



Maira's Dilemma

Soar For More 2016





The unquestioned kingpin of Indian real-estate, Maira Realty (referred subsequently as MR) has developed a formidable reputation for "reinventing in flight". Holding this mammoth giant up high and strong is Mr. Maira, the industry's toughest negotiator and a man with an unquenchable thirst to "optimize and maximize", the one mantra that is hardwired in every business decision he makes.

While most in the real-estate world may consider a successful land bid and a profitable sale to be achievement enough, Maira does not. MR now has the largest land bank in the country, delivers the maximum number of homes in a year, and has the most number of under-construction buildings. Yet, he is on a constant endeavour to fix the company's "leaky taps" so as to maintain its profitability while it continues to remain the trendsetter of the real estate world.

It is this penchant for "optimizing" that makes Maira ponder yet again on the blueprint of the 4500 acre large Palava City (located in Dombivli), which covers one entire wall of his office looking much like a three-toned wallpaper - the blue representing the fully developed Phase 1 covering 300 acres, 90% of which is delivered, the grey representing the 750 acres of Phase 2 which is under development and will be delivered in the next 10 years, and the white representing the 3500 acres of Phase 3, development on which will start post 30 years.

While the blue and grey make him proud, as they represent the beginnings of what is to become one of the top 25 most livable 'smart' cities in the world, the white agitates him. Though it is a common industry practice to buy and accumulate land for future developments, letting land lie barren year after year does not make business sense to Maira, as to him it represents his much disliked "leaky tap".

Though Maira has been considering ways of monetization by leasing out land parcels to commercial entities, his immediate desire is to lease out 500 acres of contiguous land, which is available for a span of next 30 years. MR's in-house strategy team has considered various options and has narrowed the decision down to 3 options:

- 1) Solar power plant
- 2) Data center
- 3) Warehousing complex

Solar power plant seems to be an attractive option as it requires minimum investment from MR's end and will be ready to lease by the end of 12 months. Given its lack of experience in building a solar power facility, MR is not keen to incur any capital expenditure other than the basic infrastructural costs (more details ahead). MR's strategy team has also gathered some market data (Appendix 1a, 1b) on the economics by talking to some of the major solar players. However during preliminary discussions, it came out that there are certain areas in Maharashtra which are about 10% more efficient for solar power production than Dombivli – these regions have been shown to deliver about 16 lacs units of power per MW per annum. Moreover, the land is cheaper in these areas with higher efficiency, and can be bought at as low as Rs 8 Lacs per acre, with likely



appreciation of 10% every year. Maira is open to offering solar producers a lower rental rate of Rs 10 per sq-ft (of utilizable area) per month to make the proposition interesting.

Leasing out to data centers is another attractive option with market rentals for a built-up data center facility already as high as Rs. 300 per sq-ft (of utilizable area) per month, steadily growing at about 10% every 3 years. However in this case, Maira would need to construct the entire data center facility, which has its own hassles – with construction costs to the tune of Rs 19,000 per sq-ft and construction time extending to 24 months, only beyond which Maira can start booking rental revenue. Additionally, Maira would need to connect this 500 acre facility with the nearest Fiber Optic Cable (FOC) node (costing details of which are provided in Appendix 2).

The last alternative being considered is to construct and lease out a warehousing facility. Based on demand, Maira can either construct a basic warehouse facility, with construction costs ranging at around Rs 650 per sq-ft, or a customized facility that will escalate the construction costs up to Rs 1200 per sq-ft. Building a warehouse is not as time-consuming as the data center, and can be easily constructed within 12 months. Initial market rentals are lower in this case (Appendix 3), however, driven by e-commerce they have been growing at about 15% every 3 years.

Regardless of which option to pursue, MR would need to incur certain basic costs on the 500 acre land that would comprise: leveling of the entire land parcel, constructing a two-lane road connecting it with the highway, and laying down electricity lines linking with the closest power node (more details in Appendix 4). In the case of warehouse, two-lane road will need to be replaced by four-lane road, further extending into the land parcel for an additional length of 3 km to facilitate a suitable logistical network.

The coverage ratio (percent of available land that can be utilized) is different across options and is provided in Appendix 5.

The final decision needs to be made by weighing the following:

- 1) Which option is the **most attractive from an economic point of view** for MR? Is there any option which is **might not be economically feasible for MR's partner?**
- 2) Apart from pure economics, which <u>other factors can be considered to evaluate these</u> <u>options</u> (for example, demand vs. supply, market regulations etc.)? Please evaluate each option against these factors
- 3) Apart from the three options, which others that can be considered? Please evaluate one of these options in detail. Since the land parcel in question is part of an upcoming smart city, all options <u>must be environment friendly</u>
- 4) From all the options that you have evaluated, <u>which option will be your final</u> <u>recommendation to Mr. Maira?</u>





Entries will be evaluated on soundness of logic and analysis, as well as creativity of business ideas. Any assumptions (inc. MR's cost of capital) made for calculation purpose should be mentioned in bold in the submission entries. <u>Candidates are encouraged to use external research (e.g. industry</u> <u>reports, new articles, etc.) in their findings.</u>

Particulars	Value
Area required per MW of Solar Plant (in Acres)	5
Life of solar plant (in years)	25
Capital Expenditure (Capex) per MW [refer appendix 1b for breakup] (Rs Cr)	5.3
Operating expense (Opex) per MW per annum (Rs Lacs)	10
Sale price per Unit of solar power (Rs/unit)	7.0
Cost of capital for solar power producers	12%

Appendix 1a: Solar Power Plant Economics - Key Data

<u>Appendix 1b</u>: Benchmark Capital Expenditure (per MW) for Solar Power Plant in Dombivli region

Particulars	Capital Cost (Rs Lacs)
PV Modules	328
Land Cost (if bought)	25
Civil and General Works	35
Mounting Structures	35
Power Conditioning Units	35
Evacuation Cost up to Interconnection Point (Cables and Transformers)	44
Preliminary and Pre-Operative Expenses including IDC and Contingency	28
Total	530

<u>Appendix 2</u>: Data Center FOC Requirement Details

Particulars	Value
Distance to closest FOC node (km)	10
Cost of FOC (Rs/m)	100
Cost of excavation and Hume pipe that would house the FOC (Rs/m)	100





<u>Appendix 3</u>: MMR Market Rentals for Warehousing Facility

Region	Rental Rate* (Rs/sq-ft)	MMR Market share
Bhiwandi	9-11	90%
Panvel	22-24	4-5%
Taloja	16-18	Rest of the market

*Rental rate in Rs per sq-ft of utilizable area

Appendix 4: Basic Infrastructure Requirement Details for Leasing

Particulars	Value
Cost of leveling of land (Rs/sq-m)	40
Cost of building 2-lane road (Rs Cr/km)	5
Cost of building 4-lane road (Rs Cr/km)	8.75
Cost of laying down electricity lines (Rs/m)	3500
Distance between land parcel & highway (km)	5
Distance between land parcel & closest power node (km)	10

<u>Appendix 5</u>: Coverage Ratio for Different Options

Option	Coverage Ratio
Solar Power Park	95%
Data Center	40%
Warehouse	40%