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PUBLIC PRIVATE PARTNERSHIP AND DEVELOPMENT: A CASE STUDY OF GHMC

L. PRAVAEEN REDDY

Research Scholar, Department of Public Administration Osmania University Hyderabad-TS

Abstract:

Public Private Partnership (PPP) is often described as a private business investment where two parties comprising government as well as a private sector undertaking form a partnership. In PPP model, the State shares the risks and responsibilities with private sector while retaining the control of assets, which is expected to improve services while avoiding some of the pitfalls of privatization such as higher prices. This Paper focuses on research concepts and methods that are relevant to study on **“Public Private Partnership and development: a case study of GHMC”** The aim is to conduct an study on **PPP model based Roads, (Hyderabad outer ring road- HORR) Multi-level Parking, Passengers of Metro rail and solid waste management of GHMC through Public private partnership.** Private sector in the area referred above, and on the extent to which PPPs can be used to improve the quality of service. For this, various research methodological concerns has been dealt in order to identify a research method that is most appropriate for the study. In order to do this, a distinction is made, research paradigms coupled with discussion on data collecting instruments In addition, the chapter also presents an outline of the actual empirical research process.

Key words: PPP model, GHMC, Infrastructure Development, Airport, Metro Rail, HORR, etc.

Introduction:

Public private partnership is a long or medium term arrangement between the public and private sectors whereby public sector transfers part of its responsibilities to the private sector (World Bank 2011). These arrangements are typically formed with clear goals and agreements for delivery of public services or delivery of public infrastructure. Due to increasing problem of municipal solid waste management in most cities in the developing countries, private sector participation in providing solid waste services started as a response to major failures of service delivery by the public sector (UNESCAP, 2011). It is often believed and proposed that private sector participation in providing municipal services could be the best possible way to solve the current waste problems in developing countries and in particular public private partnership is seen as a potential alternative to the traditional service delivery system fully controlled by the public sector, more importantly public private partnership is believed to provide the services that the public sector neither have the resources nor the expertise to supply alone (Forsyth 2005). According to UNESCAP public private partnership itself is not a solution option for the service delivery problems but rather a viable project implementation mechanism for a desired solution option (UNESCAP, 2011).

Urbanisation is inevitable with the growth in the economy when the share of the primary sector declines and share of the manufacturing and services sector rises. Cities are engines of economic growth and the positive ripple effects of economic growth in urban areas leads to multi-fold increase in employment and income levels. Southern Indian states are more urban. The share of Urban Population in Telangana in 2022, as per Telangana Socio-Economic Outlook 2022, is 46.8% as against the national average of 31.16%.

This puts Telangana among the top three urbanised States in the country and compares favourably with urban population of Tamil Nadu at 48.45%, Kerala at 47.23 % and Maharashtra at 45.23%. What's more heartening is that the growth of urbanisation in Telangana is faster than elsewhere, implying faster growth of GSDP & more job opportunities. Telangana will have more than 50% of its population urban before 2028, with Hyderabad Urban Agglomeration (HUA – the area within Outer Ring Road including Hyderabad) alone having at least 40% of the state's population by then. This in turn implies that our GSDP will continue to be growing much faster than the rest of India. Let us look at some of the innovative policy initiatives undertaken by the State Government enabling robust urbanisation in a planned manner. The first part deals with Hyderabad and growth initiatives and the second part deals with urban growth elsewhere in the state.

DEFINITION OF PPPs

PPPs have long been referred to as legally binding associations between public and private sector offices, focusing on financial, planning, implementation and employment services and regular facilities provided by the government or its offices. Does. Working around the strengths and limitations of the partners in implementing community-centric initiatives, they relied on legally binding statements to guarantee the proper and common harmonized role of assets, risks and revenues. The system is called PPP, which develops and

operates private sector open equipment and structures under the terms and conditions of assembly and private sector

Indian government defines

PPPs as A partnership between a public sector business (sponsoring authority) and a private sector business (a legal entity where fifty-one percent or more of the equity associated with the private sector in building and managing infrastructure for a public purpose for a period of time.

Department of Economy, Department of Finance, Government of India, 2007a. Other common definitions of PPP are:

European Union: - PPP referrals to the private sector for investment projects that were commonly used or funded by the public sector (European Commission 2003, p96).

Asian Development Bank (ADB): - The PPPs address the long-term, written partnership between the public and private sectors, with a direct focus on funding, design, implementation and operation of infrastructure and services provided historically by the public sector.

International Monetary Fund (IMF, 2004): The public-private partnership (PPP) talks about arrangements wherever the private sector provides infrastructure goods and services provided by the government traditionally.

The World Bank (2006) stated that a number of different countries have officially defined PPPs to determine which projects should be phased out under the contractual relationship identified by the PPP agreement. Some countries have taken to explain PPP arrangements legally, including

Definition of Infrastructure

Infrastructure refers to the basic programs and services that a country or organization needs to function effectively. Nationwide, it includes all tangible systems such as roads and railways, utilities, sewage, water, telephone wires and cell towers, air control towers, bridges etc., and services including law enforcement, emergency services, health care, education, solid waste management.

The progressive use of the Private Finance Initiative (PFI) has encouraged governments around the world to embrace PPP courses, as governments see their value (Yuan, Skibniewski, Li and Zheng22, 2010).The Australian government has used PPP to transfer a number of public infrastructure businesses (Yuan et al., 2010).In Malaysia, PPP infrastructure is used to perform functions as part of public transport, roads, waste management offices and water and wastewater services (Beh23, 2010).In the Netherlands, most of the PPP activities take place in the areas of transport, housing and urban improvement (Klijn24, 2009).

Major PPP Projects

- Hyderabad International Airport (Rs 2478 Cr)
- Hyderabad Outer Ring Road (Rs 3000 Cr)
- Hitech City (Rs 450 Cr)
- Convention Center & Integrated Township (Rs 670 Cr)
- Mind Space IT Park Project (Rs 2000 Cr)
- Hyderabad Metro Rail (Rs 14,000 cr)

Types of State Support for PPPs

- **Administrative Support:** Extend support in getting stat level and central level clearances, Undertake rehabilitation & resettlement, provide power and water at project site, acquire land necessary for the project
- **Asset Based Support:** Providing land at concessional lease charges, provide linkage infrastructure to projects
- **Foregoing Revenue Stream:** Exemption of sales tax & Stamp duty
- **Guarantees:** Guarantee of receivables, Provide off take guarantee
- **Financial Support:** Direct financial support like state VGF

Key Factors of Success

- Transparency in Selection Process - Key for Success
- Institutional Mechanism & Right Skill Sets to Structure and Develop the Projects
- Project Feasibility to be established before offering to private sector
- Escort Services from Government – Must for initial Stage of any project
- Land related issues to be addressed upfront

Issues & Challenges

Capacity and Awareness in State Govt. Departments to handle PPP Projects successfully Scarcity of experience in project delivery and long term service delivery Limited availability of risk capital and long term debt finance Land Acquisition, R&R issues and Project Right of Way Political in-stability Fear of Audits among the employees Lack of standard documentation like MCA, State Support Agreement etc..

Potential sectors for project replicability should be identified so as to establish efficient project delivery capacity on sectoral basis. Dissemination of information and best practices from other states to avoid wasting of time in reinventing the wheel. Developing bankable project documents acceptable to Government, bidders and lenders. Identifying of risks and sharing equally between the public and private parties. Financial evaluation is on the basis of audited balance sheets – they may be fudged at times. Difficulty in achieving the financial closure and delay in submitting performance guarantees by developers.

Innovation in Telangana

Telangana, the newest state of India, has been a hot bed of technology innovation owing to its rapid growth as a leader in the Information Technology (IT) sector. The state has traditionally been highly entrepreneurial with a major segment of its population relying on individual enterprises and unorganized businesses to earn a living. Also, for a few decades now, a considerable chunk of graduating students from Telangana – which boasts of one of the highest volumes of graduating students' annually, have pursued higher degrees internationally and established themselves as significant figures across sectors and industries globally. Having identified some key enablers for innovation, such as promoting experimentation and competition, grass roots skilling, and the development of multiple funding models, and a supportive ecosystem, the state strives to now create an innovation-friendly atmosphere by bringing to bear these key enablers. Telangana, India's most exciting startup, aims to promote innovation and entrepreneurship, leveraging upon its natural demographic assets as well as its base of skilled technology and research professionals.

Traditionally, Telangana has been an entrepreneurial society. Hyderabad, a historical melting pot situated in the centre of multiple trade routes, and host to multiple kingdoms and cultures over the centuries, has evolved in to a very nuanced, highly sophisticated commercial centre. Large enterprises across sectors such as IT, Pharma, infrastructure etc. have been nurtured from within and grown out of Hyderabad. It is probably fair to say that the original IT boom was very much centred around Hyderabad, with large companies such as Microsoft, Oracle, TCS and their ilk choosing to base large offices here, attracted by the combination of a skilled work force, great infrastructure and moderate climate all year round. In addition, there is a cluster of world-class research centres in the City, such as Central Pharma Research Institute, the Defence Research Development Organization laboratories and numerous world class pharmaceutical labs.

With a proactive political environment, and with other contending cities suffering from infrastructure constraints as well as a clear proclivity for natural disasters, Hyderabad is increasingly becoming the favoured choice for a number of multinationals setting up shop. Recent arrivals to the city include Uber, which needs no introduction, and Amazon, which is significantly expanding its presence. T Hub, India's largest incubation ecosystem that was launched recently is attracting a number of exciting early-stage companies as well as global interest from a range of partners and investors from academia and the industry. 3. Vision and Focus of the government Leveraging upon key milestones that have been achieved over the past year or so, The

Government of Telangana aims to continue its transformation from a paradigm of exclusive elitism to one of inclusive excellence.

The idea is to build up on the incredibly positive response to the launch of T-Hub, India's largest innovation ecosystem, and put Hyderabad and Telangana firmly on the global innovation map. The approach of the policy shall be focused around a few key sectors/themes. Instead of taking an all-out approach and boiling the ocean, our efforts shall be focused on the medium term. Key focus areas shall include up and coming fields such as IoT, Health Tech, Sustainability, Fin Tech, etc. Broad sectors and themes shall be finalized and updated on a regular basis through engagement with the industry and the ecosystem. Additionally, a separate Social impact accelerator will be set up for those ideas that are critical from the Government's perspective. These will typically be areas that the Government will need to play a key role in, or be areas where only the Government can affect the change that is required (eg: skilling, agri-tech, rural-commerce and payment related opportunities where existing Government infra and access can play a critical role)

The innovation policy of the Government of Telangana is based around five broad pillars

1. Developing physical infrastructure & program management capabilities
2. Focus on creating sustainable funding models, through funds and other instruments
3. Develop human capital, by creating the right environment and support systems for learning, experimentation and innovation from the early phases of education
4. Proactive engagement with industry to continuously promote and identify innovation
5. Encourage startups in the Rural and Social Enterprise space by providing additional incentives

i) Rajiv Gandhi International Airport in Hyderabad

India It is located in Hyderabad, the capital of Telangana state. It was inaugurated in 2008 by replacing the former Begumpet Airport. It is the sixth busiest airport in India in terms of passenger movement (AAI, 2019). It is constructed under PPP model on BOOT basis (Build-Own-Operate-Transfer). The airport is managed by Hyderabad International Airport Limited (HIAL). HIAL is a consortium of GMR group (63% share), Airport Authority of India (13% share), Government of Telangana (13% share) and Malaysia Airports Holdings Berhad (11% share) ("Hyderabad Airport", 2021). It has an agreement with GoI for thirty years from 2004. In this concession period the concessionaire have to build, finance and maintain the facility and to augment the passenger movement capacity to 40 million per year. It is the first Indian Airport which is having the Airport Operations Control Centre facility to acts a coordination for airport operations.

Hyderabad Outer Ring Road (HORR)

The Hyderabad Outer Ring Road (HORR) is an initiative in that direction, which promoted by the Hyderabad Metropolitan Development Authority (HMDA). The HMDA established the Hyderabad Growth Corridor Limited (HGCL) as a Special Purpose Vehicle for the implementation of ORR project. The HORR project is viewed as a „Growth Corridor“, as the aim of it is to achieve the growth as well as development of well planned and well connected urban settlements and satellite townships around the central city in the Hyderabad Metropolitan Area (HMA).

Some of the salient features of the HORR development project include (HMDA 2012): The proposed road corridor was designed as 8 lane fully access controlled expressway with 2 lane service roads on both sides (the link road connecting ORR is of 6 lanes).

The RoW of 150 m (however in Phase-I, it is 125 m wide) with the main expressway covering about 66 m and the balance for providing ramps at interchanges, service roads wherever necessary, utility ducts, rail corridor, etc., based on requirement. A design speed of 120 kmph (Ruling) with 100 kmph absolute minimum speed that gives minimum time for travel. No at-grade intersections and the provision of suitable interchanges like cloverleaf, diamond type for National and State Highways and other important urban roads.

Project Development

Phase I

The HORR Project was proposed to be developed in two major Phases (Road Traffic 2013): Phase I covers the 22 Km road stretch between Gachibowli Junction and Shamshabad NH-7 Junction, which was revised upwards to 24 Km. The four lane ring road under Phase I was developed and opened for traffic in November 2008 and the remaining four lanes were also completed and opened in July 2010. The PVNR Expressway connecting the city to the Shamshabad international airport was also developed during this phase as a radial road project connecting the HORR; it was opened for traffic in October 2009. This phase of the project was developed using the conventional construction contracts. Table 2 shows the road stretches developed under the Phase I. } Phase II covers the remaining 137 Km covering Narsingi-Kollur-Patancheru-MedchalShameerpet-Turkayamzal-Shamshabad parts of Hyderabad.

Phase II

This development phase was further sub-divided into Phase II-A and II-B, given the long length of road to be built. This development phase was proposed to be developed under BOT-Annuity model of PPP. The HGCL was created on December 26, 2005 as a Special Purpose Vehicle (SPV) to develop and operate the HORR project under the India Companies Act, 1956. The Phase II A and B were planned to be completed in 2010

and 2012 respectively, but they are yet to be fully completed. Some stretches of them, however, have been opened for traffic from 2012 onwards. Table 2 shows the road stretches developed under Phase II.

Integrated Solid Waste Management

Integrated Solid Waste Management Project (PPP model), Hyderabad Greater Hyderabad Municipal Corporation (GHMC) has taken up integrated solid waste management project in partnership of Ramky Enviro Engineers Limited. The project was based in a phased manner. In the first phase, it was confined to collection and transportation of garbage generated in East and West Zone of the city and started treating and disposal of the waste approximately two years after completion of the plant. According to an agreement signed with Ramky in February 2008, the civic body was to hand over door-to-door collection and transportation of garbage to the company. Environment Protection Training and Research Institute [EPTRI], experts stated that collection, transportation, treatment and disposal have to be taken up simultaneously as per the agreement signed between GHMC and Ramky for the project. Of total, Rs 434 crore solid waste management project has been taken up by GHMC under PPP mode. The project duration is 25 years and Ramky was held responsible for post closure maintenances of landfill facility for the period of 15 years. Therefore, treatment and disposal of the waste was being implemented at Jawaharnagar dump yard. The project developer has been doing sanitary land fill, capping and treating the waste by constructing compost and leachate plants. The corporation has decided to brave the protest and give the contract initially for two zones south and central out of the five zones.

HITEC City

The Hyderabad Information Technology and Engineering Consultancy City, abbreviated as HITEC City, is an Indian information technology, engineering, health informatics, and bioinformatics, financial business district located in Hyderabad, Telangana, India. HITEC City is spread across 81 ha (200 acres) of land under suburbs of Madhapur, Gachibowli, Kondapur, Miyapur, Nanakramguda, Serilingampally, Bachupally, Manikonda, Kukatpally and Shamshabad all the combined technology townships is also known as Cyberabad with a radius of 52.48 km (32.61 mi) surrounding approximate area of 6,100 ha (15,000 acres). HITEC City is within 2 kilometres (1.2 mi) of the residential and commercial suburb of Jubilee Hills.

History

HITEC City was commissioned by the erstwhile combined Government of Andhra Pradesh, adjoining Cyberabad to the west of Hyderabad and was inaugurated by then Prime Minister of India Atal Bihari Vajpayee on 22 November 1998.[2] In 1997, The then Chief Minister N. Chandra Babu Naidu travelled to Southeast Asia to meet potential investors and to 'market the state' and was impressed with the larger technology related developments of Singapore and Malaysia – especially Multimedia Super Corridor (MSC)

near Kuala Lumpur. Soon after coming back from his Southeast Asia tour, Naidu initiated a \$350 million knowledge enclave in Hyderabad, leading to birth of HITEC City

Foundation of HITEC City

Cyber Towers was the first tower to be built for promotion of Information Technology (IT) within 14 months and the attractive unique design was selected by N. Chandrababu Naidu[4] in 1997 to stand as a Monument in city of Hyderabad and as architectural masterpiece in the center of Cyberabad with transforming the City of Pearls, Hyderabad as the City of Destiny for IT and Pharmaceutical companies while also set up a separate Cyberabad Metropolitan Police Commissionerate and totally revamped the way of policing under safety and surveillance accomplishing HITEC City has emerged as the symbolic heart of cosmopolitan Hyderabad and it was initially marketed by both the officials of APIIC and L&T Infocity Ltd (the public and private sector partner). Companies such as Orbees Business Solutions, Knowledge Matrix India Pvt Ltd., 7 Hills Business Solutions, AppLabs, Keane Inc NTT DATA, Microsoft, Patni Computer Systems, Oracle Corporation, GE Capital, Whishworks, Prithvi Information Solutions, Naia Software Solutions India Pvt Ltd., Four Soft operate and call centers operate from this four-quadrant, 10-story building. The Cyber Towers building is divided into four quadrants with a large fountain in the middle of the quadrants.[5] Another large building of office space named Cyber Gateway has been built comprises over 866,000 square feet (80,500 square meters) across 8 acres (3.25 ha).

Key Campuses

Laxmi Cyber City

Laxmi Cyber City, started construction from 2005 and built span of two years by 2007 operations started. It consists of three blocks. A block- HSBC GLT B block- E&Y, Inventiv, etc. C block- ADP The property is close to 1 Million sft. and shares its heritage with Laxmi Cyber Centre (Banjara Hills), Laxmi CentrePoint (Begumpet GE), Laxmi Cyber Point, Laxmi Cyber Towers SEZ etc.

R & D center

Microsoft India Development Center is one of Microsoft's largest R&D centers outside the Redmond headquarters, Washington state. Set up in Hyderabad in 1998. Then Chief minister N. Chandrababu Naidu arranged a meeting with Bill Gates founder of Microsoft and discussed about the infrastructure provided and human resources availability in the state while managed him to build their sprawling 54 acres Microsoft campus of LEED Gold Certification for one of its buildings in Hyderabad. The Microsoft Corporation is the first multinational company to build a research and development center in Cyberabad.

Hyderabad International Convention Centre

In process of making India's favorite meetings and events destination in Hyderabad, then chief minister N. Chandrababu Naidu created a convention hub with the Hyderabad International Convention Centre, is a purpose-built, state-of-the-art convention facility, the first of its kind in South Asia. The convention centre was built by Emaar MGF of India. It has been the winner of the excellence award for “Best Standalone Convention Centre” for a record four times, nationally awarded by Ministry of Tourism, Government of India and the company is part owned by Emaar of UAE. The facility is managed by Accor Hospitality. The Hyderabad International Convention Centre with 5,000[11] seating capacity is India's largest convention facility. It is an integrated 27,000-square-metre (290,000 sq ft) covering 6.1 ha (15 acres). The centre can be configured to increase seating capacity to about 6,500. The convention center is connected to Novotel Hyderabad, an international business hotel, it has 288 rooms and is equipped with meeting rooms, restaurants, business centre, spa and a health club.

Raheja Mindspace IT Park

The Mindspace IT Park includes residential, recreational, entertainment, and retail spaces. The park provides about 370,000 square metres (4,000,000 sq ft) of office space. Spread across 45 hectares (110 acres), this layout also provides about 40% open space with telecommunications and civic infrastructure, wide roads and greenery. The district witnessed immediate success with over 93 thousand square metres (1 million square feet) built and occupied within just 14 months of starting the project. The park provides both multi-tenant and built to suit facilities. Companies such as Hyundai Mobis, IBM, Accenture, CSC, Bank of America, Facebook and Novartis have built to suit facilities in the park with 10000 workers within them. Other companies in multitenant facilities include Broadcom Inc., Deloitte, Parexel, Syneos Health, Qualcomm, Zensar Technologies Ltd, Tech Mahindra, Oracle, Accenture, Amazon, General Electric, OpenText, IGATE, Verizon, Thomson Reuters, Wells Fargo and TietoEVRY. As of 2008 March, 20,000 people work in the park. The park is a notified SEZ and is set to accommodate about 55,000 IT workers making it the largest of the IT parks in HITEC city. The park also has a Westin Hotel and Inorbit Mall which have been opened in the second half of 2009.

Cyber Pearl (an Ascendas IT park)

CyberPearl is located in the heart of Hyderabad's growth centre. Numerous MNC campuses, commercial facilities and extensive social infrastructure are located nearby the park. Opened in 2004, CyberPearl was the first park in Hyderabad to feature a fully equipped health club and business centre. In-house amenities include a large food court, restaurant, meeting rooms, conference and recreational facilities. Cyber Pearl would have been named Cyber Oasis, but since Hyderabad is associated with pearls, "Pearl" was considered more appropriate. The park accommodates over 5000 IT workers with 5,000,000 square feet (460,000 m²) of office space. Companies located at Cyber Pearl.

Hyderabad metro rail

The metro is one of the choices of Mass Rapid Transport System for cities like high dense because they offer a viable solution to the infrastructure that accompany urban expansion. Hyderabad Metro Rail Project integrates a multi-modal public transportation with urban spaces, and undertakes infrastructure development of Hyderabad Hyderabad Metro Rail (HMR) is a rapid transit system, currently being used in the city of Hyderabad. It is in Secant Operational model. It is being implemented entirely on public- private partnership (PPP) basis, with the state government holding a minority equity stake.

Which is developed by an Indian multi-national conglomerate headquartered in Mumbai, Maharashtra- Larsen and Turbo. The first phase of the project which is spread across 30 kilometres from Miyapur to Nagole was inaugurated by honourable prime minister Shri Narendra Modi on 28th of November 2017 , this first phase includes 24 . This is the longest rapid transit metro line which was opened in one go in India . this project is estimated to cost ₹18,800 crore (US\$2.6 billion). As of February 2020, there are about 490, 000 passengers who use the Metro per day. Trains are crowded during the morning and evening peak hours.

A ladies only coach was introduced on all the trains from 7 May 2018 . Customer satisfaction is a measure of how happy customers are with the company products, services, and skills. Customer satisfaction is the equivalent marketing term How the products or services provided by the company meet or exceed customer expectations. Customer satisfaction is important because it provides sellers and business owners with metrics they can use to manage and improve their business. Service quality refers to customer comparisons expected by the service and its relationship to company operations. A business with a high level of service may be able to operate to meet the needs of customers while also constantly competing economically in their order sector. Service quality (SQ), in its contemporary conceptualisation, is a comparison of perceived expectations (E) of service with perceived performance

Conclusions

This paper began with an exposition of PPPs becoming the way forward for infrastructure development (particularly road infrastructure, airport, Solid waste management, It hub, and metro rail) to be examined through a case study of GHMC. An urban Infrastructure project in India. especially in the role played in the traffic dispersal, improving the connectivity and promoting regional development. It comes at a time when such projects are needed for the development of Hyderabad metropolitan area i.e., it is designed to cater to the future well ahead of time. However, the implementation of the HRR AND OTHER urban Infrastructure project has been conceived and achieved different altogether

Suggestions

- Encourage PPP based development as funding the infrastructure project which is highly capital intensive, limiting the public investment as the resources are limited, thus involvement of the private partners would provide a major platform for achieving the goals of infrastructure as planned.
- A regulatory framework should be planned and executed according to bottom –up approach so as to not suffer from any delays, inefficiency in attaining the benchmarks of service delivery through infrastructure projects.
- Soft infrastructure should be given due focus as it is the root map for development and growth of the State in particular.
- There is a need to create awareness among the stakeholders regarding various Government schemes and their opportunities of accessibility and adoptability.
- Independent institutional structures for handling PPP should be set up by the policy makers.
- Higher level of accountability and transparency of information should be regulated through a proper channel so that smooth conduct of business in PPP model is gained.

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