

Samriddhii: Redesigning the Vegetable Supply Chain in Bihar

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Introduction and Analysis of Situation

Mr. Kaushlendra Kumar, a management graduate from IIM Ahmedabad started social entrepreneurial projects, 'Kaushalya Foundation' in 2007 as an Not-for-Profit NGO, and 'Knids Green Private Limited' in Patna city as the base in 2008. Knids entered Lucknow in 2009 as a joint venture. Mr. Kaushlendra turned down several lucrative corporate offers with the prime objective to leverage his competencies to uplift the poverty stricken small farmers in the state of Bihar, his birthplace. Mindset of farmers, vegetable vendors, general public and youth in particular were the reasons for the scarcity of competent and committed employees who could help in establishing and stabilizing the venture which required considerable effort and energy.

However Mr. Kaushlendra managed the Herculean task of organizing farmers and vendors and encouraging them to participate in the process more judiciously using local contact, and exhibiting great patience. His leadership skill needs special mention in the early success of the venture. The entire group managed to grow from scratch to the turnover of INR 40 million in the year 2010-11.

Samriddhii, a comprehensive supply chain for vegetables started in December 2007. The objective of this initiative was to improve the standard of living of small farmers of Bihar. Mr. Kaushlendra identified the opportunity to achieve this goal by increasing the efficiency of the supply chain by directly linking the vegetable growers from the villages to the vendors in the urban centres where majority of the consumers reside. This benefited the system a lot owing to the removal of multiple stages and a long chain of intermediaries. These intermediaries were getting the benefit from the information asymmetry and were taking a lion's share of the consumer price.

Structure and behaviour of the business of vegetable supply chain is assessed using Porter's five forces model. Competition in this sector is multifaceted and complex. Number of socio-political forces impacts the shaping of the structure and the conduct of different players. Only in recent years, some large business houses like Reliance, Godrej, ITC, Namdhari Fresh, Food Bazar, Spencers etc., have entered this business as a back-end supply chain for their retail or food processing business. At the national level the share of the organized sector is negligible and in some specific pockets it is only about 3-5 per cent. The focus was to be in the unorganised sector for the next 10-15 years at least.

From the supply side, the vegetable producers were less powerful. Their dependence on agricultural income and lack of other sources of income make them dependent on intermediaries such as local truckers and commission agents. Vagaries of weather, perishability of farm produce and information asymmetry help the intermediaries to wield power and take away a major share of the consumer price.

Consumers have a wide choice of vegetables to buy and a wide choice in points-of-purchase as well. As household consumers are price sensitive, their demand is small and they have a number of close substitutes. They switch vegetable vendors; bargain on prices and substitute alternate vegetables. Small vendors don't have much control due to the lack of capital and dependency on large vegetable agents and wholesalers for credit and regular supplies. They undertake the business activity as a means of basic livelihood and sustenance.

Traditionally vegetable vending, and other intermediary businesses are carried out as a family business for generations. Relationship of the agents with vegetable farmers and retail vendors also run

for generations. Further, there is a taboo attached to these businesses and generally youth don't want to take up such activities. The information about market arrivals and sales are kept within business circles and is difficult for any new entrant to have access.

As mentioned earlier consumers prefer different vegetables and a variety seeking behaviour among them is common. Vegetables being commodities, consumers switch from one vegetable to another without much hesitation and also switch vendors based on prices and services.

The competition among the agents and vendors is fierce and they may resort to non-economic means of competition if their position is threatened as most of them earn a major part of their income from this business.

Problems

Based on the analysis of market situation and the organizational context the problem may be narrowed down to a few major ones:

1. Graduating from initiation phase to growth phase
2. Organizational infrastructure
3. Genuine participation from farmers and vegetable vendors.

Objectives

Clarity of objectives are important to provide guidelines to the decision making process. Mr. Kaushlendra has to spell out the objectives clearly and with some qualitative targets, which may help his organizational members to clearly focus on and assign accountability. Based on the review of various aspects of internal and external contexts and problems in hand the following objectives may take precedence over others.

1. Increase the income of both small vegetable farmers and vegetable vendors.
2. Sustain financial viability of the organization.
3. Achieve a turnover of INR "X" and benefit "Y" farmers, "t" vendors. Increasing their average income from INR "xo" to INR "xt" by the year "t".

4. Demonstration of commitment and feasibility/viability.

Alternatives

Mr. Kaushlendra and his team have a number of alternatives to achieve their objectives in the long run. Some of the alternatives are listed here. These alternatives may not be mutually exclusive and they may be considered at different points of time and in different sequences.

1. Increase market share in Patna and Lucknow markets
2. Expand to Kanpur, Varanasi, Allahabad, Noida, Gaziabad and Delhi markets
3. Entering into cold chain storage business
4. Entering into food processing

Evaluation parameters

The alternatives have to be evaluated based on the following parameters.

1. Manpower
2. Financing
3. Building supply chain
4. Second line leaders
5. Competitive pressure
6. Cost of operations

Analysis

The problem in hand is quite complex and the evaluation warrants a systematic approach. Analytical tools such as Analytic Hierarchy Process (AHP) are suitable if assumed to have hierarchical relationship only, or Analytic Network Process (ANP) can be used if there exists considerable interactions among alternatives and parameters, and possible cyclical influences. In the present case analysis I just present a possible Analytic Hierarchy Structure in Figure 1, as an illustration. Both AHP and ANP can help in prioritising evaluation parameters and generate scaled weights which in turn can be used for assessing the alternatives to take decision.

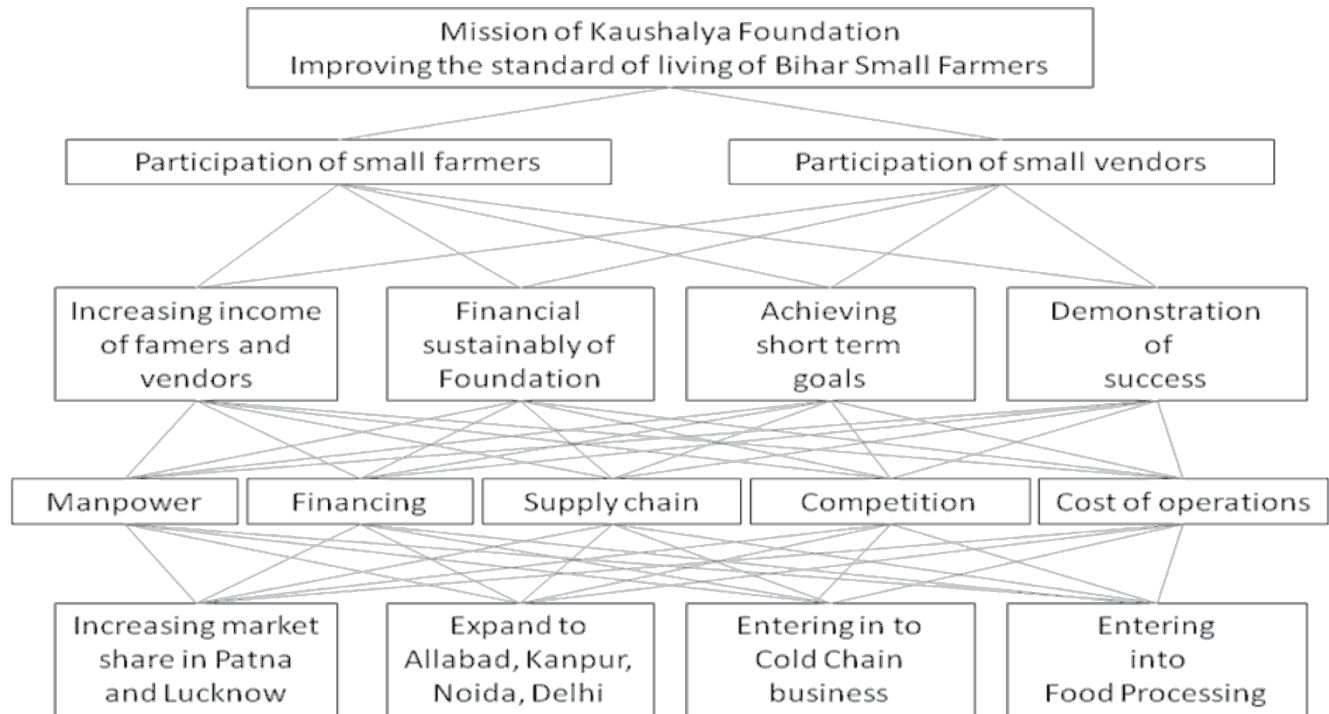


Figure 1: Hierarchical Structure of objectives, evaluation parameters and Alternatives

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