November, 2006

Opportunity Note:

Science City @ Dewas

Contents

1. Concept

Science & Technology (S&T) has a significant role in our day-to-day lives, with its application and implication on almost every phenomenon. Several knowledge incubators in the form of science cities, science museums have been set-up to promote the understanding of S&T and creating awareness among the common man, especially the young minds. These science cities support an innovation-friendly environment from which various technology-oriented economic branches could emanate and could further determine optimal possibilities for development.

The science cities are built with an objective to create awareness about S&T among common man; develop innovative ways of learning; supplement formal education at grass root level fun and amusement.

To achieve these objectives, several countries have set-up Science Cities focusing on different themes of S&T. Some successful examples of such ventures include Kansas Science City (Kansas, USA), Toronto Science City (Toronto, Canada), Science City York (York, UK); key set-ups in India include Pushpa Gujral Science City (Punjab, India), Gujarat Science City (Gujarat, India), Calcutta Science City (Kolkata, India) among others. With its unique approach of imparting education in an innovative and entertaining way these science cities/ museums witness the major inflow of students especially school students.

The State Government of Madhya Pradesh (GoMP) has acknowledged the importance of science city and thus envisages to develop the same in Dewas that would focus on the integrated participation with demonstration, education with scientific research, cooperation with exchange, leisure with tourism, so as to popularise the scientific and technological education.

1.1 Key factors driving the need of a Science City:

- To impart the basic knowledge about S&T along with the supporting explanations.
- To create a scientific environment and hence develop a scientific society.
- To create state-of-the-art infrastructure that can act as a knowledge incubator that provides explanatory examples to explain various scientific connotations.

- To support the students by providing them platform to exhibit and understand various aspects of science.
- To encourage real estate development in the region.
- To generate employment opportunities for the scientists and teachers whose intellectual potential could not be recognised.

Therefore, GoMP has proposed to develop a Science City at Dewas supporting the unique concept of ***"Edutainment"***. The envisaged project on completion would showcase the Science exhibits along with wide range of entertainment facilities. The Dewas Science City is proposed to come up on 500 acres of land earmarked by Government for industry promotion. The project has been conceptualized as a commercially and financially feasible venture which would facilitate growth of S&T in the State.

2. Concept Rationale

2.1 Science & Technology in India

India is one of the top ranking countries in the field of S&T. Indian S&T has been regarded as one of the most significant force for growth and development of the Country. The highly educated human capital provides a competitive edge to India over other countries. It has the presence of several engineering, applied sciences and management schools of international repute.

Government of India lays special emphasis on holistic development of S&T in the Country with the focus on skilled human resource, S&T infrastructure etc. Substantial investments are being made in its R&D, academic and laboratory facilities (such as **20 new national research centres, 220 universities and 200 laboratories**). These investments are expected to double in next ten years. Further, the efforts had been made to bring S&T into the mainstream of economic planning in various sectors of the economy such as agriculture, industry and services.

Keeping in view the recent developments and the new demands that are being placed on the S&T system, it has become essential to embark on some major science projects which have relevance to national needs and tomorrow's technology. To synergize these trends with global developments, the Government of India is now taking steps to make S&T an integral part of the socio-economic development of the country.

Science Cities in India

To accord with the technological advances and requirements of the science curious society, projects such as setting up of science cities have come up in recent times. In India, the first Science City was opened to public in Kolkata in the year 1977, since then various other Science Cities have been set-up in state States of Gujarat, Punjab, Goa etc.

Science City	Status	Area	Proposed/ Existing Facilities
Gujarat Science City, Gujarat	Developed by Government of Gujarat	~ 1000 acres	Imax 3D theatre, Hall of science, Thrill rider, Dancing musical fountain, Energy park, Amphitheatre, Planet earth, Life science park, Auditorium, Cafeteria, Shopping plaza, Video games parlor
Pushpa Gujral Science City, Punjab	A joint venture between Government of India and Government of Punjab	72 acres	Dome theatre, Flight stimulator, Space gallery, Planetarium, Science voyage hall, Health gallery, Fun science exhibits, Exhibits showing evolution of man, Water body (boating), Energy education park, Time machine, Railway gallery, Herbal and cactus park.
Calcutta Science City, Kolkata	-	-	Space odyssey, Dynamotion, Life sciences corner, Science park, Toy train & ropeway, Dinosaurs complex

2.2 Madhya Pradesh (MP) is poised to gain momentum in S&T

MP is the second largest State in the Indian union. It is now emerging as a centre of economic importance with the promising growth curve. With the developments taking place primarily in the knowledge intensive industries such as IT/ ITES, pharmaceuticals, biotechnology etc, the State is poised to open avenues to encourage more and more investments in the S&T sector.

With the ongoing industrial development in the State and the tourism industry also gaining momentum, there has emerged a need to develop infrastructure that could support and enhance the existing potential in the industry. The State does not have facilities that promote science and related activities which could have an impact at the grass-root level. There is also a need to identify areas in which S&T can be used to achieve the socio-economic objectives of the State and in particular tackling the

problems of backwardness, unemployment and poverty in rural areas and other under privileged sections of the society.

The proposed Science City would promote the concept of *edutainment,* with state-of-the-art infrastructure promoting S&T education along with various entertainment sources such as amusement park, shopping mall etc. This project would not only and provide impetus to the industry but would further attract tourists especially students from the State itself and also various parts of the country.

2.3 Science City @ Dewas

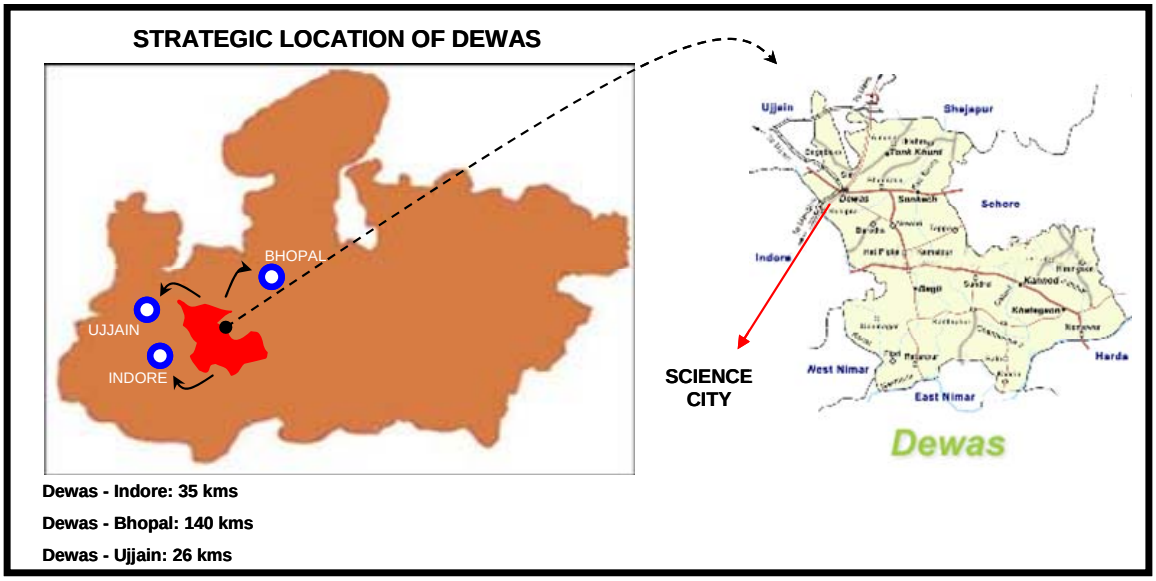
Dewas is spread over 4290 acres of land and is considered to be one of the fast growing industrial districts in MP. Some of the key economic features of Dewas is mentioned below.

Key Economic Features of Dewas:

- Dewas is located in the fertile land of Malwa region and is known for soya bean crops.
- Dewas serves as a satellite township or a sub city to the Indore metropolitan area.
- Agriculture, trade and industries are the fundamental base for economy of Dewas city.
- A big agricultural *mandi* in the city caters to the whole sale trade of grain, cotton, oil seeds, soya bean etc.
- Houses major companies such as Tata exports, Johnson & Pedder, Alpine Solvex, Ranbaxy, S Kumars, Kirloskar etc. Apart from this various other big industrial units and several ancillary industries are present in the Dewas district.

Further, Dewas is **strategically located** in convenient proximity of major cities of the State.

- Situated at a distance of 35 kms from Indore- the commercial capital and the educational hub of MP.
- Bhopal, the capital of MP is at a distance of 140 kms from Dewas.
- Ujjain, another district headquarter and a tourist destination is also at a distance of 28 kms from Dewas.



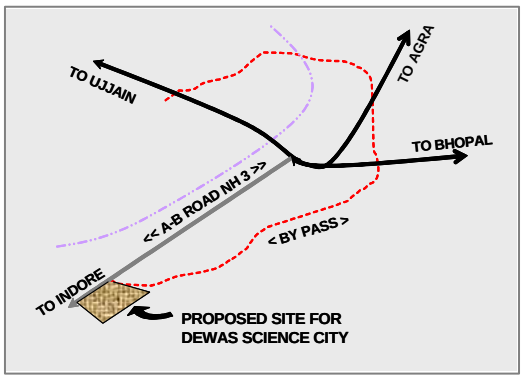
Connectivity of the City:

Dewas is well connected to other cities in the State and major cities of the country.

- Well connected through railways to major cities such as Delhi, Mumbai, Kolkata, Chennai, Cochin, Bhopal etc..
- The domestic airport at Indore caters to the demand of air-connectivity in the city and connects to major cities such as Delhi, Mumbai, Kolkota etc. The upcoming international airport in Indore would also facilitate the inflow of foreign tourists.
- The city is well connected to important towns of the region by road. Located at the intersection of National Highway (NH) 3 (Agra-Mumbai NH), State Highway 18 and new State Highway 86.

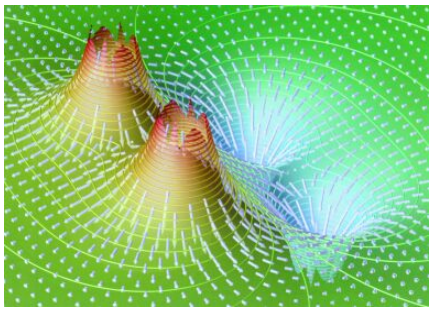
Thus, Dewas has been identified as one of the key cities of the Malwa region. Due to its strategic location and proximity to the industrial centres like Indore, Bhopal and Ujjain, the city has played an important role in easing out the load on these cities by providing the basic amenities and infrastructural services.

Location of the Science City



500 acres of land has been identified between Indore and Dewas city on the junction of Agra Bombay National Highway and bye pass of Dewas city. The location of the Science city is such that it would not only attract the visitors from the cities such as Indore, Ujjain and Bhopal but would also serve as recreational/ refreshment centre for the commuters on the National Highway.

3. Business Model



The proposed Science City at Dewas would have the facilities and infrastructure that would be comparable to international standards. It would adopt a holistic approach of imparting education with complete entertainment.

The City that is proposed to be set-up in sprawling 500 acres in Dewas, could be touted as an upcoming education centre in the region that would be a major source of employment and would further drive the tourism growth (primarily domestic and regional visitors) in the State.

3.1 Vision of the Science City

To develop a world class infrastructure that would create awareness about science and technology among the common man, thereby creating a science literate society.

3.2 Objective of the Science City

Following are the objectives of the proposed Science City:

- To create awareness about S&T among the common man.
- To develop innovative ways of learning and supplement formal education at the grass root level for popularisation of science in the State of MP.
- To create a world class infrastructure displaying exhibits illustrative of the physical sciences, life sciences, applied sciences, technology and industry to provide understanding of S&T.
- Talent search in the field of S&T to identify the capable students and future scientists.

3.3 Project Layout

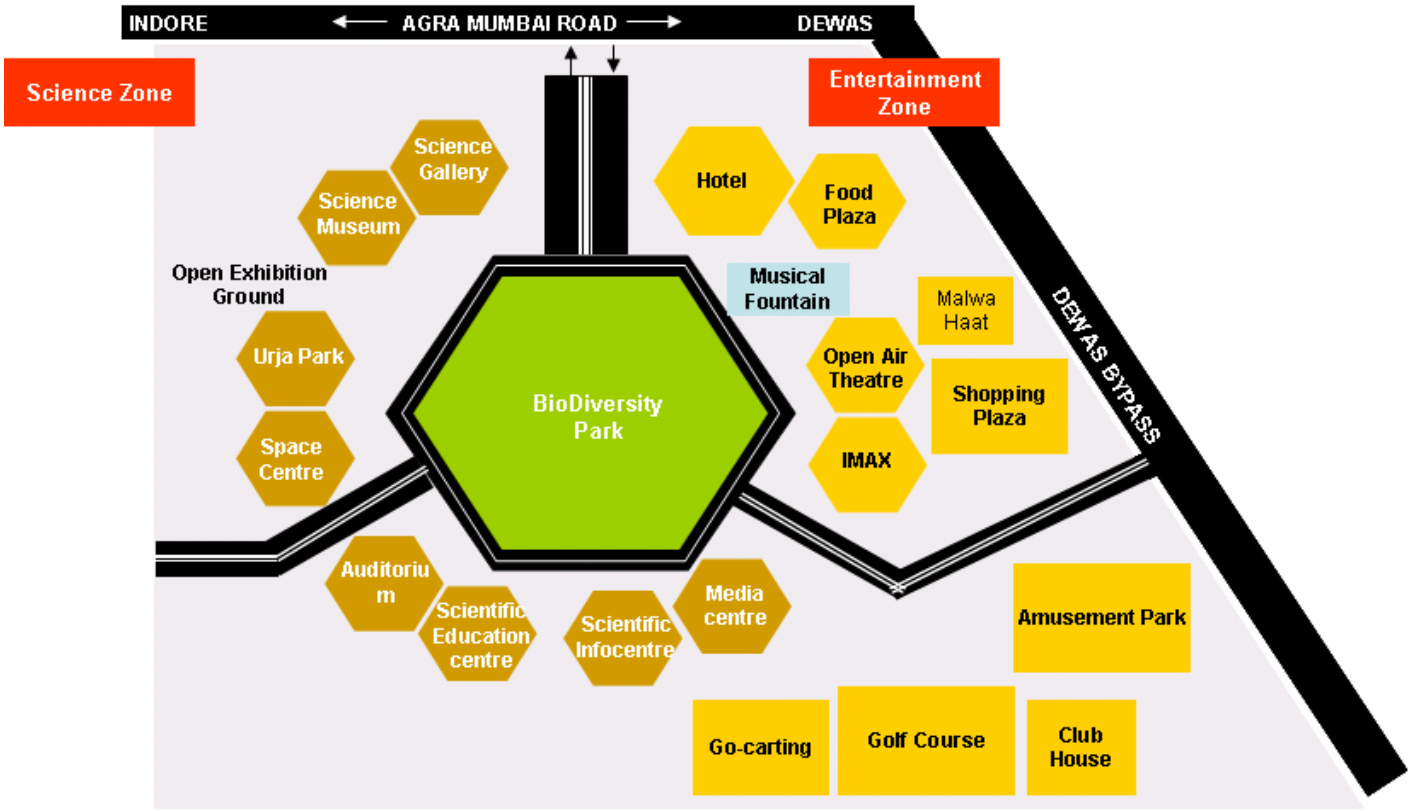
In line with the vision and objectives of the park and the preferred development model, the proposed project would have two components namely Science Zone and Entertainment Zone. These have been discussed below:

Table 3.1 Land Utilization Plan

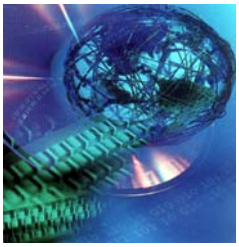
Space	Acres	Sq. feet
Science Zone	85	240,573.4
Entertainment Zone	92	-
▪ Built-up by private investor	40	2,178,042
▪ Land sold by private investor	52	-
Total	**177**	**241,861.5**

Initially, the proposed City would be developed on 177 acres of land wherein Science Zone would be developed in the area of 240,573 sqft. The Entertainment Zone is allotted 92 acres in which private developer would built-up the area of 2,178,042 sqft and would sell off the developed land of 52 acres. The brief description of each of these components has been provided below.

PROJECT LAY-OUT



3.3.3 Science Zone



The Science Zone would focus on the science education and knowledge enhancement through various activities mentioned below:

1.	**Science popularization programmes**	▪ Organising of training programmes and workshops for teachers, science club members and coordinators ▪ Organisation of Science Exhibition and workshops ▪ Celebration of important scientific events ▪ Conducting important science lectures and events ▪ Out reach programmes
2.	**Academic Programmes on Science and Mathematics**	▪ Organisation of Talent search programmes for teachers and students ▪ Organisation of science and math Olympiads for teachers and students ▪ Organising meetings with eminent scientists ▪ Career counseling ▪ Organisation of children science congress ▪ Short term certificate courses in science communication
3.	**Material Development**	▪ Development of activity modules through puppetry, science writing, journalism etc. Learning math through origami etc. ▪ Design and development of theme based posters ▪ Design and development of theme based activities ▪ Development of standard reference libraries ▪ Establishment of souvenir shop at the Science city.
4.	**Training Volunteers**	▪ Involvement of student volunteers as interns and trainers ▪ Skill enhancement of promising science writers ▪ Formation of new science clubs
5.	**Media Resource Centre**	▪ Develop and design media kits on important scientific events and activities ▪ Interviews of scientists and technocrats ▪ Arrangement for weekly science columns in local newspapers ▪ Publication of newspaper

Following are the facilities proposed in the Science Zone:

a. Science Gallery

- Informal community based learning
- Visitors will have access to operate actual science models and explore the scientific world
- Experiments related to basic sciences i.e. physics, chemistry, biology and mathematics

b. Science Museum

- Permanent exhibits of the different science streams
- Visitor friendly working models explaining different scientific phenomenon

c. 'Bramhand' Space Centre

- Various interactive exhibits and script panels
- Model space station, space ships, satellite launching vehicles, rockets etc
- Graphical presentations and in depth explanations of the solar system (planetarium)
- Space and communication pavilion

d. URJA Park

- This unit will create awareness among the people about the use and benefits of renewable sources of energy. It would include the following:
  - Solar hut - solar energy
  - Models of Dam - hydro energy
  - Tidal and wave energy models
  - Wind mills - wind energy
  - Biogas plant
  - Battery operated vehicles
  - Models of petroleum rigs

e. InfoTech Cell

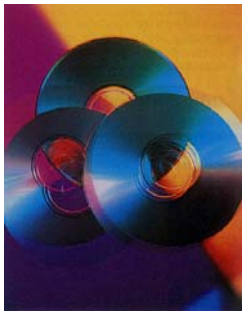
- Create awareness about the process of information and broadcasting satellite communication, internet usage etc.

- Interactive and educative exhibits
- Give the visitor an insight to the working of satellites
- Scientific games

f. Scientific Education Centre

- Administration and working of the Science City will be formulated
- Organisation of workshops, talent search programmes
- Popularisation of scientific education
- Career counseling programmes
- Organisation of Science and Math Olympiads

g. Media Centre



- Promotion of scientific knowledge
- Audio – visual, multimedia, slide shows and presentations
- Interview of eminent scientists and technocrats
- Science columns in newspapers
- Publication of magazines and newsletters

h. Science Information Centre

- The unit will work towards creating awareness in the minds of people relating to the scientific world
    - Nuclear energy for peace
    - Importance of renewable energy
    - Health awareness
    - Water conservation
    - Pollution
    - Genetic diseases
    - Disaster management etc.

i. Biodiversity Park

- This park will enthuse children in the study of nature and evolution, propagation and sustenance of life on the planet

- Butterfly corner
- Botanical garden
- Tissue culture labs
- Model ecosystem
- Zoo
- Nature care centre
- River system
- Aquatic life

j. Musical Fountain

- This unit will be a culmination point of scientific phenomenon and entertainment
- Exciting demonstration of certain phenomena of science and technology in the areas of hydrostatics, hydrodynamics, electromagnetism and digital electronics
- Water, light and sound shows illustrating the various concepts of science
- This unit can be utilised as a revenue generating space for the viability of the project

k. Open Exhibition Ground

- Open ground to carry out science exhibitions with temporary scientific models
- Celebration of different science related days and events
- Theme based exhibitions
- Create awareness about scientific discoveries and facts
- Audio - visual presentations

l. Open Air Theatre

- Capacity of 1000 seats
- Space would be utilised for lectures, magic shows, science drama, miracles, cultural programmes and for different event celebrations
- Various events like science and math Olympiads, quiz competitions would also be organised in the open air theatre

m. Auditorium

- Capacity of 500 seats
- This space would be utilised for conventions; celebration of science related days, children science congress and lectures by renowned scientists

3.3.4 Entertainment Zone

The proposed Entertainment Zone would have the following facilities which could be considered as revenue generation source for the project:

a. Food Plazas

- Eating stalls and food corners
- Cuisines of different states
- Multi cuisine restaurants

b. Amusement Park

- Roller coaster rides
- Slides
- Games stalls for kids

c. Golf Course

- 9-hole golf course spread across ~ 32 acres of land

d. Club House

- A well equipped club house with the modern recreational facilities will be developed.
- The facilities to be provided in the club house include a gymnasium, massage centre, Jacuzzi, indoor sports etc.
- Membership fee and guest fee will be charged from the users of the facilities and this will generate finance so as to make project viable.

e. Go Carting

- A carting track proposed in an area of ~ 11 acres

- The space is expected to be a major attraction especially for youngsters

f. Shopping Plaza

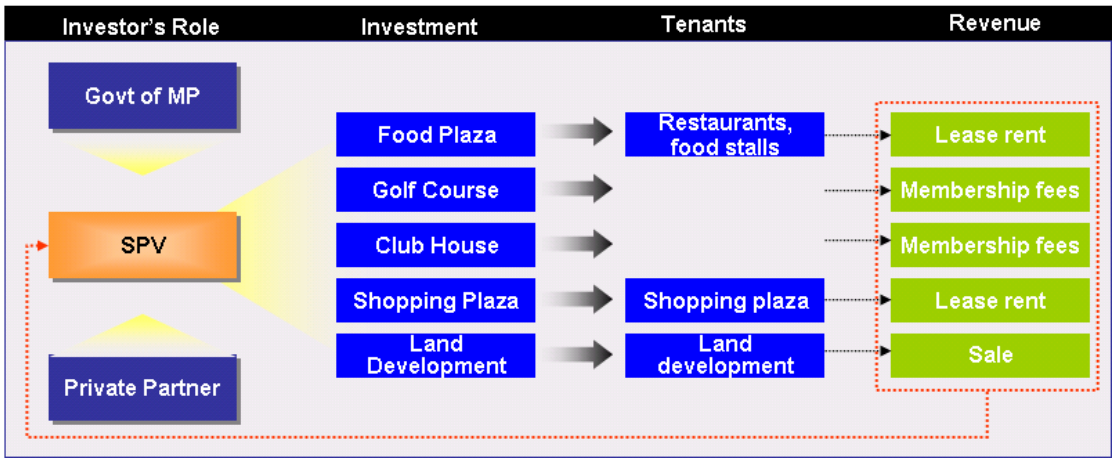
- A shopping mall is also proposed in the city. The visitors in the mall can enjoy a great shopping experience with all the branded stores being set up in the mall
- Different crafts and antiques shops can also be set up to promote the traditional craftsmanship of MP

g. Hotel and Lodging

- A staying facility in the campus is proposed so as to cater the accommodation requirements of the visiting scientists and the technocrats.
- Owing to the excellent location of the city on the National Highway, the hotels can also serve as a transit accommodation for the general public/ tourists.

3.4 Project Configuration

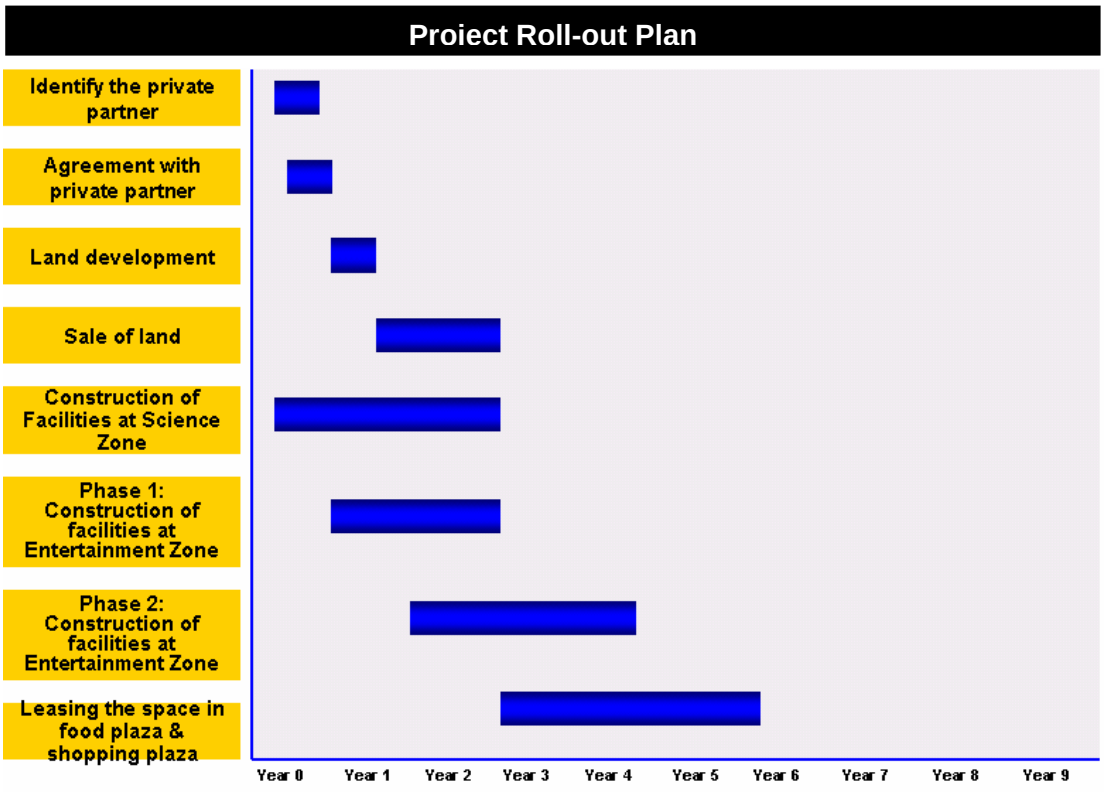
The Government of MP envisages to set-up a world-class Science City in the State with the assistance of private investor. The Science Zone of the project would be set-up and maintained by the State Government. Further, the State Government would set a Special Purpose Vehicle (SPV) in partnership with the private developer/investor that would develop various facilities proposed in the Entertainment Zone. A part of land allocated for Entertainment would be sold-off by the private investor to other private party, which could be utilised for developing hotel & lodging facilities, go-carting, amusement park etc. The SPV would be entitled to the revenue generated from these facilities and the sale of land.



3.5 Roll-out Plan

The roll-out plan of the project is expected to span across six years. The first phase would focus on development of the Science Zone, some facilities in Entertainment Zone such as golf course, club house and 50% of shopping plaza and land development by the private investor. The developed land would be sold-off during the same phase and it would utilised for go-carting, amusement park and hotel and lodging.

The phase 2 would primarily focus on Entertainment Zone wherein remaining part of shopping plaza would be developed along with the Food Plaza. The area in these plazas would leased out to various food chains, textile, accessories and other brands thereafter.


Proiect Roll-out Plan
Identify the private partner
Agreement with private partner
Land development
Sale of land
Construction of Facilities at Science Zone
Phase 1: Construction of facilities at Entertainment Zone
Phase 2: Construction of facilities at Entertainment Zone
Leasing the space in food plaza & shopping plaza
Year 0
Year 1
Year 2
Year 3
Year 4
Year 5
Year 6
Year 7
Year 8
Year 9

4. Role of the State Government

The support of the Government would be imperative for the successful completion of the envisaged project.

The State Government would act as the facilitator for the whole project. Further the Government is expected to develop the Science Zone and facilitate the development of the Entertainment Zone. The key role of the Government as a facilitator would be to expedite the clearances of various proposal plans and their implementation. As a co-developer the Government role would be to facilitate in the development and construction of basic infrastructure and amenities in the City.

An SPV would be created in association with the private developer, whereby the Government would contribute its equity in the form of subsidised land in Dewas while the construction of proposed infrastructure in the Entertainment Zone would be undertaken by the private developer.

The role of the State Government would include:

- Provide equity upto 5% for the venture through an SPV
- Develop the Science Zone
- Assist in promoting basic infrastructure in the City including:
  - 24hr power supply
  - Water supply
  - Basic road connectivity
  - Inner street roads
  - Water drainage system
  - Waste management system
- Provide the land on subsidized rate to private investor
- Assist in marketing Science City

The State Government could offer subsidies and incentives to the private investor. Apart from this, the State Government could expect some grant from the Central Government towards development of the Science Zone in the Science City.

5. Role of Private Investor

The GoMP invites various infrastructure developers focusing on hospitality, entertainment, golf course etc, as the private investor for the proposed Science City at Dewas. The proposed project would be operated through an SPV wherein private investor would own the majority stake and GoMP would hold the remaining stakes.

The private investor would be given the land at the subsidized rate for developing the Entertainment Zone which would include facilities mentioned earlier. 52 acres of the land available in the Entertainment Zone could be developed and further sold to other developers in order to set-up hotel, go-carting, shopping plaza and food plaza.

Hence, the key role of the private developer would include:

- Carry out the planning, detailed studies, surveys and investigations for the Project.
- Incorporate a Special Purpose vehicle in the form of Joint Venture Company, under The Companies Act, 1956.
- Complete the design and detailing of the Project.
- Reach financial closure for the Project as per the time stipulated in the project agreement, including mobilizing debt & equity.
- Invest in the equity component of the City (Entertainment Zone).
- Procure required clearances for commencing and implementation of the Project.
- Complete construction of the works within the stipulated time frame.
- Develop the land to be sold off
- Identify private parties to buy the land and set-up the proposed facilities
- Provide regular updates about the development of the City to the concerned Government Department.
- Implement the environmental management plan if required.
- Maintain and operate the Entertainment Zone of the City.
- Market the City to attract the tourist inflow in the area.

6. Financial Feasibility

The Science City proposed at Dewas is a financially feasible project offering a high rate of return to the private developer. The financials of the project for the ten years period have been projected, the details of which have been provided below:

Cost of Project

The total estimated cost for the complete project is estimated around USD 44.3 million. The key components include: land cost, land development cost, construction cost, cost of establishing various utilities and other pre-operating expenses such as project engineering fee, architecture fees etc. Various cost outlays have been explained in the following tables:

Table 6.1 Project cost calculations:

	Construction Costs	Golf Course	Club House	Shopping Plaza	Food Plaza
		(USD 000)			
1	Basic Building Structure	47.2	3,085.6	6,322	2,057.0
2	Interiors	36.1	2,359.5	2,995	1,573.0
3	Electricals & Fire Detection	16.7	1,089.0	1,997	726.0
4	Heat/ Ventilation/ Air Conditioning (HVAC)	27.8	1,815.0	3,328	1,210.0
5	Plumbing & Fire Fighting	11.1	726.0	1,331	484.0
6	Networking	3.3	217.8	399	145.2
7	DG Sets	10.0	653.4	1,198	435.6
8	Building Automation/ CCTV	5.6	363.0	666	242.0
9	External Development & Landscaping	2,758.9	145.2	200	96.8
10	Parking	0.3	21.8	40	14.5
11	Architect, Consultant Fee	804.7	580.8	599.0	387.2
	Total	**2,917**	**10,476**	**18,475**	**6,984**
12	Contingencies 5%	146	524	924	349
14	**Total Cost**	**3,063**	**11,000**	**19,398**	**7,333**

Key assumptions that have been taken in the cost calculations are:

- Transfer price of land is assumed as USD 2.4 per Sq. mt or USD 11,111 per acre.
- FSI for the project is assumed to be 1.25.

Table 6.2 Total Cost Calculations:

S.no	Cost Heads	Amount (USD 000)
1	Preliminary Expenses	2096
2	Land and Development Cost	1508
3	Golf Course	3063
4	Club House	11000
5	Shopping Plaza	19398
6	Food Plaza	7333
5	**Total**	**44,398**

6.2. Land and Land Development

The SPV would acquire 177 acres of land from the Government and would incur the initial cost of development and other pre-operating expenses. The total cost of land and development including fencing, road development etc. is estimated at USD 1.5 million.

6.3. Preliminary Expenses

An estimated USD 2.1 million would be incurred as preliminary expenses. The key components of this cost include project engineering fees, company formation and architecture fees.

6.4. Revenues

Key Assumptions taken for revenue calculation are:

- 5 units would be set-up in Food Plaza.
- Lease rent per sqft of Food Plaza and Shopping Plaza is expected to increase by 9% year on year.

- Membership fees for Golf Course and Club House is expected to increase by 9% year on year.
- A discount of 15% would be offered to the members of Golf Course for the first 2 years on the prevailing membership fee.
- Membership in Golf Course is expected to increase by 25 persons per year.
- Golf Course members could avail the membership facilities of the Club House.
- Membership in Club House is expected to increase by 45 persons per year.
- Entry fee in Club House for one time visitors is expected to increase by 15% year on year.
- Selling price of developed land is expected to increase at the rate of 12% yer on year.
- Interest rate of 5.5% has been assumed for calculating income from investment.

Table 6.3 Total revenue calculations:

Revenues (USD 000)	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Food Plaza				29	42	58	63	68	74	81
Golf Course		831	1189	1888	2453	3105	3855	4715	5697	6819
Club House		203	285	381	493	622	772	947	1149	1398
Shopping Plaza		12	33	78	124	203	276	342	416	454
Sale of Land		98	384	861	1377	-	-	-	-	-
Income from Investment			1	152	305	489	674	920	1287	1715
Total		**1,145**	**1,892**	**3,389**	**4,794**	**4,477**	**5,640**	**6,992**	**8,624**	**10,467**

The key sources of income would include:

- Sale of developed land for various facilities such as go-carting, IMAX, hotel & lodging, Malwa haat etc.
- Lease rent from the units set-up in Food Plaza and Shopping Plaza.
- Membership fees of Golf Course.
- Membership and entry fees of Club House.

The sales revenue would be subjected to the amount of area that would be sold during a particular year. It is estimated that the entire land of 52 acres would be sold within the 5th and 6th year.

Another key source of revenue would be the lease rental income. The total lease revenue generated would be proportional to the occupancy level in both the food Plaza and Shopping Plaza. The occupancy level is estimated to reach 90-95 percent in Food Plaza by the end of the 6th year and all the 5 units are expected to come up in Food Plaza by the end of 5th year.

Further, the membership fees of Golf Course and Club House are going to be one of the major revenue sources. The membership in both the Golf Course and Club House is expected to double by the 4th year.

There would be entry fee, rents collected for exhibition ground etc in the Science Zone, however this would not be the revenue source for private investor. The revenue would be collected by the State Government for the operations and maintenance of the Science Zone.

6.5. Profit & Loss Statement:

PROFIT & LOSS STATEMENT											
REVENUES		-	1,145	1,892	3,389	4,794	4,477	5,640	6,992	8,624	10,467
OPERATING EXPENSES		567	946	1,523	2,057	2,041	1,902	2,106	2,267	2,490	2,740
Inventory W/off		85	213	298	256	-	-	-	-	-	-
Salaries		131	149	208	248	290	310	332	355	380	407
Administrative Expenses		34	41	59	74	93	101	110	120	131	143
Insurance & maintenance for Building		-	32	58	90	90	90	90	90	90	90
Marketing Expenses		-	103	170	220	288	146	226	245	302	366
Misc Expenses	8%	-	92	151	271	384	358	451	559	690	837
Maintenance, Cleaning & Other Exp		317	317	579	898	898	898	898	898	898	898
EBITDA		(567)	199	368	1,332	2,753	2,575	3,534	4,725	6,134	7,727
Depreciation		-	2,059	3,721	5,575	5,575	5,575	5,575	5,575	5,575	5,575
Preliminary Expenses written off		-	210	210	210	210	210	210	210	210	210
EBIT		(567)	(2,070)	(3,562)	(4,453)	(3,032)	(3,210)	(2,251)	(1,060)	349	1,942
Interest		-	-	-	-	-	-	-	-	-	-
EBT		(567)	(2,070)	(3,562)	(4,453)	(3,032)	(3,210)	(2,251)	(1,060)	349	1,942
Tax	33%										
PAT		(567)	(2,070)	(3,562)	(4,453)	(3,032)	(3,210)	(2,251)	(1,060)	349	1,942
		#DIV/0!	-181%	-188%	-131%	-63%	-72%	-40%	-15%	4%	19%

6.6. Balance Sheet

BALANCE SHEET										
Liabilities										
Networth	**27,433**	**25,363**	**38,801**	**34,348**	**31,316**	**28,106**	**25,855**	**24,795**	**25,144**	**27,086**
Equity	28,000	28,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000
Reserves & Surpulus -	(567)	(2,637)	(6,199)	(10,652)	(13,684)	(16,894)	(19,145)	(20,205)	(19,856)	(17,914)
Deposits from Tenants	-	3	11	38	80	145	229	332	455	588
Increase in Long Term Loans										
Total Liabilities	**27,433**	**25,366**	**38,812**	**34,386**	**31,395**	**28,250**	**26,084**	**25,127**	**25,598**	**27,674**
Assets										
Land	3,660	3,660	3,857	4,057	4,057	4,057	4,057	4,057	4,057	4,057
Other Fixed Assets										
Gross Block	20,758	20,758	37,594	56,793	56,793	56,793	56,793	56,793	56,793	56,793
Less: Acc. Dep.	-	2,059	5,780	11,355	16,931	22,506	28,082	33,657	39,233	44,808
Net Block	**20,758**	**18,699**	**31,815**	**45,438**	**39,862**	**34,287**	**28,711**	**23,136**	**17,560**	**11,985**
Total Fixed Assets	**24,419**	**22,360**	**35,672**	**49,494**	**43,919**	**38,343**	**32,768**	**27,192**	**21,617**	**16,041**
Investments	-	3	11	2,538	5,080	8,145	11,229	15,332	21,455	28,588
Total Current Assets	**918**	**1,117**	**1,453**	**(19,114)**	**(18,860)**	**(19,286)**	**(18,751)**	**(18,026)**	**(17,892)**	**(17,165)**
Debtors										
Inventory	767	554	256	-	-	-	-	-	-	-
Cash & Bk. Bal.s	152	563	1,197	(19,114)	(18,860)	(19,286)	(18,751)	(18,026)	(17,892)	(17,165)
Total Current Liabilities										
Trade Creditors										
Net Current Assets	**918**	**1,117**	**1,453**	**(19,114)**	**(18,860)**	**(19,286)**	**(18,751)**	**(18,026)**	**(17,892)**	**(17,165)**
Misc exp to be w/o	2,096	1,886	1,676	1,467	1,257	1,048	838	629	419	210
Total Assets	**27,433**	**25,366**	**38,812**	**34,386**	**31,395**	**28,250**	**26,084**	**25,127**	**25,598**	**27,674**

6.7 Cash Flow Statement

CASH FLOW										
Sources of Funds										
Equity	28,000		17,000							
Increase in Long Term Loans										
Deposits from Tenants	-	3	8	27	42	65	85	102	123	134
PAT + Dep + Prel. Exp. w/off	(482)	412	666	1,588	2,753	2,575	3,534	4,725	6,134	7,727
Total Sources	27,518	415	17,675	1,614	2,795	2,640	3,619	4,828	6,257	7,860
Application of Funds										
Capital Expenditure	25,271	-	17,033	19,398	-	-	-	-	-	-
Inventory W/off										
Investments	-	3	8	2,527	2,542	3,065	3,085	4,102	6,123	7,134
Pre-operative Expenses	2,096	-	-	-	-	-	-	-	-	-
Total Applications	27,366	3	17,041	21,925	2,542	3,065	3,085	4,102	6,123	7,134
Opening Cash Balance	-	152	563	1,197	(19,114)	(18,860)	(19,286)	(18,751)	(18,026)	(17,892)
Surplus/Deficit	152	412	634	(20,311)	253	(425)	534	725	134	727
Closing Cash Balance	152	563	1,197	(19,114)	(18,860)	(19,286)	(18,751)	(18,026)	(17,892)	(17,165)

7. Conclusion

The Science City would aim at creating awareness about the S&T in the State. With the unique blend of Science Zone and Entertainment Zone the City is expected to witness large inflow of visitors. Further the Science City being located in proximity to cities such as Indore (Education Hub of the State), Ujjain and Bhopal, would act as major attraction for students from these areas. The State Government would also provide support in terms of expediting the project clearance, implementation of the proposed plan and offering the land at subsidised rates.

Since the project is developed in a phased manner, the project could expect positive returns from 7th year of its implementation. The project is viable financially and project offers an estimated IRR of 16.34% for the investor, on a conservative basis.

The project offers potential opportunities for foreign investors as well, since 100% FDI is allowed in all the facilities proposed in the Science City (Entertainment Zone). The results of financial pre-feasibility study are encouraging and indicate high return on investment.