



Impact of DAESI programme as perceived by agri input dealers in Rewa District of M.P.

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ABSTRACT:

Rural entrepreneur/ Agri-input dealer is considered as a technological bridge between the agricultural research & innovation and farming community. In view of capacity building and skill enhancement to make a rural entrepreneur competent enough and efficient and skill so that they may be able to serve the farming community in a better way by working as 'Para Extension Professionals', "National Institute of Agricultural Extension Management" (MANAGE) launched one-year Diploma in Agricultural Extension Services for Input Dealers (DAESI) Programme during the year 2003 for the agricultural input dealers. In Madhya Pradesh, under the flagship of SIAET Bhopal, ATMA Rewa (M.P.) conducted three Diploma courses for agricultural input dealers during the last three years (2022-23, 2023-24 and 2024-25). This study was attempted to assess the effectiveness of DAESI programme in enhancing the technological efficiency of rural entrepreneurs/ input dealers. The relevant data were collected through a pre-tested & well prepared questionnaire and need based online data through ex-post facto research design. The study reveals that majority of the respondents viewed that DAESI programmes as 'highly useful' followed by 'moderately useful' and 'less useful'. Further, it was observed that overall utility of diploma courses was rated high with utility index of 84.6 percent. Similarly specific knowledge & skill acquired by the rural entrepreneurs were found in extent of moderate increase in most of the aspects. Moreover, majority of the respondents have been moderately benefited from DAESI programmes in terms of increase in knowledge, gain in skills and enhancement in entrepreneurial ability. The study exhibited that the major benefit perceived from DAESI programme was significant enhancement in entrepreneurial ability with overall index of 72.44 percent.

KEYWORDS: DAESI programme, Utility Agri-input dealers, Rural entrepreneur, , Knowledge.

Received: 20-11-2025

Revised: 24-11-2025

Accepted: 28-11-2025



INTRODUCTION:

Agri-input dealer acts as rural entrepreneur which are responsible for triggering paradigm shift in Indian Agriculture. These individuals serve as key technological communicators and para extension workers and through them most of the technological information and solutions of technological problems are diffused to the farmers. Apart from that they also ensure the supply of agri- inputs and credit as needed. They have tremendous potential to act as para-extension professionals and if their technological competency is build up through various modes or ways of education. Keeping this in view a one year Diploma course known as DAESI (Diploma in Agricultural Extension Services for input dealers) was launched by “National Institute of Agriculture Extension Management” in order to incorporate the requisite understanding and the location-specific agricultural knowledge among the rural entrepreneurs dealing with agricultural inputs so that they can follow the rules and the regulatory norms in their business along with betterment of their business with extension services. In Madhya Pradesh, under the flagship of SIEAT Bhopal Madhya Pradesh, ATMA Rewa initiated a yearly Diploma course which was started in the year 2022-23. The present study is planned to access the effectiveness of DAESI programme in terms of technological empowerment among input dealers/ rural entrepreneurs.

MATERIAL AND METHODS:

The current study was carried out in purposive selected trained input dealers in under ATMA project of Rewa district through DAESI programme during the last three years. As per the list of participants provided by the ATMA Rewa, all the 120 trainees/ Agri-input dealers trained during the last three years were approached and a random sample of 100 participants were selected out of 120 participants the data was collected through a pretested and well prepared Questionnaire and need based online data methods like e-mail, telephone calls, Google forms, etc. and ex-post facto research design was used. Data were analyzed using frequency distribution, percentage, mean and standard deviation. The effectiveness of different aspects of DAESI programme was measured on a five point continuum ranging from very high useful to very low useful. The Diploma utility Index was developed to measure the effectiveness using following formula:

$$\text{Diploma usefulness Index} = \frac{\text{Score obtained by the respondents}}{\text{Maximum possible score}} * 100$$

In the same manner, various aspect regarding knowledge were analyzed in the present investigation covering whole syllabus of DAESI programme. The whole syllabus is categorized into 17 knowledge items and the results are recorded in 4 points scale i.e. extremely increase in knowledge level, moderate increase in knowledge level, slightly increase in knowledge level and not increased or no changes in knowledge level after availing DAESI programme. Moreover, various benefits perceived from DAESI programme was measured using four point continuum ranging from not benefited to highly benefited and an overall index was calculated.

$$\text{Overall Index} = \frac{\text{Score obtained by the respondents}}{\text{Maximum possible score}} * 100$$



RESULTS AND DISCUSSION:

The major objective of DAESI programme is to develop practicing agri-input dealers into para-extension professionals thereby empowering the agricultural extension system so as to enable these agri-input dealers to serve the farmers better at grass root level. Many rural entrepreneurs had attended this diploma course and got benefited.

A. Status of Rural Entrepreneurs: The business profile of agri- input dealers/ rural entrepreneur who had attended DAESI programme decrease the last three years ATMA,Rewa. Table 1. The outcome is portrayed as follows

1. Business Experience as Agri-input dealers

The results regarding business experience reveals that most of the agri-input dealers had upto 5 years of business experience which is followed by 11-15 years of business experience, 6-10 years of business experience, 16-20 years of business experience and very few had more than 20 years of business experience.

2. Annual turnover

The study revealed that majority of the agri-input dealers participated in DAESI programme had annual turnover more than 20 lakhs trailed by 28 percent having annual turnover of 10-15 lakhs, 24 percent having annual turnover of 15-20 lakhs, 27 percent having annual turnover of 5-10 lakhs, 15 percent having annual turnover of 2-5 lakhs and 4 percent having annual turnover of 1-2 lakhs 2 percent of the respondents had annual turnover below 1 lakhs.

3. Number of villages covered

Considering number of villages covered, majority (58.00%) of Agri- input dealers who had attended DAESI programme covered 1 to 10 villages followed by 11 to 20 villages (27.00%), 21 to 30 villages (8.00%), 41 to 50 villages (5.00%) and 31 to 40 villages (2.00%)

1. Farmers turn up

With regard to the farmers' turn-up, 35.00 percent of the agri- input dealers who had attended DAESI programme had farmer's turn up in the range of 501 to 1000 farmers annually. Progressively, 26.00 percent of agri-input dealers had farmers turn up in the range of 100 to 500 farmers annually followed by 16.00 percent had farmer's turn up in the range of 1001 to 2000 farmers, 6.00 percent had farmers turn up in the range of 3001 to 4000 farmer's, 5.00 percent had farmer's turn up in the range of 2001 to 3000 farmers, 4.00 percent had farmer's turn up in the range of 4001 to 5000 farmers, 3.00 percent had farmer's turn up in the range of 5001 to 6000 farmer's and 7001 to 8000 farmer's and only 2.00 percent had farmer's turn up in the range of 6001 to 7000 farmers.

Table 1: Distribution of rural entrepreneur according to their business profile

Sl. No.	Components	Frequency	Percentage
Business profile:			
Business Experience as Agri-input dealers			
	Up to 5 years	30	30.00
	6-10 years	27	27.00
	11-15 years	28	28.00
	16-20 years	12	12.00
	Above 20 years	3	3.00
Annual turnover			
	Up to 1 lakh	0	0.00
	1 lakh – 2 lakhs	2	2.00
	2 lakhs – 5 lakhs	4	4.00
	5 lakhs -10 lakhs	15	15.00
	10 lakhs – 15 lakhs	24	24.00
	15 lakhs -20 lakhs	27	27.00
	More than 20 lakhs	28	28.00
Number of villages covered			
	1-10 villages	58	58.00
	11-20 villages	27	27.00
	21-30 villages	8	8.00
	31-40 villages	2	2.00
	41-50villages	5	5.00
Farmers turnup			
	100-500 farmers	23	23.00
	501-1000 farmers	38	38.00
	1001- 2000 farmers	14	14.00
	2001-3000 farmers	7	7.00
	3001-4000 farmers	6	6.00
	4001- 5000 farmers	4	4.00
	5001- 6000 farmers	3	3.00
	6001- 7000 farmers	3	3.00
	7001- 8000 farmers	2	2.00

Effectiveness of DAESI programme organized by different KVK's was measured on a five point continuum ranging from very high to very low usefulness. Data pertaining to Table 2 exhibit that majority (51.00%) of the respondents reported DAESI programme as highly useful followed by 26 % moderately useful 23 % less useful. These results confirms the promising impact the useful diploma course organized by ATMA Rewa.

Table 2 :Distribution of Agri-input dealers based on effectiveness of DAESI programme (n=100)

SI. No.	Category	Frequency	Percentage
1.	Highly Useful (> 40 score)	51	51.00
2.	Moderate Useful (31- 40 score)	26	26.00
3.	Less Useful (< 31score)	23	
$\bar{X} = 27.91 \quad \sigma = 3.1$			

The usefulness was further measured based on eight aspects of DAESI programme using Diploma usefulness index. It can be observed from Table 3 that Overall utility of diploma course was rated high in terms of effectiveness with diploma efficiency index of 85.2 percent trailed by relevancy of course content (DEI= 81.80%), immediate usefulness (DEI= 80.80%) and adequate information in a particular area (DEI= 80.20%). Timeliness of Diploma course and easy understanding are rated equal in terms of efficiency with diploma efficiency index of 79.40% followed by clarification of doubts and queries during diploma course (DEI = 79.00%). Respondents reported that the diploma was slightly based on participatory need assessment (DEI = 74.80%). Need assessment is the backbone of any effective diploma programme and it must be participatory in order to increase the effectiveness of diploma programme.

Table 3: usefulness of DAESI programme :

Sl. No.	Various Aspect of DAESI Programme	Percentage of respondents					DEI
		Very low	Low	Medium	High	Very high	
1.	Relevancy of course contents.	0.00	2.00	12.00		5.00	
2.	Easy understanding.	0.00	1.00	18.00	64.00	17.00	79.40
3.	Immediate usefulness.	0.00	0.00	23.00	50.00	27.00	80.80
4.	Timeliness of Diploma course.	0.00	2.00	22.00	53.00	23.00	79.40
5.	Clarification of doubts and queries during diploma course.	1.00	2.00	15.00	65.00	17.00	79.00
6.	Adequate information in a specific area.	0.00	1.00	19.00	58.00	22.00	80.20
7.	Overall satisfaction from diploma course.	0.00	0.00	11.00	52.00	37.00	85.20
8.	Based on participatory need assessment.	0.00	3.00	30.00	57.00	10.00	74.80
DEI= Diploma utility Index							

Component wise increase in knowledge and skill of agri-input dealers after attending DAESI programme:

Table 4 portrays the component wise specific knowledge and skill acquired by the rural entrepreneur / agri input dealers data revealed that majority of the respondents exhibited moderate increase in knowledge and skill in most of the components of knowledge and skill. The promising impact was reported regarding the components seed certification, symptoms of pest attack, fungicide and herbicide.

Table 4: Component wise increase in knowledge and skill of agri-input dealers after attending DAESI programme (n=100)

Sl. No.	Components	Extent of Increase in Knowledge and skill			
		EI	MI	SI	NI
1.	Soil testing	14.00	70.00	16.00	0.00
2.	INM	15.00	78.00	7.00	0.00
3.	Deficiency symptoms of plant nutrients	26.00	71.00	3.00	0.00
4.	Nutrient content in fertilizers	39.00	51.00	10.00	0.00
5.	Fertilizers Doses	24.00	65.00	11.00	1.00
6.	Irrigation Management	19.00	61.00	20.00	0.00
7.	Seed treatment	40.00	52.00	8.00	0.00
8.	Seed certification	74.00	18.00	8.00	2.00
9.	Resistant varieties	28.00	56.00	12.00	4.00
10.	Herbicides	69.00	20.00	8.00	3.00
11.	Fungicides	70.00	21.00	4.00	5.00
12.	Natural Farming	20.00	42.00	19.00	19.00
13.	Symptoms of pest attack	71.00	22.00	5.00	2.00
14.	Bio fertilizers	41.00	51.00	5.00	3.00
15.	MSP	28.00	58.00	12.00	2.00
16.	Farm impliments	34.00	52.00	9.00	5.00
17.	Suitable cropping system according to agro-ecological zones	19.00	54.00	21.00	6.00

EI= Extremely increased, MI = Moderately increased, SI = Slightly increased, NI= Not increased/ no changes.

PERCEIVED BENEFITS OF DIPLOMA:

Agri-input dealers were requested to respond on the perceived benefits of DAESI programme and the results are presented in Table 5. Majority of respondents were moderately benefited from DAESI programme in terms of increase in knowledge (67.00%), gain in skills (65.00 %) and enhancement in entrepreneurial ability (70.00 %) whereas majority (53.00 %) of them had slightly benefited in terms of diversification of enterprise. It can be also concluded that the major benefit perceived from DAESI programme was enhancement in entrepreneurial ability with overall index of 70.00 % This may be due to high risk involved in diversification of enterprises. If further financial, technical and marketing support may be provided to agri-input dealers, they will definitely go for diversification of their enterprises.



Table 5: Benefits of DAESI programme as perceived by the agri-input dealers (n=100)

Sl. No.	Benefits of Diploma course	Percentage of respondents			Overall index (%)
		Highly benefited	Moderately benefited	Slightly benefited	
1.	Increase in knowledge	19.00	63.00	18.00	67.00
2.	Gain in skills	7.00	81.00	12.00	65.00
3.	Enhancement in entrepreneurial ability	21.00	68.00	11.00	70.00
4.	Diversification of enterprise	11.00	37.00	52.00	53.00

CONCLUSION:

On the basis of above findings, this study highlights that there is significant gain in knowledge and skill of agri-input dealers. However there were some fields of concern where progress was considerably low. Respondents viewed that the diploma was slightly based on participatory need assessment. Those who were trained, only few of them were ready for the diversification of their agricultural enterprise. Thus, there is a need for government and policy makers to incorporate some extra benefits to the input dealers so that they can expand their business along with technological empowerment. Aspects such as economic motivation and need assessment may be helpful for them. Moreover, diploma course should involve more practical session at grass root level so that knowledge & skill regarding pest attack, disease symptoms and their management can be enhanced. Therefore these factors should be considered under the course curriculum of DAESI programme.

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