# Determinants of Success of Mahagrapes as Perceived by Members

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### **ABSTRACT**

Mahagrapes was established with the aim of increasing export of grapes and income of grape growers of Maharashtra. It has helped in linking small and marginal farmers from Maharashtra to international market. Many studies indicated Mahagrapes as a success story. Therefore study was conducted to know determinants of success of Mahagrapes as perceived by members of Mahagrapes. For the study Nashik, Sangli and Pune districts of Maharashtra were purposively selected and 30 members from each district were interviewed for data collection. It was found that members perceived provision of needed infrastructure like pre cooling, cooling and storage as most important determinants of success of Mahagrapes followed by 'small and marginal farmers linked to international market' and 'increase in global competitiveness of Indian grape growers'.

Key words: Mahagrapes, Determinants, Success,

Grape is one of the important fruit crop in India. The area under grape cultivation in India is about 1,11,000 ha, with annual production of about 12.35 lakh metric tons. Maharashtra, Andhra Pradesh and Karnataka are the major grape producing states in India. Maharashtra occupies the top position in cultivation and production of grapes in the whole country having 86,000 ha area under cultivation (about 62 per cent of the country) with production of 7.74 lakh metric tons. Out of total production only seven per cent is exported to the Europe and other countries (NHB 2012).

A major problem in export of horticulture product in general and grapes in particular is the more number of small and marginal farmers in India. Owing to their limited resource base and lack of collective bargaining power they cannot withstand strong competitors from abroad. Some grape growers from Maharashtra overcame this problem by linking themselves to Mahagrapes through cooperatives. Herlehy (2012) emphasized that when farmers come together through cooperatives or member-owned businesses, they can pool their resources and maximize the value of whatever work they do. Cooperatives link farmers to markets, input suppliers, new technologies and sound farm management techniques.

Mahagrapes acts as marketing partner to group of fifteen producers' cooperatives in Maharashtra. It was formed in January 1991 with the objective of elimination of middlemen in marketing process and also encouragement and development of agricultural export. Mahagrapes negotiates better prices for its members and also provides technical assistance, inputs and information to the farmers to enable them in meeting stringent quality requirement of export markets (Working Group Report, Planning Commission, 2007).

Mahagrapes performs different functions to its

members like to source and develop worldwide markets, to provide quality control in post harvest activities, supply and supervise branded packaging. Besides this it also provide extension services and logistic support to members of co-operatives for production of export quality grapes. It negotiates better prices for its members. It also aims to encourage and develop agricultural export, maximize foreign exchange earnings, update the farmers on the latest technology in farming and accept global challenge with a commitment to quality etc. It also has helped in growth of co-operative movement.

Mahagrapes is considered as a success story because it has shown acumen as well as agility and has linked grape growers to international markets and has compressed the supply chain. In doing so it has assumed barometric role. It is pioneer in bringing precooling technology and array of post harvest operations resulting in better handling of produce. All these operations have pulled the farmers upwards in the supply chain (Roy and Thorat, 2008).

Thus, many studies have indicated that Mahagrapes is success story and has been exporting to European markets. It has helped in linking small and marginal farmers from Maharashtra to link to international market. It helped in increasing their export competitiveness by virtue of collective bargaining and economy of scale. Therefore considering these aspects in mind study was conducted to reveal determinants of success of Mahagrapes as perceived by members.

# **METHODOLOGY**

Ex-post facto research design was used for the study. The study was conducted in Nashik, Sangli and Pune districts of Maharashtra state of India as these districts comprises most of Mahagrapes members. From each district 30 Mahagrapes farmers were selected making total sample of 90. A well structured

interview schedule was developed and data were collected by interviewing the subjects and focused group discussion. Through review of literature various determinants of success of Mahagrapes were collected and members were asked to score them using Lickerts five point scale. Based on score of total members, mean score for each statement was calculated, which was used to rank the determinants of success of Mahagrapes.

# RESULTS AND DISCUSSION Basic profile of Mahagrapes farmers

Profile of Mahagrapes members shows that (Table 1) average age of members was 42 years. Members had been associated with Mahagrapes for average of 15 years, and most of them were founding members of Mahagrapes since its establishment in 1991. Average land holding of the members was 10 acres and they earned average 13.3 lakh income per year. Roy and Thorat (2008) found that Mahagrapes members earn significantly higher income than independent farmers. Calkins and Ngo (2005) in their study also found that by associating themselves with cooperatives, members got higher revenues than non-members.

Table 1
Basic profile of Mahagrapes farmers

| Sr.<br>No. | Particular                             | Mean<br>Score | Standard<br>Deviation |
|------------|--|---------------|-----------------------|
| 1          | Age (Years)                            | 42            | 8.2                   |
| 2          | Association with Mahagrapes (Years)    | 15            | 4.8                   |
| 3          | Annual income (Lakh Rupees)            | 13.3          | 5.9                   |
| 4          | Land holding (Acres)                   | 10            | 3.93                  |
| 5          | Productivity of grapes (Ton/acre)      | 11.7          | 1.65                  |
| 6          | Material possessions (Lakh<br>Rupees)* | 33.8          | 11                    |

<sup>\*</sup>Value of material and livestock possession expressed in rupees.

Average productivity of grapes at members' field was 11.7 ton per acre with standard deviation of 1.65. Roy and Thorat (2008) also found higher productivity of grapes among members of Mahagrapes than non members. It was found that members had material possessions of average value of 33.8 lakh, which include material and livestock possessions.

# **Determinants of success**

It was found that 'infrastructure like pre cooling, cooling and storage. established by Mahagrapes' at society level was perceived as most important determinants of success by the Mahagrapes members with mean score of 4.29 on five point scale (Table 2). Availability of cold storages at grass root level has helped in preserving their produce, keeping grapes at exportable quality, minimizing food waste and selling of grapes according to demand of

international market. Gundewadi (2013), also emphasized important role of cold storage units viz. reducing losses in transit, better distribution and fair prices, stabilizing market prices, maintain quality and wastage reduction. The farmers get opportunity of producing cash crops to get fair prices at the same time, the consumers get the supply of perishable fruits and vegetables with minimum price.

Mahagrapes members perceived 'linking small and marginal farmers to export market' as second most important determinant of success of Mahagrapes with mean score of 4.22. This is evident from the fact that most of the members (15.00%) interviewed belonged to small and marginal category of land holding. According to provisional national and state level data of Ministry of Agriculture (2012), the number of 'operational holdings' in India rose over a ten years period from 119.9 million to 137.7 million (up 14.8%). In the categories of small and marginal, the number rose by 8.80 and 22.4 per cent, respectively. This indicates that numbers of small and marginal farmers are increasing day by day. Therefore linking this unorganized vast segment to the market would play pivotal role in improving scenario of Indian agriculture and livelihood of these farmers. In this direction, Mahagrapes has played important role by linking small and marginal farmers from Maharashtra to international market through cooperative societies.

Third important determinant of success of Mahagrapes as perceived by members was 'Increase in global competitiveness of Indian grape growers' with mean score of 4.20. This finding is supported by Working Group Report, Planning Commission, GOI (2007), wherein it emphasized the underlying principle for Mahagrapes, as enabling market access by lowering transaction costs. It was envisioned that bringing together farmers under one umbrella would give better visibility and greater accessibility in foreign markets. It also gives collective bargaining power to the members of Mahagrapes to realize better price for their produce. All these factors helped Mahagrapes in increasing global competitiveness of Indian grape growers.

Next important determinant perceived by members was related to distribution of risk in production and marketing among all members of Mahagrapes. Thus, unlike in a situation where the farmer sells to intermediaries who bear the entire marketing risk, here the risk is shared across all farmers. However, the firm itself covers against such risks by rejecting procurements that do not meet the specifications but once they accept the produce from the farmer, the risk is totally borne by the firm where, everyone owns a share (Working Group Report, Planning Commission, GOI, 2007). Thus, it is collective responsibility of the members to produce export quality grapes and follow all recommended

Table 2

Determinants of success as perceived by Mahagrapes members

(N-90)

| S.No. | Statements  | Mean Score | Rank |
|-------|---|------------|------|
| 1     | Provision of needed infrastructure like pre cooling, cooling and storage.   | 4.29       | 1    |
| 2     | Small and marginal farmers are linked to international market.  | 4.22       | 2    |
| 3     | Increase in global competitiveness of Indian grape growers.   | 4.20       | 3    |
| 4     | Risk in production and marketing is distributed among all members.  | 4.18       | 4    |
| 5     | Characteristics of both a cooperative and a private sector partnership firm.  | 4.17       | 5    |
| 6     | Benefits of economy of scale.   | 4.14       | 6    |
| 7     | Timely information about GAP and other standards  | 4.12       | 7    |
| 8     | Better quality of services like inputs, soil testing, guidance etc.   | 4.11       | 8    |
| 9     | Better field supervision.   | 4.10       | 9    |
| 10    | Mahagrapes has good linkages with research institutes like CFTRI and governmental agencies like APEDA, MSAMB, NCDC etc. | 4.06       | 10   |
| 11    | Enables market access by lowering transaction costs.  | 4.03       | 11   |
| 12    | Ownership of Mahagrapes lies solely in the hands of the farmers.  | 4.00       | 12   |
| 13    | High income and better standard of living.  | 3.98       | 13   |
| 14    | Use of modern technology.   | 3.97       | 14   |
| 15    | Assured payment to farmers.   | 3.96       | 15   |
| 16    | Recommendations based on field and crop conditions.   | 3.92       | 16   |
| 17    | Provision of produce insurance.   | 3.86       | 17   |

practices and GAP standards for betterment of oneself and all fellow farmers.

Characteristics of both a cooperative and a private sector partnership firm was perceived as next important determinant of success by members with mean score of 4.17 on five point scale. This is because Mahagrapes is a private firm but has mobilized farmers from cooperative societies which are organized on principle of cooperation. It acts as marketing partner to these cooperative societies. The Board of Directors and members of Executive councils of Mahagrapes are selected from members of cooperative societies. The Board of Directors comprises of the heads of the fifteen co-operative Societies, of which seven are nominated to an executive council. Two prominent and expert farmers from the executive council in turn are nominated as executive partners to manage the day to day affairs.

Other important determinants perceived by members were benefits of economy of scale (mean

score 4.14), timely information about GAP and other standards (mean score 4.12), better quality of services like inputs, soil testing, guidance etc. (mean score 4.11), better field supervision (mean score 4.1), good linkages with research institutes like CFTRI and governmental agencies like APEDA, MSAMB, NCDC etc. (mean score 4.06) and enables market access by lowering transaction costs (mean score 4.03) etc. These research findings are also supported by Narrod et al. (2007)], and Roy et al. (2008).

From Table 2 it is seen that provision of product insurance was perceived as least important determinant of success by the members with mean score of 3.86. Other perceived less important determinants of success were recommendations based on field and crop conditions (mean score 3.92), assured payment to farmers (mean score 3.96), use of modern technology (mean score 3.97), high income and better standard of living (mean score 3.98) and 'ownership of Mahagrapes lies solely in the hands of the farmers' (mean score 4), etc.

#### CONCLUSION

Study was conducted in Nashik, Sangli and Pune district of Maharashtra to identify determinants of success of Mahagrapes as perceived by members. For the members, provision of needed infrastructure like pre cooling, cooling and storage was most important determinants of success of Mahagrapes. Other important determinants of success perceived by members were 'small and marginal farmers are linked

to international market', increase in global competitiveness of Indian grape growers, risk in production and marketing is distributed among all members, characteristics of both a cooperative and a private sector partnership firm, etc.

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