



Socio-economic Transformation through RKVY-RAFTAAR in Uttar Pradesh and Karnataka

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ABSTRACT

Rashtriya Krishi Vikas Yojana- Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY-RAFTAAR) is aimed at augmenting agri and allied sector income. A study was conducted to analyse the socio-economic changes generated by Rashtriya Krishi Vikas Yojana rechristened as Rashtriya Krishi Vikas Yojana- Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY-RAFTAAR) in the states of Uttar Pradesh and Karnataka in 2022. 160 beneficiary farmers and 80 non-beneficiary farmers from both the states were personally interviewed to elicit the socio-economic changes generated by the programme. The socio-economic transformation was higher for beneficiary farmers in terms of annual income, entrepreneurial opportunity, occupational status, crop diversification, material possession and access to the programme than non-beneficiary farmers of both the states. Comparative analysis of socio-economic transformation of beneficiary farmers of Karnataka and Uttar Pradesh revealed significant changes in the socio-economic indicators except entrepreneurial opportunity, education and access to RKVY-RAFTAAR. The changes brought about by the programme, before and after its launch revealed significantly higher socio-economic impact on beneficiary farmers.

INTRODUCTION

The National Development Council (NDC) in 2007 envisioned a special additional central assistance scheme namely RKVY be launched for holistic development of agriculture sector. The NDC resolved that agricultural development should be re-strategized to meet the needs of farmers and solicited ideas from Central and State governments to evolve a strategy to rejuvenate agriculture (GoI, 2014). The NDC reaffirmed its commitment to achieve 4 per cent annual growth in the agricultural sector during the 11th plan (Rajesh & Singh, 2021). The main objectives of this programme are, to incentivize the states to increase public investment in agriculture and allied sectors, to provide flexibility and autonomy to the states in planning and executing agriculture and allied sectors schemes, to ensure the preparation of plants for the districts and the states

based on agro-climatic conditions, availability of technology and natural resources, to ensure that the local needs/crops/priorities are better reflected, to achieve the goal of reducing the yield gaps in important crops, through focused interventions, to maximize returns to the farmers (GOI, 2019). RKVY operational Guidelines (2019) which stipulate that under the revamped scheme funds would be devolved as 50 per cent of the annual outlay will be provided for setting up infrastructure and assets, 30 per cent for value-addition linked production projects and 20 per cent of the outlay will be flexi-funds for supporting any project as per the local needs. The RKVY-RAFTAAR funds would be provided in the ratio of 60:40 to the states except for north east and Himalayan states which will get 90:10 grant. To make farming a remunerative profession, the government approved changes to ongoing central scheme Rashtriya

Krishi Vikas Yojana (RKVY) with a focus on value chain, post-harvest infrastructure and agri-entrepreneurship development, among others (ISEC, 2013). Now, the scheme has been rebranded as RKVY-Remunerative Approaches for Agriculture and Allied sector Rejuvenation (RAFTAAR) to be implemented for three years till 2019-20 with a budget allocation of Rs 15,722 crore (The Hindu, 2019). The objective of the scheme is to make farming a remunerative economic activity through strengthening the farmer's effort, risk mitigation and promoting agri-business entrepreneurship (Vijayan & Nain, 2020). By the end of 2021-22, RKVY programme had implemented 17636 projects with an expenditure of Rs. 125451 crores across all the states and union territories. The present study was conducted to analyse the socio-economic transformation brought about by the programme in the states of Uttar Pradesh and Karnataka. Debt ridden farmer, bankrupted farmer, farmers on the verge of suicides have had been believed to be the plight of a population constituting 55 per cent of the population of India. There is as such no panacea to rescue the farming community, but the efforts unleashed through several agricultural development programmes go unnoticed. This study reveals how agricultural development programmes can be a real game changer for the farming community in their total social-economic transformation. The comparative analysis of beneficiary and non-beneficiary, before and after programme launch, throw light on the minor and major positive socio-economic changes brought about by RKVY-RAFTAAR for the former. State-wise comparison enlighten oneself that, one for all approach wont yield desired results wherein core areas specific to particular region should be focused while implementing RKVY-RAFTAAR.

METHODOLOGY

The present study used the ex-post facto research design. Uttar Pradesh and Karnataka states were purposively selected. From the each selected state two districts and from each district two villages were selected randomly. From Uttar Pradesh, Gonda and Lalitpur districts were selected and from Karnataka, Kolar and Chikkaballapur were selected purposively. 40 beneficiary farmers and 20 non-beneficiary farmers were selected from each district, totaling to a sample size of 240 farmers. A detailed interview schedule was prepared to analyse the extent of utilization of benefits of RKVY-RAFTAAR. Personal interviews and focused group discussion with beneficiary and non-beneficiary farmers were conducted to elicit the data. Socio-Economic transformation incorporates the tangible and intangible positive changes on the beneficiary as a result of availing of benefits and access to agricultural development programmes. Variables namely; annual income, crop diversification, value-chain development, earning members, occupational status, material possession were chosen and analysed for economic indicators. Indicators namely; education, entrepreneurial opportunity, social participation and access to the programme were analysed for social indicators. The socio-economic indicators were chosen based on thorough review of literature and expert consultation. Socio-economic changes before and after the launch of the programme were analysed using Wilcoxon Sign rank test, while socio-economic changes between beneficiary and non-

beneficiary were analysed using Mann Whitey U test. Beneficiary farmers of Uttar Pradesh and Karnataka were also compared to project the difference in regional change in socio-economic indicators by the programme. Correlation analysis of socio-economic indicators to overall socio-economic transformation was also done.

RESULTS AND DISCUSSION

Comparison of beneficiary farmers and non-beneficiary farmers on socio economic indicators

Ten major socio-economic indicators were studied and compared among beneficiary farmers and non-beneficiary farmers and the results are presented in Table 1 and Table 2. The perusal of Table 1 indicated that there was significant difference in the annual income (mean rank=78.47), occupational status (mean rank=79.95), crop diversification (mean rank=79.44), earning members (mean rank=66.54), material possession (mean rank=80.20), entrepreneurial opportunity (77.20), value chain development (mean rank=77.88) and access to the programme (77.91) on beneficiary farmers than non-beneficiary farmers of Karnataka ($p < 0.05$). While, there was a significant difference in the annual income (mean rank=77.73), occupational status (mean rank=77.96), material possession (mean rank=77.20), earning members (mean rank=66.50), entrepreneurial opportunity (mean rank=77.88), social participation (mean rank=76.50), and access to the programme (mean rank=75.89), between beneficiaries and non-beneficiaries of Uttar Pradesh. The plausible reasons for income augmentation could be the focus of the government on promoting remunerative approaches in agriculture sector. The difference in annual income, occupational status, and material possession could be attributed to beneficiary farmers being able to accommodate agri-allied activities along with agriculture, thereby earning more income. Similar findings were reported by Vamsi et al., (2019), that RKVY interventions and technical knowledge gained from the programme had contributed in augmenting the income of the beneficiary farmers.

The access to RKVY-RAFTAAR might have synchronized with creation of entrepreneurial opportunity, practicing crop diversification and better value chain development of the products of the beneficiaries of Karnataka. Similar findings were reported by Samuel et al., (2021) that agripreneurial activities promoted by KAU through RKVY-RAFTAAR had resulted in creating enabling entrepreneurial environment for the beneficiary farmers. The data also shows significant difference in social participation and education among the beneficiaries of Uttar Pradesh. Analogous data reported by Shinoji et al., (2021) that empowering intervention had positively contributed in enhancing social participation of the beneficiaries. It was also observed that educational impact was not significant between the beneficiary farmers and non-beneficiary farmers. Being primary school educated was not an impediment in accessing the RKVY-RAFTAAR as found by Rajashekara et al., (2021). It was deduced that the increased access to RKVY-RAFTAAR in both states could be attributed to enhanced agricultural sensitization measures through social media, television and print media. Similar finding was conveyed through the information empowerment study of farmers by Vijayan et al., (2017).

Table 1. Mann-Whitney U test for analysis of social-economic transformation of beneficiary farmers vs non-beneficiary farmers of Karnataka and Uttar Pradesh (N=240)

Variables	Mean Rank		Mann Whitney U value	Z value	Asymp. Sig. (2-tailed)
	Beneficiary (n ₁ =80)	Non-beneficiary (n ₂ =40)			
Karnataka					
Annual Income	78.47	24.55	162	-8.491	.000*
Education	69.44	62.63	1685 ^{ns}	-.507	.0518
Occupational Status	79.95	21.60	44	-9.764	.000*
Crop Diversification	79.44	20.63	80	-9.010	.000*
Earning members	66.50	48.50	1120	-3.234	.001*
Material Possession	80.20	21.10	24	-9.480	.001*
Entrepreneurial Opportunity	77.20	27.10	264	8.003	.000*
Social Participation	61.25	59.00	1540 ^{ns}	-.387	0.699
Value chain development	77.88	25.75	210	-8.275	.000*
Access to the programme	77.91	25.68	207	-8.427	.000*
Uttar Pradesh,					
Annual Income	77.73	34.04	541.50	-7.114	.000*
Education	59.44	62.63	1515 ^{ns}	-.507	0.612
Occupational Status	77.96	25.58	203.00	-8.619	.000*
Crop Diversification	79.50	22.50	80.00	-9.01	.000*
Earning members	66.50	48.50	1120.00	-3.234	.001*
Material Possession	77.20	27.10	264.00	-8.121	.000*
Entrepreneurial Opportunity	77.88	25.75	210.00	-8.275	.000*
Social Participation	76.50	28.50	320.00	-7.741	.000*
Value chain development	62.00	57.50	1480.0	-8.09	.419
Access to the programme	75.89	29.73	369.0	-7.741	.000*

*Significant at 5% level of p

Table 2. Wilcoxon Sign rank test for analysis of social-economic transformation before and after the launch of RKVY-RAFTAAR (N=160)

Variables	Z value		Asymp. Sig. (2-tailed)	
	Beneficiary farmer (Karnataka, n ₁ =80)	Beneficiary farmer (Uttar Pradesh, n ₂ =80)	Beneficiary farmer (Karnataka)	Beneficiary farmer (Uttar Pradesh)
Annual Income	-6.945 ^b	-7.563 ^b	.000*	.000*
Education	-6.140 ^b	-6.126 ^b	.000*	.000*
Occupational Status	-7.469 ^b	-6.664 ^b	.016*	.000*
Crop Diversification	-8.744 ^b	-7.961 ^b	.000*	.000*
Earning members	-4.025 ^b	-3.683 ^b	.000*	.002*
Material Possession	-8.319 ^b	-8.118 ^b	.000*	.000*
Entrepreneurial Opportunity	-8.032 ^b	-8.032 ^b	.000*	.000*
Social Participation	-7.273 ^b	-8.024 ^b	.023*	.000*
Value chain development	-7.348 ^b	-7.231 ^b	.000*	.042*
Access to the programme	-8.166 ^b	-8.020 ^b	.000*	.000*

*Significant at 5% level of p

Comparison of RKVY-RAFTAAR beneficiary status before and after the launch

Socio-economic changes generated by RKVY-RAFTAAR was also studied by analyzing before and after the programme launch with benchmark year as 2007 using Wilcoxon Sign rank test. It is deduced that all the ten socio-economic indicators were significant for beneficiary farmers of both the states after the launch of the programme ($p < 0.05$), which reiterated the fact that RKVY-RAFTAAR had created an impact on the lives of the beneficiaries. The study of Rajashekara et al., (2021); Shilpa & Rajiv (2015) support this finding, who reported that there was a positive transformation in the socio-economic status of the beneficiaries of RKVY-RAFTAAR.

Comparison between RKVY-RAFTAAR beneficiary farmers of Karnataka and Uttar Pradesh

To bring out the difference in social-economic transformation, beneficiaries of Uttar Pradesh and Karnataka were compared using Mann Whitney U test and presented in Table 3. With respect to annual income (mean rank=94.75), occupational status ((mean rank=90.00), crop diversification (mean rank=94.50), earning members (mean rank=90.50) and social participation (mean rank=86.00), Karnataka beneficiary farmers fared comparatively better, while in material possession (mean rank=92.00) and value chain development (mean rank=69.25) beneficiary farmers of Uttar Pradesh fared better. This dovetails with the findings of Rashtrarakshak et al., (2016) who claimed that components under

Table 3. Mann-Whitney U test for comparison of social-economic transformation on beneficiary farmers of Uttar Pradesh and Karnataka (N=160)

Variables	Mean Rank		Mann Whitney U value	Z value	Asymp. Sig. (2-tailed)
	Uttar Pradesh beneficiary (n ₁ =80)	Karnataka beneficiary (n ₂ =80)			
Annual Income	66.25	94.75	2060.00	-4.656	.000*
Education	80.50	80.50	3200.00 ^{ns}	.000	1.00
Occupational Status	71.50	90.00	2440.00	-3.065	.002*
Crop Diversification	66.50	94.50	2080.00	-5.284	.000*
Earning members	70.40	90.60	2392.00	-3.472	.001*
Material Possession	92.00	69.00	2280.00	-3.628	.000*
Entrepreneurial Opportunity	80.50	80.50	3200.00 ^{ns}	.000	1.00
Social Participation	75.00	86.00	2760.00	-2.019	.043*
Value chain development	69.25	52.66	2280.00	-3.632	.000*
Access to the programme	82.31	78.69	3055.50 ^{ns}	-0.555	.579

*Significant at 5% level of p

Table 4. Correlation analysis of socio-economic indicators with overall socio-economic transformation

Socio-Economic Impact Indicators	p Value			
	Karnataka		Uttar Pradesh	
	BF	NBF	BF	NBF
Annual Income	.458**	.341	.621**	.386
Education	.235	.516**	.415	.482**
Occupational Status	.644	.422	.734*	.153
Crop Diversification	.558**	.111	.718**	.025
Earning members	.774*	.306	.537*	.722
Material Possession	.652**	.427	.404*	.761
Entrepreneurial Opportunity	.747**	.127	.574**	0
Social Participation	.404	.556	.382	.788**
Value chain development	.668*	.366	.695*	.583
Access to the programme	.426**	.258	.751**	.302

*Significant at 5% level of p & **Significant at 1% level of p

RKVY-RAFTAAR projects augmented farm income and eventually overall socio-economic status of the beneficiary farmers. The difference among the beneficiaries of two states could be attributed to several factors like compounding effects of other agricultural programmes, difference in efficiency of programme implementation by department personnel (Jena et al., 2019), variation in crops, frequency of natural calamity striking the area, remunerative approaches focused by the state agricultural department, prevalence of problem soil in the area etc. While indicators like education, entrepreneurial opportunity and access to the programme didn't show any significant difference between the beneficiaries. This might be due to the fact that agripreneurship development has been gaining equally good momentum in both states; also education of the beneficiary farmers didn't contribute to getting enrolled in the programme as well as the programme has strict guidelines for beneficiary enrollment which facilitated better access to the programme. These observations are in line with the findings of Shilpa & Rajiv (2015) and Veni et al., (2018), who reported rise in socio-economic status of the beneficiary farmers.

Correlation analysis of socio-economic indicators with overall socio-economic transformation

Spearman's rank correlation analysis of socio-economic indicators to total socio-economic transformation for beneficiary and

non-beneficiary farmers of Karnataka and Uttar Pradesh are depicted in Table 4. Among ten indicators seven indicators were positively correlated to overall socio-economic transformation for Karnataka beneficiaries whereas for non-beneficiaries only education (.516) was positively correlated. At the same time eight socio-economic indicators were positively correlated in case of beneficiaries of Uttar Pradesh and reasonably education (0.482) and social participation (.788) showed positive correlation to total socio-economic transformation in case of non-beneficiaries. Albeit being educated is an added advantage, here education was not an impediment in accessing and availing the benefits of RKVY-RAFTAAR. Rajashekara et al., (2021) in his study supported the same. Social participation also didn't contribute to the overall effect as government has strict beneficiary guidelines to include farmers irrespective of their social participation.

CONCLUSION

The socio-economic transformation generated by RKVY-RAFTAAR was significantly high for beneficiary farmers than non-beneficiary farmers of both Uttar Pradesh and Karnataka. Comparison of the two states reveal difference in socio-economic transformation, which may be due to a plethora of factors like efficiency in programme implementation, protracted disbursement of benefits among the beneficiaries, non-stringent follow up activities,

delay in accessing the benefits of the programme etc. Within the state, the distinction between beneficiary farmers and non-beneficiary farmers on socio-economic indicators are conspicuous. This explains the pertinence of the programme in the holistic development of agricultural and allied sector. Especially at a time when India focuses on made in India, vocal for local and one district, one product schemes, RKVY-RAFTAAR offers immense opportunity to the farming community. The visible socio-economic changes on the beneficiaries after the programme launch should facilitate RKVY-RAFTAAR to penetrate more of each states of India to emulate such positive results.

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