

GREEN MORNING (A): TREE TRANSPLANTATION, EXPLORING GROWTH STRATEGIES IN EMERGING ECONOMIES

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ABSTRACT

This case examines the expansion strategy of a growing enterprise named Green Morning, a tree transplantation firm. This industry is at a nascent stage of development with small and scattered players all over the country. Green Morning, a prominent name in this industry, bags most of its projects from infrastructure and development projects undertaken by the government. With the increasing awareness of transplantation as an option of saving green cover of the nation, competition is rapidly rising. The firm is now considering various strategic opportunities for its growth in terms of current and new services and markets. The case will give students an opportunity to understand and analyse the opportunities for intensive growth for a service based social enterprise.

Keywords: Business Development, Green Marketing.

INTRODUCTION

India is a growing country and as long as there are development projects, trees will be sacrificed at its cost for a better standard of living. I want to be there to save each and every tree, and I want to position my company in a way that when someone thinks of protecting trees, they think of Green Morning, Mr. Ramachandra Appari, Founder and MD – Green Morning.

It has been projected that, by 2050, the population of earth will hit the mark of approximately 10 billion people. It would not be a surprise to assume that this alarming growth in population will increase strain on the existing natural resources. At the cost of meeting the increasing global demand for food and development, the green cover of earth is also substantially decreasing which results in issues such as degradation of land, soil erosion, increase in carbon content in atmosphere, and depletion of ground water.

For the past few decades, governments of emerging economies like China, India and Brazil have been constantly focusing on developing their nations by making an investment in infrastructure sector. Particularly in India, to increase connectivity, the government has heavily invested in highways, roads, and railways (metro) projects. *Bharatmala Pariyojana*, *Chardham Mahamarg Vikas Pariyojana*, Eastern and western peripheral expressway are some of the major ongoing road/highway projects. Furthermore, various metro rail projects are also being implemented in tier I & II cities like Ahmedabad, Hyderabad, Noida, and Pune. The Indian Express, a leading Indian newspaper, reported that an upsetting number of 12,800 trees were chopped off in the last three years for various urban development projects undertaken in the NCR (National Capital Region). Times of India, another leading newspaper circulated across India, quoted a more daunting figure of 1 lakh trees being sacrificed for the Delhi metro rail project in the last 8 years. Table 1 showcases a similar scenario across the nation.

Project (ongoing/completed)	Number of trees chopped
Mumbai-Nagpur Expressway (O)	1.73 lakhs
Delhi metro rail (C)	1 lakh
Bullet train (O)	60,000
Kalka-Shimla highway (O)	33,508
Mumbai-Goa (O)	31,000
Ropar-Bhagwara highway (C)	20,977
Flyover, Road widening – Gurugram (O)	9650
Bengaluru metro rail (O)	7887

The numbers given for the completed projects are actual figures while for the ongoing projects the numbers are approximated.

To address the issue of decreasing percentage of green cover caused by the various development projects, concerned authorities in the Indian government have taken a number of measures for compensatory plantation which includes sapling plantation, transplantation, and its maintenance. It is known that a fully grown tree is capable of providing oxygen sufficient for 10 people. Therefore, even though plantation of saplings is cost effective, it does not provide the benefits of a fully grown tree till it reaches that stage. Tree transplantation, thus, proves to be a relatively efficient method of compensatory plantation.

Mr. Ramachandra Appari is a popular name in the tree transplantation industry in India. He gained popularity on saving the lives of approximately 600 trees during the construction of Hyderabad metro Rail project through the process of transplantation. By the year 2019, his firm, Green Morning, had transplanted over 9000 trees, establishing them as the pioneers of this industry in the country.

TREE TRANSPLANTATION

Tree transplantation is an ancient method that has its roots in the early 1600s. Back in the day, it was attempted for reasons such as increasing fruit yield, beautification, and shade. This method is defined as moving a tree from one location to the other by unearthing it and then replanting. The stepwise process of tree transplantation is given in Figure 1.

The process of transplantation takes approximately 15-20 days depending on the number of trees, their size, distance of relocation, number of labour and machinery involved. Once replanted, the survival of the tree can be assessed within 15-60 days. The first sign of survival is sprouting, i.e., growth of new leaves. Maintenance of the tree, as explained in Figure 1, takes another 1-2 years which requires regular watering and medication (spraying of chemicals such as pesticides, insecticides, and disinfectants).

Despite the fact that transplantation proves to be an innovative and viable option, there are various challenges associated with its execution. Firstly, there is a lack of appropriate species-specific knowledge required for the process of transplantation. This may reduce the overall survival rate of the transplanted tree. Proper research and species-specific knowledge before implementing transplantation helps in achieving higher survival rate. Secondly, this process involves various intricate procedures such as pruning, digging at the right circumference, transporting the tree delicately, etc. which requires a highly skilled workforce at every stage. A person has to be passionate and patient enough to train its workforce to implement the process smoothly. Thirdly, transplantation is a costly process which involves investment in machinery and

labour. The former has three components, an earth mover that helps in unearthing, a crane required to extract trees from the ground, and a trailer/truck to transport them to their new location. Investment in these machineries is in accordance with the number trees involved in a particular project which may range from 10-1000 trees. The latter part of the total cost is a function of the labour required, age and girth of the tree, distance of relocation, chemicals required, and material for burlap. Machineries may become a part of the variable cost if chosen to be hired/leased rather than purchased.

New Technology

As discussed earlier, transplantation requires heavy investment in both labour and machinery which increases the cost substantially for the process to be executed, in comparison to a simple procedure of plantation drive. To increase the acceptance of transplantation, various machine and equipment firms like *Duchman Industries Ltd.*, Volvo Truck India, Sandhill Equipment Inc., etc. invested in R&D to develop a machine called TREE SPADES, that could reduce the cost by investing in single machinery capable of carrying out the task of digging, burlapping, and transporting in a go.

TRANSPLANTATION INDUSTRY IN INDIA

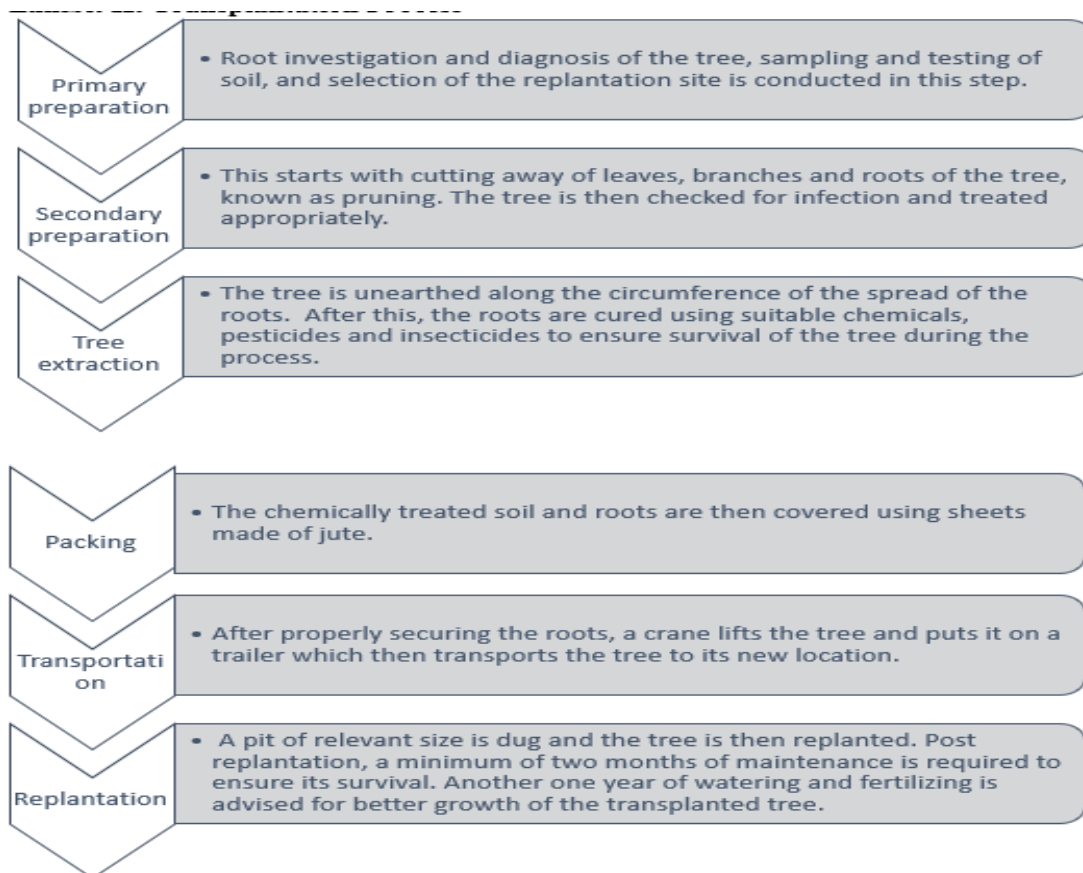


FIGURE 1
TRANSPLANTATION PROCESS

In the past few decades, the Government of India (GoI) has been heavily investing in infrastructure and development projects which has led to a major reduction in the total green cover of the country. This has increased the risk of a number of environmental issues like pollution, climate change, depleting water levels, etc. As mentioned in Table 1, it is clearly visible that the number of trees chopped for these projects is alarmingly distressing. With increasing awareness about these environmental issues, GoI is making investments in recompensing options like sapling plantation and transplantation. Sapling plantation can be done in huge numbers with ease and at a low cost which make it a more popular method. However, as mentioned earlier, it does not compensate for fully grown trees which makes transplantation a more robust technique of replantation.

The transplantation industry is underexplored in India with only a few prominent players that are limited to their geographic regions. With constant attention from media and social media the acceptance of this method is gradually increasing. Companies such as Green Morning in Hyderabad, Rohit Nursery in Delhi (NCR), Jeyam Landscape in Chennai, Vruksha in Bengaluru are some of the key players in the Indian market. Each firm has an experience of handling at least one metro rail project being undertaken in their respective regions. Apart from these firms that execute the transplantation process using traditional methods, another upcoming player in the industry is VOLVO Trucks India. This firm manufactures tree spades which is capable of implementing the whole transplantation process using single machine. Table 2 displays the projects/number of trees saved, in the last few years, by the respective firms.

Transplantation firm	Projects undertaken	Number of trees saved
Green Morning	Hyderabad Metro, Pune Metro, Forest department of Telangana, AP, and Odisha, CPWD- Delhi, Road widening in Hyderabad	9000
Volvo Trucks India	Govt. projects in Jharkhand, Chattisgarh, Karnataka	3000
Tree Machine, Gujrat Govt. (Done with help of machinery imported from GSPC, USA)	Forest Department, Gujrat Govt.	1500
Jeyam Landscape & Garden consultants	Commercial projects from firms like Infosys, Wipro, Chennai Metro, BPCL	900
Rohit Nursery	Delhi Metro, IIT Delhi campus, Commonwealth Games, Badarpur Flyover, Nauroji Nagar	450

The figures quoted in the above table have been approximated

GREEN MORNING

A company incorporated in Feb, 2010 is the brainchild of Mr. Ramachandra Appari, an entomologist. Green Morning has a proud history of successfully transplanting more than 9000 trees since its inception. Based in the city of Nizams, Hyderabad, the company has knowledge and experience of transplanting 93 different species of trees like Banyan, Ficus, Palm, etc. The transplanted trees boast an average survival rate of 85%. The company attracts its major business from Government of various states in India, Indian Army, corporate construction projects, and individual villas and apartment builders.

Background of Mr. Appari

With a strong educational background in the field of agriculture, Mr. Appari was always an environmentalist at heart. He attained his bachelor's degree in agriculture and master's degree in entomology and agribusiness management. Although he started his career in the insurance sector, he always knew that he belonged to the world of environment conservation. After three years of working with ICICI prudential, Mr. Appari resigned, in 2009, to start a small gardening and landscaping venture in Hyderabad.

In the initial period of his business, he explored various options to expand which included establishing a nursery with innovative projects like gift a plant, selling plants of religious importance, agriculture and horticulture consultancy, and landscape architecture and services. In the late 2009, Mr. Appari witnessed the construction of Hyderabad-Vijaywada highway. This highway was being built on a path which was once filled with lush green canopies that were now being razed to the ground. This troubled the environmentalist inside him and he decided to take a step towards this matter. He began with conducting primary and secondary research to have an in-depth understanding of the transplantation process. At first, Mr. Appari gathered knowledge about this process from the research work done in the area. Apart from the literature, various video platforms available on the internet also helped him in having an extensive and exhaustive view on the process. Later, to have a practical experience in the field, he commenced with a few test projects at a construction site in Hyderabad.

In 2010 they were successful enough to scale to a commercial level by undertaking transplantation projects in the construction of a hospital, expansion of a farmhouse, etc. which involved a maximum of 10-30 trees each. In 2011 Hyderabad Metro Rail project was proposed to start which called for cutting of approximately 600 trees. Environmentalists resisted the construction of this project unless the government ensured their survival. The company found this as a good opportunity to expand as he had both the knowledge and experience of the business. Along with four other landscapers, Green Morning successfully completed the transplantation of 600 trees with a survival rate of 90%. This project assured Green Morning that they were moving in the right direction and that they had the potential to make a considerable impact to counter the reducing green cover of the planet.

Although, the firm enjoyed a little success after the Hyderabad Metro Rail project, the firm was still finding it difficult to convince the government and other concerned authorities about the believability of transplantation. Mr. Appari approached various forest department officials with proposal to save trees but to his dismay, the officials seemed sceptical of the proposition and thought of it as a scam. Banyan and Ficus were believed to be the only two transplantable species, according to their limited knowledge. Also, the authorities that did believe in his business did not have any projects at the moment. This lack of awareness and knowledge about the field hindered Green Morning in reaching its potential. The business from 2011-2016 was growing slowly. From the year 2013 to 2016 independent houses and commercial construction sites contributed around 80% to transplantation revenue while the remaining share was contributed by the government projects.

Growth in Business

In Feb, 2017 a Facebook page called "*The Better India*" published an article on Green Morning's initiatives for the conservation of environment. The article talked about Mr. Appari's success in Hyderabad Metro rail project and his journey hence forth. This rendered the firm the

much-needed publicity that was necessary for creating awareness and knowledge about the transplantation industry. The article clearly mentions that Mr. Appari had successfully transplanted 5000 trees in a period of 5 years. Many other media publications picked up on this story after the appearance of this article. This created a ripple effect and many other news channels like AlJazeera, and leading newspapers like Indian Express, Navbharat Times, Deccan Chronicle, Telangana Today also featured his initiatives.

Table 3 showcases the number of trees transplanted by the firm in the last five years. These numbers are representative Green Morning's growing success and future potential. Of all the business ventures that Green Morning explored like landscaping, nursery, organic plantation; transplantation was the one that struck a chord in its founder's heart. Besides the passion for it, transplantation also generated encouraging revenues to continue undertaking one project after another.

Year	No. of trees transplanted
Until April 2014	500
April 2014-March 2015	650
April 2015-March 2016	723
April 2016-March 2017	1091
April 2017-March 2018	2034
April 2018-March 2019	4002

Organizational Structure

Green morning has 19 employees which comprises a top management of three members, five managers, and 11 supervisors. Further, the firm had hired three labour contractors for the execution of activities that required manual work. Initially, Mr. Appari decided to train 10 labours under one contractor for a project. Since the firm is based in Hyderabad this pool of skilled labour was also centred there, which made it difficult to undertake outstation projects in case of rejection from any labour. So, for the next project he asked for a different batch of 10 labours from the same contractor and another set for a different project. This ensured successful training of maximum labour employable under one labour contractor. To mitigate any risk, he further implemented the whole process with two other labour contractors, finally training almost 250 labours that were readily available to work at his beck and call. He did this because training single contractor would have increased his/her bargaining power over the firm.

Payment System

The company adopted the policy of paying labour on a "*per tree*" basis instead of the usual method of paying on a "*per day*" basis. The company also provided extra wages and lodging facilities for labour who travelled for outstation projects. This payment system ensured an effective completion of projects on time, higher daily wages for the labour, and higher margins for the contractors creating a win-win situation for all the parties involved. This helped the company in ensuring a greater labour retention rate which is essential in a labour-intensive business like this. Mr. Appari also happily quoted that his workers are very happy to work with him, and his contractors regularly ask for more business for themselves and their labourer

Execution

Figure 1 discusses the generic stages involved in the process of transplantation of a tree. However, a few modifications are required specific to the species being transplanted as well as the terrain in which it needs to be transplanted which requires both in- depth knowledge and continuous research to ensure greater survival rates. Proficient in both these skill sets, Green Morning is proud to be one of the best in this line of business.

They achieved this success by prudently planning and executing each stage of the process. Starting with pruning, which involves felling of almost 80% branches, Green Morning hires a professional team that is capable of efficiently climbing trees and possesses the knowledge of carefully selecting and cutting the right branches in a systematic manner. Besides this, the team needs to execute the process in presence of overhead electrical lines, which is a common scene in India, making the process cumbersome.

Trial and error method helped Mr. Appari realize that digging a pit four ft. in depth suffices for trees with any kind of root, namely, fibrous and tap root. For this stage, the firm hires another set of labourers consisting of a male and a female that is capable of uprooting two trees in a day. The number of pairs of labourers is hired in proportion to the number of trees being extracted. Once unearthed, the roots with thickness more than that of a pencil are treated with appropriate chemicals. Mr. Appari said that each species requires a different proportion of essential chemicals and this concoction is the secret of his business. It is these chemicals which ensure the survival of these trees. After this treatment, the trees are burlapped using jute bags before a crane uproots the trees and puts them on a trailer for transportation. The trees can survive up to five days in this state before their final replantation.

Finally, pits bigger than the root ball of the trees are dug at the location of replantation. Crucial soil amendments and fertilizer treatments are done in and around this location. After the trees are replanted in these pits, a basin like structure is constructed around them for watering and manuring purposes. Green Morning has a separate policy regarding care and maintenance of the transplanted trees. The service involves regular watering, fertilizing and disinfecting treatments which can last from 2-12 months. An annual maintenance charge of Rs. 3000-10,000 per month is levied on the client for this rigorous treatment after the compulsory maintenance requirement of 2 months. The charges are inversely proportional to the number of trees in the project. The whole process is executed in the presence and guidance of the supervisors employed by the firm. Table 4 shows the various costs involved in the process of transplantation such as the cost of labour, chemicals, machineries and equipment, etc.

Items	Cost
Pruning team (1 male & 1 female)	450 per tree
Labourer for unearthing	1200 per tree
Material for burlapping	100 per tree
Chemicals	100 per tree
Cost of earth mover	800 per hour
Crane	400 per tree

Revenue

Revenues of the firm, from transplantation business, came from three different sources, namely, independent houses, construction sites, and government projects. In the early years (2013-2016), independent houses and construction sites were its major contributors with a share of 40% each, while government projects contributed only 20%. However, in the subsequent years the number of Government projects undertaken by the firm increased fairly, making it the most significant contributor in its overall transplantation revenue by the year 2018 with 50% share in 2016-17 and 60% in 2017-2018. The major reason behind this spike is due to increasing awareness from media and personal efforts by Mr. Appari and his team leading to increased trust in the firm. Pie charts shown in Figure 2 display the major contributors and their share in the transplantation revenue of Green Morning in the last five years (2013-2018). In 2018, Green Morning had to make a difficult strategic call about its future business plan. Promising revenue stream from transplantation as well as inability to simultaneously manage various other ventures of the firm, made Mr. Appari and his team finalize the decision of exiting from landscaping and nursey ventures. Transplantation became the sole focus of the company.

The total price charged for a project is a function of distance of the site from headquarters in Hyderabad, girth of the tree, number of trees, distance of relocation site, and the type of species being transplanted. Table 5 shows the girth wise prices charged by the firm for transplantation. The prices are inclusive of the cost of earth mover for trenching at the present site as well as the new site, pruning the tree, packing the root ball carefully, putting the necessary chemicals, crane for loading and unloading the tree, labour charges, and cost of protecting the tree for 2 months from the date of translocation by timely watering, etc., complete but excluding the cost of transportation of the tree. Table 6 shows the price charged for the transportation of the tree and is inclusive of loading and unloading the trees into the tipper/trailer.

Competition

The industry in India, as discussed, includes a number of small and geographically dispersed players. These players generally keep limited knowledge of each and refrain from entering into any strategic alliance which hinders the growth of the industry in the country. This has also made the calculation of market share a cumbersome task. Yet, Mr. Appari feels that Rohit Nursery (Delhi) and Jeyam Landscapes (Chennai) are its closest competitors in the transplantation business. These firms have varied revenue sources, like Green Morning had until 2018. Transplantation still isn't their main focus and lack of skilled manpower and resources pose a hindrance in the success of these firms in the transplantation business. Green Morning, on the other hand, gains an upper hand by focusing solely on transplantation and thus has a first mover advantage whenever any government project is up for grabs. The number of trees and the type of projects undertaken by competitors is mentioned in Table 2.

With increasing acceptance of technological marvels, tree spades by Volvo Truck India pose a threat to all the existing firms in the industry. Tree spades are technologically superior as they combine the forces of an earth mover, a crane and a tipper/trailer in a single machine, reducing the labour required to execute this job. Resultantly, it decreases the variable component in the total cost involved in the process. The tree spades have successfully transplanted 3000 trees across forests of the nation. Although the technological advancement is welcomed by the government, these machines have not proven to be as successful in urban terrains of India. Because of the presence of underground water, gas pipelines, and wires and cables it becomes difficult for the tree

spades to dig without causing any damage. Looking out for these intricacies requires constant attention and care which makes the job labour-favourable.

Currently, the transplantation industry in India is an unorganized one with lack of stringent policies. The transplantation firms do not follow a standardized pricing structure because there is no interference from any of the competitors present. Being a labour-intensive industry, the firms, generally, follow the traditional methods of transplantation and are averse to any upgradation in technology. Although, firms like VOLVO Trucks have introduced the tree spades, they are still not a widely accepted alternative. Transplantation has still not become a compulsory alternative of uprooting trees in any legal policies in India. Even though, there is the WALTA Act, 2016 that stops an individual from uprooting trees without permission from the forest department, there are loopholes in this policy which hinders its effective application.

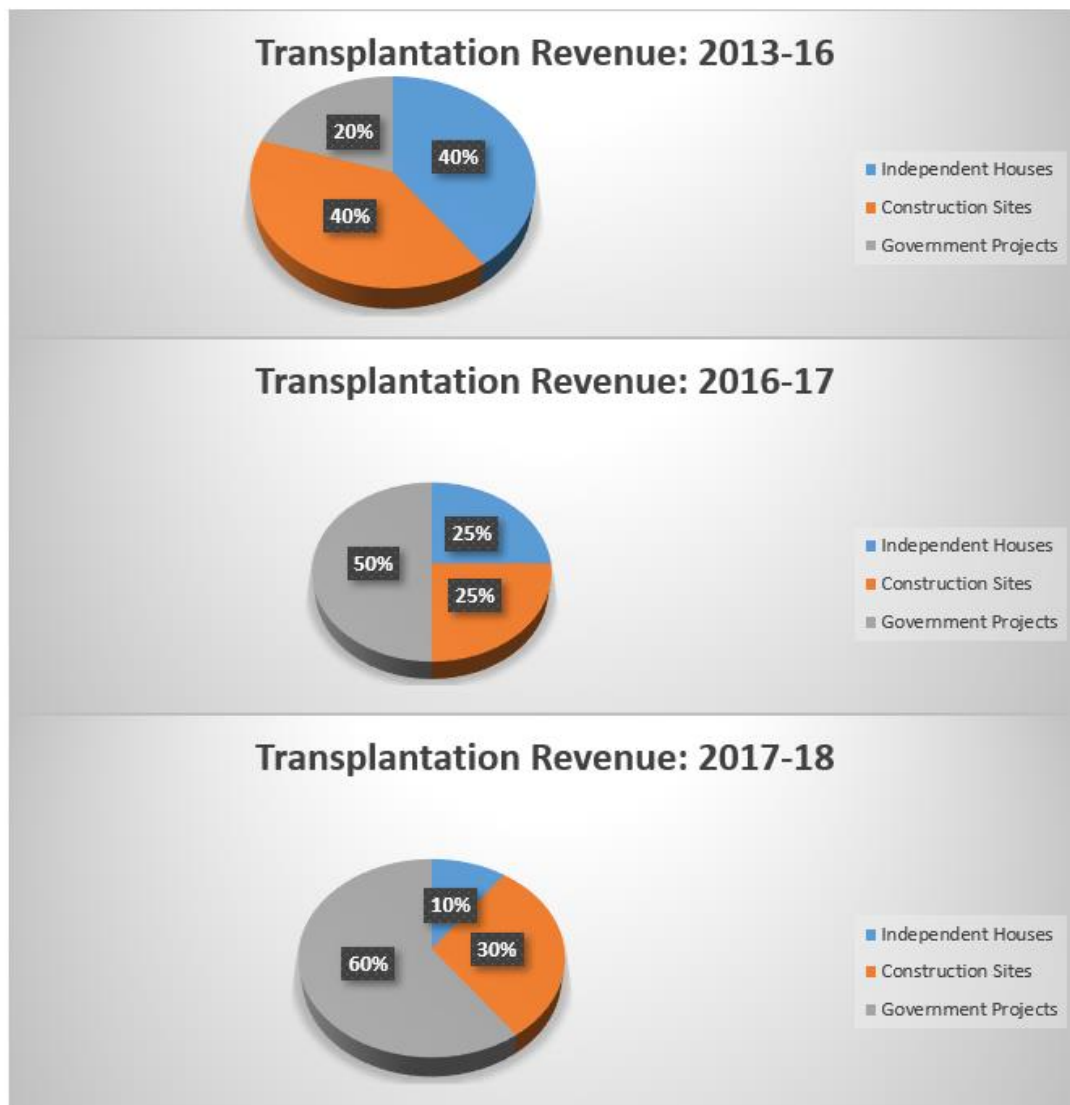


FIGURE 2
REVENUE FROM VARIOUS SOURCES (2013 TO 2018)

Girth Range (in mm)	Price charged (in INR per tree)
Below 600	5850
600-900	15600
900-1400	25000
1400-1800	35000
1800-2500	53000
2500-4000	75000
4000 and above	95000

Distance covered	Price charged (in INR per trip)
Up to 10km	4950
10-15km	7425
Above 15km	10500

The transportation process includes loading and unloading the trees carefully into the tipper/trailer.

EXPANSION OPTIONS

The players in the transplantation industry are small and geographically dispersed, yet, it seems to be gaining the much-needed momentum due to the increasing awareness in the society. Mr. Appari feels that in this dynamic competitive landscape, he does not have enough time to gain foothold and advantage over others. He is optimistic, yet worried, that the business will soon slip out of his hands if he doesn't take necessary actions to expand at this stage. For this, Mr. Appari is considering several options, which are discussed subsequently.

App Development

Mr. Appari feels that there is a dire need to tap into the losing business from independent houses and construction sites. Although, focusing on government projects for a few years has served the business well, Green Morning has a strong conviction that there is huge scope to expand in this direction, and if not done within the span of two years, competition may capture this segment. For this purpose, the firm has the idea of developing a user-friendly app that will provide platform for connecting with this target group. The app is meant to automate the process of client registration, easy and hassle-free transactions (as India is moving towards a cashless economy), and provide a database for existing and new clients. The aim is to standardize the process of customer acquisition and payment systems. Furthermore, the app also has a potential of reaching and acquiring a vast number of potential customers, eventually helping the firm in growing and strengthening its network.

In this scenario, the firm aims to receive major business from commercial construction sites and independent villas and houses. Presently, the firm is dependent on government for business and Mr. Appari fears that this might pose some challenges in the future such as stringent policies, bribery, and delayed payments. Hence, increasing the share of business from commercial construction sites and independent houses and villas would help them in decreasing their dependency on government projects. Market research and analysis suggests that development of a fully functioning app will take around two months and cost the firm Rs. 6,72,000. Also, acquiring

new customer would take up to a year and will result in 2000 downloads per year. It is assumed that only 2 % of these downloads would generate demand for the firm. The company is projecting an incremental growth rate in demand of 1.6 percentage points per year for commercial construction site projects, while independent villas and houses will grow at 0.4 percentage points per year over the current growth rate, through this option.

Tree Bank

Generally, in the process of transplantation, the client arranges for the site of replantation. However, at times, people cannot arrange for the same, which refrains them from considering the option of tree transplantation. These potential clients of Green Morning had the will to save trees but did not have enough resources to implement it. To deal with this issue, the firm is considering two alternatives. First, introducing a tree bank that can cater to this demand by extracting these trees from the site at minimal charges and transplanting it at a location, taken on lease by Green Morning. The firm, now, has the option to sell these excavated trees to the government for replantation in the forest to increase green cover of the nation. Also, these trees can be used for beautification purposes by individuals and big infrastructure firms. Second, instead of leasing a land, which will increase the fixed cost, Green Morning can initiate talks with firms that have significant corporate social responsibility (CSR) budgets. These firms can be convinced that along with sapling plantation drives, they can also consider adoption of these orphaned trees. It would help in increasing the awareness of transplantation as an option of saving trees.

Training and Development

The core objective of Green Morning is to protect trees from being guillotined. With almost 10 years of experience in transplantation, a survival rate of 85%, and more than 9000 trees saved, Mr. Appari feels that Green Morning is now competent enough to impart its knowledge about the industry to young and upcoming entrepreneurs. He wishes to train others like him in order to grow and flourish this industry in India. Three segments have been chosen for this one of a kind training and skill development programme, which are:

1. Labourer under contractors in other cities
2. Plant nurseries
3. Forest and other Government Department officials

Green Morning has built successful relationships with three labour contractors in Hyderabad who provide skilled labourer at any given time for execution of transplantation. Relationship building with these contractors plays a very important role in smooth execution of the process, since they provide labourers who can be trained and then called to work as and when required. At times, these labourers need to be transported to various cities for outstation projects that Green Morning undertakes making it a cost incurring and cumbersome task. To overcome the hassle of being geographically constrained, Mr. Appari wishes to build strong networks with similar contractors in major Tier I cities of India like Delhi (NCR), Mumbai, Bengaluru, Chennai, Pune, Ahmedabad. A batch-wise training programme can be implemented, similar to the strategy adopted in Hyderabad during the inception of the business. This will help in multi-fold expansion to newer geographies.

Also, Mr. Appari is in thoughts of entering into a training and development contract and a memorandum of understanding (MoU) with various nurseries in tier 1 and 2 cities, resulting in a strategic partnership with the concerned nurseries. As a part of this, Green Morning will take up responsibility of training the workforce of these nurseries and every time an outstation project in their city is up for grabs, Green Morning will supply the chemicals and the concerned nursery will execute the process. For this, Green Morning will charge a commission for each project that the nursery gains in the name of Green Morning.

Market research conducted by the firm is indicating that the above-mentioned options should be carried out simultaneously because both processes have a similar target audience and will result in synergistic growth in all the segments targeted by the firm. The firm will be able gain foothold in only two-three cities in the initial execution and will take at least a year to establish contacts and build relationships. Next year, it is projected that the growth rates of government, commercial construction sites, and independent villas and houses will increase by 5,2 and 1 percentage points per year respectively in the Figure 3 and Figure 4.

Lastly, Green Morning is also in talks with the forest officials of certain states to enter into a paid training and skill development contract. Imparting knowledge to the workforce under the forest department will prove to be the easiest and the most efficient method of saving the green cover of the nation. This programme will be designed to train the top officials and the labour by giving an internship in a few government transplantations projects that Green Morning will undertake. Furthermore, as the required number of people are trained over a few years, Green Morning will switch from a tree transplantation firm to a transplantation training centre, entirely changing the firm's major source of revenue. In this scenario, the business from government projects will decrease significantly over the time, stagnating growth from this segment eventually. The growth rate is projected to decrease by 20 percentage points per year from the government projects, while commercial and independent houses and villas will follow the current growth rate.

However, skill development will help the business in retaining sources of revenue. In the initial years, the business might face difficulties in its growth due its niche services to a selective audience contributing around Rs. 1,00,00,000. It is projected that this business will follow the growth trends of Green Morning's initial business from 2014-2015 onwards. This is because it takes a lot of time to convince audience to avail these services, and once the audience gains knowledge of the procedure, the business grows exponentially, as seen earlier.

Mr. Appari and his core management team are now thinking of the way forward for Green Morning. All the alternative courses of action seem enticing for the firm, however, due to constrained resources, the team will have to strategically decide the best option suitable for their objectives of increasing revenue and overcome competition. The challenge before the team is to expand the market of Green Morning along with simultaneous growth of the industry.



FIGURE 3
A SAMPLE MACHINE FOR PLANTING TREES



FIGURE 4
A SAMPLE MACHINE FOR PLANTING TREES

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