 years from now there will be 26% of the population (factoring growth at 1.33%) which would be between the age of 15-25, reducing our new available work force to just 1/4th of the population. Adolescents are using mobile phone differently from adults – for example, they use for texting more than talking. Adolescents are also rapidly shifting towards using mobile phones as multimedia devices. This is because mobiles can be used as web browsers, cameras, photo albums, diaries, address books, MP3 players, game consoles and more (Prashanthi, 2013)

Many adolescents use the internet to talk with friends, and to share their ideas and creative outputs. It's an important way for teenagers to connect with each other, socialize and feel part of a peer group. Exploratory research design was adopted for the present study. Hyderabad was purposively selected for conducting the study. The sample of the study was 200 adolescents between the age groups of 18-19 and 20-21 years. The data was collected by using the questionnaire.

Another study observed how the Government of Indonesia attracting the young generation to engage in agriculture. Susilowati (2007) found that in the last ten years there has been a shift in the structure of agricultural labor in Indonesia, where the number of young farmers was declining, while the number of aging farmers was increasing. The factors that affected the farmers' interest on working in agriculture were mainly land tenure and earning prospects from the agricultural sector. To attract youth to work in agriculture sector, many countries are providing incentives, particularly to improve access to capital and land.

Learning from the experience of these countries, the Government of Indonesia, particularly the Ministry of Agriculture, should give a priority to young farmers through an incentive policy in order to attract youth to agriculture and retain young farmers in the sector. To assure youth involvement in agriculture, the policies required are not only in the form of incentives but also the overall rural industrialization policy, through rural agro-industry development, innovation, investment, infrastructure and strengthening agricultural institutions from upstream to downstream.

The Impact of Social Media on Youth: A Case Study of Bahawalpur City

Social media sites provide a platform for discussion on burning issues that has been overlooked in today's scenario (Sabir, 2014). This research was conducted to check the impact of social media sites in the changing the mind-set of youth.

Majority of the respondents shared their agreements with these influences (eg. positive or negative) of social media. Respondents opine Facebook as their favorite social media form, followed by Skype as the second most popular social media. About 46 percent respondents connect social media in educational institution computer labs while mainstream responded to it as informative links share. Main problems faced by respondents during social media use are, unwanted messages. Social media is beneficial for youth in the field of education, while the deterioration of social norms in the social media is affecting the youth negatively in their studies. Social media promotes unethical pictures, video clips and images among youth, anti-religious post and links create hatred among peoples of different communities, negative use of social media is deteriorating relationship among countries, while social media is playing a key role in creating political awareness among the youth.

This study by Bahman,(2010) was conducted to know whether differences between rural youth and urban youth exists on acceptance attitude and knowledge, towards contract farming and this study was conducted in Malaysia. It is very important for the development in Malaysia. Contract farming is one of the agricultural activities which is still in its infancy stage in Malaysia that offers huge benefits to interested parties.

Based on the results, it can be concluded that contract farming can be a mechanism to attract more urban and rural youth to be part of the agriculture community in Malaysia. To do this, more promotion and information on contract farming should be exposed to the youth. It is recommended that agriculture agencies and agriculture related universities take the responsibility of introducing the concept of contract farming to the youth.

Land Ownership for Youth in Agriculture: A case study of Bolivia, Brazil and Liberia

The rapidly growing population of the world has incited concerns from development practitioners on world hunger and food insecurity; and the importance of food production is rising (Williams and Ocha, 2016). Global agricultural innovations in the past years, though they have yielded great results, are still not satisfactory in ensuring sustainable food production. Another important aspect of agriculture sustainability where inequality is widespread, despite numerous reforms, is land access and ownership.

Women have been reported as the main actors in small scale agriculture in developing countries. They feed their families and ensure food availability, but inequalities in land access are limiting and hampering their efforts. Youth on the other hand, are the future of the agriculture sector as farmers and extension workers in most developing countries are ageing and there is a desperate need for young minds and strength in the sector.

However, they tend to shy away from agriculture due to the inequalities. The massive exodus of youth from rural communities into urban areas and across oceans has become a cause for concern as urban areas are flocked with people leading to rapid slum and shanty town development, overpopulation in urban areas, pollution and huge unemployment. Youth from developing countries are also perishing in high seas and perilous journeys through the desert and other dangerous roads to reach developed countries. Global development projects are turning to rural development and engagement of youth in agriculture.

Smallholder farming and youth's aspirations: Case study in Bacninh province, Red River Delta, Vietnam

Smallholder farming which is the important source of employment as well as food security, has become a priority on the development agenda, focusing attention on the next generation of farmers. However, emerging research shows that even though youth have potential qualities to promote agriculture, most of them appear reluctant to enter farming.

The study aimed at finding out the determinants which influence rural youth participation in agriculture and identified conditions under which capable youth are interested in agriculture. Based on the empirical findings in a village in Bacninh province, through systematic survey and interviews, the study revealed that age, sex, marital status, education level, family background, as well as the ability of rural credit facilities and land access are important factors associated with rural youth's participation in agricultural activities. Furthermore, the perception on agriculture as heavy work, low income and low status made farming an unattractive prospect for many. The analysis suggests that factors such as new information, communication technologies and associated desire for consumption, have influence on the decisions about farming choice. Moreover, majority of the respondents were attracted to invest independently in their own farms rather than being employed as agricultural labor or involved in family farms.

RESEARCH METHODOLOGY

1. Locale of the study

Uttar Pradesh State is selected purposely for the study. The criteria for the selection were based on the youth population. Uttar Pradesh is one of the most youth populous states of India.

2. Sampling procedure

- **Selection of districts:** Lucknow and Kanpur districts ranks first and second in terms of population in Uttar Pradesh state and hence, these two districts were selected purposely for the study. (As per 2011census)
- **Selection of the blocks:** Selection of the blocks were through random sampling and four blocks were selected for the study namely Kalyanpur, Bidhunu in Kanpur and Kakori, Mohanlalganj in Lucknow districts and from every block, two (two) gram panchayats were selected for the study.
- S**election of respondents:** A sample size of 80 was selected using simple random sampling method. In this study two types of respondents were selected i.e., farming youth and non-farming youth.
- **Procedure of data collection:** A semi-structured interview schedule for data collection was designed and pretested by interviewing few respondents or farm families to test its validity and modify its structure as pre the need, if any. Thereafter, the data were gathered with the help of semi-structured schedule by employing personal interview technique.

3. Sampling Design

For the purpose of this study mixed method was used that involves initial rapport building, preliminary qualitative and quantitative study in the geographical area of the target population. A semi-structured interview schedule was prepared to study the youth and social media involvement in agriculture. Other than this, focused group discussion (FGD) and observation methods were also used to support the information.

Table 1. Sampling design and respondents selection

S.No.	Unit	Particular	Design
1.	Title	"Reshaping the future of agriculture: A youth and social media perspective"	Purposively
2.	District	Kanpur and Lucknow	Purposively
3.	Sample Block (4)	2 blocks in each districts 1. Kanpur district:- Kalyanpur and Bidhunu block 2. Lucknow district:- Kakori and Mohanlalganj	Purposively

4.	Village pancha-yats (8)	2 village Panchayat in each blocks 1. Kalyanpur:- Binaur and Sachendi 2. Bidhunu:- Kathara and Ramaipur 3. Kakori:- Amethia and Saraipremraj 4. Mohanlalganj:- Mau and Dalauna	Purposively
5.	Respondents	10 respondents/village Panchayat in which the respondents were divided in two categories- 1. Farming youth 2. Non-farming youth 5- farming youth 5- non-farming youth	Randomly
Total respondents		**A total sample size 80 respondents**	

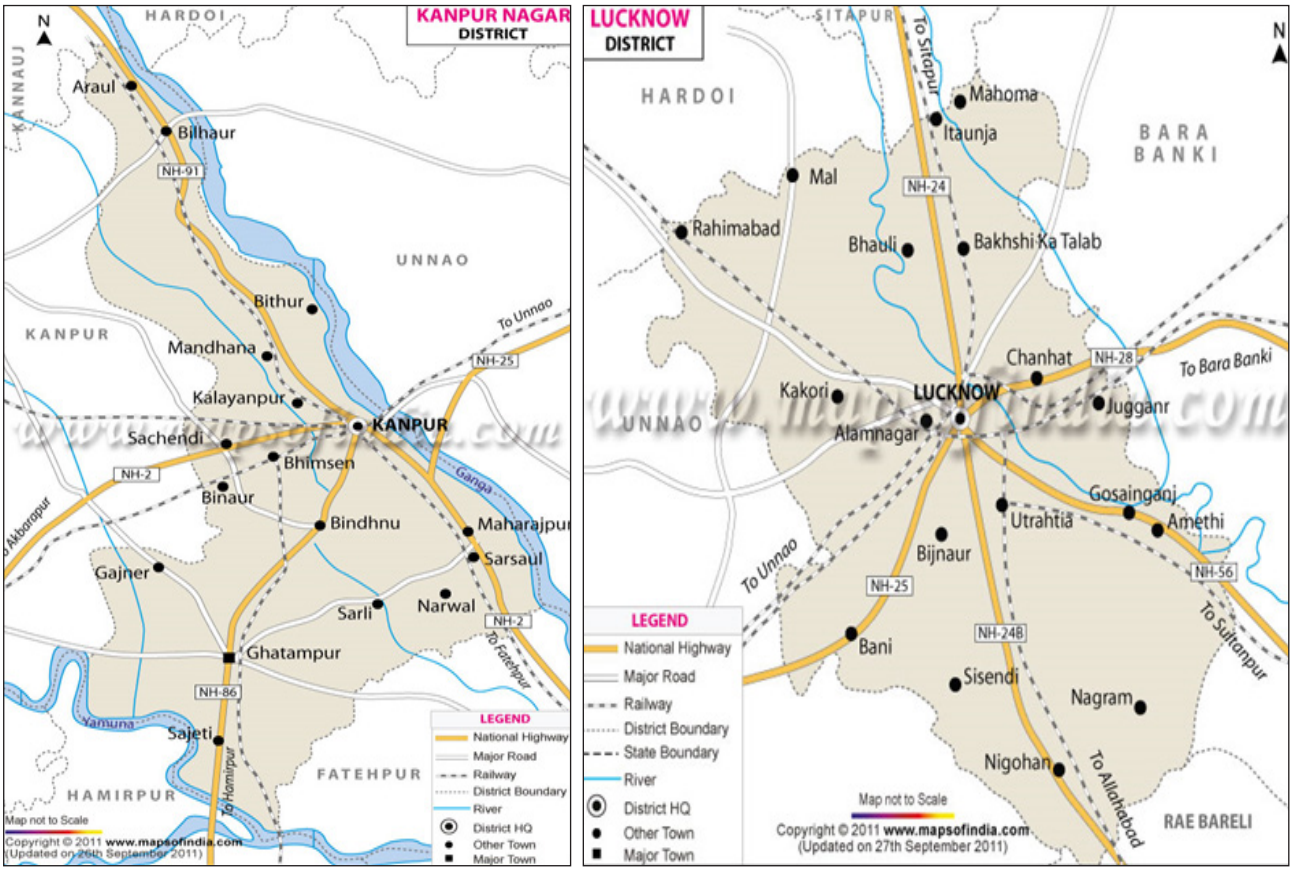

Fig.1 Maps of the locale

4. Identification of thrust areas and policy support in favour of Youth in Agriculture

- **Thrust area:** Agriculture consists of different thrust areas which include method of farming, allied activities, farming, research and development, services, advocacy, social work, agri-business, agricultural development, consultancy etc. In this context, an attempt has been made to develop a scale that enable the youth to mention whether they are interested or not interested, as well

as to understand their decision making with regard to the thrust areas listed in the interview schedule and the causes/reasons for the same.

- **Youth involvement in agricultural activities:** It is referred to the actual participation in farm and farm related activities by the youth in terms of common activities and seasonal activities. The schedule consisted of common and seasonal activities. Against each activity, it has been designed to obtain responses as all-time, sometime and never participate, and the frequency and per cent analysis will be used for categorization based on the above criteria.
- **Training needs:** Training is an important educational tool which can be effectively used to improve, refresh or to update the farmers' knowledge. The training needs in agricultural activities were assessed using a three point continuum namely; most needed, needed and not needed, in specific areas. Then frequency and percentage were calculated for each of the training needs.
- **Policy/ programme support in favour of youth:** In this context, a comprehensive list of current policies/development programmes of the government was prepared, so as to get the response of the respondents about the schemes of the government and find out the knowledge level of the respondents about their benefits. Therefore, the list was useful in knowing the impact of aforesaid programmes/policies on youths. This study may reveal ground reality as to what magnitude the programmes and policies have impacted farming youth and non-farming youth in enhancing the livelihood of their lives.
- **Youth involvement in community based educational programme:** In this context, a list of community based programmes have been prepared. Besides these, if any other programmes/ policies are in practice, they were also added at the time of data collection.
- **Challenges faced by youths in agriculture:** This study has made use of the above statement to get responses from the youth, directly about the challenges faced by them in agriculture and farming practices. Lists of statements of challenges have been prepared from literature review, yet other additional challenges were added after having discussion with the youth during the survey.
- **Suitable strategies for overcoming the challenges:** On the whole, strategies may possibly be framed to address the challenges faced by the youth in farming, based on the responses collected from them. These strategies may further help extension policy makers to recommend them to the government.

5. Benefits of social media and perceptions of youth about the extent of usage in farming

- **Youth involvement in social media for farming:** This study made use of the identified items to get response from the youths directly about the efficiency of social media in farming. Their responses shall be noted as statements on the basis of literature review, discussion papers and discussion with the respondents.
- **Benefits of Social media in farming experienced by youth:** In this context, a list of the important social media sites generally used in India was prepared and given to the respondents to mark the social media which they have been using. This helped the study to identify the social sites which

they are interested in (or not interested in). This was also helpful in identifying as to what extent the social media is useful in farming.

- **Perception of youth towards social media in farming:** Perception of youth towards social media in farming is examined on the basis of the open ended responses from respondents. In this study, a discussion was held with the respondents to get their responses pertaining to the felt perceptions about the social networking sites usage in farming. After the collection of data, the responses were analyzed and tabulated, to understand, to what extent the responses from the youth have the relative similarity. Then, with the use of frequency and percentage analysis, the distribution of youth based on their responses shall be assessed.

RESULTS AND DISCUSSIONS

1. Socio-economic profile of the respondents

I. Age composition

Majority of farming youth (62.50%) were observed in Adult Youth (category 3), followed by Youth (category 2) (20%) and Youth (category 1) (17.50%), respectively.

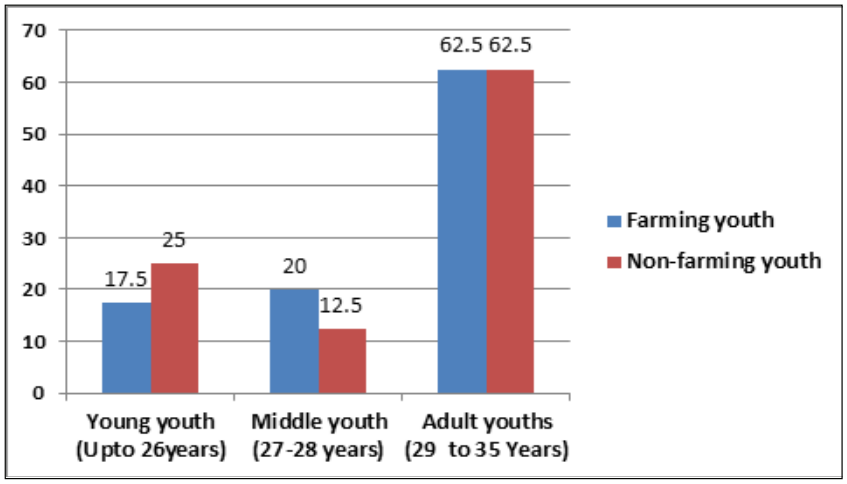

Fig.2. Age group of respondents

Majority (62.5%) of the non-farming youths were observed in Youth (category 3), followed by Youth (category 1) (25%) and Youth (category 2) (12.5%), respectively. The age of the selected non-farming youth range are from 18 to 35 years. The mean age of the respondents were observed to be 29.45 years. Result shows that the up to 26 years, youth involvement is less.

II. Education

The Fig. 3 shows that, of all the farming youth, 92.5 per cent were literate and 7.5 per cent were illiterate. Further, the educational levels were worked out and given in the ascending order as, 16.21 per cent, 37.82 per cent, 27.01 per cent, 13.51 per cent and 5.45 per cent for, an read and write only, high school, intermediate, graduate and post graduate, respectively.

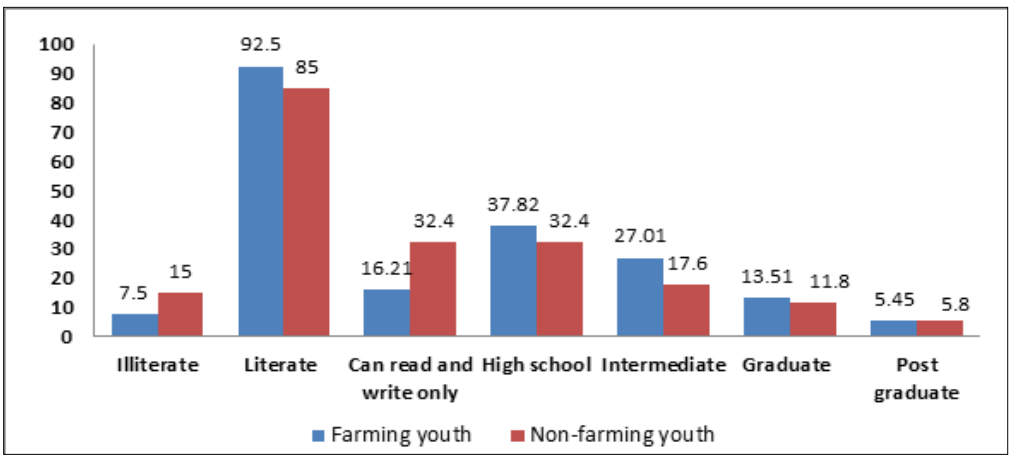

Fig. 3 Education Level

It can be concluded that the maximum number of respondents were literate. Also focusing on the non-farming youth, it was observed that 85 per cent were literate and 15 per cent illiterate. This study shows that the majority of the farming and non-farming youth were having high school it's also a reason behind the adoption of the new innovation or practices or scientific methods of farming. Due to lack of education they not seem to be interested in the social media usage in agriculture. So there is need to improve the education level of the young generation.

III. Caste category

Fig. 4 Indicates that about 42.5 per cent of the farming youth belong to other backward caste followed by the general caste (32.5%) and the scheduled caste (25%). The figure concludes that a considerable number of respondents in the sample belonged to the other backward caste category.

Fig. 4 also indicates that the maximum number of the non-farming youth belong to the other backward caste (37.5%) followed by the general caste (35%) and the scheduled caste (27.5%). This concludes that a considerable number of respondents in the sample belonged to the other backward caste, in both categories of farming and non-farming youth.

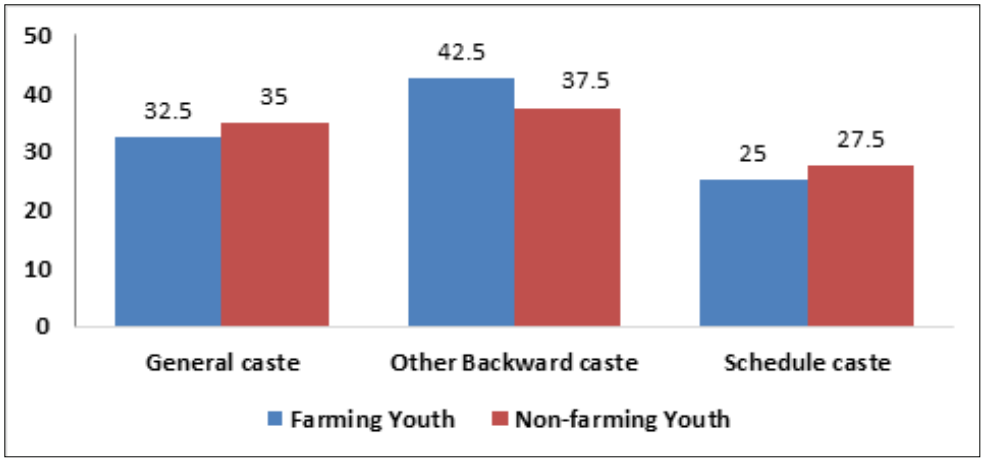

Fig. 4 Caste Category

IV. Type of family

Fig. 5 reveals that the farming youth having joint families are more than those with nuclear families. In terms of percentage, 60 per cent of the respondents belong to joint families, while 40per cent belong to nuclear families. Survey shows that the farming youth were interested and believe in living together.

The figure also reveals that the non-farming youth in nuclear families are more compared to those in joint families. In terms of percentage, 57.5 per cent of the respondents belong to nuclear families, while, 42.5 per cent belong to joint families. Survey shows that nuclear families give them more freedom than joint families.

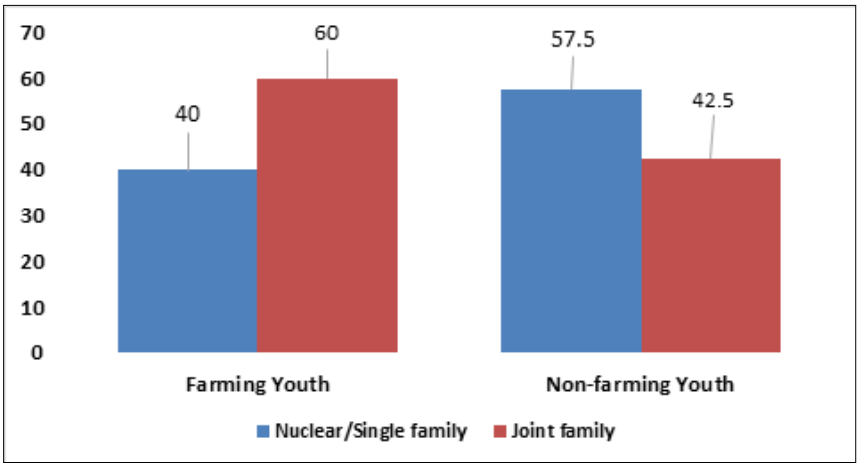

Fig.5 Type of Family

V. Size of family

Fig. 6 shows that 37.5 per cent of the farming youth belong to the category of those with up to 5 members and 6 to 8 members in their families, followed by 25per cent belonging to the category of above 8 members.

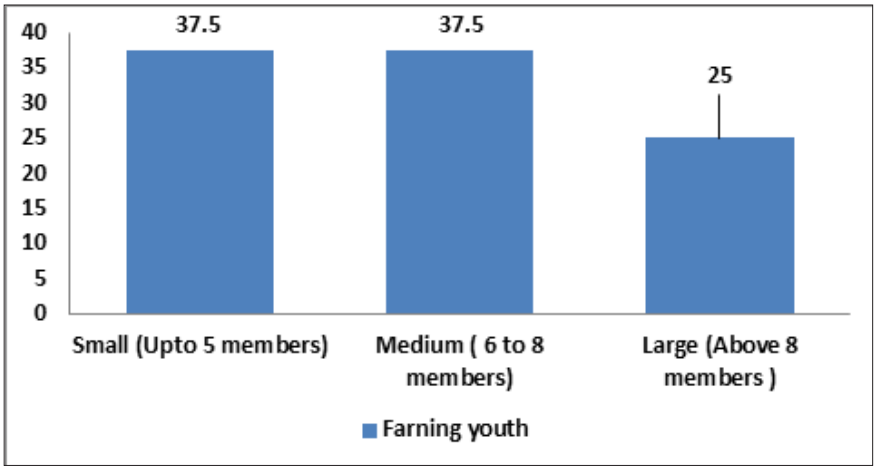

Fig. 6 Size of Family

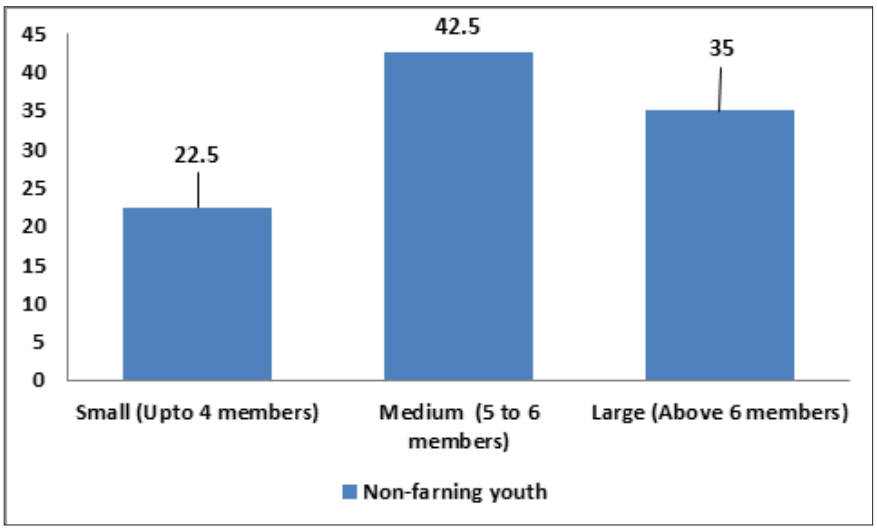

Fig. 7 Size of Family

Fig.7 shows that the 42.5 per cent non-farming youths belong to large families with 5 to 6 members, followed by 35 per cent in the category of above 6 members and 22.5 per cent to the category up to 4 members, respectively.

VI. Size of land holding

Fig.8 indicates that most of the farming youths (57.5%) were found to have small land holding (upto 5 acres), 22.5per cent were large farmers (above 8 acres) and 20 per cent were in the medium farmer (6 to 8 acre) category. Results show that the farming youth hold enough land for their survival and to export the produce.

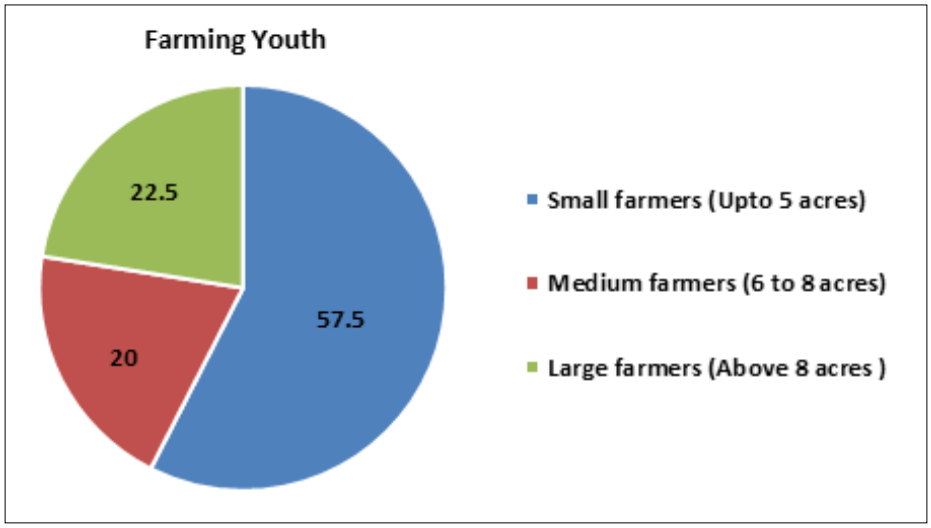

Fig.8 Land holding Size

VII. Land type

Fig. 9 shows that of all the farming youth owning land, 17.5 per cent of the youth farmers also have leased land. This is a good change for the agriculture scenario.

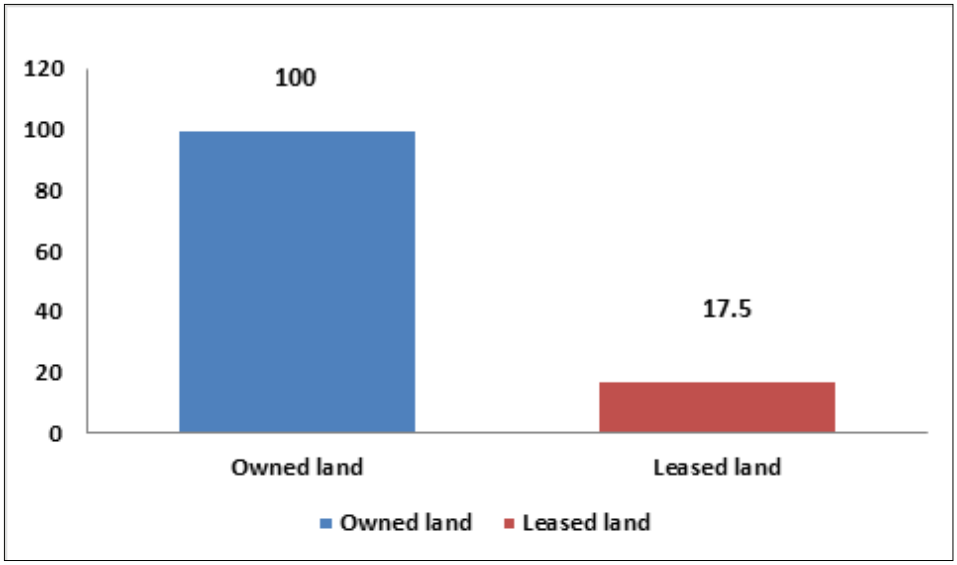

Fig. 9 Land Type

VIII. Occupation

It is evident from the Fig. 10 that for all the respondents, the main occupation was agriculture. The maximum (12.5%) respondents had their subsidiary occupation as agriculture labor and about 0 per cent respondents in services, 5per cent in agro based enterprises and dairying, with 2.5per cent in fisheries, business and gardening. On the basis of data, it can be said that agriculture is the main occupation of the rural people and that all farming youth were interested in agriculture. The reason behind the interest of the farming youth in agriculture is they are belonging to families with agriculture background and it's also their traditional occupation.

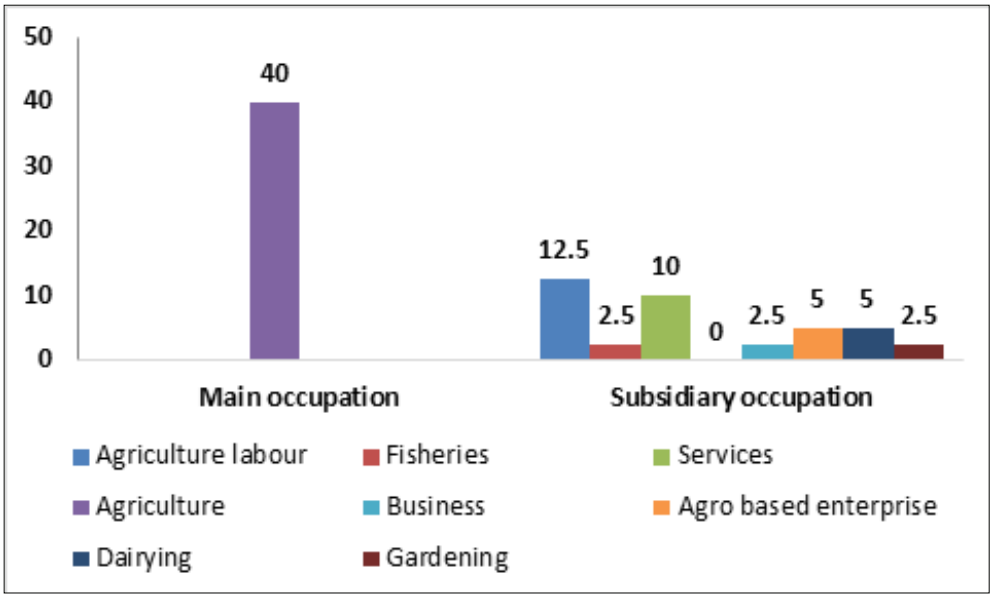

Fig. 10 Occupation (Farming Youth)

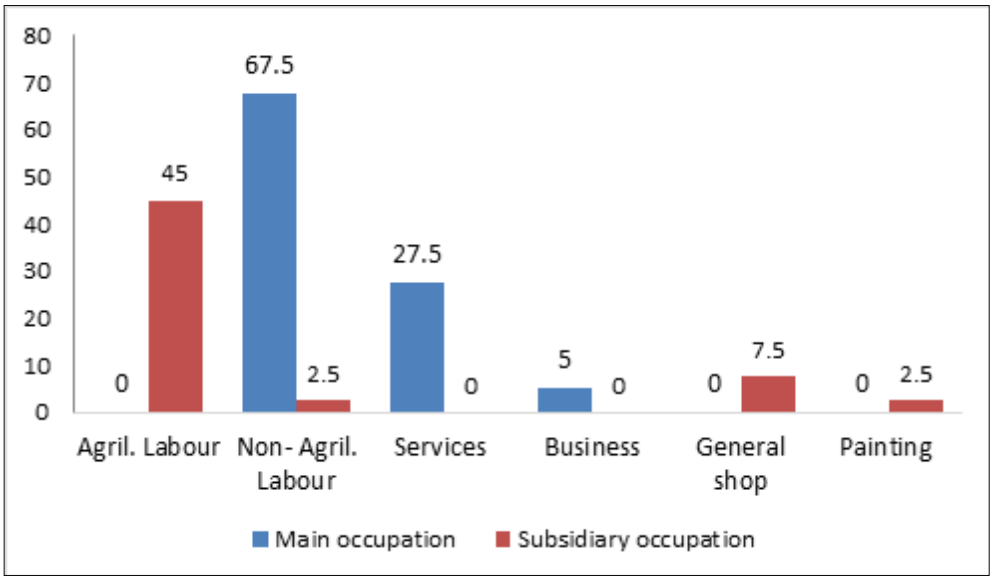

Fig. 11 Occupation (Non-farming youth)

It is evident from the Fig. 11 that the maximum (67.5%) of the respondents had their main occupation as Non-agril labor, 27.50 per cent Services and 5.00 per cent Business. The maximum

45 per cent respondents were observed such who had their Subsidiary occupation as Agriculture labour and respondents 2.50per cent non-agril labour, 7.50 per cent General shop and 2.50per cent others. On the basis of data, it can be said that non-agril labour is the main occupation of Non-farming youths people. The present scenario shows that the majority of the non-farming youth having non-agril labour as a main occupation. Reason behind that is good source of income or daily income.

IX. Annual income

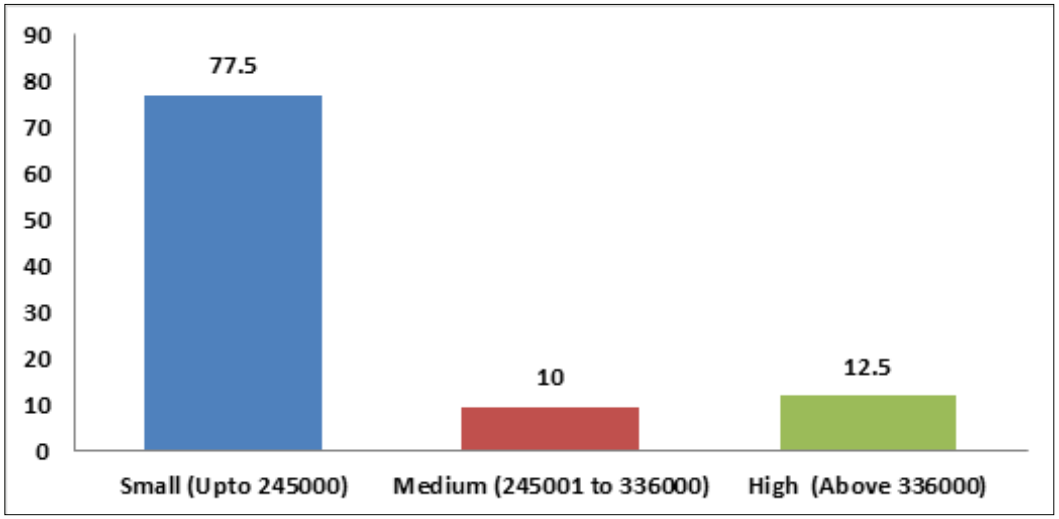

Fig. 12 Annual Income (Farming Youth)

Fig. 12 reveals that a maximum number of the respondents (77.5%) belong to the category with annual income up to Rs 2,45,000, whereas 12 per cent and 10 per cent respondents belonged to the income range of above Rs 3,36,000 and between Rs 2,45,001 to Rs 3,36,000, respectively. It can be said that the maximum respondent were having the annual income up to Rs 2,45,000.

The Table 13 reveals that a maximum number of the respondents (95%) belong to the category with annual income of up to 1,49,000, whereas five per cent and zero per cent, respondents belong to income range of above 1,74,000 and 1,49,001 to 1,74,000 categories respectively. Majority of the respondents were having the annual income of up to Rs. 149,000.

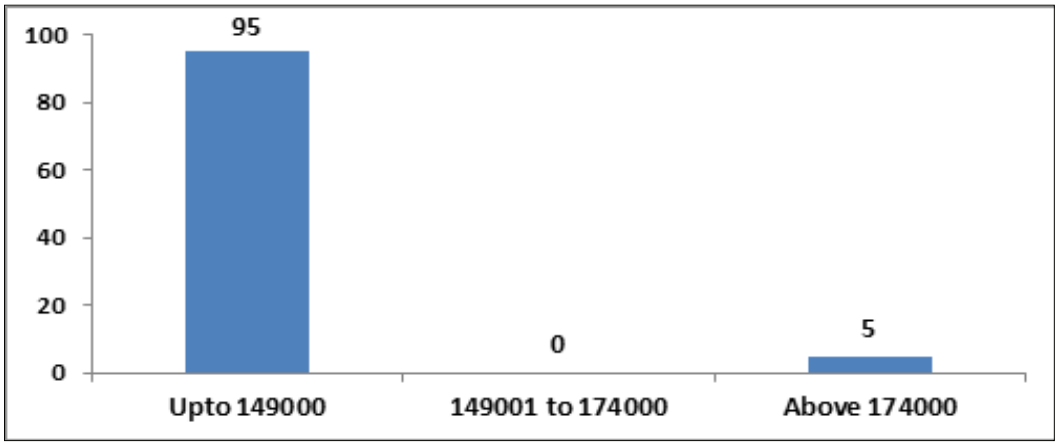

Fig. 13 Annual Income (Non- Farming Youth)

2. Identification of thrust areas and policy support in favor of youth in agriculture

The table 2 shows that the 87.50 per cent of the respondent's thrust areas were inorganic farming reason behind that is higher production compared to the organic farming, followed by 35 per cent, 12.50 per cent, 12.50 per cent, 5.00 per cent, 2.50 per cent, 2.50 per cent, 2.50 per cent, 2.50 per cent and 2.50 per cent for dairy, organic farming, floriculture, poultry farming, seed and agrichemical, pesticide shop/center, bee keeping, mushroom production and fisheries, respectively. This means that majorities of the farming youth were interested in inorganic farming because they thought it is a traditional method of the farming and also lack of awareness about the organic farming techniques.

And in the food crops maximum 92.50 per cent respondent's interested to grow Paddy followed by Wheat 90 per cent, Gram 32 per cent, Maize 20 per cent and Bajra 5 per cent, respectively. To growing horticultural crops the farming youths were interested maximum 35 per cent in vegetables followed by 10 per cent Mango, 5per cent Potato, and 2.50 per cent Radish and Pea, respectively. Majority of the farming youths were interested to grow the paddy crop because paddy and also wheat is the major crop of the area reason behind that climatic condition of the area.

Table 2 Preferred areas of agricultural operations according to farm youth (n=40)

S. No	Thrust area	Respondents	
		Number	Percentage
1	Inorganic farming	35	87.50
2	Dairy	14	35.00
3	Floriculture	5	12.50
4	Organic farming	5	12.50
5	Poultry Farming	2	5.00
6	Bee keeping	1	2.50
7	Fisheries	1	2.50
8	Mushroom production	1	2.50
9	Pesticide shop /center	1	2.50
10	Seed and agrichemical	1	2.50
	Food crops		
A	Paddy	37	92.50
B	Wheat	36	90.00
C	Gram	13	32.50
D	Maize	8	20.00
E	Bajra	2	5.00

	Horticultural crops		
A	Vegetables	14	35.00
B	Mango	4	10.00
C	Potato	2	5.00
D	Radish	1	2.50
E	Pea	1	2.50

Table 3 Preferred areas of agricultural operations according to Non-farm youth (n=40)

S. No	Thrust Area	Respondents	
		Number	Percentage
1	Dairy	20	50.00
2	Inorganic farming	15	37.50
3	Transport	5	12.50
4	Pesticide shop /center	5	12.50
5	Organic farming	4	10.00
6	Poultry Farming	3	7.50
7	Fisheries	2	5.00
8	Mushroom production	2	5.00
9	Floriculture	1	2.50
10	Land banking	1	2.50
	Food crops		
A	Paddy	18	45.00
B	Wheat	18	45.00
C	Gram	5	12.50
D	Bajra	4	10.00
E	Maize	2	5.00
	Horticultural crops		
A	Vegetables	2	5.00

The Table- 3 shows that the thrust area of 50 per cent of the respondent's was dairy, followed by 37.50 per cent, 12.50 per cent, 12.50 per cent, 10 per cent, 5 per cent, 5 per cent, 7.50 per cent, 2.50 per cent and 2.50 per cent for floriculture, inorganic farming, pesticide shop /center, transport, organic farming, poultry farming, mushroom production and fisheries, floriculture and land banking respectively. Survey shows that the maximum of non-farming youth wants involvement in agriculture and allied activities, more so in dairy. Reason behind that is the demand of the milk and milk products are high in that area and rearing of animals is easy for the villagers because availability of the fodders.

In food crops, a maximum of 45 per cent of the respondents were interested to grow paddy, followed by 12.50 per cent interested in growing Wheat, Bajra 10 per cent and Maize 5 per cent. Only 5 per cent of the non-farming youth were interested in growing vegetables. That means, a maximum of the non-farming youth were interested in growing paddy followed by wheat, because of the climatic condition of the area.

Participation of youth in Agricultural activities

Table 4 Participation of farming youth in agricultural activities (n=40)

S. No.	Activities	T.S	M.S	Rank	Overall Rank
A.	**COMMON ACTIVITIES**				
1	Leveling	107	2.67	I	I
2	Cleaning	107	2.67	I	I
3	Clod crushing	106	2.65	II	II
4	FYM broadcasting	105	2.62	III	III
B.	**SEASONAL ACTIVITIES**				
1	Var. selection	106	2.65	I	II
2	Disease/pest management	105	2.62	II	III
3	Marketing	105	2.62	II	III
4	Seeding	104	2.60	III	IV
5	Post-harvest	104	2.60	III	IV
6	Fertilizer application	103	2.57	IV	V
7	Activities (threshing, winnowing, drying, cleaning)	103	2.57	IV	V
8	Harvesting	102	2.55	V	VI
9	Weeding	102	2.55	V	VI

T.S= Total Score, M.S. = Mean Score

The Table-4 shows that the participation of farming youth in common activities was more in Leveling and Cleaning ranked 1st, followed by Clod crushing and FYM broadcasting, ranked 2nd and 3rd, respectively.

The participation of farming youth in the seasonal activities were maximum in variety selection (ranked 1st), followed by Disease/pest management, Marketing, Post-harvest, Seeding, Activities (threshing, winnowing, drying, cleaning), Fertilizer application, Weeding and Harvesting.

Finally, the overall participation of the farming youth in agricultural activities were maximum

in Leveling and Cleaning, ranked 1st, followed by Variety selection, Cloud crushing and Disease/ pest management, Marketing and FYM broadcasting ranked 2nd and 3rd, respectively. That means maximum of the farming youths are doing the work themselves, as they have limited resources.

Table 5 Participation of non-farming youths in agricultural activities (n=40)

S. No.	Activities	T.S	M.S	Rank	Overall Rank
A.	**COMMON ACTIVITIES**				
1	Clod crushing	60	1.50	I	I
2	FYM broadcasting	60	1.50	I	I
3	Leveling	58	1.45	II	III
4	Cleaning	58	1.45	II	III
B.	**SEASONAL ACTIVITIES**				
1	Activities(threshing, winnowing, drying, cleaning)	60	1.50	I	I
2	Weeding	59	1.47	II	II
3	Harvesting	59	1.47	II	II
4	Disease/pest management	58	1.45	III	III
5	Post-harvest	58	1.45	III	III
6	Var. selection	46	1.15	VI	VI
7	Fertilizer application	57	1.42	IV	IV
8	Seeding	56	1.40	V	V
9	Marketing	46	1.15	VI	VI

T.S= Total Score, M.S. = Mean Score

The Table-5 shows that the participation of non-farming youth in common activities was more in Clod crushing and FYM broadcasting ranked 1st, majority of the young generation generally engaged clod crushing because it is an energetic work and youth having good energy than old age famers followed by Leveling and Cleaning, ranked 2nd and 3rd respectively. Survey shows that the majority of the non-farming youth were involved in agricultural activities on a part time basis.

Participation of the farming youth in seasonal activities was maximum in Activities (threshing, winnowing, drying, cleaning), ranking 1st, followed by Weeding and Harvesting, Disease/pest management and Post-harvest, Fertilizer application, Seeding, Marketing and Variety selection that ranked 2nd, 3rd, 4th, 5th and 6th, respectively.

Finally, the overall participation of the non-farming youth in agricultural activities was mostly in threshing, winnowing, drying, cleaning, Clod crushing and FYM broadcasting, followed by Harvesting, Weeding and Disease/pest management, Post-harvest, and Variety selection.

Table 6 Training needs for farming youth for betterment of the farming (n=40)

S. No.	Training needs	T. S	M. S.	Rank
1	Nursery preparation	102	2.55	I
2	Calculation of fertilizer dosage	96	2.40	I
3	Seed treatment with chemicals	99	2.47	II
4	Fertilizer application	99	2.47	II
5	Identification of pests and diseases	93	2.32	III
6	Processing of food grains	93	2.32	III
7	Water management	93	2.32	III
8	Plant protection measures	92	2.30	IV
9	Seed selection	92	2.30	IV
10	Weed management	91	2.27	V
11	High technology horticulture	83	2.12	VI
12	Storage	81	2.07	VII
13	Marketing	77	2.08	VIII
14	Control of stored pests	75	1.92	IX
15	Proper use of farm waste	74	1.89	X

T.S= Total Score, M.S. = Mean Score

Table-6 shows that under training needs for the farming youth, Nursery preparation and Calculation of fertilizer dosage ranked 1st, followed by Seed treatment with chemicals and Fertilizer application which ranked 2nd, while Water management, Identification of pests and diseases and Processing of food grains got 3rd rank, Plant protection measures and seed selection got rank 4th, Weed management 5th rank, High-tech horticulture rank 6th, Storage rank 7th and Marketing was ranked 8th. Above table shows that to change the present scenario of agriculture, there is a need to train the farming youth through training programmes related to agriculture.

Table 7 Training needs for the non-farming youths for the betterment of the farming (n=40)

S. No.	Training needs	T. S	M. S.	Rank
1	Nursery preparation	75	1.87	I
2	Seed treatment with chemicals	70	1.75	II
3	High-tech. horticulture	69	1.72	III
4	Fertilizer application	68	1.70	IV
5	Calculation of fertilizer dosage	65	1.62	V
6	Seed selection	63	1.57	VI

7	Water management	62	1.55	VII
8	Processing of food grains	61	1.52	VIII
9	Weed management	60	1.50	IX
10	Plant protection measures	60	1.50	IX
11	Identification of pests and diseases	60	1.50	IX
12	Marketing	55	1.44	X
13	Control of stored pests	56	1.40	XI
14	Storage	55	1.37	XII
15	Proper use of farm waste	54	1.35	XIII

T.S= Total Score, M.S. = Mean Score

Table 7 shows that under training needs for non-farming youth, Nursery preparation ranked 1st,followed by Seed treatment with chemicals ranked 2nd, High-technology horticulture ranked 3rd, Fertilizer application 4th, Calculation of fertilizer dosage rank 5th, Seed selection rank 6th, Water management rank 7th, Processing of food grains rank 8th, Identification of pests and diseases, Plant protection measures and Weed management rank 9th, Marketing, Control of stored pests, Storage and Proper use of farm waste with rank 10th, 11th and 12th, respectively. Survey shows that the non-farming youth were interested in agriculture and they felt that if the government trained them, then involvement of the youth will definitely increase and it will be beneficial for agriculture sector as well. So to increase the involvement of the non-farming youth in agriculture, government can start training programme related to cultivation practices through the NGOs, SAUs and with the help of KVKs at the block/gram Panchayat level

Awareness about the Policy/programme support in favor of youth

Table 8 List of the programme/scheme launched by the government for Youth/Agriculture.

S.No	Schemes/ Programme	Remark
Focus on youths		
1	PMKVY	Prime Minister Narendra Modi promised an abundance of skilled labour in the country. Complementary to this was the idea of skills development among the youth of the nation. The Pradhan Mantri Kaushal Vikas Yojana (PMKVY) was thus envisaged as a key measure to impart skills-based training to young men and women, making them capable of earning and supporting the nation's anti-poverty endeavors. The scheme becomes all the more important in India as it has the world's largest youth population that requires employable skills.

2	Free laptop scheme	This scheme was first introduced by Samajwadi Party in its 2012 Assembly Election manifesto to give free laptops and tablet computers to intermediate and high-school pass outs of 2012 by Akhilesh Yadav. After becoming the Chief Minister of Uttar Pradesh he distributed 15 lakh laptops under this scheme in first three years of his administration. In the year 2015 Government announced to gift free laptops to toppers of each district in Uttar Pradesh. 625 High School Class and 425 Intermediate Toppers of session 2014-2015 were benefitted
3	10000 reward scheme	Yogi Adityanath's government in Uttar Pradesh has announced a cash reward scheme for every girl who passes 10th class. The government would provide Rs. 10,000 cash reward to every girl upon passing class 10th examination. The scheme has been announced by the Deputy chief minister of Uttar Pradesh for promoting girl's education in the state. The new Rs. 10000 cash reward scheme would be implemented on the lines of existing Kanya Vidya Dhan Yojana. Under the scheme the government aims to provide cash benefits to about 1, 00, 000 girls across the state.
4	Skill India	Skill India is a campaign launched by Prime Minister Narendra Damodardas Modi on 15 July 2015 which aim to train over 40 crore people in India in different skills by 2022. It includes various initiatives of the government like "National Skill Development Mission", "National Policy for Skill Development and Entrepreneurship, 2015", "Pradhan Mantri Kaushal Vikas Yojana (PMKVY)" and the "Skill Loan scheme"
5	Mukhyamantri kaushal Vikas Yojna	The main objective of this scheme is to make the youth self-reliant with the necessary skills for employment. For this, the government will provide a loan of one lakh rupees. Pradhan Mantri Kaushal Vikash Yojana and CM Skill Grant Scheme can benefit both at the same time. For this scheme, the young is a citizen of Rajasthan and he is more than 18 years old. The government will provide interest of 4% to 6% of the amount of one lakh rupees for subsidy to start their business at a cheap interest rate.
6	ARYA project	The new scheme ARYA has recently been launched by the Indian Council of Agricultural Research (ICRA). This program is planned to be implemented through Krishi Vigyan Kendras (KVK-Farm science centres) in 25 states of our country.

		Each KVK would train about 200 to 300 youth in taking up agriculture's allied and supplementary activities such as poultry farming, dairying, fisheries, goat rearing, mushroom production and other similar activities which keep the rural youth attached to agriculture, either directly or indirectly. Finally, the trained young entrepreneurs would be assisted in preparing project reports for seeking bank loans.
7	STUDENT READY	The Student READY (Rural Entrepreneurship Awareness Development Yojna) programme aims to provide rural entrepreneurship awareness, practical experience in real-life situation in rural agriculture and creating awareness to undergraduate students about practical agriculture and allied sciences. The programme will help in building confidence, skill and acquire Indigenous Technical Knowledge (ITK) of the locality and thereby, preparing the pass-out for self-employment. It also aims to provide opportunities to acquire hands-on-experience and entrepreneurial skills. To reorient graduates of agriculture and allied subjects for ensuring and assuring employability and develop entrepreneurs for emerging knowledge intensive agriculture, it was felt necessary to introduce this program in all the AU's as an essential prerequisite for the award of degree to ensure hands on experience and practical training.
Focus on agriculture		
1	Krishi Rin Mochan Yojna	The state government of Uttar Pradesh is going to launch a new scheme named as "Krishi Rin Mochan Yojana" as a farm loan waiver scheme for farmers. The chief minister of UP had approved the waiver of farm loans up to Rs. 1,00,000 for small and marginal farmers in month of April this year. During the launching of Krishi Rin Mochan Yojana, the union home minister had distributed around 7,500 certificates to small and marginal farmers at program. This scheme will cover those farmers who have taken crop loan from banks for procurement of seeds, pesticides and fertilizer in financial year 2015-16.
2	Pradhanman-tri Fasal Bima Yojna	The Pradhan Mantri Fasal Bima Yojana (Prime Minister's Crop Insurance Scheme) was launched by Prime Minister of India Narendra Modi on 18 February 2016. It envisages a uniform premium of only 2 per cent to be paid by farmers for Kharif crops, and 1.5 per cent for Rabi crops. The premium for annual commercial and horticultural crops will be 5 per cent

3	Pradhan Mantri Mudra Yojna	Micro Units Development and Refinance Agency Bank (or MUDRA Bank) is a public sector financial institution in India. It provides loans at low rates to micro-finance institutions and non-banking financial institutions which then provide credit to MSMEs. It was launched by Prime Minister Narendra Modi on 8 April 2015
4	Soil Health Card Scheme	Soil Health Card Scheme is a scheme launched by the Government of India in February 2015. Under the scheme, the government plans to issue soil cards to farmers which will carry crop-wise recommendations of nutrients and fertilizers required for the individual farms to help farmers to improve productivity through judicious use of inputs. All soil samples are to be tested in various soil testing labs across the country. Thereafter the experts will analyse the strength and weaknesses (micro-nutrients deficiency) of the soil and suggest measures to deal with it. The result and suggestion will be displayed in the cards. The government plans to issue the cards to 14 crore farmers

Table 8 shows that the list of the programme/scheme launched by the government for the Youth / agriculture. The all schemes are beneficial for the young generation to improve their farm condition, because government giving financial assistance through the schemes.

Table 9 Awareness level of farming youths about policy/programme (n= 40)

S. No.	Programme/ Policy	Respondents			
		Known	Percentage	Rank	O. R.
A.	**Focus on youths**				
1	PMKVY	14	35.00	I	II
2	Free laptop scheme	10	25.00	II	III
3	Mukhyamantri Swarojgar Yojna	6	15.00	III	V
4	10000 reward scheme	5	12.50	IV	VI
5	Skill India	3	7.50	V	VII
6	Mukhyamantri kaushal Vikas Yojna	2	5.00	VI	VIII
7	ARYA project	1	2.50	VII	IX
8	STUDENTREADY	1	2.50	VII	IX
B.	**Focus on agriculture**				
1	Krishi Rin Mochan Yojna	26	65.00	I	I
2	Pradhanmantri Fasal Bima Yojna	10	25.00	II	III
3	Pradhan Mantri Mudra Yojna	8	20.00	III	IV
4	Soil Health Card Scheme	2	5.00	IV	VIII

O.R. = Overall rank

The Table 9 indicates the awareness level of farming youth about policy/programme with focus on youth and it was observed that a majority (35%) (ranked 1st) known about PMKVY, followed by the Free laptop scheme, Mukhyamantri Swarojgar Yojna, 10000 reward scheme, Skill India, Mukhyamantri Kaushal Vikas Yojna, ARYA project and STUDENTREADY ranked 2nd, 3rd, 4th, 5th, 6th and 7th respectively. Under focus on agriculture 'Krishi Rin Mochan Yojna' ranked 1st as most (65%) among the farming youth, followed by Pradhanmantri Fasal Bima Yojna, Pradhan Mantri Mudra Yojna and Soil Health Card Scheme ranked 2nd, 3rd and 4th respectively.

Krishi Rin Mochan Yojna was ranked overall 1st. During survey a list of government schemes or programmes was prepared and results shows that the majority of the farming youth had knowledge about the Krishi Rin Mochan Yojna as majority of the farming youth having Kisan Credit Card and under this scheme the state govt. will pay the amount of the crop loan upto 1 lakhs. The state government already launched many schemes related to agriculture and youths but due to lack of awareness about schemes or programme they don't adopt the schemes. That means that the awareness level of the farming youth is very low and so there is need to improve their awareness level through awareness programmes.

Table 10 Awareness level of non-farming youths about policy/programme (n=40)

S. No.	Programme/ Policy	Respondents			
		Known	Percentage	Rank	O. R.
A.	**Focus on youths**				
1	Free laptop scheme	9	22.50	I	I
2	PMKVY	7	17.50	II	III
3	Mukhyamantri Swarojgar Yojna	2	5.00	III	V
4	Mission Parivar Vikas	1	2.50	IV	VI
5	Skill India	1	2.50	IV	VI
B.	**Focus on agriculture**				
1	Krishi Rin Mochan Yojna	9	22.50	I	I
2	Pradhanmantri Fasal Bima Yojna	8	20.00	II	II
3	Pradhan Mantri Mudra Yojna	8	20.00	III	II
4	Soil Health Card Scheme	3	7.50	IV	IV

O.R. = Overall rank

Table 10 indicates that the awareness of the non-farming youth about policy/programme focusing on youths was a majority of 22.50 per cent (ranked 1st) for the 'Free laptop scheme', followed by the, PMKVY, Mukhyamantri Swarojgar Yojna, Mission Parivar Vikas and Skill India ranked 2nd, 3rd and 4th respectively. Under policy/programme focusing on agriculture, the 'Krishi Rin Mochan Yojna' ranked 1st as most (22.50%) of the non-farming youths followed by Pradhanmantri Fasal Bima Yojna and Pradhan Mantri Mudra Yojna, Soil Health Card Scheme with rank 2nd, 3rd, and 4th, respectively.

Finally, Krishi Rin Mochan Yojna and Free laptop scheme were overall ranked 1st. So it can be said the non-farming youth had low awareness levels about the schemes or programme launched by the Government. So there is need to aware them through social media and awareness programme.
Table 11 Participation of farming youths in community based non-formal rural youth agricultural education programmes (n= 40)

Table 11 Participation of farming youths in community based non-formal rural youth agricultural education programmes (n= 40)

S. No	Community based educational programme	Respondents	
		Number	Percentage
1	Religious groups	40	100
2	Age-grades	4	10
3	Young farmers organizations	0	0

Table 11 reveals that 100 per cent of the farming youth were involved in religious groups followed by age-grades (10%) and no farming youth is interested or involved in young farmers' organizations. Surveys shows that the farming youth were not involved or interested in the young farmer's organizations, so it can be stated that if they are not involved in any organization, then how can they get new information? So involvement of the farming youth in NGOs and other organizations is a must, to change the present scenario.

Table 12 Participation of non-farming youths in community based non-formal rural youth agricultural education programmes (n= 40)

S. No	Community based educational programme	Respondents	
		Number	Percentage
1	Religious groups	40	100
2	Age-grades	2	5
3	Community cooperatives	1	2.5
4	Young farmers organizations	0	0

Table 12 reveals that 100 per cent of the non-farming youth were involved in Religious groups, followed by the age-grades (5%) and community cooperatives (2.5%) and there is no non-farming youth interested or involved in young farmer's organizations. So it can be stated that if they are not involved in any organizations, then they are not likely to get new information. So involvement of the non-farming youth in NGOs and other organizations is a must to change the present scenario.

3. Challenges faced by youths in agriculture

We all known that the youth are the backbone of the country; if the involvement of the youth will increase in the agriculture then it will be better for the development of the agriculture. Youth having the potentiality to use the new techniques and resources because the old age farmers generally don't wants to adopt new practices due lack of the education and also lack of know-how of the practices, so they thoughts that the traditional methods of the farming are better than modern or scientific techniques. The major problem faced by the youths to involve in agriculture that is lack of support by the members of the family and another major problem is that decreased land size of the family. Land holding sizes of the family decreased generation to generation so the family member's thoughts that if the young generation will engage in agriculture then how they will survive because the size of the land holding is not enough for survival.

Table 13 Challenges faced by the farming youths in agriculture (n=40)

S. No.	Nature of constrains	T. S	M. S.	Rank
A.	**Psychological constraints**			
1	Lack of education	80	2.00	I
2	Lack of enthusiasm	69	1.97	II
3	Lack of confidence in operating ICTs	63	1.96	III
4	Drudgery involved in agriculture work	60	1.76	IV
5	Negative attitude towards ICTs tools	60	1.71	IV
6	Lack of patience	59	2.03	V
7	Lack of economic motivation	59	1.59	V
8	Lack of knowledge	58	1.56	VI
9	Lack of inclination towards traditional job	51	1.59	VII
10	Lack of foresightedness	44	1.37	VIII
B.	**Social constraints**			
1	Decreased size of the land holding due to division of family	72	1.94	I
2	Lack of faith by seniors of the family/ lack of family support	68	1.74	II
3	Participation in other social activities	65	1.71	III
4	Lack of time due to social work	65	1.71	III
5	Early marriage	64	1.68	IV
C.	**Technical constraints**			
1	Lack of knowledge about exact doses and time of application of fertilizers	85	2.17	I

2	Lack of knowledge regarding critical stage of irrigation	85	2.17	I
3	Not using recommended seed rates, fertilizers, pesticides technology	82	2.15	II
4	Lack of training for modern agricultural technologies	78	2.29	III
D.	**Infrastructural constraints**			
1	Lack of training programme	100	2.63	I
2	Lack of information regarding; Mandi rate/ Access to markets	87	2.23	II
3	Non-availability of quality and improved seed in time/ Low quality of inputs	87	2.28	II
4	Lack of appropriate technology and education	83	2.24	III
5	Poor internet connectivity	82	2.27	IV
6	Lack of information regarding right combination of mixed and intensive combination	80	2.35	V
7	Lack of awareness benefits of ICTs	77	2.48	VI
E.	**Economic constraints**			
1	Lack of alternative employment during lean period of agriculture	89	2.34	I
2	No finance by Government/ Lack of loan facility	88	2.31	II
3	Access to financial services	88	2.31	II
4	High cost of Hybrid seeds	90	2.30	III
5	High cost of new technology	87	2.23	IV
6	High cost of cultivation	87	2.23	IV
7	Poor economic condition	87	2.23	IV
8	High cost of agricultural machinery	86	2.20	V
9	High cost of agricultural labors	85	2.17	VI
10	Price fluctuation of agricultural product	74	2.05	VII
F.	**Other constraints**			
1	Lack of timely guidance by RAEO, ADO, to farmers.	103	2.57	I
2	Inadequate Access to Agricultural land for youth engagement in Agriculture	99	2.53	II
3	Migration to urban areas due 'to unavailability of employment	96	2.52	III
4	Undeveloped Agricultural value chains	88	2.51	IV

5	Policies for youths/lack of number of focused policies	98	2.51	IV
6	Youth prefer employment in urban industries	92	2.48	V
7	Lack of repairing at village level	78	2.43	VI
8	Exploitation of farmers by middle man, dealers, fertilizer traders etc.	93	2.38	VII
9	Lack of support of family member to continue higher education	89	2.34	VIII

Psychological Constraints: Table- 13 shows the different constraints with regards to the participation of farming youth in agricultural activities. Lack of education is the major psychological constraint faced by the farming youth (ranked 1st). Results shows that the majority of the farming youth were having high school level, so there is need to improve the education level of the farming youth Lack of confidence in operating of ICTs it is also a major problem due to lack of education reason behind that the majority of the farming having feature phone, they were not aware about the social media and thoughts that the use of the ICTs in agriculture are risky. Thereby, it can be stated that in the psychological constraints, lack of education is the major problem so there is a need to improve the education levels; through the improvement in the education level all round development of the youth are possible.

Social Constraints: Among the social constraints, decrease in land holding size due to division of family was seriously felt by most of farming youth (ranked 1st) it is major problem among the social constraints due to small size of land holding the family member not wants to engage their young generation in the agriculture and they suggested them go for another work means job, Lack of faith by senior of family ranked 2nd, lack of inclination towards traditional job and participation in other social activities ranked 3rd and early marriage as slight constraint was ranked last with only 1.68 mean score. Among the social constraints, decrease in land size is the major problem to solve, and the government can distribute the unused land to the youth on a rental basis. It may be good solution to address this problem.

Technical Constraints: It is clear from the data contained in Table 13 that the highest mean score of 2.17 was found in lack of knowledge about exact doses and time of application of fertilizers and lack of knowledge regarding critical stage of irrigation, which were ranked 1st and ultimately considered as extreme technical constraint, above all other three constraints. Use of recommended seed rates, fertilizers, pesticides is also a technical constraint faced by the farming youth was ranked 2nd, to join the agriculture as a profession and lack of training for modern agricultural technologies, ranked 3rd. Exact dose and time of application of the fertilizer dosage is the major problem under the technical constraints, and to solve this problem, the govt. can provide training camps through the KVKs and NGOs.

Infrastructural Constraints: The Table-13 shows that among the different infrastructure

constraints that farming youth faced, the major one is lack of training programme which ranked 1st, followed by non-availability of quality and improved seed in time/ low quality of inputs and also lack of information regarding mandi rates/access to markets which ranked 2nd. The results shows that lack of the government shops related to the agriculture inputs/ seed centre, government can build a schemes or programme to establish seed centers, lack of appropriate technology and education, poor internet connectivity, lack of information regarding right combination of mixed and intensive combination, lack of awareness benefits of ICTs were ranked 3rd, 4th, 5th and 6th. Lack of training programme is the major constraints faced and to solve this problem, the government can start training programmes in the rural areas to relate to farming and there is need to aware them about the benefits of the ICTs in agriculture.

Economic Constraints: It is evident from Table-13 that lack of alternative employment during lean period of agriculture with mean score of 2.34 in economic constraints, was ranked 1st. results shows that the during the lean period of the agriculture the farmers become unemployed so to solve this problem can start an alternative unit in the local area, No finance by government/ lack of loan facility and access to financial service were ranked 2nd, high cost of hybrid seeds was ranked 3rd, followed by high cost of new technology, high cost of cultivation and poor economic condition that were ranked 4th, high cost of agricultural machinery, high cost of agricultural labors and last but not least, price fluctuation of agricultural products, were ranked 5th, 6th and 7th respectively. Lack of alternative employment during lean period of agriculture is the major problem under the economic constraints and to solve this problem, the government can establish government ventures in the rural area.

Other constraints: A perusal of Table-13 makes it clear that lack of timely guidance by RAEO, ADO to farmers was perceived, as an important constraint with top priority mean score of 2.57, with 103 being the total score and this was the major problem faced by the farmers so to solved this problem government can make policy for Rural Agricultural Extension Officer and Agriculture Development Officer to meet farmers in a week compulsory. This was followed by inadequate access to agricultural land for the youth engagement in agriculture, migration to urban areas due to unavailability of employment, policies for youths/lack of number of focused policies, youth prefer employment in urban industries, lack of repairing at village level, exploitation of farmers by middleman, dealers, fertilizers traders etc., and last but not the least, lack of support of family member to continue higher education, were ranked 2nd, 3rd, 4th, 5th, 6th, 7th and 8th, respectively. Lack of guidance by the extension officers and others are a major problem that comes under other constraints, to solve this problem, and every extension worker should take their responsibilities seriously.

Overall, there were six levels of constraints regarding farming youth participation in agricultural activities, viz., psychological, social, technical, infrastructural, economical and other constraints. Amongst all the 6 categories of constraints, lack of training programme was perceived as a major constraint, with top priority (mean score 2.63) ranked 1st. Lack of timely guidance by RAEO, ADO

to farmers and migration to urban areas due to unavailability of employment was ranked 2nd and 3rd. And overall the major constraints faced by farmers were lack of training programme and so to solve this problem, the government should take steps to establish training centers or conduct them through the KVKs etc.

Table 14 Suitable strategies to overcome the challenges and enhance participation of the farming youth (n=40)

S. No.	Statements	T. S	M. S.	Rank
A.	**Psychological suggestion**			
1	Youth must be aware of agriculture through social media	83	2.24	I
2	Youth must have foresightedness	87	2.23	II
3	Must require higher education in agriculture	84	2.15	III
4	Be motivated for innovation in agriculture	77	2.13	IV
5	Youth must have inclination	72	2.00	V
6	Continues updating of information towards traditional occupation	70	2.00	VI
B.	**Social suggestions**			
1	Support from family members to adopt agriculture as a profession	78	2.22	I
2	Social inclusion of young farmers should be prioritized.	78	2.16	II
3	Integration of participation between youths and elders should be prompted in agriculture.	75	2.02	III
4	Young farmer profile of every village should be made available in social media.	69	2.02	III
C.	**Economic suggestions**			
1	Availability of farm machinery at low price	99	2.47	I
2	Loan should made available at no interest	94	2.47	I
3	Loan procedure should be made easy	96	2.46	II
4	Extension officer should motivate farmer for Kisan Call Centre and other agriculture related schemes	91	2.45	III
5	Crop insurance should be made easy	86	2.45	III
6	Facilitate access to land and credit	85	2.42	IV
D.	**Technical suggestions**			
1	Training should be given one time in a month to young farmers	83	2.24	I

2	Timely availability of agriculture inputs at fair prices through social media	85	2.23	II
3	Link social media to agriculture/ Agriculture information disseminate through the social media	82	2.21	III
4	We need a mixture of hi- and low-tech solutions related to agricultural activities	75	2.20	IV
5	More up to date market research is required about farmer social media use	87	2.17	V
6	Good quality of farm literature should be made available through social media	76	2.17	V
7	Scientist should be visit the farm and solve the problems related to agriculture and train the farming youth	82	2.15	VI
E.	**Infrastructural suggestions**			
1	Training programme related to ICT for farmers	74	2.00	I
2	Improve internet connection	77	1.97	II
3	A plan should be made to cover losses occurred due to climate disturbance through social media to youths	75	1.92	III
4	Agriculture fair, exhibition, health camps should be organized at Panchayat level	74	1.89	IV
F.	**Other suggestions**			
1	Youths involvement in policy making	104	2.60	I
2	Strengthen higher education in agriculture	100	2.56	II
3	Put agriculture in the school curriculum	102	2.55	III
4	Agriculture based small and cottage industry, should be encouraged	91	2.45	IV
5	Greater public investment in agriculture	90	2.30	V
6	Rebranding of agriculture	86	2.26	VI
7	Unused land of village' should be made available for youth on lease for farming	88	2.25	VII
8	Youth should be made awareness on conversion of arable lands into residential/ industrial sites through social media	75	2.20	VIII
9	Food growers should be given proper respect in the society	77	2.13	IX
10	Organization of Gram Sabha at different time interval to solve local problem related to farming.	73	2.08	X

Psychological suggestions: Tables 14 shows that the psychological suggestions given by farming youth. The rural youth must be made aware of agriculture through social media, was ranked 1st followed by youth must have foresightedness, youth require higher education in agriculture, be motivated for agriculture innovation, youth must have inclination towards traditional occupation and continues updating information towards traditional occupation, were ranked 2nd, 3rd, 4th, 5th, and 6th, respectively. Increase the awareness level of the farming youth through social media is good for involvement of the farming youth in agriculture.

Social suggestions: Among the social suggestions, support from family members to adopt agriculture as a profession was ranked 1st. Social inclination of young farmers to be prioritized, was ranked 2nd, integration of participation between youths and elders should be prompted in agriculture and young farmer profile of every village should be made available in social media were ranked 3rd. Focusing on strengthening the support from family members to adopt agriculture as a profession, is very good because according to the present scenario, agriculture needs young brain power.

Economic suggestions: Suggestions from the farming youth to solve economic constraints included availability of farm machinery at low price and loan to be made available at no interest, which ranked 1st, and loan procedure to be made easy was ranked 2nd, crop insurance to be made easy and extension officer should motivate farmers for KCC, call center and other beneficial scheme and facilitate access to land and credit, were ranked 3rd and 4th, respectively. Availability of the farm machinery at low prices, the suggested solutions by the farming youths maybe good for the betterment of farming. To solve price related problems, the government can give financial assistance to the farming youths in terms of subsidy.

Technological suggestion: Another suggestion made by the majority of the youth that ranked 1st was, training should be given once a month, followed by the timely availability of agriculture inputs at fair prices which was ranked 2nd, link social media to agriculture/agriculture information disseminate through the social media ranked 3rd, need a mixture of hi- and low-tech solutions related to agricultural activities was ranked 4th, good quality of farm literature made available through social media and more up to date market research is required about farmer social media use, were ranked 5th and scientist should visit the farm and solve problems related to agriculture and train farming youth was ranked 6th. To solve the technical problem related to farming, through KVKs and other agencies, the government can provide training programmes at the village or block level.

Infrastructural suggestions: On the basis of the problem faced by the youth in the farming, one of the suggestions given by the farming youth was, infrastructural training programme related to ICTs for farmers, ranked 1st, followed by improve internet connection, a plan to be made to cover losses incurred due to climate disturbance through social media to youth and agriculture fair, exhibition, health camps to be organized at Panchayat level through social media were ranked 2nd,

3rd and 4th, respectively. Majority of the youth were unaware of the social media usage in farming and so there is a need to train them and give them information about the benefits of ICTs.

Other suggestions: The other suggestions made by the farming youth was the youth's involvement in policy making, which ranked 1st, followed by strengthen higher education in agriculture, put agriculture in the school curriculum, agriculture based small and cottage industry should be encouraged, greater public invest in agriculture, rebranding of agriculture, unused land of village should be made available for youth on lease for farming and youth should be made awareness on conversion of arable lands into residential/industrial sites through social media were ranked 2nd, 3rd, 4th, 5th, 6th, 7th and 8th, respectively. Youth involvement in the policy may be good for increase in involvement of the farming youths in agriculture, to attract youth in farming.

Overall suggestions: The overall suggestions made by the farming youth to enhance their participation were divided in to 6 categories namely: Psychological suggestion, Social suggestion, Economical suggestion, Technical suggestions, Infrastructural suggestions and other suggestions. Among all the 37 suggestions made by them, youth's involvement in policy making was overall ranked 1st, followed by, strengthen higher education in agriculture and put agriculture in the school curriculum which ranked 2nd and 3rd, respectively. Overall, youth involvement in policy making is the most suitable suggestion given by the farming youths to solve their problems and increase their involvement in agriculture.

Table 15 Challenges faced by the non-farming youths for involvement in agriculture and allied activities (n=40)

S. No.	Statements	T. S	M. S.	Rank
A.	**Psychological constraints**			
1	Lack of confidence in operating of ICTs	72	2.11	I
2	Lack of patience	72	2.11	I
3	Lack of enthusiasm	81	2.07	II
4	Drudgery involved in agriculture work	72	2.00	III
5	Negative attitude towards ICTs tools	68	1.94	IV
6	Lack of education	75	1.87	V
7	Lack of inclination towards traditional job	67	1.67	VI
8	Lack of economic motivation	62	1.55	VII
9	Lack of knowledge	59	1.51	VIII
10	Lack of foresightedness	51	1.41	IX
B.	**Social constraints**			
1	Decreased the land holding size due to division of family	65	1.80	I

3	Lack of time due to social work	65	1.62	III
4	Early marriage	65	1.62	III
5	Participation in other social activities	63	1.61	IV
5	Early marriage	64	1.68	IV
C.	**Technical constraints**			
1	Lack of training for modern agricultural technologies	74	2.00	I
2	Lack of knowledge regarding critical stage of irrigation	76	1.90	II
3	Lack of knowledge about exact doses and time of application of fertilizers	72	1.80	III
4	Not use of recommended seed rates, fertilizers, pesticides technology	68	1.78	IV
D.	**Infrastructural constraints**			
1	Lack of training programmes	83	2.18	I
2	Lack of awareness benefits of ICTs	73	2.08	II
3	Poor internet connectivity	75	1.97	III
4	Lack of appropriate technology and education	74	1.94	IV
5	Lack of information regarding; Mandi rate/ Access to markets	77	1.92	V
6	Non-availability of quality and improved seed in time/ Low quality of inputs	74	1.89	VI
7	Lack of information regarding right combination of mixed and intensive combination	72	1.84	VII
E.	**Economic constraints**			
1	Lack of alternative employment during lean period of agriculture	87	2.28	I
2	Poor economic condition	79	2.02	II
3	High cost of agricultural machinery	77	1.97	III
4	High cost of cultivation	77	1.97	III
5	High cost of new technology	76	1.94	IV
6	No finance by Government/ Lack of loan facility	70	1.75	V
7	High cost of Hybrid seeds	68	1.74	VI
8	Access to financial services	69	1.72	VII
9	Price fluctuation of agricultural product	60	1.62	VIII
10	High cost of agricultural labors	57	1.58	IX

F.	Other constraints			
1	Lack of timely guidance by RAEO, ADO, to farmers.	97	2.48	I
2	Migration to urban areas due 'to unavailability of employment	88	2.37	II
3	Undeveloped agricultural value chains	88	2.37	II
4	Lack of repairing at village level	83	2.30	III
5	Policies for youths/lack of number of focused policies	89	2.28	IV
6	Exploitation of farmers by middle man, dealers, fertilizer traders etc.	90	2.25	V
7	Inadequate access to agricultural land for youth engagement in Agriculture	87	2.23	VI
8	Lack of support of family member to continue higher education	88	2.20	VII
9	Youth prefer employment in urban industries	84	2.15	VIII

Psychological constraints: Table-15 shows the different constraints faced by the youth in their involvement in agricultural activities. Lack of confidence in operating ICTs and lack of patience were the major psychological constraints faced by the youth and were ranked 1st, the results shows that the due to lack of awareness about the benefits of the ICTs in agriculture youths avoid the usage of the ICTs in the agriculture so there is need to improve the education level and improve the awareness level of the youths about the use of the ICTs in Agriculture.

Social constraints: Among the social constraints, decreased land holding size due to division of family was seriously felt by most of the youth, and was ranked 1st, to solve this problem government can distribute the unused land or land of the gram Sabha among the youths on certain rent, it can be a way to attract the youth in agriculture. Lack of faith by senior of family ranked 2nd, reason behind that the old age persons or members of the family thoughts that nowadays agriculture is not a profit venture so the family members advise them to do a job. Agriculture having many risks and our farming youth does not want any type of research lack of time due to social work and early marriage ranked 3rd and participation in other social activities ranked 4th. Decrease in land holding size is also problem faced by the non-farming youth, and to solve this problem, the government can distribute unused land or Gram Panchayat wasteland to the youth on rental basis.

Technical Constraints: It is clear from the data in Table-15 that the highest mean score of 2.00 was found in, lack of training for modern agricultural technology (ranked 1st) and was ultimately considered as an extreme technical constraint above all other 3 constraints. Lack of knowledge regarding critical stage of irrigation, lack of knowledge about exact dosage and time of application

of fertilizers and not use of recommended seed rates and fertilizer were ranked 2nd, 3rd and 4th, respectively. These problems restrict the involvement of the non-farming youth in agriculture.

Infrastructural constraints: The Table-15 shows that among the different infrastructure constraints the non-farming youth faced the major one is lack of training programme (ranked 1st), followed by the lack of awareness benefits of ICTs ranked 2, due to these problem the involvement of the youths always affected, poor internet connectivity, lack of appropriate technology and education, lack of information regarding mandi rates/access to markets, non-availability of quality and improved seed in time/ low quality of inputs and lack of information regarding right combination of mixed and intensive combination, ranked 3rd, 4th, 5th, 6th and 7th, respectively. Survey shows that if the government trained the youth, then maybe their involvement will increase. Some youth were of the opinion that if the government trained them on agriculture related issues, then they can involve in agriculture activities more effectively.

Economic constraints: It is evident from Table-15 that lack of alternative employment during lean period of agriculture, with mean score of 2.28, in economic constraints ranked 1st, to solve this problem can build a processing unit related to agriculture. Poor economic condition ranked 2nd it's also a major constraints faced by the young generation because they lack of money, high cost of cultivation and high cost of agricultural machinery ranked 3rd, high cost of new technology, no finance by government/ lack of loan facility, high cost of hybrid seeds, access to financial service, price fluctuation of agricultural products and, last but not the least, high cost of agricultural labor show ranking of 4th, 5th, 6th, 7th, 8th and 9th, respectively. Employment during the lean period is the major problem of the non-farming youths. They felt that if the government established an enterprise related to farming, it will help to increase their economic level.

Other constraints: A perusal of Table-15 makes it clear that lack of timely guidance by Rural Agricultural Extension officer, Agriculture Development officer of farmers] was perceived as an important constraint with a top priority mean score is 2.48, with 97 as total score. This was followed by migration to urban areas due to unavailability of employment and undeveloped agricultural value chains which were ranked 2nd, lack of repairing at village level, policies for youths/lack of number of focused policies, exploitation of farmers by middleman, dealers, fertilizers traders etc., inadequate access to agricultural land for the youth engagement in agriculture, lack of support of family member to continue higher education and last but not least, youth prefer employment in urban industries were ranked 3rd, 4th, 5th, 6th, 7th and 8th, respectively. Guidance is a must to do something in a proper way.

Overall Constraints: There were six levels of constraints regarding non-farming youth participation in agricultural activities viz., psychological, social, technical, infrastructural, economical and other constraints levels. Amongst all the 6 categories of constraints, lack of timely guidance by RAEO, ADO, to farmers, was perceived as a major constraint, with top priority (mean score. 2.48) and ranked 1st, followed by migration to urban areas due 'to unavailability of employment and also

undeveloped agricultural value chains ranked 2nd with, lack of repairing at village level ranking 3rd. In all constraints, RAEOs and ADO are a major problem with no proper guidance being provided and so, there is a need for every extension worker to take their responsibility seriously.

Table 16 Suitable strategies for overcoming the challenges and enhance the participation of the non-farming youth (n= 40)

S. No.	Suggestions	T. S	M. S.	Rank
A.	**Psychological suggestion**			
1	Must require higher education in agriculture	91	2.27	I
2	Youth must be aware for agriculture through social media	82	2.21	II
3	Youth must have foresightedness	84	2.21	II
4	Be motivated for innovation in agriculture	86	2.15	III
5	Youth must have inclination	83	2.07	IV
6	Continues updating of information towards traditional occupation	75	1.97	V
B.	**Social suggestions**			
1	Support from family members to adopt agriculture as a profession	89	2.22	I
2	Social inclusion of young farmers should be prioritized.	85	2.17	II
3	Young farmer profile of every village should be made available in social media.	84	2.15	III
4	Integration of participation between youths and elders should be prompted in agriculture.	81	2.13	IV
C.	**Economic suggestions**			
1	Loan procedure should be made easy	96	2.40	I
2	Extension officer should motivate farmer for KCC, Call centre and other agriculture related schemes	93	2.38	II
3	Availability of farm machinery at low price	95	2.37	III
4	Loan should made available at no interest	92	2.35	IV
5	Crop insurance should be made easy	91	2.33	V
6	Facilitate access to land and credit	78	2.16	VI
D.	**Technical suggestions**			
1	Link social media to agriculture/ agriculture in-formation disseminate through the social media	93	2.32	I

2	More up to date market research is required about farmer social media use	91	2.27	II
3	Training should be given one time in a month to young farmers	90	2.25	III
4	Timely availability of agriculture inputs at fair prices through social media	86	2.20	IV
5	Scientist should be visit the farm and solve the problems related to agriculture and train the farming youth	82	2.05	V
6	Good quality of farm literature should be made available through social media	79	2.02	VI
7	We need a mixture of hi- and low-tech solutions related to agricultural activities	75	1.97	VII
E.	**Infrastructural suggestions**			
1	Agriculture fair, exhibition, health camps should be organized at Panchayat level.	85	2.12	I
2	A plan should be made to cover losses occurred due to climate disturbance through social media to youths	80	2.10	II
3	Improve internet connection	78	2.10	II
4	Training programme related to ICT for farmers	74	2.00	III
F.	**Other suggestions**			
1	Youths involvement in policy making	108	2.70	I
2	Put agriculture in the school curriculum	106	2.65	II
3	Strengthen higher education in agriculture	104	2.60	III
4	Agriculture based small and cottage industry, should be encouraged	100	2.50	IV
5	Rebranding of agriculture	95	2.37	V
6	Greater public investment in agriculture	91	2.33	VI
7	Youth should be made awareness on conversion of arable lands into residential/ industrial sites through social media	91	2.27	VII
8	Unused land of village' should be made available for youth on lease for farming	88	2.20	VIII
9	Organization of Gram Sabha at different time interval to solve local problem related to farming.	86	2.15	IX
10	Food growers should be given proper respect in the society	84	2.15	IX

Psychological suggestions: Table 16 shows that in the psychological suggestion given by non-farming youth, youth must require higher education in agriculture, was expressed by a majority of the rural youth and was ranked 1st followed by youth must gain awareness about agriculture through social media and also youth must have foresightedness were ranked 2nd, be motivated for innovation in agriculture, youth must have inclination towards traditional occupation and continues updating of information towards traditional occupation, were ranked 2nd, 3rd, 4th and 5th, respectively.

Social suggestions: Among the social suggestions, support from the family members to adopt agriculture as a profession was ranked 1st. Social inclination of young farmers should be prioritized was ranked 2nd, young farmer profile of every village should be made available in social media and integration of participation between youths and elders should be prompted in agriculture were ranked 3rd and 4th, respectively. Of these suggestions given by the non-farming youth, one that was felt as the most important was that their families do not support them to adopt agriculture as a profession.

Economic suggestions: The non-farming youth's suggestion to solve the economic constraints included, loan procedure should be made easy (ranked 1st), as followed by extension officer should motivate farmer for KCC, call center and other beneficial scheme, availability of farm machinery at low price, loan should be made available at no interest, crop insurance should be made easy and last but not least, facilitate access to land and credit were ranked 2nd, 3rd, 4th, 5th and 6th, respectively. Survey shows that if the government made the loan processing easy, then maybe the youth's involvement will increase. Thereby, it can be stated that this may be one way to increase the involvement of the youth in agriculture.

Technological suggestion: Another suggestion was made by the majority of the youth, that was ranked 1st was, link social media to agriculture/agriculture information disseminate through the social media, followed by the more up to date market research required about farmer's social media use; training should be given once in a month, timely availability of agriculture inputs at fair prices, scientist should visit the farm and solve the problems related to agriculture and train the youth, good quality of farm literature should made available through social media and need a mixture of hi- and low-tech solutions related to agricultural activities, were ranked 2nd, 3rd, 4th, 5th, 6th and 7th, respectively. To solve the agriculture related problems under technological suggestions, link social media to agriculture made by the non-farming youth, may be good to increase the involvement of the non-farming youths in agriculture.

Infrastructural suggestions: On the basis of problems faced by the youth, suggestions given by the non-farming youth included agriculture fair, exhibition, health camps to be organized at Panchayat level, ranked 1st, followed by, a plan should be made to cover losses occurred due to climate disturbance, through social media to youth, and improve internet connection (ranked 2nd), and training programme related to ICTs for farmers was ranked 3rd. Training is a major problem

of the area and to solve this problem there is a need for the government's effort to establish institutions which provides training to the youths at the village level.

Other suggestions: The other suggestions made by the non-farming youths included, youths involvement in policy (ranked 1st), followed by put agriculture in the school curriculum, strengthen higher education in agriculture, agriculture based small and cottage industry should be encouraged, rebranding of agriculture, greater public invest in agriculture, youth should be made aware on the conversion of arable lands into residential/industrial sites through social media, unused land of villages should be made available for youth on lease for farming, food growers should be given proper respect in the society and organization of Gran Sabha at different time intervals to solve local problem related to farming were ranked 2nd, 3rd, 4th, 5th, 6th, 7th, 8th and 9th, respectively. At the present scenario, the youth involvement in agriculture is very less and so to increase their involvement, there is a need to engage the youth in policy making.

Overall suggestions: The overall suggestions are made by the non-farming youth to enhance their participation in agriculture was divided into 6 categories namely: Psychological suggestion, Social suggestion, Economical suggestion, Technical suggestions, Infrastructural suggestions and other suggestions. Of all 37 suggestions made by the non-farming youths, youth's involvement in policy making was overall ranked 1st reason behind that the young generation thoughts that the if the involvement of the youth will be increased then the other youths will be inspired, followed by strengthen higher education in agriculture and put agriculture in the school curriculum ranked 2nd and 3rd, respectively. Youth involvement in policy making was felt strongly by maximum of the non-farming youth, and so it can be stated that, to increase youth in the agriculture, their involvement in policy making is a must.

4. Analyse benefits of social media and perceptions of youth about the extent of its usage in farming

Table 17 How youths can effectively get involved in social media for farming according to farming youth (n=40)

S. No.	Statements	T. S	M. S.	Rank
1	Train adults in how to engage directly with young people online through social media	94	4.94	I
2	Create a thematic network or engagement opportunity	109	4.03	II
3	Provide quick information and opportunities on agriculture through social media	108	3.00	III
4	By posting the farming related activities on social media	93	2.58	IV

5	Establishing network among the similar interests of youths	62	2.58	V
6	Promoting your service and provision through social media	75	2.02	VI

Table 17 reveals how the youths can be effectively involved in farming and majority of the farming youth expressed that train adults in how to engage directly with young people online through social media, was a good start up for the involvement of youth in farming (ranked 1st) followed by create a thematic network or engagement opportunity, provide quick information and opportunities on agriculture through social media, by posting farming related activities on social media, establishing network among youth with similar interests, and promoting your service and provision through social media were ranked 2nd, 3rd, 4th, 5th and 6th, respectively. Survey shows that a majority of the farming community used social media to a very small extent and so felt that training or demonstration through extension workers would help them do better and to effectively involve in agriculture.

Table 18 How youths can effectively involve in social media for farming by non-farming youth (n=40)

S. No.	Statements	T. S	M. S.	Rank
1	Establishing network among the similar interests of youths	53	2.40	V
2	Promoting your service and provision through social media	69	1.97	VI
3	By posting the farming related activities on social media	100	2.63	IV
4	Provide quick information and opportunities on agriculture through social media	93	3.10	III
5	Create a thematic network or engagement opportunity	87	3.48	II
6	Train adults in how to engage directly with young people online through social media	58	3.86	I

In Table-18 majority of the non-farming youth expressed that to training adults on how to engage directly with young people online, through social media, was a good start up for the involvement of the youth in the farming (ranked 1st) followed by create a thematic network or engagement opportunity, provide quick information and opportunities on agriculture through social media, by posting farming related activities on social media, establishing network among the similar interests of youths, promoting your service and provision through social media, were ranked 2nd, 3rd, 4th, 5th and 6th, respectively. Majority of the non-farming youth felt that if the government establishes a network among groups with similar interests, it will be helpful to get more involved in agriculture.

Table 19 Primary source used to access social media by farming youth (n= 40)

S. No	Social Media Source	Respondents	
		Number	Percentage
1	Smart phone	21	52.50
2	Feature phone	17	42.50
3	Personal computer (laptop, desktop)	3	7.50
4	No phone	3	7.50
5	iPad/ Tablet	1	2.50

Table 19 indicates that a majority of the farming youth used Smart phone (52.50%) followed by feature phone, personal computer (laptop, desktop) and also No phone and iPad/Tablet with 42.50per cent, 7.50per cent and 2.50per cent respectively. Results shows that near about 1/2 of the farming community were not used to smart phone, and that is also a problem because if they are not involved in social media, then how will they get new information? The reason behind that is that they don't know more about social media usage in farming.

Table 20 Primary sources used to access social media by non-farming youths (n= 40)

S. No	Social Media Source	Respondents	
		Number	Percentage
1	Feature phone	27	67.50
2	Smart phone	6	15.00
3	No phone	6	15.00
4	Personal computer (laptop, desktop)	1	2.50
	Total	**40**	**100.00**

Table 20 indicates that the majority of the non-farming young had feature phone (67.50%), followed by smart phone (15%) and 15 per cent of the non-farming youths had No phone. Majority of the farming youth have feature phone which is a major problem in getting new information through social media.

Table 21 Social media sites in which farming youth generally engage (n=40)

S. No	Social media sites	Respondents	
		Number	Percentage
1	WhatsApp	19	47.50
2	Not involved	19	47.50
3	Facebook	13	32.50
4	YouTube	13	32.50

Table 21 shows that majority of the farming youth were generally engaged in social media sites; Whatsapp (47.50%) followed by the YouTube and Facebook with (32.50%) and on the other side, a majority (47.50%) of the farming youths were not involved or interested in any social media sites. Majority of the farming youths were generally engaged in social media sites Whatsapp only for daily conversation.

Table 22 Social media sites frequented by non-farming youth (n=40)

S. No	Social media sites	Respondents	
		Number	Percentage
1	Not involved	34	85.00
2	Whatsapp	6	15.00
3	Facebook	5	12.50
4	YouTube	5	12.50

Table 22 shows that a majority of the non-farming youth were generally engaged in social media sites, Whatsapp (15%) followed by the YouTube and Facebook with 12.50% and on the other side a majority (85%) of the non- farming youth were not involved or interested in any social media sites. Result show that the majority of the non-farming youth were not involved in social media sites.

Table 23 Details of social media activities of farming youth (n=40)

S. No	Activities in Social media	Respondents	
		Number	Percentage
1	Chatting	19	47.50
2	Entertainment	12	30.00
3	News	4	10.00
4	Networking	3	7.50
5	Work related browsing	2	5.00
6	To gain knowledge / information	1	2.50
7	Promote positive activities	1	2.50
8	Communicate with group members	1	2.50

Table 23 shows that the social media activities in which the majority (47.50%) of the farming youth were generally engaged in chatting is (30%), followed by entertainment (10%), News (7.5%), networking (5%), work related browsing (2.50 %), communicate with group members (2.50 %), promote positive activities and to gain knowledge/information (2.50 %). The involvement of the farming youth in social media sites were maximum only for chatting, the reason being, they don't know the benefits of ICT in farming, as a means to gain new information.

Table 24 Details of social media activities non-farming youth engage in (n=40)

S. No	Activities in Social media	Respondents	
		Number	Percentage
1	Chatting	6	15.00
2	Networking	6	15.00
3	Entertainment	5	12.50
4	Updating profile	4	10.00
5	Communicate with group members	3	7.50
6	News	3	7.50
7	Browsing	2	5.00
8	Commenting on others status	2	5.00
9	Promote positive activities	1	2.50

Table 24 shows that the social media activities in which the majority (15%) of the non-farming youths were generally engaged in is chatting and networking, followed by entertainment (12.5%), updating profile (10%), News (7.5%), communicating with group members (7.5%), browsing (5%), commenting on others status (5%) and promote positive activities (2.5%). Finding shows that majority of the non-farming youth were not engaged in any social media activity, the reason being, they have no smart phone.

Table 25 Risks involved in social media usage according to farming youths (n=40)

S. No.	Categories	Respondents	
			Percentage
1	Low (Upto 13)	6	15
2	Medium (14 to 15)	3	7.50
3	High (Above 15)	31	77.50
	Total	**40**	**100**

From Table 25 it is apparent that the majority (77.50%) of the farming youth through there was a high level of risk involved in the social media usage, while 15 per cent and 7.50 per cent of the farming youth felt there was low and medium level of risk involved in the social media usage. Majority of the farming youth thought about social media usage in farming as risky due to lack of proper knowledge of social media use, and therefore, to increase the involvement of the youth in social media first, there is a need to improve their education level of this particular area.

Table 26 Risks involved in social media usage according to non-farming youths (n=40)

S. No.	Categories	Respondents	
		Number	Percentage
1	Low (Upto 18)	10	25.00
2	Medium (19 to 21)	3	7.50
3	High (Above 21)	27	67.50
	Total	**40**	**100.00**

From Table 26 it is apparent that a majority (67.50%) of non-farming youth thought there was a high level of risk involved in social media usage, while 25 per cent and 7.50 per cent of the non-farming youth though it was low and medium levels of risk involved in the social media usage. Majority of the non-farming youths thoughts that social media usage in farming is risky, as they lack proper knowledge of social media usage, and so, to increase the involvement of the youth in social media first, there is a need to improve the education level of the particular area.

Table 27 Perception of the farming youth towards social media usage in farming (n=40)

S. No	Perception	Respondents	
		Frequency	Percentage
1	Social media is very helpful to getting new information related to farming	19	47.50
2	Its time consuming/wastage of time	14	35.00
3	It's not beneficial for agriculture	12	30.00
4	Social media saves the time & money	12	30.00
5	Social media is helpful to getting new information at anywhere, anytime	15	28.75
6	But there is need to trains people/ farmers	10	25.00
7	Improvement in education level is must	9	22.50
8	Social media is very helpful in giving accurate information	7	17.50
9	Social media helpful to getting mandi rates	5	12.50
10	Sometime fake news dissemination creates problem	4	10.00
11	Social media covers large area in short time to disseminate information	3	7.50

12	Disturbance in the work	1	2.50
13	No more beneficial due to awareness	1	2.50
14	Social media presence among the farmers reduces the farming risks	1	2.50

Table 27 shows that in favor of social media usage in farming, majority (47.50%) of the farming youth agreed that social media is very helpful in getting new information related to farming, followed by the perception that social media saves time and money (30%), social media is helpful to getting new information anywhere, anytime (28.75%), but there is need to trains people/farmers (25%), improvement in education level is a must (22.50%), social media is very helpful in giving accurate information (17.50%) and last but not the least, social media is helpful to get mandi rates (12.50%), social media covers large area in short time to disseminate information (7.50%) and social media's presence among farmers reduces farming risks (2.50%). Results show that in favor of social media usage in farming, majority of the farming youth thought that it's very helpful approach to get new information quickly and to save time and money.

But on the other hand, a majority (35%) of the farming youths felt that its time consuming/wastage of time, followed by it's not beneficial for agriculture (30%), social media presence among farmers reduces the farming risks (10%), disturbance in work and also no more beneficial due to awareness (2.50%).

Table 28 Perception of the non-farming youth towards the social media usage in farming (n=40)

S. No	Perception	Respondents	
		Frequency	Percentage
1	Social media saves the time & money	13	32.50
2	Social media helpful to getting mandi rates	3	7.50
3	Social media is very helpful to getting new information related to farming	20	50.00
4	But there is need to trains people/ farmers	9	22.50
5	Improvement in education level is must	20	50.00
6	Its time consuming /wastage of time	17	34.00
7	Sometime fake news dissemination creates problem	6	15.00

8	Social media is very helpful in giving accurate information	10	25.00
9	Social media covers large area in short time to disseminate information	8	20.00

It is apparent from Table 28 that the majority (50%) of the non-farming youth agreed that social media is very helpful in getting new information related to farming, followed by social media saves the time and money (32.5%), social media is very helpful in giving accurate information (25%), social media covers large area in short time to disseminate information (20%) and social media helpful to getting mandi rates (7.5%). Survey shows that a majority of the non-farming youth thought about social media usage in the farming as very helpful to get new information quickly. It's good approach to disseminate the information.

On other hand, majority (50%) of the non-farming youth agreed that, to increase the social media usage in farming, there is a need for improvement in education levels, followed by, its time consuming /wastage of time (34%), but there is need to trains people/farmers (22.5%) and sometime fake news dissemination creates problem (15%). Majority of the non-farming youth felt that to increase social media usage in farming, first there is a need to improve the education level.

Recommendation

The results of this study are the basis for several recommendations of the farming youth and non-farming youth. The recommendations are as follows:

Training programmes related to newer agricultural technologies is the need of the hour and this must be exposed to both farming and non-farming youth. Similarly, training to farming youth is also imminent pertaining to cultivation of paddy and wheat. For this purpose the government may entrust the KVKs, SAUs, and NGOs to conduct trainings, so as to effectively bring about the transformation in farming through the farming youth.

Moreover, most of the farming and non-farming youth have inadequate education to handle smart phone. Therefore, the government should promote adult education through the creation of separate platforms through KVKs. More importantly, policies with reference to agriculture should be strengthened so as to retain the youth who have been captivatingly involved in farming. It is equally important to formulate and implement policies and programmes in order to attract the attention of the non-farming youths.

Kisan Sahayak should create a WhatsApp group of farming and non-farming youth in which farming related and other youth focused information can be disseminated. Also, to train youth about usage pattern of the social media, BDOs and ADOs can start training programmes at block /grampanchyat level.

Another suggestion given by the youth is to distribute the grampanchyat land among the youth on a rental basis and though it can be a long term process, it may be good way to increase the involvement of youth in agriculture.

On the whole, if the aforesaid lacuna in farming is rectified, then youth involved in farming will possibly contribute to the reshaping and of agriculture in the coming days.

Conclusions

The study has observed that inorganic farming has been the major thrust area among the farming youth. It might be due to the fact that after the introduction of green revolution farming has mostly been carried out inorganically. However, farming youth felt that more demonstration of new technologies may be efficient to improve the production, profit and sustainability of farming.

Besides, paddy and wheat crops have mostly been cultivated by the farming youth owing to the temperate climatic condition of the region. On the other hand, non-farming youth have been interested in dairy production owing to the remunerative income from the growing dairy industries. (Major of the training needs felt by the farming youth is in nursery preparation for paddy crop and to solve this problem the government can start training programme through the KVKs, SAUs and even in collaboration with NGOs. The non-farming thrust areas were allied activities, with majority of the non-farming youth interested in dairy).

However, the study found that lack of awareness about new technologies/schemes/policies among the farming youth is a major issue. What is more important is that the absence of exposure among the farming youth to the innovative production technologies affects the production and productivity of crops indirectly. All the more, farming youth are mostly unaware of the government's policies that have been implemented, concerning the attraction and retaining the youth in farming and the benefits thereof. (So there is a need to make them aware through awareness programmes, awareness camps, and demonstration conducted by KVKs, SAUs and even NGOs).

The result of the study revealed that a majority of both farming and non-faming youth have not been involved in the use of social media as a majority of them use only feature phones. On the contrary, youth that have android version of mobile phones be it the farming youth or the non-farming youth, had no awareness about the usage pattern of smart phones. One of the reasons could be that the majority of the farming and non-farming youth have education up to high school.

The study further observed that both the farming and non-farming youth had inadequate access to trainings, guidance and exposure related to use and advantage of the use of ICT gadgets and tools in farming.

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