



ISSN Print: 2664-844X
 ISSN Online: 2664-8458
 NAAS Rating (2026): 4.97
 IJAFS 2026; 8(10): 839-841
www.agriculturaljournals.com
 Received: 14-07-2026
 Accepted: 04-09-2026
 Published: 20-10-2026

Wagh Yogita Babanrao
 M.Sc. (Agri.) Scholar,
 Department of Agricultural
 Extension Education, College
 of Agriculture, Vasantnao Naik
 Marathwada Krishi
 Vidyapeeth (VNMKV),
 Parbhani, Maharashtra, India

Pravin S Kapse
 Professor(CAS), Department
 of Agricultural Extension
 Education, College of
 Agriculture, VNMKV,
 Parbhani, Maharashtra, India

Rajesh P Kadam
 Professor and Head,
 Department of Agricultural
 Extension Education, College
 of Agriculture, VNMKV,
 Parbhani, Maharashtra, India

Anuradha S Lad
 Assistant Professor,
 Department of Agricultural
 Extension Education, College
 of Agriculture, VNMKV,
 Parbhani, Maharashtra, India

SS More
 Professor and Head,
 Department of Agricultural
 Economics, College of
 Agriculture, VNMKV,
 Parbhani, Maharashtra, India

Corresponding Author:
Wagh Yogita Babanrao
 M.Sc. (Agri.) Scholar,
 Department of Agricultural
 Extension Education,
 College of Agriculture,
 Vasantnao Naik
 Marathwada Krishi
 Vidyapeeth (VNMKV),
 Parbhani, Maharashtra,
 India

Utility perception of AgriStack among beneficiary farmers in Parbhani district of Marathwada region, Maharashtra

Wagh Yogita Babanrao¹, Pravin S Kapse², Rajesh P Kadam³, Anuradha S Lad⁴, SS More⁵

DOI: <https://www.doi.org/10.33545/2664844X.2026.v8.i10k.2097>

ABSTRACT

This study was undertaken to understand how beneficiary farmers perceive the usefulness of AgriStack. It was conducted in Parbhani, Manvat and Purna talukas of Parbhani district in the Marathwada region of Maharashtra. A total of 120 farmers were selected through random sampling, with 10 beneficiaries from each of the 12 selected villages. Information was collected through personal interviews using a pre-tested structured interview schedule. The collected data were analysed using frequency, percentage, mean and standard deviation.

The findings revealed that farmers generally had a favourable perception of AgriStack. Among the different aspects studied, 93.33 per cent of respondents agreed that Farmer ID helps them access information about government schemes more easily. Similarly, 92.50 per cent felt that AgriStack simplifies the use of digital services and makes online registration and application procedures easier. About 90.00 per cent acknowledged its role in facilitating Farmer ID creation and access to subsidies, while 88.33 per cent reported that it helps save time and money. However, comparatively lower agreement was observed regarding access to bank loans (82.50%), crop insurance (80.83%), timely advisory services (74.17%) and transparency in financial transactions (72.50%). Overall, 88.33 per cent of the farmers considered AgriStack useful and felt that it had contributed to better farm management. The overall utility perception score further showed that 83.33 per cent of respondents belonged to the medium category, whereas 16.67 per cent fell into the low category.

Keywords: AgriStack, Farmer ID, Utility perception, Beneficiaries, Marathwada

1. Introduction

Agri Stack is a digital public infrastructure initiative developed to create the a digital ecosystem for the agricultural sector in India. It brings farmer-related and agricultural information onto a common digital platform so that farmers can easily get access government schemes, subsidies, crop-related information and other services more easily on digital platforms of the official website of government of India. The Farmer ID created under Agri Stack identifies each farmer digitally and links the farmer with these services which are helpful for the farmers in various schemes related to the agricultural works. In Maharashtra, related digital services such as the E-Peek Pahani mobile application are used for recording crop information and many others also. The value of any such platform depends on how useful farmers themselves find it to get the access of various benefits of the schemes for the farmers. Few studies have examined the perceived utility of Agri Stack among beneficiary farmers in Marathwada. The present study was therefore undertaken with the following objective:

1. To find out the utility of AgriStack as perceived by the beneficiary farmers.

2. Materials and methods

2.1 Locale of the study

The present study was carried out in Parbhani district, located in the central part of the Marathwada region of Maharashtra. The district extends from 18°45' to 20°10' north latitude and 76°13' to 77°39' east longitude, covering an area of 6,250.58 km². According to the figures used in this study, the district has a population of approximately 1.836 million. Parbhani district comprises nine talukas: Parbhani, Jintur, Gangakhed, Pathri, Purna, Palam, Sailu, Manvat and Sonpeth. It has 841 villages, and agriculture is the main occupation of a large proportion of its rural population, which accounts for 68.24 per cent of the total population. The district is also home to Vasantnao Naik Marathwada Krishi Vidyapeeth, an important institution contributing to agricultural education and research in the region.

2.2 Sampling and selection of respondents

Random sampling was used at each level of the category. Three talukas are randomly selected for the study namely Parbhani, Manvat and Purna, were selected from Parbhani district. Four villages were randomly selected from each taluka, giving twelve villages: Paralgavhan, Mirkhel, Signapur and Pokharni (Parbhani); Kinhola, Kolha, Somthana and Tad Borgaon (Manvat); and Balsa, Phulkalas, Sirkals and Makhani (Purna). Ten AgriStack beneficiary farmers were selected randomly from each village, making a total sample of 120 respondents ($12 \times 10 = 120$).

2.3 Research design

An ex-post facto research design was used, because the phenomenon had already occurred and the researcher had no direct control over the independent variables.

2.4 Interview schedule and data collection

A structured interview schedule was prepared in line with the objectives. It covered eleven independent variables (age, education, family size, farming experience, land holding, annual family income, social participation, extension contact, innovativeness, network connectivity and techno-savviness) and one dependent variable, the utility perception of AgriStack. It also recorded the constraints faced by respondents and their suggestions for improving AgriStack services. The schedule was pre-tested with 15 beneficiaries in a non-sampled area and modified in light of the pre-test. Data were collected by personal interview between May and June. The investigator explained the pur-

pose of the study to each respondent, built rapport and recorded responses item by item.

2.5 Measurement of variables

Age, family size, farming experience, land holding and annual income were measured in their natural units and classified using the mean $\pm$ standard deviation or equal-interval method, or the Government of Maharashtra norms for land holding. Education was scored from 1 (illiterate) to 5 (college level and above). Social participation was measured using the scale of Supe (2007) [1], extension contact using the procedure of Nirban (2004) [2], and innovativeness using the scale of Moulik (1965) as modified by Natikar (2019) [3]. Network connectivity and techno-savviness were measured with schedules developed for the study.

Utility perception was defined as the degree to which AgriStack, including the E-Peek Pahani application, is perceived as useful by farmers. It was measured through 17 statements on which respondents indicated agree, partially agree or disagree. Total scores were used to classify respondents into low, medium and high categories. Constraints were recorded through close-ended questions and suggestions through open-ended questions; responses were quantified and ranked by percentage.

2.6 Statistical analysis

Responses were transferred to a master sheet, coded and tabulated. Frequency, percentage, arithmetic mean and standard deviation were used to describe the data, and Karl Pearson's coefficient of correlation (r) was used to find the relationship between the independent variables and utility perception.

3. Results and discussion

3.1 Utility of AgriStack as perceived by the respondents

Table 1. Perceived utility of AgriStack: statement-wise responses ($N = 120$)

Statement	Agree	Partially agree	Disagree
Facilitates creation of Farmer IDs, which is beneficial for farmers	108 (90.00)	12 (10.00)	0 (0.00)
Enables a digital farmer database, making information management easier	104 (86.67)	16 (13.33)	0 (0.00)
Farmer ID gives easy access to information on government schemes	112 (93.33)	7 (5.83)	1 (0.83)
Has made it easier to obtain government subsidies	108 (90.00)	11 (9.17)	1 (0.83)
Has made availing benefits under government schemes faster	100 (83.33)	20 (16.67)	0 (0.00)
Has reduced the need for paperwork	102 (85.00)	18 (15.00)	0 (0.00)
Has made it easier to obtain bank loans	99 (82.50)	20 (16.67)	1 (0.83)
Has simplified obtaining crop insurance	97 (80.83)	20 (16.67)	3 (2.50)
Has increased transparency in financial transactions under schemes	87 (72.50)	30 (25.00)	3 (2.50)
Helps farmers receive timely and appropriate advisory services	89 (74.17)	30 (25.00)	1 (0.83)
Has made it easier to avail PM-KUSUM benefits (e.g. solar pump)	101 (84.17)	16 (13.33)	3 (2.50)
Has made receiving PM-KISAN benefits easier	104 (86.67)	13 (10.83)	3 (2.50)
Helps save both time and cost	106 (88.33)	14 (11.67)	0 (0.00)
Has made farm-related decision-making easier	104 (86.67)	15 (12.50)	1 (0.83)
Has made use of digital services easier for farmers	111 (92.50)	9 (7.50)	0 (0.00)
Has simplified online registration and application	111 (92.50)	9 (7.50)	0 (0.00)
Overall, AgriStack is useful and has improved farm management	106 (88.33)	14 (11.67)	0 (0.00)

Respondents perceived AgriStack positively on every statement (Table 1). The highest agreement was that the Farmer ID helps farmers access information about government schemes (93.33%), followed by ease of using digital services (92.50%) and simpler online registration and application (92.50%). Ninety per cent agreed that AgriStack facilitates Farmer ID creation and eases access to subsidies. Time and

cost saving (88.33%), ease of receiving PM-KISAN benefits (86.67%), easier decision-making (86.67%), reduced paperwork (85.00%) and easier PM-KUSUM benefits (84.17%) were also widely agreed. Agreement was comparatively lower for bank loans (82.50%), crop insurance (80.83%), timely advisory services (74.17%) and transparency in financial transactions (72.50%), where 25 per cent of

respondents only partially agreed in the last two. Overall, 88.33 per cent agreed that AgriStack is useful and has improved farm management, and none disagreed.

Table 2. Distribution of respondents according to overall utility perception ($N = 120$)

Category	Frequency	Percentage
Low (up to 44)	20	16.67
Medium (45 to 52)	100	83.33
High (53 and above)	0	0.00

Table 2 shows that most respondents (83.33%) had a medium level of utility perception, 16.67 per cent had a low level and none had a high level. The overall perceived utility of AgriStack was therefore medium. This is in line with Zinzade *et al.* (2024) [4], Lekule (2000) and Dabhade (2001). Although agreement on individual statements was high, many respondents agreed only partially on some benefits, which pulls the overall score into the medium range.

4. Conclusion

Farmers perceived AgriStack as useful on all 17 aspects studied, with the strongest agreement on access to scheme information, ease of digital services and simpler online registration. Agreement was weaker, with many respondents only partially agreeing, on transparency in financial transactions, advisory services, crop insurance and bank loans. Most respondents (83.33%) had a medium overall utility perception and none had a high one.

AgriStack services should be strengthened where perceived utility is weakest, namely timely advisory services, crop insurance and loan facilitation, and the transparency of benefit transfers should be communicated clearly to farmers. Future studies may examine actual utilization and the impact of AgriStack on farmers' livelihoods.

References

1. Supe SV. *Measurement Techniques in Social Sciences*. Udaipur: Agrotech Publishing Academy; 2007.
2. Nirban AJ. *Analysis of Agricultural Produce Market Committees in Konkan and Western Maharashtra with Reference to Their Potential Role in Agricultural Marketing Extension*. Ph.D. Thesis, Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra, India. 2004.
3. Jamanal SK, Natikar KV, Halakatti SV. A Study on Farmers Knowledge about Crop Insurance Schemes in Northern Karnataka. *International Journal of Environment and Climate Change*. 2019;9(12):691–700.
4. Zinzade PS, Kapse PS, Puri SG, Kadam RP. Correlates of utility perception of E-Peek Pahani Mobile App by user farmers. *International Journal of Agriculture Extension and Social Development*. 2024;7(2):06–09.
5. Ainlawar. Utility perception of farmers about Red Kandhari cattle by the rearers [Unpublished Master's thesis]. Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani, Maharashtra. 2012.
6. Balu D, Kavaskar M, Santha G. Constraints faced by the farm youth in utilization of information and communication technology (ICT) tools. *Indian J Ext Educ*. 2018;8(4):14–8.
7. Devkule. Farmers' attitude towards Kisan mobile phone advisory services [Unpublished Master's thesis]. Mahatma Phule Krishi Vidyapeeth, Rahuri. 2017.
8. AS, Deshmukh PR. Utility perception of mass media by farm women. *International Journal of Extension Education*. 2014;10:76–79.
9. Pathak A, Sharma A. Correlates of utility perception of agricultural information by farmer readers. *Indian Research Journal of Extension Education*. 2022;22(5):295–299.
10. Pawar HY. Utility perception of AgroTech VNMKV mobile app by the users (Master's thesis). Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani, Maharashtra, India. 2019.
11. Shelke SV. Utility perception of Krishi Patrika by its subscribers (Master's thesis). Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola, Maharashtra, India. 2020.
12. Kumar S, Singh M, Singh P, Rohit K. Utilization pattern of ICT tools by paddy growers in Uttar Pradesh. *Indian J Ext Educ*. 2023;59(2):135–137.
13. Naik BJ. A study on ICT tools usage by the farmers in Anantapur district of Andhra Pradesh [master's thesis]. Guntur: Acharya N.G. Ranga Agricultural University; 2018.
14. Sontakke NB, Deshmukh PR, Kadam RP, Kapse PS, Pathrikar DT. Utilization pattern of ICT tools among cotton growers in Marathwada region. *Int J Adv Biochem Res*. 2025;SP-9(9):844–847.
15. Sontakke NB, Deshmukh PR, Kadam RP, Kapse PS, Pathrikar DT. Profile and constraints faced by the cotton growers towards utilization pattern of ICT tools in the Marathwada region of Maharashtra. *Int J Agric Food Sci*. 2025;7(10):30–34.

How to cite this article: Wagh YB, Kapse PS, Kadam RP, Lad AS, More S. Utility perception of AgriStack among beneficiary farmers in Parbhani district of Marathwada region, Maharashtra. *International Journal of Agriculture and Food Science*. 2026;8(10):839–841. doi: <https://www.doi.org/10.33545/2664844X.2026.v8.i10k.2097>