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# PROFILE OF KVK-DAMU BENEFICIARY FARMERS IN RAYALASEEMA REGION OF ANDHRA PRADESH

**K. HARSHAVARDHAN*, T. LAKSHMI, K. RAGHAVENDRA CHOWDARY AND K. NAVYA JYOTHI**

Department of Agricultural Extension Education, S.V. Agricultural College, ANGRAU, Tirupati-517 502.

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## ABSTRACT

The present study was carried out to know the profile of KVK-DAMU beneficiary farmers in Kurnool and Kadapa districts of Andhra Pradesh over a purposively drawn sample of 120 respondents. The results revealed that majority of the KVK-DAMU beneficiary farmers were in middle age (71.67%), completed middle school education (20.83%), marginal farmers (42.50%), medium level of farming experience (71.67%), medium training undergone (66.67%), had medium level of extension contact (60.00%), fair cropping pattern (42.50%), medium social participation (57.50%), medium training undergone (41.67%), medium extension contact (44.17%), level of mass media exposure (75.00%), medium social participation (60.00%), medium level of economic orientation (62.50%) and medium level of scientific orientation (59.17%).

**KEYWORDS:** Profile, KVK-DAMU and beneficiary farmers.

## INTRODUCTION

The weather, one of several factors that affect agricultural production. Weather fluctuates across time and geography, thus forecasting it can help to reduce farm losses by managing agricultural operations effectively. It is impossible to completely prevent all agricultural losses brought on by weather factors, but they can be somewhat reduced by making adjustments based on early and accurate weather forecast information. The India Meteorological Department has established 130 Agro-Meteorological Field Units (AMFUS), interdisciplinary units tasked with developing and disseminating district agromet alerts during the XII$^{th}$ FYP (IMD). In accordance with Gramin Krishi Mausam Sewa (GKMS), IMD and ICAR propose to establish District Agro-Met Units (DAMUS) in an additional 530 districts, including 115 aspirational districts, within the grounds of Krishi Vigyan Kendra (KVK) of ICAR in 2017, as part of a centrally sponsored scheme that MOES has approved. Weather forecast and weather based agro-advisory services provided by DAMU in KVK's help in increasing the economic benefit to the farmers by suggesting them suitable management practices according to the weather conditions.

## MATERIAL AND METHODS

The study was conducted with an *Ex post facto* research design to assess the profile of KVK-DAMU beneficiary farmers in Kurnool and Kadapa districts with well-established KVK-DAMU units. The study will be purposively conducted in two districts with highest area under cultivation of major crops i.e paddy and cotton . From each district three mandals will be selected purposively based on the highest number of beneficiaries, thus making a total of 6 mandals .From each of the selected mandal, two villages will be selected purposively based on the highest number of beneficiaries, thus making a total of 12 villages. From each selected village, ten respondents will be selected purposively thus making a total of 120 respondents. After review of literature and consultation with experts a set of 11 personal and socio-economic variables were selected. The data was collected through a structured comprehensive interview schedule and analyzed using mean and standard deviation for drawing meaningful interpretations.

## RESULTS AND DISCUSSION

The beneficiary farmers of KVK-DAMU were distributed into different categories based on their selected profile characteristics and the results were presented in the table 1.

### Age

Majority 71.67 Percent of the KVK-DAMU beneficiary farmers were middle aged followed by old

*Corresponding author, E-mail: kharsha1999k@gmail.com

age (18.33%) and young age (10.00%) groups. From the above findings it is clear that the majority of KVK-DAMU beneficiary farmers were in the middle age group. The probable reason might be that middle-aged farmers are more likely to adopt weather-based advisory services due to their awareness of weather's impact on agriculture and need for effective planning. Younger farmers show a lower adoption rate, possibly due to limited experience and awareness, while some technically adequate ones embrace these services. Older farmers resist newer technologies, relying on traditional knowledge and local wisdom for weather prediction. Similar findings were reported by Samarpitha *et al*. (2016) and Reddy *et al*. (2017).

**Education**

About 20.83 Per cent of the KVK-DAMU beneficiary farmers were educated up to middle school followed by primary school (20.00%), functionally literate (19.17%), high school (16.67%), illiterate (15.83%) and college level (7.50%). The majority of beneficiary farmers had middle school and high school level education. This trend highlights that growing awareness of education significance has led to improved educational infrastructure in rural areas, benefiting farmers who recognize its importance for their development. However, financial constraints and the absence of nearby higher educational institutions hinder over half of participants from pursuing further education. Educated individuals make more informed decisions based on weather forecasts, enabling access to weather-based technologies crucial for adapting to changing conditions. The results are in tune with results of Atheequlla *et al*. (2021).

**Farm size**

About 42.50 percent of the KVK-DAMU beneficiary farmers were marginal farmers followed by 29.17 per cent small farmers, 24.16 per cent were medium farmers and only 4.17 per cent of them were big farmers. The possible reason might be due to the fact that beneficiary farmers mostly consist of small and marginal landholders, relying on weather-based advisory services to optimize practices and mitigate climate risks. Medium farmers find value in these services for diversification, while bigger farmers with more resources may prefer specialized solutions or monitoring systems. Similar findings were reported by Ushasri *et al.* (2022) and Ramachandrappa *et al*. (2018).

**Farming experience**

Majority 71.67 per cent of the KVK-DAMU beneficiary farmers had medium level of farming experience followed by high (15.00%) and low (13.33%) levels of farming experience. Farmers with medium farming experience have better access to weather-based advisory services and actively use them to adapt their practices. However, experienced farmers rely less on external advisories due to their traditional expertise, while less experienced farmers may have limited awareness and interaction with such services. Hence this trend was observed with similar findings of Naika *et al.* (2016) and Natthu (2019).

**Cropping pattern**

About 42.50 per cent of the KVK-DAMU beneficiary farmers had fair cropping pattern followed by good cropping pattern (40.83%) and poor cropping pattern (16.67%). The possible reason might be that majority of beneficiary farmers had fair and good cropping patterns, influenced by access to weather-based advisory services and modern practices. Poor cropping patterns resulted from inadequate irrigation, lack of awareness, and limited access to weather-based advisories**.** Similar finding was reported by Babu (2019).

**Social Participation**

More than half 57.50 per cent of the KVK-DAMU beneficiary farmers had medium level of social participation followed by low (20.83%) and high (21.67%) levels of social participation. Farmers with medium social participation have a wider network for weather-based advisory information, engaging with fellow farmers and local organizations. High social participation allows them to accumulate diverse knowledge, learn from others, and partake in community-driven weather adaptation initiatives. Conversely, low social participation hinders access to valuable information and may limit their ability to make informed decisions for weather-related challenges. This finding had drawn its support from the findings of Kumar *et al.* (2021).

**Training Undergone**

About 41.67 Percent of the KVK-DAMU beneficiary farmers had medium level of training followed by low (31.67%) and high level of training (26.66%). The probable reason might be due to the fact that farmers

**Table 1. Distribution of KVK-DAMU beneficiary farmers**

| S. No. | Variables | Category | Frequency | Percentage |
|---|---|---|---|---|
| 1. | Age | Young age (<35 years) | 12 | 10.00 |
| | | Middle age (36-55 years) | 86 | 71.67 |
| | | Old age (>55 years) | 22 | 18.33 |
| 2. | Education | Illiterate | 19 | 15.83 |
| | | Functionally literate | 23 | 19.17 |
| | | Primary school | 24 | 20.00 |
| | | Middle school | 25 | 20.83 |
| | | High school | 20 | 16.67 |
| | | College level | 9 | 7.50 |
| 3. | Farm size | Marginal farmer | 51 | 42.50 |
| | | Small farmer | 35 | 29.17 |
| | | Medium farmer | 29 | 24.16 |
| | | Big farmer | 5 | 4.17 |
| | | Mean | 2.27 | |
| | | S.D | 0.87 | |
| 4. | Farming experience | Low | 16 | 13.33 |
| | | Medium | 86 | 71.67 |
| | | High | 18 | 15.00 |
| | | Mean | 18.88 | |
| | | S.D | 6.27 | |
| 5. | Cropping pattern | Fair | 20 | 16.67 |
| | | Good | 51 | 42.50 |
| | | Poor | 49 | 40.83 |
| | | Mean | 3.19 | |
| | | SD | 1.68 | |
| 6. | Social participation | Low | 25 | 20.83 |
| | | Medium | 69 | 57.50 |
| | | High | 26 | 21.67 |
| | | Mean | 8.65 | |
| | | S.D | 4.28 | |
| 7. | Training undergone | Low | 38 | 31.67 |
| | | Medium | 50 | 41.67 |
| | | High | 32 | 26.66 |
| | | Mean | 2.16 | |
| | | S.D | 1.05 | |

Cont...

**Table 1. Cont...**

| S. No. | Variables | Category | Frequency | Percentage |
|---|---|---|---|---|
| 8. | Extension contact | Low | 25 | 20.83 |
| | | Medium | 53 | 44.17 |
| | | High | 42 | 35.00 |
| | | Mean | 27.93 | |
| | | S.D | 8.84 | |
| 9. | Mass media exposure | Low | 10 | 8.33 |
| | | Medium | 90 | 75.00 |
| | | High | 20 | 16.67 |
| | | Mean | 5.75 | |
| | | S.D | 2.35 | |
| 10. | Economic orientation | Low | 34 | 28.33 |
| | | Medium | 75 | 62.50 |
| | | High | 11 | 9.17 |
| | | Mean | 21.92 | |
| | | S.D | 3.98 | |
| 11. | Scientific orientation | Low | 14 | 11.67 |
| | | Medium | 71 | 59.17 |
| | | High | 35 | 29.16 |
| | | Mean | 21.92 | |
| | | S.D | 3.98 | |

receive up-to-date technical information through training programs. Young and middle-aged farmers show interest and attend on INM practices trainings, while the elderly may be less willing due to a lack of interest in new technologies. To engage all age groups, lively and interactive training approaches such as farm visits, demonstrations, and advisory bulletins can be used to enhance their skills and knowledge. Similar results were reported by Mohan and Reddy (2012).

**Extension contact**

About indicated that 44.17 per cent of the KVK-DAMU beneficiary farmers had medium level of extension contact followed by high (35.00%) and low (20.83%) levels of extension contact. Nearly half of the farmers had satisfactory extension contact, indicating satisfactory advisory services and technical support. while low contact could result from personnel shortages and communication barriers. Farmers with high extension contact showed keen interest in adopting new technologies. To support all farmers, increase personnel visits, arrange demonstrations, meetings, and training at the grassroots level. Findings are in line with the studies of Ambedkar (2010) and Sidhu (2014) by indicating that majority of them had medium level of extension contact.

**Mass media exposure**

About one-third 75.00 per cent of the KVK-DAMU beneficiary farmers had medium level of mass media exposure followed by high (16.67%) and low (8.33%) levels of mass media exposure. Majority of beneficiaries have medium media mass exposure through newspapers, radio, T.V and digital platforms. Technologically competent farmers show high media exposure, while others prefer conventional methods. Some rely on face-to-face encounters for information. This result was in accordance with the results of Verma and Sharma (2022).

**Economic orientation**

About 62.50 per cent of KVK-DAMU beneficiary farmers had medium level of economic orientation followed by low (28.33%) and (9.17%) high levels of economic orientation. The possible reason might be that some farmers stick to traditional practices and may not see the immediate value in weather-based advisory services. However, others in this category understand weather's impact and show willingness to adopt to some extent. Farmers with high economic orientation are more likely to embrace such technologies for increased productivity and profitability. Hence this trend was observed with similar findings of Hadimani (2016).

**Scientific orientation**

About 59.17 per cent of the KVK-DAMU beneficiary farmers had medium level of scientific orientation followed by high (29.16%) and (11.67%) low levels of scientific orientation. The probable reason might be that majority of beneficiaries exhibit a medium to high scientific orientation due to their education and access to diverse information sources. They are eager to experiment with new practices and technologies to remain competitive and increase earnings. In contrast, beneficiaries with low scientific orientation may resist change, relying on traditional techniques due to limited education and exposure to information. Financial constraints and limited resources further hinder their adoption of modern technologies. Similar studies were reported by Neelam (2016) and Sowjanya *et al.* (2018). These studies indicated that farmers had medium level of scientific orientation.

The results revealed that majority of the KVK-DAMU beneficiary farmers belonged to middle-aged (36-55 years) with medium farming experience, medium cropping pattern, and medium social participation. Majority of the beneficiaries undergone medium level of training and extension contact. Additionally, most of the beneficiaries exhibited a medium level of economic and scientific orientation, suggesting a balanced approach to farming practices.

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