

# AWARENESS AND KNOWLEDGE LEVEL OF CASHEW GROWERS ABOUT HDP PRACTICES IN TAMIL NADU

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## Abstract

India is the largest producer, processor, consumer and exporter of cashew (*Anacardium occidentale* L., family-Anacardiaceae) in the world. The current production accounts for 45 per cent of the global production. In Tamil Nadu, Cuddalore district was considered to have the maximum area and production under cashew than other cashew producing districts in the state. High density planting is a technique capable of enhancing the productivity of cashew plantations to a great extent. This involves planting of more number of grafts per unit area initially and thinning out at later stages.

The present study was designed to measure the awareness and knowledge level of the recommended HDP practices in cashew cultivation. The study was carried out in selected twelve villages of Panruti and Kurinjipadi blocks in Cuddalore District of Tamil Nadu. The samples consisted of 120 respondents who were selected by using proportionate random sampling method. The respondents were interviewed personally by a well structured and pre-tested interview schedule. Percentage analysis and cumulative frequency method were used for analyzing and interpreting the data.

Majority of the respondents possessed high level of awareness (75.80 per cent) and knowledge (64.20 per cent) about the recommended HDP practices in cashew cultivation. About the sixteen HDP practices in cashew cultivation, cent per cent for seven practices viz., varieties, planting, application of organic manures, irrigation management, flowering management, intercropping and time of harvesting, more than ninety per cent of the respondents had knowledge on pit preparation spacing, age of cashew grafts for planting, below ninety per cent of the respondents had knowledge on pruning, pest management, weed management, nutrient management, and disease management and below fifty per cent of the respondents had knowledge on fertigation.

**Key words:** Cashew, HDP, Awareness and Knowledge level.

## Introduction

High density planting of late became a very popular technology in most of the crops to harness the initial benefits of closer planting in the orchards. In tree crops when go for wider spaced planting lot of space will get wasted, at least for an initial few years. Many occasions, the mixed or inter cropping in the vacant spaces with annual crops species is suggested to cover such spaces and exploit maximum out of the given piece of land. But in crops like cashew as the production is as such very low and requires meeting the demand in short span of time, high density is proved to be a successful venture in the initial few years to achieve higher productivity (Nayak, M.G, 2015).

Cashew as a marketable commodity has a very important role to play in the liberalized Indian economy and grown in almost all kinds of soil. Due to the absence of high yielding varieties and multiplication techniques, seeds and seedlings were used for plantation development in an unscientific manner. However, as a result of governmental interventions, coupled with sustained efforts of Research, Development organizations and farmers the development of Cashew Plantations has become re oriented in a scientific manner to great extent with HDP. Because of its adaptive ability in wide range of agro climatic conditions and excellent return per unit area, Cashew has attained again the status of an export oriented crop of high commercial value.

On the whole, by practicing HDP farmers can very well increase their productivity by reducing the use of inputs like fertilizers and saving the vital resources like water simultaneously. Hence, it is very much possible for cashew growers to reap greater economical benefits by maintaining ecological sustainability. Plants should be meticulously trained from the first year of planting itself so as to derive maximum benefit of high density system of planting and avoid thinning of plants. In modified Leader System, the sprouts on leaf axils of the young grafts were removed periodically during the first year. A clear stem of 0.5-0.75m from the ground level should be maintained and later the trunk is allowed to branch in all directions. The central leader should be detopped at a height of 2.5-3 m and a clear semi globular canopy should be allowed to form. The canopy requires minimum trimming, thereby helps in reduced dead wood and water shoot development. Hence, tapping maximum sunlight can be achieved (Haripriya, 2014).

Keeping this in view, the present study has been made to know the awareness and knowledge level of cashew growers about HDP practices. The study would bring out the existing awareness and knowledge among the cashew HDP growers, which could be made use of by the planners and administrators to develop appropriate strategies and to impart knowledge to the cashew growers effectively.

## Methodology

The present study was taken up among the cashew growers in the area of Cuddalore district of Tamil Nadu. It was carried out in selected twelve villages of Panruti and Kurinjipadi blocks in Cuddalore District of Tamil Nadu. The samples consisted of 120 respondents who were selected by using proportionate random sampling method. The respondents were interviewed personally by a well-structured and pre-tested interview schedule. Percentage analysis and cumulative frequency method were used for analyzing and interpreting the data.

In this study, recommended production technologies for HDP in cashew cultivation were selected for assessing the existing awareness and knowledge about that technology. The cultivation practices for maximizing yield of cashew were selected in consultation with Extension scientists, subject matter specialists and Officials of the State Horticulture Department. Totally sixteen practices were selected for studying the existing awareness and knowledge about that technology.

Ram Sundar (2016) measured awareness on a two point continuum namely, 'aware' and 'not aware' with scoring pattern of two and one respectively. The same scoring procedure was adopted in this study to find out the awareness of farmers about the recommended HDP in Cashew cultivation practices. The score obtained by the respondents were added to arrive at the final score which was classified into low, medium and high using percentage analysis.

To measure the knowledge level of the HDP cashew growers in respect of cashew production technologies, a teacher made test was used. The same test was also followed by Loganathan (2017). The test included major items, each item of knowledge test which was dichotomized into correct and incorrect responses with scoring pattern of two and one respectively. The total score arrived for all the items are the knowledge score of the

respondents. Maximum score would reveal high knowledge. Percentage analysis was done to study the practice wise knowledge level of the respondents.

## Results and discussion

### I. Awareness level of the respondents about the recommended HDP practices in cashew cultivation

Awareness is the first step in adoption process. Adoption of any innovation begins with awareness. Awareness provides principle knowledge of the technology thereby leading to the adoption of technologies. Hence, as a prior step, awareness of farmers about the recommended HDP practices was studied and the salient findings are presented here. The results of respondents according to their awareness about recommended HDP practices are presented in Table 1.

**Table 1. Distribution of respondents according to their awareness about the recommended HDP practices**

(n=120)

Sl. No.	Category	Number	Per cent
1.	Low	05	4.20
2.	Medium	24	20.00
3.	High	91	75.80
	<b>Total</b>	<b>120</b>	<b>100.00</b>

It could be observed from the Table 1, which in the total sample, three-fourth of the respondents (75.80 per cent) had high level of awareness about the recommended HDP practices in cashew cultivation followed by medium (20.00 per cent) and low (4.20 per cent) level of awareness. The high level of awareness may be due to the fact that majority of the respondents had high level of extension agency contact. This is in agreement with the findings of Jayasankar (2000).

### II. Knowledge level of the respondents about the recommended HDP practices in cashew cultivation

Knowledge is the pre-requisite for adoption of any technology. Lack of knowledge about any idea prevents an individual to avail of its benefits. Perfect knowledge about an idea or

practice related to his needs help an individual better in terms of profitability and productivity. Hence as a prior step to assess the extent of adoption of recommended practices by the HDP cashew growers the knowledge level of the respondents was studied and the salient findings are presented. The results on distribution of respondents according to their over all knowledge level on the recommended HDP practices are presented in Table 2.

**Table 2. Distribution of respondents according to their overall knowledge level about the recommended HDP practices**

(n=120)

Sl. No.	Category	Number	Per cent
1.	Low	20	16.70
2.	Medium	23	19.20
3.	High	77	64.20
	<b>Total</b>	<b>120</b>	<b>100.00</b>

The results in Table 2 show that 64.20 per cent high level of knowledge about the recommended HDP practices in cashew cultivation followed by medium (19.20 per cent) and low (16.70 per cent) levels. This might be due to their educational status, frequent contact with extension agencies and officials of the State Horticulture Department. This findings is in accordance with that findings of Ravi et al., (2004) and Ram Sundar (2016).

### III. Practice wise knowledge level of respondents about the recommended HDP practices

In order to have an in-depth idea about knowledge level of the respondents, a practice wise knowledge level of respondents was worked out. The mean percentage score for practice wise knowledge of respondents about recommended HDP practices in cashew cultivation are presented in Table 3.

**Table 3. Practice-wise knowledge level of respondents about the recommended HDP practices**

(n=120)

Sl. No.	Recommended practices	Mean Percentage Score
1.	Pit preparation	96.20
2.	Varieties	100.00
3.	Age of cashew grafts for planting	91.70
4.	Planting	100.00
5.	Spacing	96.20
6.	Nutrient management	77.20
7.	Application of organic manures	100.00
8.	Irrigation management	100.00
9.	Fertigation	43.00
10.	Pest management	87.80
11.	Diseases management	60.00
12.	Flowering management	100.00
13.	Intercropping	100.00
14.	Weed management	87.50
15.	Pruning	88.30
16.	Time of harvesting	100.00

It is interesting to note from the Table 3, that out of sixteen HDP practices in cashew, the mean percentage score of respondents were found to be cent per cent for seven practices viz., varieties, planting, application of organic manures, irrigation management, flowering management, intercropping and time of harvesting . Further, it could be observed that more than ninety per cent of the respondents had knowledge on pit preparation (96.20 per cent), spacing (96.20 per cent) and age of cashew grafts for planting (91.70 per cent).

The mean percentage scores of respondents those who had knowledge on pruning 88.30 per cent, pest management 87.80 per cent, weed management 87.50 per cent, nutrient management 77.20 per cent and disease management 60.00 per cent. The reported high knowledge about these practices may due to their high awareness on such practices. Most of the

respondents had reported that they got information about HDP practices in cashew cultivation from the extension officials of the State Horticulture Department and majority of the farmers attended trainings on HDP practices in cashew cultivation. This finding is in contradictory with the finding of Ram Sundar (2016). The practice in which the respondents had received little low mean percentage score was fertigation (43.00 per cent). It may be due to lack of interest, time consuming, cost expensive and it required more labourers.

## Conclusion

According to the above research, the existing awareness and knowledge of the cashew growers in Cuddalore District of Tamil Nadu about the recommended HDP practices in cashew cultivation is getting better. Regarding to awareness three-fourth of the respondents (75.80 per cent) had high level of awareness about the recommended HDP practices in cashew cultivation followed by medium (20.00 per cent) and low (4.20 per cent) level of awareness. According to overall knowledge level 64.20 per cent of the respondents had high level of knowledge about the recommended HDP practices in cashew cultivation followed by medium (19.20 per cent) and low (16.20 per cent) levels.

This makes it possible for cashew growers to know the vast majority of technologies. This was due to the goodwill between the cashew growers and the Officials of State Horticulture Department.

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