Original Research Article

Constraints perceived by the Rural youth in adoption of ARYA interventions in Telangana State

ABSTRACT

Realizing the prominent role of rural youth in agricultural development especially from the point of view of food security of the country, ICAR has initiated a scheme on "Attracting and Retaining of Youth in Agriculture (ARYA)". This project was launched by the Prime Minister on the foundation day of ICAR in 2015 and implemented through Krishi Vigyan Kendras in 25 states of the country. Under this scheme, special efforts will be taken to attract the rural youth under the age of 35years in agriculture and allied sector so the increase in the migration of rural youth towards cities can be controlled. Krishi Vigyan Kendra, Kampasagar will be the locale of the study because initially ARYA project was implemented through KVKs in 25 states of the country. In Telangana, Nalgonda is the only district in which this project was initiated in 2015. In Nalgonda district, under KVK Kampasagar 60 respondents (beneficiaries of ARYA Project) were selected purposively to study the constraints faced by the beneficiaries in adoption of ARYA interventions. Garrett ranking technique was used to rank the constraints in order of their influence in adopting the ARYA interventions.

Keywords: ARYA Programme; KVK Kampasagar; Telangana;rural youth;

1. INTRODUCTION

Agriculture and its allied sector are the heart of social development of India since it provides livelihood and employment for majority of Indian population and plays a vital role in national income. Rural areas acts as the economic backbone in most of the developing countries by providing food and raw materials to other growing sectors of the economy. Thus, realizing the potential of rural area and for food security of the Nation; ICAR launched a scheme called ARYA (Attracting and Retaining of Rural Youth in Agriculture). This scheme was launched on the foundation day of ICAR by Prime Minister of India in 2015. It was implemented through Krishi Vigyan Kendra's (KVKs) in 25 states of the country. This scheme focuses on providing

employment to rural youth in agriculture and to control their migration from rural areas to towns and cities; which indirectly attains the goal of food security.

KVK was the responsible institute for this scheme. Thereby, each KVK was assigned to train about 200-300 youth (below the age of 35 years) in agriculture and its allied sector. The KVK provide training on various supplementary activities like poultry farming, dairying, fisheries, goat rearing, mushroom production and similar other activities which are related to agriculture and its allied activities. Meanwhile, it enables trained youths to establish network groups, to deploy resources and capital intensive activities like processing, value addition and marketing.

In Telangana, about 39 per cent of the total population (3.8 Crores) is under the age group of 15-35 years. About 55.49 per cent of the state's population is dependent, in some form or the other, on farm activity for livelihoods (MoSPI, GOI, 2017). In Nalgonda District, the youth population is 9.8 lakhs which constitutes 30 per cent (32.7 lakhs) of the total population as of 2015 (Directorate of Economics and Statistics,, Government of Telangana, 2017). Realizing the emerging need of attracting and retaining youthin farming, ARYA project has been implemented in this district.Two KVKs are implementing ARYA programme in Telengana State, KVK kampasagar, Nalgonda from 2015 and KVK Malyal, Mahabubabad from 2018.

Since 2015, the KVK, Kampasagar is actively conducting many skill development programme in agriculture and allied sectors for the establishment of micro enterprises by the youth In the District, till now 149enterprises were established by the youth in the district. The areas focused in conducting Skill development programes such as Nursery raising of vegetables and Fruits, vermicompost units, Integrated Farming systems, Bakery etc. Alok et.al., (2021) mentioned that youth trained through ARYA program can acts as role model and master trainers for the youth in their rural area; which eventually inspire and motivate the other youth to initiate agri-based start-ups. While, Gamit et.al., (2020) reported that nearly two-third of the youth trained in ARYA programme were literate (67%) and the remaining were illiterate (33%).

Meanwhile, it was revealed that most of the youth trained in ARYA programme had medium level of extension contact (Meena et.al., (2017)), medium level of achievement motivation (Pratap et.al., (2017)), medium level of social participation (Alok et.al., (2021)) and medium level of risk orientation (Vekariya et.al., (2016)). Further, Sharma and Kumar (2022) identified that lack of veterinary services (88.33 MPS), inadequate credit facilities in the area

(87.22 MPS), lack of marketing facilities (83.89 MPS), lack of training on different aspects of goat farming (82.78 MPS) and lack of knowledge about common diseases and their preventive measures (81.67 MPS) were the major constraints encountered by the beneficiaries of ARYA programmes in adoption of goat farming practices.

Statement of the problem

It is a matter of concern that in farming economy like India, rural youth are looking down at agriculture with disdain and moving to towns, cities and urban centers in search of better jobs. This sector not only needs integrated approach but certain structural reform to deal with farm crisis. Keeping all these views in mind, the present study was planned to study the perceived constraints in adoption of ARYA interventions by the farmers.

2. METHODOLOGY

The present study was conducted in Krishi VigyanKendra, Kampasagar, Nalgonda district during the year 2022.A total of 2 mandals Miryalaguda and Tripuraram were selected purposively from Nalgonda district as most of the beneficiaries are concentrated in these 2 mandals and from each mandal, 2 villages are selected such that forming a total of 4 villages namely Srinivasapuram and Miryalaguda from Miryalaguda mandal and Tripuraram and Peddadevulapalli from Tripuraram mandal. To collect the primary data 60 participants, from each village 15 farmers were selected purposively for the study. The data was collected with the help of an interview schedule. The constraints faced by the targeted beneficiaries in adopting the ARYA interventions were identified.

Constraint analysis:

Garret's Ranking Technique was used to rank the constraints faced by the beneficiaries of CFLD-Pulses. The identified problems of beneficiaries in the adoption of ARYA interventions disseminated by selected KVKs were personally collected through interview schedule. Garret's Ranking Technique was used to figure out what is the most influential factor/ constraint by considering responses of all the respondents (60) for ARYA beneficiaries. Accordingly, a total of constraints were listed separately for respondent farmers. (Garrett & Woodworth 1966).

1. Respondents were asked to rank various constraints which were pre-listed in the schedule, based on their experience regarding adoption of technologies.

2. A frequency table was prepared to distribute all the respondents into respective rank positions they have assigned for each constraint and those ranks have been converted into score values with the help of Percent position formula. Then Percent position was calculated Percent position

$$Percent\ position = \frac{100\ (R_{ij} - 0.5)}{N_j}$$

Where, Rij = Rank given for theith variable by j th respondents

Nj = Number of variables ranked by jth respondents

3. The percent position scores were transformed into Garett scores by referring to the table provided by Garret and Woodworth (1969).

4. The Garett scores of each rank were multiplied with frequencies in the table and then the summated score for each constraint and mean scores were calculated.

5. Mean values were determined by dividing total value for each constraint by number of respondents (60 beneficiaries).

6. The most important factor which has significant influence upon adoption of technologies was determined by the factor with the highest mean value. Below is the tabular representation of the constraints faced by the beneficiaries in adoption of technologies.

3. FINDINGS AND DISCUSSION

Constraints in adoption of ARYA interventions by the beneficiaries

Table 1: Distribution of respondents according to the rank provided for technical constraints in adoption of ARYA interventions

(n=60)

S. No.	Technical constraints	GRS	Rank
1.	Poor communication skills	71.00	**IV**
2.	Lack of guidance by KVK during initiation of activities	60.80	**VIII**
3.	Lack of knowledge about equipment's/machinery for enterprise	78.30	**I**

4.	Lack of technical support by KVK	62.30	**VII**
5.	Lack of awareness of new machinery/techniques	72.10	**III**
6.	Less technical Staff in KVK	75.00	**II**
7.	Lack of feedback received by KVK staff related to ARYA Programme	65.00	**VI**
8.	No follow-up after trainings	68.50	**V**
9.	Poor participation in trainings and workshops	58.43	**IX**
10.	Absence of contact with KVK scientists	47.20	**XI**
11.	Poor participation of Subject Matter Specialists in training under ARYA	50.15	**X**

From the table 1., it was clear that the farmers had technical problems related to,lack of knowledge about equipment's/machinery for enterprise(78.30),less technical Staff in KVK(75.00),lack of awareness of new machinery/techniques(72.10),difficulties in getting inputs under subsidy under ARYA programme (71.00),no follow-up after trainings(68.50),lack of feedback received by KVK staff related to ARYA programme(65.00),lack of technical support by KVK(62.30), lack of guidance by KVK during initiation of activities(60.80),poor participation in trainings and workshops (58.43), poor participation of Subject Matter Specialists in training under ARYA (50.15), and absence of contact with KVK scientists (47.20).The finding was in similar with the findings of Chitra (2011), Verma *et.al.* (2014), and Gajendra (2017) who also reported that lack of knowledge was the major technical problem faced by the respondents in adopting the ARYA programme**.**

Table 2: Distribution of respondents according to the rank provided for input constraints in adoption of ARYA interventions

(n=60)

S. No.	**Input constraints**	**GRS**	**Rank**

1.	Difficulties in getting inputs under subsidy under ARYA programme	69.20	**IV**
2.	Lack of motivation to start a new enterprise	66.15	**VI**
3.	Lack of subsidies	75.00	**II**
4.	Training period is not sufficient for the farmers	62.50	**VIII**
5.	High costs of inputs	80.12	**I**
6.	Lack of transport facilities for carrying trainees to on-campus and off-campus training	65.00	**VII**
7.	Limited training programmes by KVK	68.75	**V**
8.	Limited land resources	71.00	**III**

From the table 2., it was evident that the farmers had input problems related with, high costs of inputs (80.12), lack of subsidies (75.00), limited land resources (71.00), difficulties in getting inputs under subsidy under ARYA programme (69.20), limited training programmes by KVK (68.75), lack of motivation to start a new enterprise (66.15), lack of transport facilities for carrying trainees to on-campus and off-campus training (65.00), and training period is not sufficient for the farmers (62.50). The finding was in similar with the findings of Chitra (2011), Sarita *et.al.* (2016), and Alok *et.al.* (2021) who also reported that cost of inputs was so high to meet was the major input problem faced by the respondents in adopting the ARYA programme**.**

Table 3: Distribution of respondents according to the rank provided for marketing constraints in adoption of ARYA intervention

(n=60)

S. No.	**Marketing constraints**	**GRS**	**Rank**
1.	Poor marketing skills	69.50	**V**
2.	Difficulty in marketing the products	76.20	**I**

3.	Fear of consumer acceptance	71.00	**IV**
4.	Lack of managerial skills	68.00	**VI**
5.	Lack of marketing information	72.30	**III**
6.	Unfair competition in market	75.00	**II**

From the table.3., it was understood that the farmers had marketing problem related to difficulty in marketing the products (76.20), followed by unfair competition in market (75.00), lack of marketing information (72.30), fear of consumer acceptance (71.00), poor marketing skills (69.50), and lack of managerial skills (68.00). The finding was in similar with the findings of Shrieesha *et.al.* (2017), *and* Kavitha *et.al.* (2020) who also reported that marketing the products was the major marketing problem faced by the respondents in adopting the ARYA programme**.**

Table 4: Distribution of respondents according to the rank provided for financial constraints inadoption of ARYA interventions

S. No.	**Financial constraints**	**GRS**	**Rank**
1.	Inadequate credit facilities in the area	62.30	**V**
2.	High cost of farm labour	71.20	**I**
3.	Lack of initial capital to start venture	70.40	**II**
4.	Increased transport charge	66.50	**IV**
5.	High cost of equipment's	69.50	**III**

From the table 4., it was understood that the farmers had financial problem related to high cost of farm labour (71.20), followed by lack of initial capital to start venture et (75.00), lack of marketing information (70.40), high cost of equipment's (69.50), increased transport charges

(66.50), and inadequate credit facilities in the area (62.30). The finding was in similar with the findings of Mubeena (2017) who also reported that labour cost was the major financial problem faced by the respondents in adopting the ARYA programme**.**

Suggestion provided by the beneficiaries for adopting ARYA interventions

Table 5: Distribution of respondents according to the rank provided for suggestions inadoption of ARYA intervention

(n*=60)

S. No.	Suggestions	Frequency	Per cent	Rank
1.	Strengthening of some of the entrepreneurial units which are running lack of resources under ARYA Programme	45	65.00	**IV**
2.	Establishment of rural youth organizations	30	50.00	**VI**
3.	Provisions of proper marketing facilities	49	71.67	**II**
4.	Timely availability of Subsidies/Loans.	36	60.00	**V**
5.	Inputs should be available in time	52	76.67	**I**
6.	Training should be organize by the KVK according to the young farmers needs	48	70.00	**III**
7.	Scientists should visit the farm and solve problems with proper demonstrations.	27	45.00	**VII**

* = multiple response.

From the table 5., It was clear that the farmers were suggesting as**,** inputs should be available in time (76.67%), followed by provisions of proper marketing facilities (71.67%), training should be organize by the KVK according to the young farmer's needs (70.00%), strengthening of some of the entrepreneurial units which are running lack of resources under ARYA Programme (65.00%), timely availability of Subsidies/Loans (60.00%), establishment of rural youth organizations (50.00%), scientists should visit the farm on regular basis and solve problems with proper demonstrations. (45.00%). The finding was in similar with the findings of

Byaruhanya *et.al.* (2015), Mubeen (2017), and Alok *et.al.* (2021) who also reported that suppling inputs at right time was the major suggestions proposed by the respondents for adopting the ARYA programme**.**

CONCLUSIONS:

It is a bitter truth that, in a farming economy like India, rural youth are looking down at agriculture with disdain and moving to towns, cities and urban centers in search of better jobs. But, provide employment to rural youth and to control their migration from rural areas to towns and cities; ARYA programme assures employment by providing training to youth in agriculture and its allied sector; which indirectly attains the goal of food security. Though, ARYA programme has numerous advantages, there are some constraints in adoption of ARYA interventions among the rural youth. Some of the constraints identified through this study were, lack of knowledge about equipment's/machinery for enterprise, high costs of inputs and difficulty in marketing the products were the major technical, input and marketing problems encountered by the youth in adoption of ARYA interventions. Thus, it can be concluded that ARYA programme not only provides employment to rural youth, but it also assures food security of our Nation. Hence, it become important to eliminate the constraints and the necessary facilities like provision of inputs, establishing proper marketing facilities and providing training on new machineries will help the beneficiaries to overcome the constraints.

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