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Review of issues and challenges in empowering scheduled caste farming community through agriculture led interventions

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Abstract

Farming in India is practised by farmers belonging to various social groups. Small and marginal farmers account for 86.20 percent of the total farmers (Situation Assessment Survey, 2019). Majority of them belong to disadvantaged groups like Scheduled Castes (SCs), Scheduled Tribes (STs) and Other Backward Classes (OBCs). Non SC/ST households are relatively more involved in agriculture as compared to the SC/ST households (Xavier Institute of Social Service, 2019). Scheduled Castes are the most backward in socio-economic development. SCs account for 11.84 percent of the total operational holdings and their average size of operational holding is 0.78 ha (Agricultural Census, 2015-16). This tiny farm size may not guarantee sustainable living. Farm labour is the major source of income from which they derive more than 40 percent of total income (SAS, 2019). Social exclusion, restrictions in access to productive resources, institutional credit, input, market, and discrimination by employers/contractors and other social factors apart from seasonal nature of agriculture force these downtrodden people to migrate in search of wage related jobs (Deshingkar and Start, 2003). SCs have the highest share of income from wage employment, which makes them more vulnerable to unemployment. This is an alarm signal for the policy makers to act towards empowerment of SC community before there is a large scale shift in labour from agriculture to other sectors threatening the food security of the nation.

Keywords: Challenges, empowering scheduled caste, agriculture led interventions

Introduction

Factors determining socio-economic development of the nation

Socio-economic development of any nation is influenced by factors like education, skill development, income, employment status, access to health, major working sectors, and poverty and unemployment rate etc. (Information Resources Management Association, 2018) ^[8]. Globalization, which means the exchange of labour and technology across international borders. Liberalization, which means removing restrictions in imports and exports in agriculture along with urbanization, would facilitate accelerated development of the sector which in turn contributes to growth of the nation. Urbanization not only represents a potential market for processed agricultural (food) products, but also for labour. The wages are often higher in urban areas which attract the rural labour class people into urban areas (Meijerinka and Roza, 2007) ^[11]. SCs, viewed as marginalized community in rural areas have been found engaged in occupations that are considered unhygienic and derogatory by upper caste people since past generations (Mosse D, 2018) ^[13]. In agriculture also, they usually work as farm labourers to secure their daily livelihood. Therefore capacity building of this labour community gets precedence to bring them to the forefront of the society.

Role of agriculture in facilitation of socio-economic development

India is an agrarian economy with 54.60 percent of the total workforce engaged in agriculture and allied sector activities (www.niti.gov.in). SC households were significantly involved in dairying activities as compared to the non-SC/ST beneficiary households which might be due to less land holding size. This shows that vulnerable and marginalized communities depend more on dairying than better off communities (Xavier Institute of Social Service, 2019) [27]. Most of the SCs are poor with limited access to education, inputs, and credit which makes their socio-economic status in poor condition. Educating and imparting training and skills would transform this mere labour force into potential human capital which directly promotes socio-economic growth of this community (Meijerinka and Roza, 2007) [11]. Though, the fast growth of manufacturing and service sectors have reduced the role of agriculture in national

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Agricultural Extension Management, Rajendranagar, Hyderabad, Telangana, India GDP it remains the prominent sector as it feeds the growing population. In fact, during COVID-19 outbreak the only sector to register positive growth rate in the country was agriculture sector. The share of agriculture and allied sector in total Gross Value Added (GVA) of the country is 18.80 percent in 2021-22. Thus, agriculture not only plays a key role in food and nutrition security as well as in the economic recovery and social stability of a nation (FAO, 2018) [24].

Different social categories of farmers

Agriculture Census 2015-16, classified operational holdings into three categories based on social groups, viz., Scheduled Castes, Scheduled Tribes and Others. Scheduled Castes possess about 11.84 percent of the total operational holdings and operate 8.54 percent of it as compared to 79.33 percent of total operational holdings held by general farmers. Of the total land owned by Scheduled Castes, nearly 61 percent of the holdings are marginal (below 1 ha) and small (1 to 2 ha). Different size category of farmers Scheduled Castes is as follows; marginal farmers (below 1 ha) account for about 35.47 percent, small farmers (1-2 ha) with 25.18 percent, semi-medium farmers (2-4 ha) with 19.52 percent, medium farmers (4-10 ha) with 13.74 percent and large farmers (10 ha and above) with only 6.09 percent. Thus, SCs not only own less land disproportionate to their share in population, their land is also much smaller in size forcing them into economic distress and social backwardness.

Why scheduled caste farmers need a special treatment?

Scheduled caste farmers have lower access to the public extension services, primarily due to their inferior resource-endowment status. Though, there is increase in per capita income and living standards among the rural households since last two decades, economic disparity across different castes is deeply rooted down and the SCs tend to be represented at the bottom of the socio-economic development. Many studies have been conducted on the socio-economic status of farmers with varying farm size and education status, but not in respect of the social strata of the rural communities (Krishna *et al.*, 2019) [10]. Scheduled Castes are economically poor, which gets reflected in the fact that 63 percent of the SC households participated in food-subsidy schemes as against 31 percent of other general farmers (Thorat, 2009) [25].

SC farmers have limited access to land, inputs, information, credit and market which results in lower farm income for them (Iversen *et al.*, 2010) ^[9]. Farmers with extension access received 68 percent higher income than the income received by SC farmers that is significantly lower because of their lower access to public extension services (Birthal *et al.*, 2015) ^[2]. They are more dependent on family labour and draught power of animals for crop production as against agricultural equipments and machineries used by other caste farmers. Their land holdings are also meager which limits their potential for income generation as land is a critical factor of production. They are also excluded from being benefitted by the rural development programs (Deshpande, 2011) ^[5].

Further, women of this disadvantaged community are highly marginalized due to stringent gender norms which prevent their upliftment. Their contributions to farming are undervalued due to gender specific roles and have received minimum attention in the policies of the government (Sardar, 2020) [22]. It was reported that Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) led to a 9-13 percent reduction in child labour and broadened the choices

and capabilities of women by improving their earnings thereby facilitating women empowerment (Dev, 2011; Ponnusamy and Chakravarty, 2018) ^[6]. In the wake of increased male outmigration and feminization of farming activities, the policies of the Government must be directed towards narrowing down the gender divide for attaining socio-economic empowerment of women in general (Ponnusamy *et al.* 2017) ^[17].

Therefore, the focus must be on to promote the development of Scheduled Castes and other weaker sections of the society towards growth and development in order to bring all the sections on a level playing field which also fulfills the objective of inclusive agrarian development.

Issues in empowerment of scheduled caste farmers

Agricultural extension agencies in India experience staff shortages and inefficient organizational structures which inhibits from providing quality information at appropriate times. Their reach is even poorer among socially marginalized communities in many parts of the country (Ponnusamy and Padaria, 2021) [16].

Farmers belonging to socially-marginalized castes primarily follow subsistence agriculture and their demand for information and contact with extension agencies are dismal which results in nominal returns and in turn lead to vulnerable household economic position (Rao, 2017) [21].

The extension services effectiveness is affected by poor education status prevalent among the socially-marginalized castes in rural areas. Certain extension interventions like pamphlets, folders, magazines and other literary materials do not reach farmers of these groups (Thorat, 2009) [25].

Field extension workers tend to focus on the well-to-do farmers, because their efforts will more likely to produce an immediate and visible results and also well-off farmers could offer them personal benefits such as meals, accommodation, and agricultural produce (Feder and Slade, 1986).

In rural hierarchical society with heterogeneous farming population, the information passed to the contact farmers by the extension agents do not trickle down to lower strata of the society which widens socio-economic inequality in the region (Munshi, 2004).

Social exclusion which is a direct effect of caste system acts as an impediment to obtain services of extension agency and other organizations like FPOs, NGOs, and SHGs (Krishna, 2019) [10].

Lack of awareness and interest among the farmers of the community in knowing about improved agricultural practices as well as depending on the fate rather than one's own efforts to improve their standard of living are the internal factors affecting their access to extension and advisory services.

The SC community usually resides away from the centre of the village due to their social exclusion which makes the extension agency to sideline this community and focus on the problems of farmers' residing in the midst of the village.

Challenges in empowerment of scheduled caste farming community

Insufficient allocation of budget on extension and advisory services by the Government with significant regional imbalance particularly in states where significant share of the population belongs to the scheduled castes.

Lack of information about access to productive resources by SC farm households is also an impediment to target a particular community for empowerment.

Proper identification and targeting of SC farm families is difficult as they rarely come in contact with extension agencies.

SC farmers are likely to experience more hardships during extreme weather events due to climate change and frequent disasters (Ponnusamy *et al.* 2019) [15-18].

Heterophilous nature of relationship between extension agent and SC farmers often stands as an obstacle as the farmers accord least credibility to extension messages.

Extension agencies mostly associate and work with farmers' groups such as Farmer Producer Organizations, Commodity Interest Groups, Self Help Groups and Non Government Organizations etc. but the involvement of SC farmers in such organizations is poor and thereby SC farmers must be approached through targeting the community as a whole or through individual contact method which is difficult to achieve with available time and money.

Since the educational and literacy levels among the SC community is very low, extension literature like leaflets, folders, bulletins, magazines etc. though reliable cannot be

effective in promoting new practices which have to be disseminated through demonstrations, farm tour to successful farmer's field which are resource intensive activities for the extension agency.

Availability of improved technologies/practices for SC farm families

Majority of Scheduled Caste farm families are resource poor with meager land holdings. They own on an average one to three indigenous animals for milch and draught purposes. The Government through agricultural and animal husbandry departments is distributing these technologies on subsidy basis to enable them to adopt on their farms. There is a need to create awareness among the SC farm families through social media, farm literature and broadcast media regarding benefits of the government and disseminate these low cost technologies (Table 2) to these marginalized farmers to ensure their sustenance in agriculture as well as improvement in livelihood and standard of living (Prajapati *et al.* 2011) [20].

Sl. No	Technologies/practices in animal husbandry	Technologies/practices in agriculture
1	Hybrid fodder seeds	Hybrid crop seeds
2	Mineral mixture	Plough, harrow, tiller, rotovator etc.
3	Artificial insemination	Fertilizers, pesticides and insecticides
4	Deworming	Farm yard manure, Green manure
5	Rubber mat for the cattle shed	Vermicompost
6	Ivermectin for Ectoparasite control	Bio-fertilizers
7	Chaff cutter	Drip and sprinkler irrigation systems
8	Vaccination	Solar water pumps, Electric pumps, Diesel pumps
9	Sex sorted semen	Neem coated urea
10	Pro-biotic Pro-biotic	Plastic mulch
11	Pregnancy diagnosis	Contour farming

Table 1: Low cost technologies available in agriculture and allied enterprises

Strategies for empowering Scheduled Caste farm families

Agricultural extension should be directed towards capacity building of scheduled castes through educating, imparting skill and training and transfer of locally-relevant information and technologies to enhance the human capital of the community that forms largest share as farm labourers (Ponnusamy and Padaria, 2021) [16].

Caste mainstreaming, where one can ensure that lower caste farmers have equal access to production resources and developmental opportunities, while exercising control over decision-making in all stages of development processes which can help to reduce the caste-based inequalities (Krishna *et al.*, 2019) [10].

Inclusion of caste as one of the variable in impact assessment of extension programmes so that it is possible to know the extent of utilization of extension services by different caste households especially scheduled castes.

Prioritizing technological interventions for the scheduled castes especially those living in remote areas based on their resource endowment giving importance to regional or local activities.

Since SC farmers are laggards with respect to modern technologies, there is a need to employ Para-professional aides who are homophilous to their socio-economic status and are credible and trustworthy in order to persuade them to adopt new technologies. Extension has the potential to become crucial instrument for alleviation of poverty in rural India.

Extension agency should increase its collaboration with grass

root level organizations like Farmers Producer Organizations (FPOs), Self Help Groups (SHGs), and Non-Government Organizations (NGOs) working with the rural people in order to target and identify poor SC farmers for empowering them (Ponnusamy *et al.* 2021) [19].

Conclusion

Scheduled Caste community has experienced social exclusion, discrimination and marginalization since ages which are primarily due to their lower caste status. This has been reflected in their poor socio-economic conditions, lower level of education, inadequate access to healthcare, lack of productive assets in agriculture. SC farmers are further underprivileged as they do not have own lands, limited access to formal credit, inputs, market, technological products and extension and advisory services. Though economic conditions of the SC farm families may have improved slightly over time but the age old oppressive social barriers cannot be completely ruled out. Inclusive growth which is the major goal of the government can be effectively realized by targeting and sensitizing SC farm families and their empowerment through capacity and skill development policies and programmes. Therefore, scheduled caste farm families must be identified, mapped and prioritized through target approach and ensured effective delivery of low cost farm friendly technologies to promote sustainable livelihood among them leading to their empowerment.

References

- Babu SC, Joshi PK, Glendenning CJ, Asenso OK, Sulaiman RV. The state of agricultural extension reforms in India: Strategic priorities and policy options. Agricultural Economics Research Review. 2013;26(2):159–172
- 2. Birthal PS, Kumar S, Negi DS, Roy D. The impact of information on returns from farming: Evidence from a nationally representative farm survey in India. Agricultural Economics. 2015;46(4):549-561.
- 3. Department of Animal Husbandry and Dairying. Schemes and Programmes; c2021.
- 4. Deshingkar P, Start D. Seasonal Migration for Livelihoods in India: Coping, Accumulation and Exclusion, Working Paper, 2003, 220,
- 5. Deshpande A. The grammar of caste: economic discrimination in contemporary India. New Delhi: Oxford University Press; c2011
- Dev SM. NREGA and Child wellbeing. Institute for Human Development (IHD)-UNICEF working paper No. 10. Institute for Human Development, New Delhi; c2011.
- 7. Feder G, Slade R. The impact of agricultural extension: The Training and Visit system in India. The World Bank Research Observer. 1986;1(2):139–161
- Information Resources Management Association, 2018, USA.
- 9. Iversen V, Kalwij A, Verschoor A, Dubey A. Caste dominance and economic performance in rural India. Discussion Papers in Economics No. 10–01, Indian Statistical Institute, New Delhi; c2010.
- 10. Krishna VV, Aravalath ML, Vikraman S. Does caste determines farmer access to quality information? PLOS ONE. 2019;14(1):e0210721
- 11. Meijerink G, Roza P. The role of agriculture in development. Markets, Chains and Sustainable Development Strategy and Policy Paper, no. 5. Stichting DLO: Wageningen; c2007. Available at: http://www.boci.wur.nl/UK/Publications/
- 12. Ministry of Agriculture and Farmers' Welfare. Agricultural Census; c2015-16.
- 13. Mosse D. Caste and development: Contemporary perspectives on a structure of discrimination and advantage. World Development. 2018;110:422-436
- 14. Munshi K. Social learning in a heterogeneous population: Technology diffusion in the Indian Green Revolution. Journal of Development Economics. 2004;73(1):185-213.
- 15. Ponnusamy K, Chakravarty R. Achieving zero hunger through women empowerment approaches in agriculture. Indian Farming. 2019;68(10):91-94
- Ponnusamy K, Padaria RN. Research in agricultural extension: Review of its contribution and challenges. Indian Journal of Agricultural Sciences. 2021;91(5):659-665.
- 17. Ponnusamy K, Bonny BP, Dutta MD. Impact of public private partnership model on women empowerment in agriculture. Indian Journal of Agricultural Sciences. 2017;87(5):613-617
- 18. Ponnusamy K, Chakravarty R, Singh S. Extension interventions in coping of farmers against effect of climate change in dairy farming. Indian Journal of Dairy Sciences. 2019;72(4):430-436
- 19. Ponnusamy K, Singh V, Chakravarty R. Strategies to overcome the challenges in dairy extension. Indian Journal of Animal Sciences. 2021;91(6):430-437

- 20. Prajapati JV, Bhatt PM, Patel HB. Adoption of no-cost and low-cost technologies of animal husbandry by tribal dairy farmwomen. Gujarat Journal of Extension Education. 2011;22:31-35
- 21. Rao S. Caste discrimination and agricultural performance in India. Economic and Political Weekly. 2017;52(25 & 26):32-38.
- 22. Sardar S. An analysis on socio-economic Status of scheduled castes population in Tirol village, Arambagh, Hooghly. International Journal of Research-Granthaalayah. 2020;8(07):401-409.
- 23. Situation Assessment of Agricultural Households and Land and Livestock Holdings of Households in Rural India. Ministry of Statistics and Programme Implementation; c2019.
- 24. Socio-economic context and role of agriculture. FAO; c2018.
- Thorat S. Dalits in India: Search for a common destiny New Delhi: SAGE Publications India Pvt Ltd., 2009, 339.
- 26. www.niti.gov.in
- 27. Xavier Institute of Social Service. Social Inclusion and Empowerment of Scheduled Caste and Scheduled Tribe Population under National Dairy Plan-I; c2019.