COMPARATIVE STUDY OF SKRAU NURSERY WITH OTHER PRIVATE NURSERIES OF BIKANER, INDIA

MOHIT SHARMA¹, JOLLY MASIH² & ADITIMATHUR³

¹,²Research Scholar, IABM, SKRAU, Bikaner, Rajasthan, India
³Assistant Professor, IABM, SKRAU, Bikaner, Rajasthan, India

ABSTRACT

Present study had been conducted with comparative analysis of SKRAU nursery (government nursery) with other private nurseries at Bikaner area. An attempt had been made in this paper for understanding different category of buyers of SKRAU Nursery, also to find out most popular selling plants of nursery, while overall comparison had also been made with other private nurseries in relevance to find the suitable promotional activities for SKRAU nursery at Bikaner area. Buyers had been categorized with reference to purpose or end use, as commercial, domestic and institutional buyers. Awareness about nursery and its products to customer were either through local KVK centres or either by fellow buyers of nursery i.e. WOM (word of mouth). Shadow & firewood plants were found to be most popular plants among flowering, fruit & vegetable plants. Private nurseries were more near to the city, hence grabbed more opportunities; also adoption of variety of plants by them gave competitive edge over SKRAU nursery. For competitive analysis, strategic tools like Porter’s 5 forces model, SWOT analysis were conducted for SKRAU nursery with other private nurseries in the area. Enhancement of suitable promotional strategies like collaborating with other private partners, adequate technical training to hired manpower and hi-tech poly houses for off season flower cultivation were given as major recommendations for SKRAU, nursery for having a competitive edge over other private nurseries in Bikaner. Also adoption of online selling practices and e-commerce were among the major recommendations for SKRAU nursery to develop a competitive advantage over other private nurseries at Bikaner.

KEYWORDS: Competitive, Strategic Tools, E-Commerce, Promotional Activities

INTRODUCTION

Nursery formed the base for future development of Horticulture. Nursery could be a profitable venture only when it was thoroughly planning. Nursery was depended on its physical resources as well as the financial resources. Careful planning and management of nursery were vital and important for long term success and profitable venture. Surabhi Mittal (2007) mentioned that India could look forward to emerge as a major producer of horticultural products and thus secure reasonable market access for its agro exports, which were largely dependent on the competitive technologies that would help in enhancing export potential. The diversification plan of the horticulture sector needed to identify potential crops area wise and the area under low yielding vegetables and fruits shall be shifted to more productive and profitable one. There was a strong need to strengthen the research on horticultural crops to develop demand-driven technology by improved variety, pest management, etc., in both public and private sectors. Michael Cleghorn (2007), studied to understand the full impact of continual discounting, it was useful to think of discounting as having addictive properties for both businesses and consumers. Radhudkar et al (2010) said that nursery enterprise was based on assumptions of demand...
of plants and availability of various production inputs like raw material and labour. Matthew Carroll (2011) found cross sector partnerships leading to benefits of businesses working with each other within the industry, which culminated in the form of Business to Consumer (B2C) collaboration, where the economic model of comparative advantage played a key role in establishing a more sustainable industry. Bob Wynyard (2013) worked on developing E business solutions and training in the Nursery Industry. Chandra P. Kuniya (2014) said that conservation of threatened species through cultivation was anticipated to be helpful in sustainable supply of raw material of high value Himalayan medicinal plants. Jim and Dan (2014) developed a business plan for rose nursery to make it into a profitable business using creative advertisements.

In this study key focus was on to sell products of the highest quality with excellent customer service and support. Communicating with customers through creative advertising. Continuing to expand daily sales by adding to the variety of plants we sell. Retaining customers to generate repeat purchases and making the referrals.

OBJECTIVES OF THE STUDY

- To understand different category of buyers of SKRAU nursery
- To find out most popular selling plants of SKRAU nursery
- To find out overall performance of SKRAU nursery and its comparison with other private nurseries

METHODOLOGY

Data Source: Primary data

SKRAU NURSERY

- Commercial Buyers: 50
- Domestic Buyers: 50
- Institutional Buyers: 20

Private Nurseries: 10

Sampling Method: Convenience sampling

FINDINGS AND ANALYSIS

Objective 1: To Understand Different Category of Buyers of SKRAU Nursery

<table>
<thead>
<tr>
<th>Type of Farmers</th>
<th>Commercial</th>
<th>Domestic</th>
<th>Institutional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Farmers (1-20 beegha)</td>
<td>16%</td>
<td>68%</td>
<td>20%</td>
</tr>
<tr>
<td>Medium Farmers (&gt;20-40 beegha)</td>
<td>76%</td>
<td>8%</td>
<td>40%</td>
</tr>
<tr>
<td>Large Farmers (&gt;40 beegha)</td>
<td>8%</td>
<td>24%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Figure 1: Type of Farmers in Each Category as Per Land Holding
Interpretation

Commercial Buyers

Mainly medium size farmers bought plants for commercial purpose as they were self-sufficient in domestic needs and with aim to earn profits they stepped out of domestic criteria. They bought plants in small to medium quantities from nursery and then sold the bought plants further in their respective areas within 15-20 days so that they don’t have to spend on maintenance of plants.

Domestic Buyers

Mainly small farmers bought shade and firewood plants for domestic purpose to get fuel (wood) for cooking and other purpose.

Institutional Buyers

Majority of large farmers had tie-ups with the institutes where they sold nursery plants, or they themself were the owners of institutes like schools, colleges, big commercial farm houses where they planted these nursery plants.

<table>
<thead>
<tr>
<th></th>
<th>KVK/ Ag. Dept/ University</th>
<th>Fellow Farmers</th>
<th>Self Explored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>58%</td>
<td>32%</td>
<td>10%</td>
</tr>
<tr>
<td>Domestic</td>
<td>46%</td>
<td>42%</td>
<td>12%</td>
</tr>
<tr>
<td>Institutional</td>
<td>32%</td>
<td>60%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Figure 2: References being Acquired about SKRAU Nursery

Interpretation

Commercial Buyers

Mostly commercial buyers got reference from local KVK centre and agriculture experts as nursery was a part of agricultural university. Trust and faith over government scientist and certified plants created a good image of this nursery.

Domestic Buyers

Mainly domestic buyers were influenced by agriculture experts and fellow farmers. First few progressive farmers tried the plants on this nursery and based on their recommendation, other farmers also bought the plants and found them good.

Institutional Buyers

They were mostly influenced by fellow farmers, institutes had tie ups with each other and supplier of plants was being referred from institute to another, same thing happened in this case.

Objective 2: To Find Out Most Popular Selling Plants of SKRAU Nursery
Interpretation

Commercial Buyers

They mainly focused on shadow and firewood plants as they were common in areas like Bikaner where there was a lack of healthy shadow-giving and firewood-providing plants. Favourite shadow and firewood plants comprised of Khejri, English Babool (thorn less variety), Sesame, Peepal etc. Some liking was also there about seasonal flowering plants, as they were being sold further immediately to marriage gardens, individual houses etc. Favourite flowering plants were rose, jasmine, juhi, flocks, chrysanthemum etc.

Domestic Buyers

Since majority of buyers were from village and were farmers so they heavily bought firewood plants to meet the needs of fuel (wood) & fodder for cattle.

Institutional Buyers

Institutional buyers also focused on shadow plants due to hot climate of Bikaner. They were also keen about flowering plants like red rose and chrysanthemum in winters.

Interpretation

Commercial Buyers

Less than 25 plants were purchased by each commercial buyer; they mostly bought in small quantity and sold it further to avoid maintenance charges of plants.

Domestic Buyers

They also focused on small quantities of plants (<25 plants), since the bought plants for personal use.
Institutional Buyers

They played on volumes (>100 plants). Major buyers were from Military campus, colleges, schools etc. They planted trees in volume every time to improve landscape and greenery.

Objective 3: To Find Out Overall Performance of SKRAU Nursery and its Comparison with Other Private Nurseries

![Figure 5: Strengths of SKRAU Nursery](image)

**Interpretation**

**Commercial Buyers**

They emphasised on easy availability of plants along with government certification and expert opinion which helped them to sell good quality stuff to other buyers along with technical assurance.

**Domestic Buyers & Institutional Buyers**

They focused on good quality plants at affordable price along with easy availability, so that plants can we bought and maintained easily.

![Figure 6: Area of Improvements for SKRAU Nursery](image)

**Interpretation**

**Commercial Buyers**

As reported by commercial buyers, lack of maintenance lead to over-grown plants, big in size and difficult to carry and sell. Other factors found were, lack of skilled labour leading to problems such as, improper cutting, grafting of plants, high mortality rate of plants and extra maintenance charges.

**Domestic Buyers**

They faced problems like distance from city, due to which sometimes they preferred to buy plants from nearby
local nursery. Other problems were lack of skilled labour and maintenance leading to distorted shape and size of plants.

**Institutional Buyers**

The major issue of concern was lack of skilled labour, which affected rate of survival of plants, its health, shape and size. Improper cutting and grafting of plants sometimes lead to loss in fruiting and vigour of plants.

![Figure 7: Opportunities being Grabbed by Private Nurseries](image)

<table>
<thead>
<tr>
<th>Variety of plants available</th>
<th>Nearness to city</th>
<th>Proper maintenance</th>
<th>Skilled labour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>42%</td>
<td>10%</td>
<td>0</td>
</tr>
<tr>
<td>Domestic</td>
<td>16%</td>
<td>24%</td>
<td>50%</td>
</tr>
<tr>
<td>Institutional</td>
<td>40%</td>
<td>60%</td>
<td>0</td>
</tr>
</tbody>
</table>

**Commercial Buyers**

Commercial buyers mostly emphasised on variety of plants so that they could attract large customer base and skilled labour, to get properly grafted plants as poor grafting deteriorated the brand image.

**Domestic Buyers**

Domestic buyers were happy with the private nurseries offering well groomed and maintained plants instead of bushy and messed plants.

**Institutional Buyers**

Institutes gave weightage to wide variety of plants and nearness to city since they required plants in bulk and large distance was always a problem to carry large number of plants.

**Detailed Study of Private Nurseries**

In our study we had taken 10 private nurseries and with scheduled questionnaire data have been collected. Private nurseries had been divided into 3 major types, as large nursery, marginal nursery and small nursery based on number of plants they were having and nursery area. In study we found 5 Medium nurseries, 2 large nurseries and 3 small nurseries. Nurseries had different varieties of plants available like, fruit plants, shadow plants, flowering plants, seasonal plants and ornamental plants. For each category profit estimation had been done and for large nurseries it was found that profit earning in fruit plants was more than other type of available plants followed by ornamental and shadow plants. Although all variety of plants were profit earning. Profit had been estimated as for average plant (in Rs.) in each category. Results and analysis for private nurseries are as below:
Figure 8: Profit Obtained by Large Nurseries

Interpretation

Profit margin in various plant types among private nurseries had been observed and it is found that fruit plants carried more profit margin to nursery growers among other categories of plants i.e. ornamental plants, shadow plants, flowering and seasonal plants, respectively.

Figure 9: Profit Obtained by Medium Size Nurseries

Interpretation

Profit margin in various plant types among private nurseries had been observed and it was found that fruit plants like pomegranate, kinnow, orange etc. carried more profit margin to nursery growers among other categories of plants i.e. ornamental plants, flowering and seasonal plants and shadow plants, respectively.

Figure 10: Profit Obtained by Small Nurseries

Interpretation

Profit margin among various type of plants availed by nursery growers had also been observed for small nurseries. Results obtained indicating that ornamental plants were more profitable to them followed by fruit plants, shadow plants, seasonal plants, shadow plants and flowering plants, respectively.
Effect of Government Schemes to Nursery Growers

In addition to this, effect of government schemes was also examined on various factors, like increment in number of buyers, for availability of quality planting material, agrochemical, FYM & fertilizers etc. In all type of nurseries various responses were being quoted, results obtained are as;

<table>
<thead>
<tr>
<th>1=least preferred</th>
<th>6=most preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased number of buyers</td>
<td>4</td>
</tr>
<tr>
<td>Availability of better planting material</td>
<td>2.5</td>
</tr>
<tr>
<td>Availability of agrochemical</td>
<td>2.5</td>
</tr>
<tr>
<td>Availability of FYM &amp; fertilizers</td>
<td>3.5</td>
</tr>
<tr>
<td>Availability of material for poly/net house</td>
<td>5.5</td>
</tr>
<tr>
<td>Increased sales and profit</td>
<td>4.5</td>
</tr>
</tbody>
</table>

**Figure 11: Effect of Government Schemes on Large Nurseries**

**Interpretation**

For large nurseries most privileged factor observed was availability of material for polyhouses/net houses. Likewise for large nursery growers adopting hi-tech nursery system, proper maintenance of plants was imperative, while government schemes found positive impact on them. While availability of factors like better/quality planting material, agrochemical were least preferred.

<table>
<thead>
<tr>
<th>1=least preferred</th>
<th>6=most preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased number of buyers</td>
<td>1.8</td>
</tr>
<tr>
<td>Availability of better planting material</td>
<td>3.2</td>
</tr>
<tr>
<td>Availability of agrochemical</td>
<td>3.8</td>
</tr>
<tr>
<td>Availability of FYM &amp; fertilizers</td>
<td>4.4</td>
</tr>
<tr>
<td>Availability of material for poly/net house</td>
<td>4.0</td>
</tr>
<tr>
<td>Increased sales and profit</td>
<td>5.8</td>
</tr>
</tbody>
</table>

**Figure 12: Effect of Government Schemes on Medium Sized Nurseries**

**Interpretation**

For Medium sized nurseries effect of government schemes have found more impactful on increment in sales and profit. Same is due to reason like various government schemes for developing quality planting material, subsidies on plant varieties on lower rates and further selling to consumers cause the same to happen. Beside that, other factors like, availability of FYM & Fertilizers, agrochemicals, infrastructural material for nursery were less privileged.
Interpretation

For small nurseries, it was found that availability of quality planting material to them was most favoured factor of government schemes, followed by availability of FYM& fertilizers, agrichemicals and also in increasing sales and profit etc.

Strategic Models/Tools

Competitive analysis with Porter’s 5 forces model

<table>
<thead>
<tr>
<th>Power of buyers</th>
<th>Power of suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial and institutional buyers were most powerful. They were prominent buyers of big nurseries.</td>
<td>This was high in case of ornamental plants, seasonal flower and fruit trees since these plants were not easily available in Bikaner. Flowers were specially brought from Jaipur and Agra during October and suppliers charged premium price for these seasonal flowers due to increased demand in nurseries. Likewise ornamental plants were brought from Delhi, UP and Jaipur, but prices were reasonable.</td>
</tr>
<tr>
<td>Commercial buyers used to buy costly flowering &amp; fruit plants to sell it further and institutional buyers used to buy plants in bulk yielding heavy profits to the nurseries. Domestic buyers used to buy more from nearly small or middle nurseries as per convenience. They visited big nurseries mostly to explore more variety at reasonable price.</td>
<td></td>
</tr>
<tr>
<td>Industry rivalry</td>
<td>Threat of substitute</td>
</tr>
<tr>
<td>Industry rivalry was intense case of big nurseries. Big nurseries were in race of offering new variety of plants and were bringing new plants from places out of Bikaner like Jaipur, Delhi, Agra etc.</td>
<td>Local vendors on footpath, vendorcarts etc. were substitute of these nurseries which mainly took away the share of domestic customers as they went colony to colony to sell the products.</td>
</tr>
<tr>
<td>Threat of new enterant</td>
<td></td>
</tr>
<tr>
<td>Online gardening website could be a potential threat to these nurseries. They were becoming popular in big cities and might enter Bikaner as well. They offered high variety to plants and home delivery which attracted large customer base</td>
<td></td>
</tr>
</tbody>
</table>

Figure 14: Porter’s 5 Forces Model of SKRAU Nursery
RECOMMENDATIONS

- Efforts shall be made to enhance skills of labour working in nursery. Proper training shall be imparted about different gardening techniques and nursery management practices.

- Plants shall be maintained and groomed properly to attract customers. Pruning, training and trimming of plants shall be a regular exercise. Attractive pots of different and bright colours and in various shapes could be used to make plants more attractive specially flowering plants like roses, chrysanthemum.

- Limited variety of plants was a serious issue. It shall be dealt carefully. More varieties of fruits and flowers could be brought from areas other than Bikaner to provide large product offering to the customers.

- More suitable promotional activities were required for long term growth and increasing profit, e.g. seminar, workshops for technical know-how to farmers etc. Reason being location was far away than city; hence outlets could be opened in city as an alternative.

- More emphasis was required on ornamental plant varieties, as it was found in competitive analysis that other private nurseries had a good collection of seasonal ornamentals,

- Special emphasise shall be given to promotional strategy for SKRAU nursery. Fixed price strategy shall be followed along with combination of occasional discounts.

- Collaborations with other private partners could be made to enhance promotions, retail outlets and better supply for plants. It could be a win-win situation for SKRAU nursery and other private players. It could be done on profit sharing basis or margin basis.

- E-Commerce shall be made a part of this promotion and selling activity. This practice had proved to be successful in sales of other agri-products, same approach could be applied here as well.

- Rare herbs of desert region available in nursery like Aloe-vera, Sangri etc. shall be made available online for the people outside the Bikaner.

- Poly-house of nursery could be restarted with floriculture and using coco pit to avoid soil-borne infections.

REFERENCES

1. Surbhi Mittal (August 2007), Indian council for research on international economic relations ‘Can horticulture be a success story for India’ w.p. no. 197

2. MA Haque, MAM Miah and MA Rashid (Sep., 2007)–‘Bangladesh Journal of Agricultural research’ 32 (3): 375-385


5. Garg, Sahil, Kaur, Prabhjot and Dhaliwal, R. K. (2013). Satisfaction of ruit growers regarding the services availed


