THE PROFILE CHARACTERISTICS OF MAIZE VALUE CHAIN PARTNERS

ABSTRACT

Value chains have always been in existence in agriculture in the sense that farms carried out production and the final consumer accessed the produce, with the product being passed through several intermediaries. With the diversified end uses, maize industry in India is being dominated by many players viz., farmers, aggregators/traders, processors (Feed industry/ Starch industry) and Consumers (Poultry industry/Food or feed industry. The current investigation exploredprofile of maize value chain partners in Telangana State of India.Majority of maize growers reported medium information seeking behaviour, low creative potential, low quality consciousness, medium economic motivation, medium innovativeness, low risk taking ability and medium achievement motivationwhereas majority of other stakeholders reported medium level in all the characteristics but low in risk taking ability. An examination of profile of value chain partners thereby answers how these individuals can be similar or dissimilar in managing their business since these characteristics determine their business behaviour the most.The findings further can add value in the interventions that focus on effective management of maize value chains.

Key words: Maize; Value Chain Management, Profile Characteristics

INTRODUCTION

A value chain is a collection of activities that are performed by a company to create value for its customers (Porter, 1985). It refers to "the full range of activities which are required to bring a product or service from conception, through the intermediary phases of production, delivery to final consumers, and disposal after use" (Kaplinsky and Morris, 2002). Further, Wang Aimin and Li Shunxi (2011) stated that value chain management is a coordinating management process in which all of the activities involved in delivering customer value satisfaction are integrated such that customer satisfaction is maximized and the objectives of the stakeholders involved (the suppliers of activities, processes, facilitating services, etc.) are optimized.

Maize has traditionally been grown as a staple food crop primarily for domestic consumption. However, in recent years, its demand has increased manifold because of its other diversified end-uses. Its consumption in India can be broadly seen in three important categories i.e., feed, food and industrial(Maize Vision, 2022).With these multiple value-added products from maize, there are many value chain actors who add and take value along a value chain.

Further, the behavioural tactics that each chain partner exhibits depends to a greater extent on analysing his/her personal traits. These personal traits can further explain how effectively or ineffectively a value chain is operating. For example, achievement motivation can affect the way a value chain partner performs the task besides exhibiting a desire to be competent and his/her level of this trait impacts the management behaviour of other linked chain partners. Similarly, Lumsden, K. and Mirzabeiki, V(2008) in their work stated, the warehouse operations information as the most valuable information type from the practitioner's perspective and there was an increasing value of information down the supply chain.Since an efficient value chain necessitates the existence of value chain partners who

perform well along the value chain, the personal traits that each chain partner exhibit can have an effect on overall effectiveness of the value chain.

METHODOLOGY

The current investigation was carried out in four major maize growing districts of Telangana. Telangana state was selected purposively for the study since the researcher hails from the same state and can familiarize with local language. Exploratory research design was followedwith an intention to get a well-grounded insight of the situation being studied.A sample of 10 maize growers was randomly selected from 16 villages where area of maize cultivation was more.With regard to other stakeholders, snowball sampling was used to interview involved stakeholders along the value chain. These stakeholders included managers from state governed market federations, market committees, procurement centres besides poultry farmers, processing industry firms, few large scale traders and seed companies.Seven profile characteristics viz., information seeking behaviour, creative potential, quality consciousness, economic motivation, innovativeness, risk taking ability and achievement motivation were examined with the help of questionnaire developed for the study.

RESULTS AND DISCUSSION

Information seeking behaviour:

It can be observed from figure 1 that majority (73.12%) of the maize growers had medium information seeking behaviour followed by high (14.38%) and low (12.5%) levels. It was observed that peer to peer relations amongst farmers in a village were strong except for few of the farmers and hence most of the information sharing was between the farmers of the same village. Major sources to access information were newspapers, television besides most followed a “leader farmer” for majority of farm operations. In most of the sampled villages, Agricultural Extension Officer served as an important source of information, especially amid lockdown situations where farmers were in distress situations for sale of maize.The findings are similar to that of the results by Bernard Roland (2014) where majority of the rice farmers relied on their family or parents, personal experience, neighbors and agriculture extension officers for obtaining the information.

More than half (51.25%) of the other value chain partners had medium information seeking behaviour followed by low (32.50%) and high (16.25%) levels. The other stakeholders had good accessing ability to varied information sources. Also, most of them were independent knowledge holders and decision makers on available information sources. Low category was observed because some stakeholders did not rely on informal sources at all.

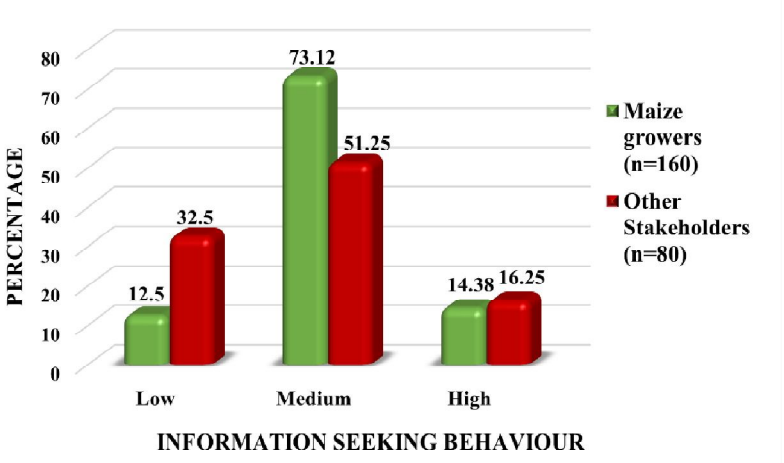

Fig 1 Distribution of respondents according to their information seeking behaviour

Creative Potential:

Majority (61.88%) of the maize growers had low creative potential followed by medium (22.50%) and high (15.62%) levels as shown in figure 2. This was observed because most of the maize growers had no inclination to try new methods/new crops, rather they relied on the fellow farmer's way of thinking. It may be conspicuous to mention here that, if farmers are enabled to think the positives and negatives of growing a routine versus high demand crops well before the season, then the problems of surplus produce may not prevail.

With regard to the creative potential of other stakeholders in the value chain, it was observed that more than half (55%) had medium creative potential followed by low (23.75%) and high (21.25%). This may be due to the mediocre experience and exposure to multitude information source like poultry exhibition. This may call for a facilitative support to the poultry farmers in the form of field tours to larger poultry units/ companies that may enable them to look and try new technologies or methods.Similar argument was made by Bufkin TM(2019) in their work that stated farm tours serve as excellent agricultural literacy tools which had a positive effect on shifting perceptions of the respondents.

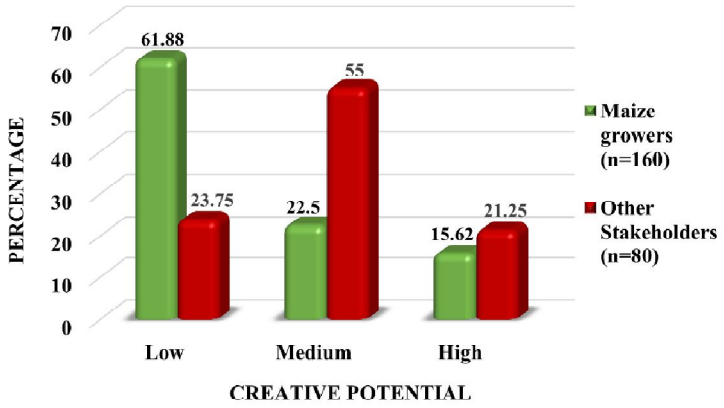

Fig 2 Distribution of respondents according to their creative potential

Quality Consciousness:

It can be seen from figure 3 that majority (68.13%) of the maize growers had low quality consciousness followed by medium (18.12%) and high (13.75%) levels. This could be due to mediocre understanding of the maize growers on quality related parameters. It was observed that, moisture content and absence of foreign matter were the only two parameters given more preference by the maize growers. It appeared that maize growers had "what" comprehension of quality parameters more than "why" comprehension.

Quality consciousness of less than half of other stakeholders in the value chain was medium (43.75%) followed by low (40%) and high (16.25%). This may be due to the moderate inclination towards the aspects of managing quality. Especially poultry farmers were lacking sufficient skills in scouting the infected birds, removal of contaminated feed, eradicating rodents etc.Similar arguments were made by Shoaib *et al* (2018) stating that poultry farmers had low orientation towards identification of affected birds and maintenance of quality feed.

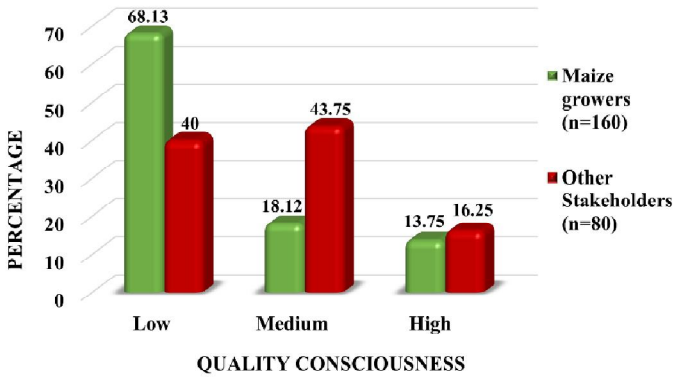

Fig 3 Distribution of respondents according to their quality consciousness

Economic Motivation

From the figure 4, it can be observed that more than half (55%) of the maize growers had medium economic motivation followed by high (31.25%) and low (13.75%) levels. Dhruw*et al* (2012) also observed similar results of economic motivation in their investigation.Majority (68.75%) of other value chain partners also had medium economic motivation followed by low (18.75%) and high levels (12.50%). Desire to be financially secure with job,stronger motive to scout buyers who offer more price and generate more money from the existing business can be the probable reasons.

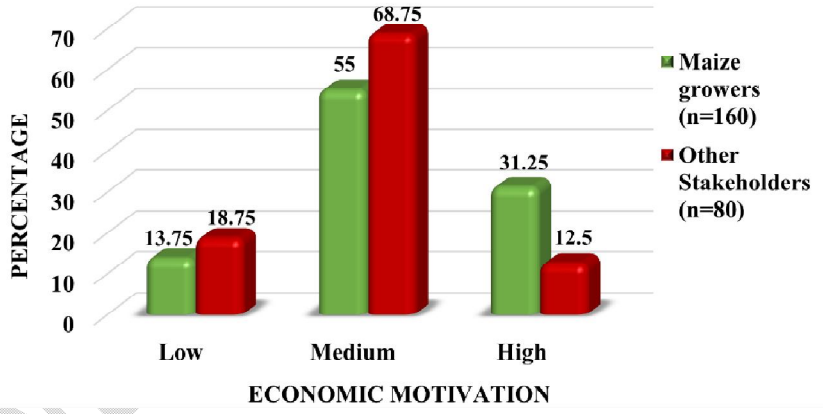

Fig 4 Distribution of respondents according to their economic motivation

Innovativeness

Majority (61.24%) of the maize growers had medium innovativeness followed by high (21.88%) and low levels (16.88%) as shown in figure 5. Similar trend in innovativeness was observed by Kohisatani*et al* (2018).This indicates that, there was a neutral mindset of the maize growers in trying new crops. This may be due to their coping strategy to avoid uncertainties cause by any "newness" in their routine. This must be a probable reason why farmers continued to cultivate maize despite the regulations enforced by the government.

With regard to innovativeness of other value chain partners, it was found out that equal percentage (38.75%) had medium and low levels of innovativeness followed by high (22.50%) level. This might be attributed to the post effect of lockdown with covid. The losses caused especially with small scale firms had a negative impact on trying anything new.

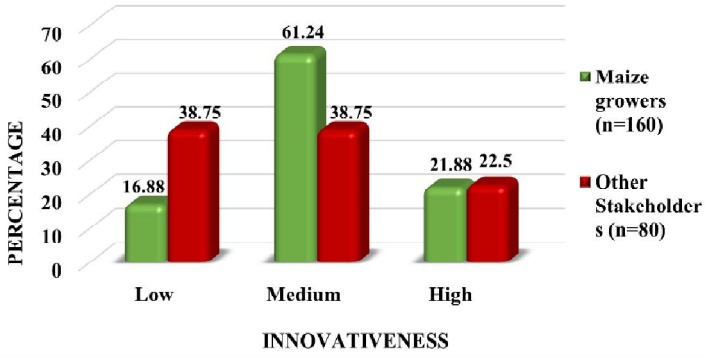

Fig 5 Distribution of respondents according to their innovativeness

Risk taking ability

It can be observed from figure 6 that less than half (43.75%) of the maize growers had low risk-taking ability followed by medium (35%) and high (21.25%) levels. As stated in the innovativeness section of profile characteristics, most maize growers had a coping mindset and hence cultivated the "safe crop" that needs less maintenance yet gives good yields. Ultimately it can be inferred that most maize growers do not wish to take risk in trying new crops.

Less than half (40%) of other stakeholders in the value chain had low risk-taking ability followed by medium (36.25%) and high (23.75%) levels indicating a lower tendency to plan and tackle the uncertainties in their business.This is in agreement with the findings of Baliyan and Marumo (2016) who reported that the ability of developing contingency plans as a method of dealing with future uncertainties by poultry producers was the lowest ranked among all the risk management skill areas.

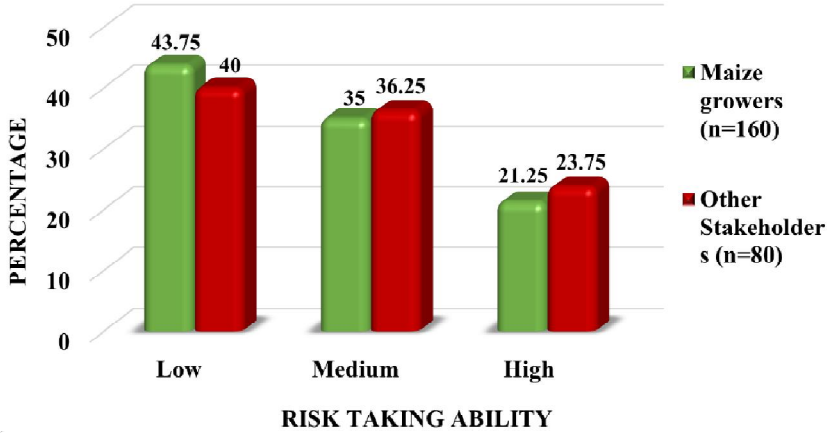

Fig 6 Distribution of respondents according to their risk raking ability

Achievement motivation

Less than half (42.50%) of the maize growers had medium achievement motivation followed by high (38.13%) and low (19.37%) levels as seen from figure 7. This might be due to the propensity of maize growers to get more out if what they do and seek satisfaction with the efforts made.Similar trend in achievement motivation was observed by the respondents in the investigation made by Khuvung*et al* (2022).

Achievement motivation of more than half (55%) of other value chain partners was found to be medium followed by high (26.25%) and low (18.75%). Desire to work on the job

given for getting paid by the logistics, distribution and storage managers, motive to expand their business units in future to obtain more benefits by the industry firms and poultry farmers can be the reason for such result.

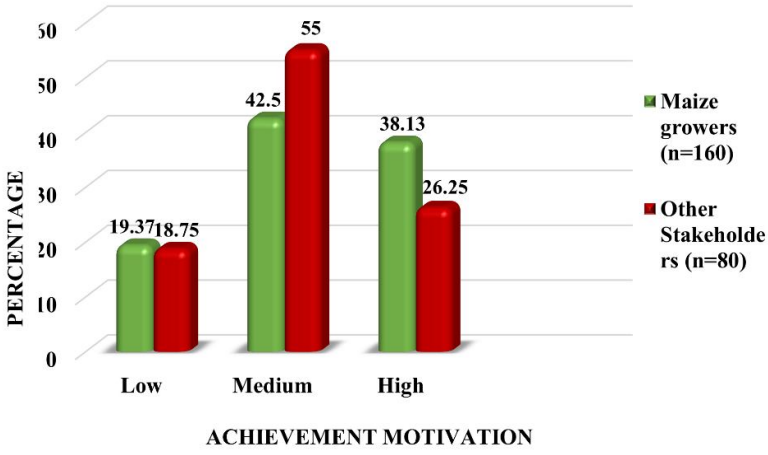

Fig 7 Distribution of respondents according to their achievement motivation

CONCLUSION

Any value chain encompasses actors, their activities and an enabling environment. When it comes to the actors i.e., the value chain partners, their personal traits influence entire value chain as a whole. Analysing these characteristics gives certain reflections on their management behaviour and effectiveness of the value chain.

Disclaimer (Artificial intelligence)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

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