

OCCASIONAL PUBLICATION 31



Magarpatta Story:
Farmers Building Sustainable Cities

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A panoramic view of Magarpatta City residential neighbourhoods



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Magarpatta Story: Farmers Building Sustainable Cities*

What is now called the Magarpatta City grew out of a dream, an idea. The idea came from a strong feeling amongst those of us who lived in this region to preserve our lands that were at the verge of being acquired either by the government or by the local developers and organizations. So the city of Magarpatta grew out of an idea where farmers came together and planned to do something different with their inheritance.

The entire development area of Magarpatta City covered 430 acres and was owned by about 120 farmer families with more than 800 beneficiaries. The area was marked for agricultural use but fell within the limits of Pune Municipal Corporation. The name 'Magarpatta City' comes from our clan name. Most of the people who lived in this area were called Magar; and Patta, as we all know, refers to a belt of land. Magarpatta, thus, was our identity and since we did not want our clan identity to be forgotten or lost, we decided to keep the same name when we embarked upon this project.

As happened in many parts of our country, rapid development in this area from 1990 onwards sparked off an enormous chain of urbanization that led to a wave

* Adapted from an illustrated talk delivered by Shri Satish Magar at the IIC on July 29, 2011 in collaboration with the Business and Community Foundation.

of migration from the village to the city. At the same time, the city of Pune itself witnessed a sudden spurt of growth. As the demand for housing grew, Pune joined the ranks of most other Indian cities of that time in undertaking several housing projects. The upshot of these developments was that all the agricultural land in the periphery began to get fragmented into small plots. In what has now become a familiar story, agricultural land so far owned by a single family, was sold off to developers and builders because the money that came was tremendous.

Naturally, this brought several social problems in its wake. The income from land sales was often spent by the sellers in all kinds of unproductive assets. The beneficiaries of land sales first joined politics, then bought a couple of cars. In addition, a lot of vices crept into our simple rural life. We saw that people who sold their land to developers then began to splurge on lavish weddings and also took to spending money on drinking and gambling. Naturally, many of them soon ran through their money and were left with little to show for it. At the same time, several unauthorized buildings started to come up in Pune's suburban areas.

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Since there was no productive diversion of the earnings from land sales, people who owned large acres of land of around 4-5 acres were ultimately often reduced to working as house maids, drivers or chowkidars as they were uneducated and had run through the entire money they got from selling their lands. In a democratic country like India where there is so much influx from village to city, nothing can be done to stem urbanization. Since there was no way of stopping the march of urbanization, Magarpatta began to grapple with the same problems faced by other farming communities living near large towns. We were surrounded by residential complexes and there was enormous pressure on us from greedy developers to sell our lands.

The question that needed to be urgently addressed was how to save our lands and our future. We did not want to sell this land and, even if we were forced to sell, we did not know what to do with the money that would come to us. On the other hand, development could not be stopped. So, everyone put their heads together to think of a solution. The turning point came when we all decided that we would tackle



Biogas plant at Magarpatta City



Cybercity, Magarpatta with Aditi Gardens in foreground

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development ourselves. If urbanization is inevitable and we cannot carry on with the agricultural activities, why don't we become our own developers, we said. So, in 1993-94, we went to the government with the plan to form our own development company.

For us, this was the benefit of India's age of liberalization, a time when everyone was trying to do something different. Fortunately, we were able to set up our own development company—Magarpatta Township Development and Construction Company Limited. The company was formed by the original farmers of the area and everyone became a shareholder in proportion to their land-holding. The entire area was pooled under the principle of land pooling. We also decided to develop this entire project strictly in accordance with government rules and it took us seven years to achieve our goal.

We managed to secure all the necessary government permissions. However, we soon discovered that no financial institution was ready to support us because it was commonly believed that Indian farmers are unable to come and work together. The only time they came together was to take sides in some fight, we were told. So we now had to prove this wrong. We started planning this project by initially deciding to design an integrated township, a concept then not in vogue. Our mission was to create a networked society fit for the new millennium.

We began the exercise by asking: what did the new millennium need? The answers were: a clean and sustainable environment, good living standards, a modern educational system, state of the art working conditions, and reliable security. So these became the five elements on which we decided to plan the township based on the government rules and regulations that then existed.

When I speak of the concept of environmental control, I mean that everything had to be done in such a way that there was no degradation of the environment. We Indians like to believe that we are very passionate about the environment but when it comes to implementation, we say that urbanization cannot go hand in hand with protecting the environment. We in Magarpatta decided to implement our project differently because we wanted to attract people to come and visit this project. So

we created large gardens, taking care that the planning was done keeping in mind the entire neighbourhood. We planted 25,000 trees and created a huge green cover spread over 25 lakh sq.ft. of lawns. We also planned for rain water harvesting as the region often suffered from scarcity of water, despite the fact that we have several dams on the western side of Pune. Again, during the monsoons, this area used to face a lot of problems as local roads and fields were inundated with rainwater spillages. So we used paving blocks in the open areas instead of opting for concretization. This ensured that rain water in Magarpatta is collected through a storm water drainage system along roadsides by preceding soak chambers and trench drains. Care was taken to ensure recharging bores inside the city and mounds were created to preserve the top soil, which had to be removed during construction. Since we belonged to the farming community, we understood the importance of top soil. There were boards made along side the open spaces where the rain water was collected and the sub soil water was enhanced.

Magarpatta's solar water heating systems came not as an amenity to attract more buyers but as a part of the original design. In our part of the country, one needed hot water for bathing throughout the year and a lot of power was consumed in heating up bath water. This is why in Magarpatta a solar water heating system has been installed in every residential complex. Nine lakh litres of water were heated every day, which translated into saving 13,000 tonnes of carbon emission annually. The idea of using solar water power came in handy for environmental control as well. We saved one and half crore units of power per year. If you calculate the volume of savings by taking Rs. 8 as the cost of each unit of power, you can imagine how cost-effective this system is!

All the bricks and construction material for the Magarpatta project were made by using fly ash. This, in turn, translated into a saving of 125,000 tonnes in terms of carbon emission. We also treated the entire sewage water generated through four sewage treatment plants. The treated water was then used for curing during construction and landscape irrigation. In addition, it was used for air-conditioning and flushing in the project's commercial premises.

We also managed the entire household and commercial waste of Magarpatta City. There was no garbage container inside the city because we segregated the garbage at source into degradable and non-degradable heaps. Bio-degradable

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The whole concept of good living standards was planned on the basis of creating congenial neighbourhoods. We are all social animals and cannot stay in isolation. We realized while planning that if there were 400-500 families staying in a neighbourhood, they would see each other's faces and get to know each other. We have factored this into the plan of our residential blocks. In our part of the country, there is a strong belief in the principles of *vastu shastra*. So while the inclusion of the principles of *vastu shastra* started off as a marketing tool, they ultimately helped in keeping the living standards healthy by providing for lots of light and ventilation in the residential areas. We had originally planned an underground parking system. However, we did away with plans for creating basements because the stratum was very hard and it was in any case difficult to maintain basements. Today, as you all know, basements are also considered a security hazard.

As I said earlier, we had planned the whole project keeping in mind environmental control but as Magarpatta City has many glass buildings, we have periodically faced some criticism on the use of glass facades for some buildings. This is why we had to think of a solution. We made sure that these buildings were constructed in such a way that there was air insulation inside the glass facades. This means that when the outer glass heats up due to external temperatures, the hot air moves up and fresh cool air from underneath replaces it. This is regarded by environmentalists as a very practical solution.

Our city also has internet connectivity with total cable network and intercom and all the allied facilities. The maintenance of this entire township is done by the division of our main company, Magarpatta Township, which has a property management department. There is a lot of scope for sports and recreation with 25000 sq. ft. of space devoted

to a Gymkhana, tennis courts, swimming pool and amphitheatre. We have provided for food courts and restaurants as well.

A sound educational system was very essential for a good community to develop. Keeping this in mind, Magarpatta already has more than 1200 students in the pre-primary to high school level and the basic criterion is that you have to love the place to study in the school. Although a post graduation institute has been established, we deliberately did not plan for a college because we thought that unless our children stepped out of Magarpatta to a college outside, they would never be able to experience life in the outside world. If we had planned a college inside the city they would have spent their entire student life inside this secure environment. So we have a post graduation institute now that has just started for which we have tied up with the Georgia College and State University for enhancing academic development.

As for providing opportunities for employment, since nearby Pune is the seat of knowledge with several IT companies and knowledge-based institutions, there is ample scope for securing a job. As a part of the development, we have around six million square feet of IT space that can translate into the employment of about 60,000 people directly as IT professionals and about 20,000 people for indirect employment.

Security has now become an important need of every housing project and residential society. Ours is a gated community and not open to everyone. The entire township is monitored by close-circuit television (CCTV) cameras. We have around 750 such cameras to monitor movement within the city, and these are manned round the clock every day of the week. To provide additional protection to our IT hub, we have our own dog squad, which is trained for bomb detection. In addition to this, we have power substations, a petrol pump, a library for residents, and a 250-bed hospital. The whole idea was to create the complete infrastructure which was required by the community. And remember that all this came out from a project that simple farmers started!

What did this entire model give to the farmers? As the shareholders of the company

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Entrance to Magarpatta City



Waterbody in Aditi Gardens

in proportion to their land holding, other than the money they would get for the entire development because there has to be some value for the land. The model was on a revenue sharing basis hence all land-owners were entitled to receive a percentage of sale-proceeds in proportion to their land-holdings as and when the sales accrue. The company was the farmers' company. We did not have money to buy the land. My holding in the project translated into one percent in the entire pool. Whatever money came, a percentage of that came to me every year by way of my land cost in proportion to my holdings. So, if someone was 10 per cent holder in the entire stake and if Rs. 100 was the dividend, I would get Rs. 10 that year. It kept on coming for the next 10 years. I did not get any amount of money up front but I got the benefit of appreciation. When I started selling at Magarpatta City, it started at Rs. 1000 per square feet. Today it costs Rs. 5000 per square feet. So, if I look at the percentage of rupees that I got, the appreciation came back to the farmer.

A major idea behind this project was to add value to the land assets we had inherited. The most important factor we had to keep in mind was that what we were going to do for developing a township and getting money out of it was just one part. What would be the benefit to the farmer other than money he earned? The entrepreneurs among the landowners were identified with the help of experts who took aptitude tests to identify their strengths. They were then further trained and helped to get experience in whatever activity they were confident of taking on.

We never used river sand while constructing: instead, we used stone crushed sand. The money to buy or set up these quarries came from banks. We also believed that we cannot do business only from the money that we were getting from the land. At that time we thought that anyone below the age of 35 was the ideal person to develop because when he reached that age, he was settled in life and would not want to be an entrepreneur. But we were proved wrong. Even at 55—and even after retirement—people wanted to do something because the revenue and the opportunity they got from there were tremendous incentives. We trained around 250 such entrepreneurs from 120 families, all the way from manufacturing of construction material, infrastructure development (such as roads and landscaping, to building construction). We took advantage of the fact that Pune has an institution called NICMAR (National Institute of Construction Management and Research), which could train our people to be contractors. Today 90 per cent

of these entrepreneurs were liable for tax audits because they were engaged in a business that earned them more than Rs. 40 lakhs per year. So they were no longer dependent on the money that came from the land: they were earning their own money. This has naturally enhanced their own self-esteem levels as they are seen as self-sustaining entrepreneurs as well.

What was the benefit to me as a farmer?

First, there was tremendous value appreciation of my land because of the revenue sharing model.

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What was the benefit to me as a farmer? First, there was tremendous value appreciation of my land because of the revenue sharing model. In the year 2000, the land rate around that area was somewhere between Rs. 30-35 lakhs per acre. What I have got today is in excess of Rs. 3.5 crore per acre. This means that in 11 years, there has been an appreciation of more than 900 per cent in the land value alone. Now when this happens elsewhere, farmers are resentful because with development comes appreciation. Yet if this appreciation benefits the developer, farmers feel that they have been deprived of a share in this.

This is what lies behind the idea of leasing our entire IT Park, which was owned by the parent company. The reason for providing for this rented income was that when we were talking about this whole concept in 1995-96, our seniors said, go ahead and develop this but what about creating an asset? They were farmers and they wanted to see the physical asset. So they insisted that they needed an asset that they could touch, feel, and see. We wanted more than just money stashed in banks, they said. At that point we said we will do something that is knowledge based. So, the entire IT Park is owned by the company and not sold but leased. The idea was to create a perpetual source of income for the farmers. Even after the entire land money has been recovered, there should be some asset from where they can receive an income. This year we distributed approximately Rs. 23 crores as dividends. We always refer to it as the largest FDI deployment in the city of Pune. By FDI we mean Farmers' Direct Investment.

What benefit did this project give to the city of Pune? We created a residential infrastructure for 35,000 people. We created employment opportunities for 60,000 people. The entire IT Park was fully occupied

and operational. The GDP of this city was enhanced by about Rs. 150 crores per month. We did not take any concessions from the government during the construction of our project, because the moment you take concessions from the government, the regulatory authorities make your life miserable. I am of the strong belief that the government should only govern and not try to run a business. We have paid around Rs. 57 crores to Pune's municipal corporation as development charges to secure all the permissions and over Rs. 2.25 crores was the average monthly property tax payment collected every year. We consider it a handicap that we were under the municipal corporation. Even though we did not take any help from them, their logic is that since all roads, water and drainage lines leading to Magarpatta City were manned by the corporation, we fell in their jurisdiction. The municipal corporation of Pune earns Rs. 25 crores per year from us by way of taxes. We managed the entire power inside the city. The entire infrastructure had been created by us. We were still generating employment for 1800 people who were working in the management service department and in the security department. Every month, over Rs. 1.4 crore is distributed as salary money paid to these people.

What are the benefits to the residents? Often such gated communities become totally dead cities because no one interacts with anyone, so we came out with a different concept here. We said that we must ensure the participation of the residents of Magarpatta in the management of the entire project. This is the reason why we developed the concept of a city council. For every 75 units we had one representative who got elected to the city council, and out of these, 33 per cent of the seats were reserved for women. This was like a mini corporation. Since we were not unlike a city administration, and my role was probably similar to that of a municipal commissioner. The entire management of the city: that is, all the cultural, social, sports activities, were managed by the council to keep the city active and vibrant. We had a separate revenue model for this. Our whole city was full of beautiful greenery, so we realized that film shooting can also become an avenue of earning some money. The film 'Shivaji' was shot in Magarpatta City and it taught

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us how to get money from films. Initially, just to avoid shooting, we quoted a very high price but they negotiated it by 10-15 per cent and we gave in. Today, we generate about Rs. 2 crore a year from this film business. The earnings from it go to the foundation for the benefit of the community.

With Magarpatta City almost complete, we have now embarked on a 700 acre project on the same model but with some minor modifications. Magarpatta Township holds shares of 51 per cent while 49 per cent is again shared with the land owners, in addition to the revenue model. We have been the only fortunate developers who could acquire such large lands because we were not buying land. We develop partnerships with the farmers there on a revenue sharing model. There are two other projects in the pipeline on the equity model. So, the original shareholders of Magarpatta City are also going forward and are becoming shareholders in other projects as well. In my estimation of their spirit, they deserve every bit of the success they get.

Today, we employ more than 600 engineers in the company. Magarpatta has become a large construction company with lots of equipment, capital assets in addition to the goodwill we have generated by now. Other than being an entrepreneur, the parent company is doing other projects too. In Pune's Nanded village, we have close to 750 families and more than 2000 beneficiaries. All of them are going through the same process as Magarpatta City. Finally, it has become a project execution company. What started in the year 2000 to protect their own land and get maximum returns, has now gone one step forward.

Satish Magar is the Chairman and MD of the Magarpatta Development and Construction Company Ltd.



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