
Exploring Marketing Insights for Grassroots Innovation: The Case of Bullet Santi

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This study was undertaken to support the grassroots innovation alternate for farming, Bullet Santi, by exploring its marketing needs in a specific market. A qualitative field research using interview & observation methods was undertaken in four villages of Ahmedabad-rural to understand the potential target market, demographics and behavioural intent, major issues and needs, new product perception, pricing gaps, communication and distribution requirements for generating insights for the grassroots innovator for the marketing of Bullet Santi. Besides providing insights to the product innovator, support institutions and policymakers, our research will enable an improved understanding of the determinants of successful commercialisation of grassroots innovation and help researchers to examine new avenues for future research in grassroots innovation by linking it to the marketing domain.

Keywords: *Bullet Santi, Grassroots Innovation, Grassroots Innovator, Marketing Needs, Commercialisation*

1. Introduction

Hardship and poverty affect human life indifferently, which gives birth to the accidental innovator. The desperate wish to fulfil the basic needs of people in the lowest socio-economic group gives rise to grassroots innovation. It may refer to the innovations by individual innovators who often pursue innovative efforts to solve localised problems and generally work outside the sphere of formal organisations like business firms (Bhaduri & Kumar, 2009). It may also be defined as innovation by civil society and not by business organisations or government (Tang et al., 2011). It provides solutions that differ from mainstream and routing innovation (Monaghan, 2009). There are numerous innovations continuously made at the grassroots level across the world. India might not be the only country. India's rural demography spreads across six lakh villages consisting of millions of households and people. They have a severe need for low priced utility products for different purposes to solve their difficulties. Learning across various aspects over time and vision that converts into real-life projects is the main characteristic of grassroots innovation. Grassroots innovation may also involve novel ways of doing something like refrigeration without the usage of electricity and made of clay (Abrar & Nair, 2011).

Grassroots innovation gradually contributes to the global market in the form of niche products and is then adopted by the mainstream. This can happen when a large organisation owns or supports the commercialisation of these projects (Hess, 2013).

1.1 Brief Literature Review on Grassroots Innovators

Few researchers define grassroots innovators as 'innovative network of activists' who are located locally and helped by people of common interest (Church, 2005), while few also call them as 'innovators who come from origin' or 'individual actors coming from rural communities' (Agarwal, 1983; Butkeviciene, 2009). Usually, these grassroots innovators are people who did not get any formal education and don't have theoretical knowledge of science and technology etc. (Rao, 2006). Despite the fact, they possess knowledge and skills that come from traditional resources or are indigenous (Onwuegbuzie, 2010). This knowledge is applied by these grassroots innovators to solve their problems. The innovation capability of grassroots innovators can create many benefits to an individual and community in the resource-constrained environment (Singh et al., 2020). Other than their limited knowledge due to lack of formal education, grassroots innovators may also lack in

few skills like capabilities to execute new projects, commercialising their project, making their project functional, optimising their project solutions, etc. They may also lack the skill of scaling up their project. Also, there are a lot of constraints in grassroots innovation like sources of finance, the dependence on locally available raw material, lack of infrastructure, etc. Large populations, poverty in the country, low cost of establishing a company and good opportunities in the social enterprise ecosystem is motivating these grassroots innovators to develop and scale up the projects (Rawat et al., 2019). However, lack of funds and knowledge is becoming a hurdle for their growth. Hence, creating proper funds through small grants, subsidies, co-funding, insurance facilities, etc., can boost such innovations (Hoppe et al., 2015). Innovating in scarcity is the difference between multinationals and grassroots innovations that prevails in developing countries. This ability to innovate under such critical circumstances is, in that perspective, an essential requirement at the bottom of the pyramid (Krämer & Belz, 2008), and therefore it has the potential of scaling up. It can be scaled up for the local market first and then in other national and international markets (Srinivas & Sutz, 2008). Scaling up of these innovations can also help in increasing employability and earning opportunities of that country's citizens (Dutz, 2007).

The scaling-up process also involves integrating grassroots innovations which can help to get information about consumers, their needs and how to use the product. Hence, employing market research for the same is essential. In such kinds of work like research, a proper communication channel to promote their project is also a challenge for these innovators (Creech, 2014). The innovators need the handholding of people, institutes or organisations that can do it for them and help them scale up their project. There should be intermediaries to support such kinds of grassroots innovations and innovators in terms of legal, local, market, policy and social context.

Most of the grassroots innovators are need-based innovators, and they do not have the intention of becoming entrepreneurs. Innovators are born because of the need, and hence, at times, they are not motivated enough to commercialise their projects (Kumar et al., 2013). Hence, to motivate such innovators and to commercialise their projects, different networks, organisations, people, communities, academic researchers must connect with them and support them in all means. These products are developed keeping in mind issues of the target audience like adoptability, availability, and affordability.

2. Justification of the Study

India is the first country in the world to have set up a committed office under the Department of Science of Technology, Government of India, to search, reward and value-add individual grassroots innovators. The Indian government patronised grassroots innovators and movements like the Honey Bee Network, SRISTI (Society for Research and Initiative for Sustainable Technologies and Institutions), and NIF (National Innovation Foundation) dedicated to grassroots innovations in the country (Ferreiro et al., 2021). Prof. Anil Gupta, who is the founder of Honey Bee Network, NIF, Grassroots Innovation Augmentation Network (GIAN), and SRISTI and whose objective is to support and boost global and local grassroots innovation introduced to the product studied. Widely known and discussed, grassroots innovations solve many challenges of the people at the bottom of the pyramid, but the innovators lack the skills to commercialise it to be benefited. They also lack financial resources to promote their products. GIAN, NIF, SRISTI, and Honey Bee Network incubate these products, document, and commercialise. Developing innovative marketing strategies for these products required in-depth study of the target audience, differentiation, consumer behaviour, and suitable channel of distribution. As per Anil Gupta in the interview given to Balachandran (2018), grassroots innovators must be given entrepreneurial support for taking their idea to the economic and social market. In his words, "Not all grassroots innovators make good entrepreneurs."

Again, looking at the research contributions in grassroots innovation and social entrepreneurship, innovativeness has been identified as a critical factor, but an analysis of the marketing staples like four Ps (product, price, promotion & advertising, and physical distribution) and segmentation, targeting, and positioning (STP) have not been explored completely (Short et al., 2009).

This study was undertaken to support the social entrepreneur's grassroots innovation by exploring its marketing needs in a specific market. It also links the marketing domain with the grassroots innovation field, where research questions can be formulated for future interdisciplinary research.

3. Research Objectives

The study was undertaken with the objective to generate marketing insights for the formulation of the marketing strategy of the grassroots innovation product, Bullet Santi in Ahmedabad-rural by exploring the following items:

1. Target audience
2. Demographics, Behavioural intent
3. Significant issues in farming (Needs)
4. New product perception, including functional and emotional
5. Pricing strategy
6. Marketing communication needs
7. The requirement of a channel of distribution

A detailed discussion was undertaken with a team of marketing experts, including an ex-Indian Institute of Management, Ahmedabad (IIM-A) faculty. During the discussion, the following research objectives were formulated:

1. To study the marketing impact on the commercialisation strategy for Bullet Santi in the rural areas of Ahmedabad.
2. To investigate the marketing staples applicable in the study.

During the discussion, it was also agreed that demographics-based targeting like age, gender and income might not be adequate. It was also important to assess the farmers' behavioural intent and affinity to understand their marketing needs. Broadly, the STP and the four Ps were used to design the template and discussion guide for the field research.

4. Methodology

One of the significant issues with grassroots innovation identified in the literature review was the scaling up of business/enterprise due to a lack of resources and knowledge. In the case of a grassroots innovation product like Bullet Santi, the innovator and the team wanted to develop marketing strategies (marketing plan) to scale up the business. It was essential to understand farmers' perceptions of Bullet Santi to formulate marketing strategies for the product. It was also important to understand their needs for farming-related products, farmer's demographical and economic backgrounds. Therefore, qualitative field research mainly using the interview method for the study as the respondents were farmers, and in-depth interviews would help uncover rich and deep insights into the product. Also, it was believed that the interviewer's presence would give the respondents additional comfort while answering the questions in the local language. Observations were also made during the interaction. For the introductory level, a telephonic interview was also conducted with the product innovator of Bullet Santi at the preliminary level. The study was conducted in two stages:

Stage 1: Initially, a telephonic interview with the product innovator and published sources in research was undertaken to understand the innovator's background, the origin of the grassroots innovation, and other relevant details about the product.

Stage 2: In-depth interviews were carried out with 30 farmers from four villages of Ahmedabad district, Gujarat, to understand the market needs for the product. Thirty farmers from these villages were chosen based on judgemental sampling. The rationale behind the number of interviews was based on almost similar background and geographic location of the respondents (Baker & Edwards, 2012) besides the recommendations of the marketing expert from IIM-A. Again, the interviews were conducted till we reached theoretical saturation or 'redundancy' (Srivastava et al., 2021; Creswell, 2014). The laddering technique was used for interviewing the farmers for understanding them better. It is particularly useful in developing an understanding of how consumers translate the attributes of products into meaningful associations concerning self-defining attitudes and values (Reynolds & Gutman, 1988). The interview questions were formulated in the local language, i.e., Gujarati, to ease interaction with the respondents.

The observation method was also used throughout the interaction. The unit of observation included the target market for Bullet Santi, major issues in farming, new product perception, functional and emotional benefits, pricing, communication, and distribution.

5. Findings and Analysis

From the review of literature, it is found that grassroots innovations lack appropriate research, especially in the case of scaling them up and developing marketing plans of the same though it solves local environmental issues of people (Seyfang & Smith, 2007). These innovations majorly lack resources; despite this fact, innovators develop new products that are cost-effective to the market for which it is developed in this industrialised society. This is the beauty of grassroots innovation in terms of difference with multinationals.

The preliminary findings were generated using published sources and telephonic interview with the innovator, Mr. Mansukh Bhai Jagani.

5.1 Phase 1 (The Genesis of the Grassroots Innovation: Bullet Santi)

Many farmers in India suffer from resources available, knowledge of technology, and other modern farming skills.

They are usually uneducated and, therefore, have little knowledge about the government schemes for their welfare. They do not even get paid as per the yield due to ignorance and lack of skills, and hence, the financial condition is critical. Most of the time, shortage of resources gives rise to remarkable grassroots innovation. One such innovation was created by Mr. Jagani, the developer of Bullet Santi. He belonged to a small village of Amreli district of Gujarat state in India. Born as a poor farmer, he could not even complete primary education as he had to support his family. It is said that many people are born with some talent, and so was Mr. Jagani, who, with his challenging conditions, gave the world a unique product that was patented and won many national and international awards. In his words:

“I always had a passion for being an innovator and for developing things that did not exist.”

He tried other occupations too, but that did not interest him much. His inclinations, passion, and inquisitiveness to develop something new made him start a workshop related to innovative farm products that reduce farmer's efforts and generates more yield cost-effectively. He quoted:

“I was not sure whether to continue with agriculture or start my workshop. Finally, I decided to start a workshop on my own. I also continued with farming.”

Bullet Santi was a product developed by Mr. Jagani that was a combination of the front part of motorcycle Bullet, and ploughing equipment attached behind; therefore, the name given was Bullet Santi. This patent won the award in not only India but in the US too. According to him:

“The farmers have greatly benefited from Bullet Santi. It has helped them to improve productivity as they did not have to bother about the labour cost or bullocks to plough their land.”

The device received great appreciation from Africa and other countries as it can plough one-acre land in only two litres of diesel in less than thirty minutes. The cost of a tractor is more than Rs. 4 lakhs while Bullet Santi costs Rs. 1.65 lakhs indicating cost-effectiveness, reduced work, effort, and more benefit. This success boosted his confidence, and he launched his workshop. In his words:

“My workshop is performing well. The Grassroots Innovation Augmentation Network and the National Innovation Foundation recently assisted me with a grant for workshop expansion and purchased more equipment. However, the need for skilled labour remains a concern for my business.”

He has developed several such farm devices to benefit farmers and ease their work effort. He not only got appreciation from foreign countries but also got a chance to visit South Africa. In his words:

"I enjoyed my first trip abroad. I observed that the style of agriculture was a bit obsolete in African countries. There is a lot that African countries can adapt and learn from our work. There is immense scope for improvement. The people there were delighted to know that farmers from India had come to interact with them."

He also received the award from former President Dr. APJ Abdul Kalam. In his words:

*"The most cherished moment of my life was receiving an award from President Dr. APJ Abdul Kalam."*¹

Authors (A): Do you regret not completing your education?

Mr. Jagani (MJ): "I do not worry about it much. However, sometimes I feel if I had learned English, I would have been able to connect and communicate with many people."

A: What are your lessons for other innovators?

MJ: "Do not focus on incremental innovations; develop something completely new on your own."

A: Any future work or plans?

MJ: "I am working on a machine that can help draw water easily from deep wells. There are more than a few ideas on which I am working now. It is too early to comment on them."

Mr. Jagani is a good exemplar of a grassroots innovator who, despite social challenges against all odds, created a low-cost alternative for farming that benefited the farmer community in his region. His contribution as an individual innovator, addressing localised problems, no formal education or theoretical knowledge, and novel ways of innovation, especially for rural communities, is consistent with the literature review.

5.2 Phase 2 (Findings from the Field Interviews and Observations)

The findings generated through the interviews and observations were summarised into seven categories, namely target market, demographics and behavioural intent, major issues and needs, new product perception, perceived benefits (functional and emotional), pricing strategy, and communication and distribution insights for *Bullet Santi*.

5.2.1 Target Market for Bullet Santi:

Thirty farmers interviewed from four villages near Sanand, Ahmedabad belonged to one or the other segments as below:

- Farmers who could not afford tractors and equipment (as an alternative to tractors)
- Rich farmers who had their own land (those looking for labour substitute)
- Poor farmers who had taken land against rent or had little land (those looking for cost-benefit)

All the above segments had different needs but were found to be suitable target groups for *Bullet Santi*.

Table 1: Key Segments (Target Market)

Segment	Characteristics	Needs
Middle-level Farmers	Had own land	Needed alternative to expensive tractors and equipment
Rich Farmers	Had own land of large size	They required replacement for daily wagers and agricultural labourers and workers
Poor Farmers	Little land or leased land	Desperate need for low-cost farming gadgets and equipment, couldn't afford tractors

Source: Compiled by the Authors

1. Innovator has been awarded National Award from NIF's First National Competition for Grassroots Innovations and Traditional Knowledge in 2001.

5.2.2 Demographics, Behavioural intent of farmers

The age group of the farmers was between 35 to 55 years, and the majority of them were males who were associated with farming on a reasonably large scale. Their income from farming ranged between 1 to 8 lakhs per annum and had other different sources of income as well. Many of them were less educated, while their sons were well educated, with some qualified as engineers and other professionals. In most of the cases, the sons were not interested in farming.

Almost all the farmers were observed to have a simple lifestyle, and they were found to be extremely hospitable and kind-hearted. Despite their simple living, traditional values and straightforward approach, they were open to trying new things or new innovative farming methods. All the farmers were found to exhibit strong inner job values of keeping up with the tradition, being independent and enjoying their work. The table below categorises the key statistics from demographics and the behavioural intent observed:

5.2.3 Major Issues and Needs

During the interviews with the farmers, the following insights were generated through discussion to identify the specific needs of the farmers:

- The foundation for agricultural development depended on the changes in the cropping pattern and in the levels of productivity of various crops. Also, soil and its type affected crop productivity.
- According to the farmers, a very important and crucial input for agricultural production was the irrigation method used.

- In India, cattle-like bullocks or tractors are used for ploughing and as other agricultural implements. Tractors are sold through agencies as the channel of distribution. Due to high prices that small and medium level farmers cannot afford, their time, energy, and efforts are increased.
- Non-traditional agriculture means that were either cheaper or multifunctional, or both were welcomed by the farmers. All farmers felt that the irrigation system, fertilisers, ploughing techniques, etc., needed new technologies and means.
- As per most of the farmers, the majority of development, research, and action plans were focusing on the rich and large farmers having land to cultivate, and the target was to increase the crop or output, etc. Most of them felt that their small farmers' plight was ignored, i.e., the small farmers needed new technology or innovation to sustain their livelihood.

5.2.4 Bullet Santi Perception (New Product)

The following features of *Bullet Santi* were explained to the farmers before recording their perceptions:

- The product was smaller and cheaper than a tractor but more powerful than bullocks used for ploughing farms.
- It was fuel-efficient as two acres of farmland could be ploughed by only one litre of diesel.
- It was easy to use and handle, including assembling and dismantling the device from the motorcycle.

Table 2: Key Demographics

Age :	35 to 55 years
Gender :	Males
Income :	Rs. 1 to 8 lakh per annum
Education :	Matriculation and below

Source: Compiled by the Authors

Table 3: Behavioural Intent

Code	Interpretation
Simple lifestyle, traditional and hospitable	Cultural and sociable
Straightforward and kind-hearted	Honest and good-natured
Open and curious about trying new things	Venturesome
Independent and enjoyed work	Free and strong inner job values

Source: Compiled by the Authors

- The device could also undertake other farm operations like sowing seeds, spraying, inter-culturing, etc., including ploughing.
- The product could be used for orchards and crop plantations as it would prevent soil compaction due to being lightweight.
- 8 to 12 acres of land was possible to be ploughed in 8 hours depending on the type of soil.
- The rear-wheel spacing could be adjusted depending on crop spacing.

Functions of *Bullet Santi* explained:

It was explained to the farmers that *Bullet Santi* was a modified Bullet with attachments for ploughing, cross cultivation, sprayer and other similar functions.

The farmers from the four villages, namely Khoraj², Chandrasan³, Yashodanagar⁴ and Govindpura⁵, were of the following perceptions for *Bullet Santi*:

- The farmers felt that *Bullet Santi* could perform additional functions by providing attachments. They liked the idea of the product, inquired, and suggested a

wider variety of attachments that can perform functions like seed cum fertiliser drill, rice harvester, reaper (farm machine that cuts grain), and sugarcane cutter and grasscutter (see Exhibit 1).

- Farmers believed that the type of land would create difficulty in farm activities using *Bullet Santi*. Therefore, they believe that tractor's work cannot be replaced. Nevertheless, they also feel that for some farmers (labours, workers, and wagers), the product would have huge potential. They also mentioned that products should be demonstrated for better understanding and for creating awareness.
- Most of them were curious and appreciative of the innovation, while some expected few modifications in the grassroots innovative alternative like it should have larger wheels and should preferably be hydraulic and automatic.

5.2.5 *Perceived Benefits of Bullet Santi*

Based on the interactions with the farmers through pamphlets including photos and video of *Bullet Santi*, they perceived several benefits, which were categorised into functional and emotional benefits as below:

Table 4: New Product Perceptions and their Interpretation

Perceptions of <i>Bullet Santi</i>	Interpretation of Response
Can perform additional functions with attachments	Versatile, Multi-utility gadget
May not substitute for a tractor as land is sticky	Not very clear with the functions and benefits, product demonstration and objection handling required
Can replace daily wagers and agricultural workers	For some farmers, it could be a substitute for problems related to farm labourers
Has smaller wheels compared to a tractor, and it is not hydraulic and automatic	It was smaller and technologically inferior to a tractor but much better than traditional means of farming
Can be used as a harvester for inter-cultivation, spraying insecticides, fertilising, etc.	It could perform all necessary functions related to farming

Source: Compiled by the Authors

2 Khoraj is a village panchayat located in the Ahmadabad district of Gujarat state, India

3 Chandrasan is a village panchayat located in the Mahesana district of Gujarat state, India

4 Yashodanagar is a village panchayat located in the Mahesana district of Gujarat state, India

5 Govindpura is a village panchayat located in the Mahesana district of Gujarat state, India

Table 5: Perceived Benefits (Functional & Emotional)

Functional Benefits	Emotional Benefits
It could save water	It would make one feel special and royal-like
It could reduce cost and labour related problems	It would create comfort and make one feel relaxed
It could be cost-effective and would require low maintenance	It would reduce stress and anxiety
It was a multipurpose device and versatile	It would generate a sense of pride in the owner for using an ethnic (Gujarati innovator) innovative product
It was compact and easy to use	It could make one feel more masculine
Could be used in spraying insecticides and sowing seeds	It would make neighbours jealous

Source: Compiled by the Authors

5.2.6 Pricing Strategy

The traditional competitor tractors range started from Rs. 4.0 lakhs, where few small sizes were also available at around Rs. 2.5 lakhs which was very expensive for the common farmer. The equipment was also priced separately.

Bullet Santi was commercially priced in the range of Rs.1.25 to Rs.1.65 lakhs which also included all four-farming equipment by the innovator (Singh & Mehta, 2018). While inquiring about what price farmers were ready to pay for the features of *Bullet Santi*, it was revealed that farmers were ready to pay anything between Rs.1.8 to Rs.2.0 lakhs.

5.2.7 Communication and Distribution

As per the farmers, all tractor manufacturing and marketing companies communicated their products through the use of traditional media like place advertising, hoardings, pamphlets, local newspapers and radio. Based on their requirements, a local marketing campaign and demonstration program in the villages was highly recommended. Most of the farmers expected product demonstration of *Bullet Santi* in their villages and farms to understand the features, usage and feasibility of the product to them.

The farmers also expected ready availability of the product for demonstration and sales, assembly, and service support just like the tractor and mini tractor companies in the area.

6. Discussions

The findings from the case (Stage 1) of *Bullet Santi* also adds to extant literature where grassroots innovations lacked appropriate research, especially in the case of scaling them up and developing marketing plans of the same though it solved local environmental issues of people (Seyfang & Smith, 2007).

The findings from Stage 2 can be summarised as follows:

The observations were consistent with the literature where target audience issues related to adaptability, availability, and affordability applied to such low-cost innovative products and grassroots innovations. The findings would contribute to the literature by generating insights on the behavioural intent of farmers for grassroots innovations like *Bullet Santi*. The same shall be useful in assessing the marketing needs of customers of grassroots innovations. The findings are also consistent with the literature review, which proves that the Indian rural population has a serious need for low-priced utility products for different purposes to solve their difficulties. The insights generated towards the perceptions of *Bullet Santi* could add value to the extant literature in the study of perceptions for new products and grassroots innovations. They could be used by practitioners and academicians for the formulation and study of the marketing strategy for grassroots innovations. The findings also contribute to the marketing literature where perceived benefits, i.e., both functional and emotional, can be used for developing the marketing strategy, especially the positioning of a grassroots innovation. They also generate useful insights for the grassroots innovator in the pricing strategy, communication, and distribution strategy for the launch of the low-cost innovation.

The following recommendations based on the field research can be proposed to the innovator for formulating the marketing strategy of *Bullet Santi*:

- The target market should essentially constitute farmers who cannot afford tractors and who are looking for cost-effective labour substitutes. Cost-effective ploughing methods involving fewer efforts were a major need of farmers. Although branded tractors with multiple farming options were desirable, they were

found to be costly. The demographics and the behavioural intent findings could be used by the innovator to arrive at the target market and positioning of *Bullet Santi* during commercialisation. The type of irrigation, soil and cropping pattern were major issues to be considered by the innovator. It was also found that farmers were in desperate need of a low-cost alternative for farming and to sustain their livelihood.

- *Bullet Santi* was perceived as a unique product that was cost-effective, easy to assemble and use, capable of multiple farming, and saving water. It was also perceived as a product that gave immense pride to the user and made him feel like a royal. Most of the farmers were highly appreciative of *Bullet Santi* as a farming option, but some expected a few modifications in the device as well. The modifications were suggested to the innovator.
- The farmers were willing to pay between Rs. 1.8 to Rs. 2.0 lakhs for *Bullet Santi* and offers good profit to the innovator. *Bullet Santi* may be positioned as the best cost provider during the launch in the future.
- The communication and the personal selling strategy for *Bullet Santi* must be localised by using regional language and demonstration. The findings related to new product perceptions, perceived benefits, and behavioural intent can be integrated into the communication strategy of *Bullet Santi* during the launch in the future. It may also be used for personal selling efforts during the demonstration and objection handling process.
- The product should be demonstrated, promoted and showcased in agriculture markets, agriculture events like *Krushi Unnati Mela*⁶ and *Agri Asia*⁷ (Singh & Mehta, 2018).
- The distribution strategy should involve local partners located close to the farmers and capable of assembly, sales and service. Additionally, a tie-up with some local manufacturers in the nearby location of the target segment was suggested to easily cope up with the demand and availability of the product in the market. The manufacturing and assembly should have proximity to the target market area.

6. Krishi Unnati Mela is a three-day event launched by Prime Minister Narendra Modi

7. Agri Asia showcases the continuous upgradation of technology and interrelated development in Agriculture Industry.

7. Managerial Implications

Current findings add up to the existing body of theoretical literature besides making a useful contribution, as seen in the introduction section earlier. Grassroots innovations have a lot of potential to satisfy the need of people, especially at the bottom of the pyramid at an affordable price in developing countries. As the products are developed by innovators of similar environments and economic conditions, usually the products have ease of use, they are pocket friendly and meet the need. Therefore, these products have acceptability in the market. It becomes easy for the marketer to communicate the product in the market, educating customers and developing value propositions to those customers. Usually, the product distribution (accessibility) is easy in the same market; for example, the product (*Bullet Santi*) is developed in the Saurashtra region of Gujarat state of India. It becomes easy for farmers of that region to buy the product, but while interacting with farmers of Ahmedabad district of the same state, farmers were not even aware of the product. Though when communicated, they showed great interest in buying the product. It is very important to create good and impactful awareness about these innovations to the rural market for which mainly the products are developed. If the innovations are really good and affordable, rural customers are likely to spread positive word of mouth for the product. It is important to spread knowledge about the existence of such products in the market. From the theoretical analysis, it is found that there is a large number of grassroots innovations across the world that have remained confined to the local market. Support is necessary to scale up such innovation so that people from other markets (both nationally and internationally) can derive the benefits of these grassroots innovations.

8. Conclusion

There is a strong need to develop grassroots knowledge and an innovation-led approach to poverty alleviation by identifying, acknowledging, and supporting creative individuals like Mr. Jagani through government initiatives and other organisations. The efforts of organisations like GIAN, NIF, and SRISTI are commendable, and more such initiatives for funding and research should be encouraged by policymakers and research institutions. Our research would hopefully contribute to generating marketing insights for the successful commercialisation of *Bullet Santi* in Ahmedabad-rural, and the findings will enable an improved understanding of the determinants of successful commercialisation of grassroots innovation.

Education institutes should take up such projects and help innovators with research regarding their innovation. With

findings like our research, they can either position themselves appropriately or, with the intervention of some marketer, formulate a marketing plan for scaling up the project. If they do not have support in formulating it, they can take the help of expert faculty or students of business schools or management institutes. An effective marketing plan with the help of appropriate research insight will help innovators and their supporters to communicate their products properly. Even corporates, multinationals and industrialists can provide a huge helping hand to these innovators by not only providing funds but by producing and promoting these products and giving profit sharing to the innovators. With the knowledge and resource advantage of the companies and competitive advantage of the product, such grassroots innovation can bring laurels to the country in the global market. Such grassroots innovations also help in strengthening a country's economy.

8.1 Future Directions

The study would be useful to researchers for examining new avenues for future research in grassroots innovation and social entrepreneurship by linking it to the marketing domain, i.e., multidisciplinary approach. A future agenda for us as researchers will be to understand how marketing impacts the success of grassroots innovators and social enterprises for future theoretical and empirical efforts. Hopefully, the findings of our study will also assist the country's policymakers in developing strategies that will provide an impetus to innovations and social entrepreneurship.

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Appendix

Exhibit 1: Multi-functional Bullet Santi



Photographs courtesy: National Innovation Foundation
