

Reorienting Youth Towards Farming: A Review

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ABSTRACT: Currently, India has the world's greatest youth population. Only about 5 percent of rural youth is currently engaged in agriculture and when given a choice, two out of five farmers would quit farming. Rural youth migration to cities is around 45 percent, which is quite concerning. Bringing sustainability to agriculture by adequate livelihood choices is one of the strongest strategies to attract and retain youth in farming. This would help resolve the crisis of youth unemployment and migration. Improving agricultural production, food security, and the economy require the involvement of young people in the agricultural industry. The youth may be the perfect catalyst for changing the poor image of people involved in farming, particularly in rural communities, due to their greater ability to adapt new ideas, concepts, and technology, all of which are important in changing the way farming is practiced and perceived. This paper discusses about factors contributing for avoidance of agriculture as livelihood and also strategies to attract and retain youth in farming.

Keywords: Agriculture, Attract rural youth, Retain youth, Migration.

INTRODUCTION

According to the suggestion of the National Youth Policy 2014, the Government of India (GoI) officially defines youth as people aged 15 to 29 years (GoI, 2014^b). For cross-country comparison and analysis, the United Nations and the International Labour Organization (ILO) defined youth as people aged 15 to 24. The entire youth population in India surged from 168 million in 1971 to 422 million in 2011, according to the 2011 Census (GoI, 2017^b). India now possesses the world's highest youth population (356 million between the ages of 10 and 24) (UN Report, 2014), surpassing China's (269 million) (MAYA, 2018). According to current projections, the youth population will reach 464 million by 2021 (Shivakumar, 2013).

As per the National Sample Survey (2005), when given a choice, two out of five farmers would quit farming. More recent figures indicate that 76 percent would prefer to undertake some other vocation instead of farming. The 24 percent who would be interested in continuing would do so solely because it was their ancestral tradition (CSDS, 2014).

According to the most recent census data, there are approximately 15 million fewer farmers than there were in 1991, and over 7.7 million less farmers since 2001. On an average, 2035 agrarians have lost their 'Main Cultivator' status per day for the past 20 years. According to the census, there are 95.8 million farmers whose primary occupation is farming. This equates to fewer than 8 percent of the population (Down from 103 million in 2001 and 110 million in 1991). Even if all marginal farmers are included (22.8 million), the population is still less than 10 percent. To put it another

way, if all farmers and agricultural labourers were counted together, the entire population would be around 263 million, or 22 percent of the total population (Sainath, 2013). By 2035, it is expected that about half of India's population would be urban-based, posing a food security challenge in the country (Kumar *et al.*, 2019).

While the average age of the Indian population is 29, the average age of farmers is 55, indicating that young people are less involved in agriculture. In addition, farmers under the age of 30 are more likely to leave agriculture (Singh *et al.*, 2016).

Why does agriculture not attract youth?

1. Personal factors: The important personal factors faced by farmers to avoid agriculture as livelihood were they wanted to do any work other than farming, didn't want to bring their children into agriculture, avoiding work in difficult weather conditions and didn't want to do drudgery-oriented work (Kumar *et al.*, 2019). Farmers under the age of 30 are more likely to leave farming, and research in other countries has shown that younger farmers have more occupational mobility and are more sensitive to wage disparities between farm and non-farm employment (Sharma and Bhaduri, 2009).

2. Social factors: The social factors responsible for avoiding agriculture as a livelihood were parents want their children to achieve a high social position through education, girls of the current generation don't want to marry a farmer, lack of support from family members to continue farming, no social acknowledgement of farming as a career (Kumar *et al.*, 2019). As a result of the idea that agriculture is an outdated sector with low

financial rewards, youth are less interested in pursuing careers in agriculture (Paisley, 2013).

3. Economic factors: The economic factors experienced by landholders to avoid agriculture as livelihood were:

(i) It carries a considerable financial risk because it is a profession that is reliant on nature.

(ii) High production costs

(iii) Insufficient funds for farming: Banks are the primary source of credit (50 percent or more) for farmers with land holdings of two or more hectares, while informal sources such as moneylenders account for 41 percent for farmers with less than a hectare of land. Shopkeepers, relatives or friends, and co-operative societies are also important sources of agricultural finance. Uncertainty about land records makes it difficult for farmers to obtain formal credit, ratio of short term (pre- harvest and post- harvest operations) and long term agricultural finance (agricultural equipment and machinery) is unbalanced as well as insufficient access to crop insurance coverage are the most pressing issues for agricultural credit (PRS India, 2017).

(iv) Unfriendly crop insurance system: Small farmers, in particular, dislike farming, because of the risk involved; as a result, insurance companies must focus their efforts on strengthening their outreach to smallholder farmers due to the fact that barely one-tenth of Indian farmers utilize insurance for risk management in agriculture (Birthal *et al.*, 2015).

4. Psychological factors: The primary psychological factors were unfavourable perceptions towards agriculture as a profession, loss of enthusiasm in farming, lack trust in adopting scientific farm technologies and a risk averse attitude (Kumar *et al.*, 2019). Farm work, according to highly educated professionals, is not intellectually gratifying because it does not need creativity and expression (Anonymous, 2011).

5. Market related factors: Agricultural landholders were discouraged from farming because of market-related concerns like inequitable returns owing to unorganized market structure, product cost is determined by purchaser rather than producer, middle man dominance in marketing and Government farm trade policies that are unfavourable to farmers (Kumar *et al.*, 2019).

6. Labour related factors: The major personal factors faced by farmers to avoid agriculture as livelihood were labour shortages due to industrialisation, lack of skilled labour for farming, and the negative impact of MGNREGA on the availability of labour, as well as the inability to find workers on time and in sufficient numbers when required (Kumar *et al.*, 2019).

7. Situational factors: The situational factors encountered by agricultural land holders were insufficient storage facility for agricultural produce, inadequate irrigation facility for farming, electricity scarcity. Farming mechanisation suffers as a result of land fragmentation into irregular sizes. Small holdings dominate agriculture in India; holdings measuring less

than or equal to one hectare account for two-thirds of the total 139 million land holdings. Furthermore, landholdings have been steadily fragmenting; between 1970–71 and 2010–11, the overall number of holdings nearly doubled, while the average size decreased by half (to 1.2 hectares) (GoI, 2014^a).

8. Next generation related factors: The next generation factors causing agricultural landholders to avoid agriculture as a profession were the educated new generation prefers occupations other than agriculture, prefers to settle in urban areas after completing higher education and has little interest in farming. Next generation is discouraged from settling in rural areas for family farming because of the lack of urban amenities (e.g., education, communication, etc) (Kumar *et al.*, 2019). Young college graduates in the Indian city of Meerut, the sons of lower middle-class Jat farmers, enrol in one course after another rather than returning to the village, and describe their existence as 'timepass', a form of aimless waiting (Jeffrey 2010).

Strategies to attract and retain youth in agriculture:

1. Agricultural extension service - can effectively boost youth participation in agriculture transformation since they are eager to adopt new ideas and technologies (Chander, 2013).

Increased NGO participation, counseling and advising rural youth, creating awareness about youth programmes, fostering entrepreneurship, promoting scientific farming and agri-business are some of the most effective extension strategies that could be used.

In order to encourage them to get more involved in agricultural related activities, an exclusive nationwide extension programme might be developed to address rural youth challenges (Srivastava, 2013). Only 5 percent of farm households had access to animal husbandry information, compared to 40 percent for crop farming (Planning Commission, 2012). Interestingly, the distribution of livestock resources is more equitable, with marginal farmers owning more than half of the cattle population and two-thirds of the small ruminants, compared to their share of land, which is only 24 percent (NABARD, 2018).

2. Mass media and information and communication technologies (ICTs) can also be used effectively to pique the interest of youth in agriculture. Radio, TV, and newspapers can be used to share the success stories of innovative young farmers or agripreneurs in order to inspire other young farmers. Community radio and social media can also play an important role in motivating and educating young farmers about the opportunities in agriculture (Som *et al.*, 2019).

3. Low levels of youth involvement in agriculture are often the result of a lack of agricultural skills and inadequate financial resources. Working through group mechanisms such as farmers' organisations, cooperatives, farm youth clubs, and farmer producers' groups can help facilitate credit access from a variety of institutional sources. Only 13.3 percent of NABARD's total agricultural credit is allocated to livestock credit (NABARD, 2018).

4. An Indian Agriculture Service, similar to the Indian Administrative Service and the Indian Forest Service, is urgently needed. Not only will this strengthen the agro-regulatory system, but it will also create jobs for agriculture students (Jitendra, 2017).

5. Presently, "Agriculture, including Agricultural education and research, protection against pests and prevention of plant diseases" are in Sl. No. 14 of the 2nd list of 7th schedule in the Article 246 under Part XI of the Constitution of India. It is under State list. In accordance with the state constitution, the state government is accountable and responsible. As a result, the central government is excused from responsibility and accountability. In addition, the Central Government must protect inter-state interests and agricultural aspects relating to agricultural inputs. The Central Government has to be the party to the International, Bi-lateral, Pluri-lateral, Multi-lateral Agreements, Treaties, Intellectual Properties, Rounds, Summits, Convention, Protocol Memorandum of Understanding, Import & Export, Plant & Animal(domestic) quarantine and many other implications on Agriculture. Similarly, the Central Government is expected to respond to the International Community, the FAO, the United Nations, and others. Agriculture, including soil and water conservation, is believed to be appropriate for inclusion in the concurrent subject/list, i.e. the 3rd list in the 7th Schedule of Article 246 of the Indian Constitution. Both the Central and State Governments will be in a better position to serve India's residents/citizens as a result of its inclusion. This will require both governments to take efforts and develop policies to safeguard and promote the interests of farming families and their youth in order to attract and retain them in agriculture (Mandal, 2016).

6. Youth development as a priority area for State Agricultural Universities (SAUs) and other agricultural education institutions would be a significant step in refocusing attention and resources to meet important goals of linking youth to agriculture. The vast network of agricultural universities and colleges can play a leading role in instilling self-confidence and capabilities in students who wish to pursue agriculture as a career. In Agricultural Universities and Institutes, 0.4 million students are enrolled each year. However, the majority of them join the banking sector instead (Jitendra, 2017). Farm graduates can begin as rural entrepreneurs by establishing agri-clinics and agri-business centres (ACABC) in villages. ACABC schemes, which are already in place, should be expanded to accommodate a greater number of agricultural graduates in villages to start up new rural enterprises (Som *et al.*, 2019).

7. Capacity building of youth: Young people require training and skill-building opportunities that will prepare them to participate actively in decision-making processes. Other areas that the current extension system will address are the development of soft skills such as communication, leadership, and business skills, as well as the mobilisation of young farmers to start high-tech ventures and micro enterprises.

8. Link youth to planning and policy efforts: This can be achieved by incorporating youth in the review of current policies as well as the identification and evaluation of potential policy alternatives.

9. Agribusiness should be taught in agricultural colleges/universities, emphasizing the use of relevant technology, success stories, and the importance of youth federations and extension in the agribusiness in the state.

10. Priority should be given to agricultural transformation through Community College and Farmer's Field School. Agricultural transformation can only be achieved if rural youth are given more opportunities to engage in agriculture.

11. Promotion of Agro- Eco tourism: It is a symbiotic partnership between the farming sector and tourism business for the aim of relaxation through active involvement in farm operations hence boosting knowledge of agrarian heritage. Farm stays, guest ranches, organic food, recreation pond, fishing, plantations, dairy, piggery, poultry, processing of farm products, demonstration of farm activities, wool processing, rural festival celebrations, handicrafts, folklore, dances, and various rides such as bullock cart, tractor, horse, and so on. Farmers can earn more money by making better use of available resources, while tourists can enjoy village life and nature at reasonable prices (Mishra *et al.*, 2017).

12. In order to establish a role model of agriculture field aimed at retaining youth in agriculture, such as pulses village and seed village, as well as community grain and seed bank, waste lands can be assigned to young farmers. Accolades such as the Best Young Agriculturalist Award at the district level can be instituted to be distributed on National Youth Day (12th January) in the presence of Agriculture Department officials in order to recognise youth who are active in the best agricultural practices (ARYA II Proceedings, 2014).

13. To make agriculture a profitable venture, young farmers should be guided to implement integrated farming system, mixed farming system, organic farming and precision farming for better utilization of natural resources and attain sustainable productivity. Rural youth would be motivated by success stories of seed growers and the expertise in seed production provided through training and field demonstrations to foray into seed production activities as a producer or as a seed production organiser. The strategies that could help to retain youth are to develop entrepreneurship among rural youth by providing training in agro-based enterprises such as vermicomposting, poultry farming, mushroom farming, beekeeping, livestock feed production, piggery and medicinal herbs farming, and so on, as well as providing knowledge on marketing methods for agricultural products and creating export opportunities. In addition to this provision of social amenities, establishment of industries, educational institutions, corporate branches, and provision of recreation facilities in rural areas may aid in reducing

the rate of youth migration from rural to urban areas (Kurnalliker *et al.*, 2016).

14. Regional Exchange program: These include gatherings of young farmers, exchange visits among young farmer organisations, cooperation and international solidarity among young farmers, participation in trade fairs, exhibitions, and other events such as farming technique competitions, sharing success stories of youth involvement in agriculture, etc. (Anonymous, 2014).

15. Partnership with various actors: As a means of attracting youth to agriculture, collaboration with a variety of actors (government, corporate sector, banks, academia) is required, such as establishing links with training centres for refresher courses, partnering with consumer groups on food safety and organic foods, and garner community support for food purchasing schemes. The general public must be educated about the importance of agriculture in the economy and in ensuring food security. A greater understanding of the importance of farmers should be fostered, and young farmers should be encouraged to succeed their parents in farming (Anonymous, 2014).

16. Among the proposals made by rural landowners to get young people into farming are the following (Kumar *et al.*, 2019): Government should provide pension to the well-experienced farmers during their latter years; implementation of practical and employability generating higher agricultural education; special reservation should be given to farm families in government recruitment; and channel irrigation water should be made accessible as and when needed and these issues must be addressed by concerned departments.

17. Appropriate allocation of budget by Government: More than half of India's workforce is employed in agriculture, which accounts for 17.5 percent of the country's GDP (at current prices in 2015-16) (PRS India, 2017). The contribution of livestock sector to GDP is 4.5 percent and 25.8 percent of total agriculture GDP of the Nation (GoI, 2017^a). Agriculture and allied sectors' contribution to the economy fell from 18.2 percent in 2012-13 to 16.4 percent in 2017-18. In 2017-18, the growth rate of the agriculture sector is estimated to be 2.1 percent, as compared to 4.9 percent in 2016-17 (Economic Survey, 2018). But the share of livestock sector from 2013-14 to 2015-16 increased from 22.6 percent to 25.7 percent (GoI, 2018).

Agriculture budget accounts for 5.2 percent of total budget (Acharya, 2019). In 2018-19, the Department of Agriculture, Co-operation and Farmers Welfare accounts for 81 percent of the Ministry's allocation, the Department of Agricultural Research and Education is allocated 13.5 percent, the Department of Animal Husbandry, Dairying and Fisheries accounts for 5 percent of the allocation (PRS India, 2019). According to the Indian Council for Research on International Economic Relations (Icrier) study, India spends about 0.7 percent of its agriculture GDP on agriculture research and education (R&E) (including extension education), with 0.54 percent going to R&E and 0.16

percent going to extension and training as per expenses recorded in 2013-14. This falls short of the World Bank's recommendation of 2 percent of GDP. Only 10 percent of the agriculture R&E budget was allocated to A.H. and dairy development (Anonymous, 2018).

CONCLUSION

Being the largest employer in the country, Agriculture sector holds the responsibility to provide sustainable and secure livelihoods to the farmers. Unfortunately, farming is no more viewed as a prospective employment option for the youngsters of the country because of the various constraints faced by this sector. In order to attract and retain youth in agriculture a respectable brand image is to be formed so that people's view on this sector is altered. Today, agriculture needs to be perceived as an enterprise and the farmer as an agri-preneur. There is a wide range of scope that need to be explored by young people because they have the creativity and desired innovation needed to reshape agriculture. What is currently needed is to formulate appropriate policies and strategies for attracting and retaining young people in this sector so that Indian agriculture can experience a new stature in the hands of young and enthusiastic farmers. Already many public and private efforts are paving the way, which are chiefly focused at sensitizing and leveraging youth for agriculture. With adequate public investment in agriculture, continuous regulatory and policy reforms, and extensive attention to ensuring youth participation in India's agricultural renaissance, the country's youth can be wisely used for the nation's development.

Conflict of Interest: None.

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