Public Private Partnerships in Infrastructure Development

The Odisha Story

(State PPP & Project Monitoring Cell)
Planning & Coordination Department
Government of Odisha
“Government of Odisha is committed to having more PPP projects in infrastructure sectors with single-window clearance & facilitation in a transparent and time-bound manner. Our effort is to meaningfully leverage Public Private Partnerships to enhance the State’s productivity and reducing poverty.”

Shri Naveen Patnaik
Hon’ble Chief Minister, Odisha
The initial projects implemented by Government of Odisha under the Public Private Partnership (PPP) framework were largely in the port and urban development sectors. These provided significant lessons that guided the State Government to step up efforts to develop infrastructure projects through PPP.

With the focus of State Government during the current Plan period, PPPs have gradually emerged as a well-accepted route for Departments to adopt in implementation of their infrastructure development mandates. Today, the State has about 100 PPP projects in different stages of planning and rollout, across varied sectors such as healthcare, education, water supply, warehousing, urban management, tourism, power transmission, roads and ports. The State PPP & Project Monitoring (P.M.) Cell has been supporting this effort, by creating an enabling environment for PPPs and by assisting the Departments in development of their projects.

The State Government acknowledges the support of different partners - Asian Development Bank, Department for International Development (UK Aid), German Development Cooperation (KfW), The World Bank Group (including IDA, IBRD and International Finance Corporation) - in scaling up its PPP portfolio and building capacities of stakeholders. The Department of Economic Affairs (DEA), Government of India has been continuously providing valuable direction to improve the structure of our projects and proposals. The keenness shown by private sector organizations to participate in Odisha based projects is well appreciated. The various transaction advisors have worked diligently to ensure successful bids for the PPP projects.

I would like to thank Shri Jugal Kishore Mohapatra (Chief Secretary) and Shri Injeti Srinivas (Development Commissioner-cum-ACS) for their guidance and leadership in mainstreaming PPPs in the State. I would also like to thank my colleagues in other Departments for their enthusiasm to adopt the PPP route to execute their projects.

Finally, I would like to place on record my appreciation for my team-members, Shri Jayanta Kumar Mishra (Joint Director) and Shri Subhra Ranjan Mishra (PPP Expert) who are the fulcrum of State PPP & P.M. Cell.

This publication is a product of active collaboration with IDCO & IFC and we are delighted to release it on 08th November 2013 on the occasion of National PPP Nodal Officers’ Conclave organised by DEA in which Odisha is the Partner State.

(Pradeep Kumar Jena)
Special Secretary (PPP & P.M.)
Planning & Coordination Department


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1. ODISHA – DEVELOPMENT PROFILE

Odisha is located on the eastern coast of India. The State borders West Bengal in the Northeast, Jharkhand in the North, Andhra Pradesh in the South, Chhattisgarh in the West, and the Bay of Bengal in the East. It is the 9th largest State in India, spread over an area of 1,55,707 square kilometers[1]. The State has a population of over 41.9 million making it the 11th largest State in India based on population[2]. Urban population constitutes 16.68% of the total population of the State. Bhubaneswar, the State’s capital, is the largest city in Odisha and a centre of economic and religious significance. Other cities are Cuttack, Balasore, Baripada, Berhampur, Puri, Rourkela and Sambalpur. The State has 30 districts and is further divided into 58 subdivisions, 314 blocks and 317 tehsils[3].

### District-wise Map of Odisha

![District-wise Map of Odisha](image)

**Key Statistics**

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odisha’s Share in India’s Population</td>
<td>3.0%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Literacy Rate</td>
<td>63.1%</td>
<td>72.9%</td>
</tr>
<tr>
<td>Birth Rate (per thousand persons)</td>
<td>22.3</td>
<td>20.1</td>
</tr>
<tr>
<td>Death Rate (per thousand persons)</td>
<td>9.5</td>
<td>8.5</td>
</tr>
<tr>
<td>Infant Mortality Rate (per thousand live births)</td>
<td>97</td>
<td>57</td>
</tr>
<tr>
<td>Sex Ratio (females per 1000 males)</td>
<td>972</td>
<td>978</td>
</tr>
</tbody>
</table>

**Source:** Census of India 2011

The State Government’s objective is to enable "Human Development" in the State to improve skills, capabilities and choices of Odisha’s residents to live a long, healthy and fulfilled life. The Human Development Index[^4] in Odisha has increased from 0.275 in 1999-2000 to 0.362 in 2007-08, i.e. an improvement of 32%. Odisha has succeeded in reducing poverty by 20.1% as against the national average of 7.4% during the period 2004-05 to 2009-10, which is the highest amongst all States.

<table>
<thead>
<tr>
<th>Year</th>
<th>Odisha (%)</th>
<th>India (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
</tr>
<tr>
<td>2004-05</td>
<td>60.8</td>
<td>37.6</td>
</tr>
<tr>
<td>2009-10</td>
<td>39.2</td>
<td>25.9</td>
</tr>
</tbody>
</table>

Source: Planning Commission of India

There has been a visible structural shift in Odisha’s economy from agriculture based to industry and service led economy. As per 2012-13 estimates, the service sector contributes about 58.3% of the Gross State Domestic Product (GSDP) followed by industry (24.2%) and agriculture (17.5%) in real terms at 2004-05 prices. The economy of Odisha has depicted a rising trend over the last decade, although it dropped during the global economic slowdown in 2008-09. The State’s GSDP grew at a compounded annual growth rate of approximately 15% annually from 2004-05 to 2011-12[^5]. With a real average annual growth rate of 9.14% during 2012-13, economic growth in Odisha has stayed ahead of the national average and is nearly double the growth rate of 1990s.

[^4]: A function of levels of literacy, infant mortality rates, life expectancy at birth, access to safe drinking water and income

[^5]: Centre for Monitoring of Indian Economy, IBEF
Composition of Odisha’s Economy vis-à-vis National Economy at Constant Prices

(Sectoral shares of GSDP/ GDP in percent)

<table>
<thead>
<tr>
<th>Plan Period</th>
<th>Agriculture</th>
<th>Industry</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odisha</td>
<td>India</td>
<td>Odisha</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999-2000 Base</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8th Plan</td>
<td>37.60</td>
<td>29.08</td>
<td>17.52</td>
</tr>
<tr>
<td>9th Plan</td>
<td>32.44</td>
<td>24.96</td>
<td>17.65</td>
</tr>
<tr>
<td>10th Plan</td>
<td>25.46</td>
<td>20.28</td>
<td>21.66</td>
</tr>
<tr>
<td>2004-05 Base</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th Plan</td>
<td>18.33</td>
<td>15.15</td>
<td>26.09</td>
</tr>
</tbody>
</table>

Source: Directorate of Economics & Statistics, Odisha

Annual Growth Rates of Odisha vis-à-vis India’s Economy at Constant Prices

(Growth Rates are in percent)

<table>
<thead>
<tr>
<th>Plan Period</th>
<th>Agriculture</th>
<th>Industry</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odisha</td>
<td>India</td>
<td>Odisha</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999-2000 Base</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8th Plan</td>
<td>-1.22</td>
<td>4.78</td>
<td>3.15</td>
</tr>
<tr>
<td>9th Plan</td>
<td>3.97</td>
<td>2.49</td>
<td>4.03</td>
</tr>
<tr>
<td>10th Plan</td>
<td>3.10</td>
<td>2.51</td>
<td>18.70</td>
</tr>
<tr>
<td>2004-05 Base</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th Plan</td>
<td>2.32</td>
<td>3.66</td>
<td>7.81</td>
</tr>
</tbody>
</table>

Source: Directorate of Economics & Statistics, Odisha

Odisha has been a forerunner in the field of industrial development for the past few years. The State has a vast depository of natural resource, minerals and ores due to which it has become a destination for key industries in steel, aluminum and power generation sectors. The State Government has encouraged investments in further value-added sectors to boost employment creation and revenue generation. The capital city of Bhubaneswar has emerged as a leading knowledge hub in eastern India through a confluence of Infotech, Biotech and Technical Education. The State also aims to achieve faster growth in other sectors such as tourism, handicrafts and manufacturing sub sectors. Odisha has been ranked as one of the top three States for attracting highest private sector investment from 2001 to 2010 in India. In 2012-13 alone, Odisha attracted an investment of approximately USD 100 billion, which is 27% of total investment committed in India[6]. The capacity multiplication in key economic sectors has ranged from 3.5 to 7.5 times during the period from 2000 to 2012.

The Government of Odisha has taken a number of steps to provide an investor friendly environment by streamlining its decision making process as well as its industries related policies. It formulated the Industrial Policy and Public Private Partnership (PPP) Policy in 2007, which stress on the role of private sector as the driving force of growth and development in the State. The annual “Doing Business in India” report, published by the World Bank has ranked Bhubaneswar as the third easiest place to do business or conduct trade across borders in India[7]. This recognition proves that the State is moving in the right direction to achieve its vision of sustained growth.

A key objective of the State Government now is to progressively address the huge task of achieving sustainable, inclusive economic growth and accelerating human development in the State. This places greater emphasis on upgradation and improvement of infrastructure base in the State and efficient delivery of public services. PPPs would play a key role towards achievement of this vision.

<table>
<thead>
<tr>
<th>Sector</th>
<th>2000</th>
<th>2012</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Generation (in MWs)</td>
<td>3679</td>
<td>13311</td>
<td>262%</td>
</tr>
<tr>
<td>Alumina (in million tonnes)</td>
<td>0.8</td>
<td>3.5</td>
<td>338%</td>
</tr>
<tr>
<td>Aluminium (in million tonnes)</td>
<td>0.38</td>
<td>2.51</td>
<td>561%</td>
</tr>
<tr>
<td>Steel (in million tonnes)</td>
<td>2.00</td>
<td>15.04</td>
<td>652%</td>
</tr>
<tr>
<td>IT Exports (in million USD)</td>
<td>53.25</td>
<td>322.2</td>
<td>505%</td>
</tr>
<tr>
<td>Technical Education (number of seats)</td>
<td>26328</td>
<td>154414</td>
<td>487%</td>
</tr>
</tbody>
</table>

Source: IDCO, IPICOL and OCAC

2. GOVERNANCE OF PPPs IN ODISHA

Government of Odisha recognises that harnessing private sector efficiencies, resources and competitiveness is critical for the development of quality economic and social infrastructure in the State. In order to catalyse greater private participation in infrastructure creation and management, the State Government notified a PPP Policy in 2007 with the technical assistance of Department for Infrastructure Development, UK.

Key Features of Odisha’s PPP Policy

- **Leverages Government funds with private sector expertise to provide better infrastructure at optimal cost**
- **A transparent, consistent and efficient administrative mechanism for speedy clearance of projects**
- **Features of Odisha PPP Policy**
  - **Creation of Odisha Infrastructure Development Fund (OIDF)**
  - **Provides Viability Gap Funding (VGF) wherever projects are intrinsically unviable**
  - **A robust dispute redressal mechanism and regulatory framework for PPP projects**
  - **Structures projects with a necessary risk sharing framework suited for all stakeholders**
  - **A shelf/pipeline of PPP projects to be undertaken by Departments concerned**
A) Institutional Arrangement and Operationalisation of PPP Policy

To streamline the processes and achieve the objectives outlined in the PPP Policy, an effective institutional structure has been established.

As part of the institutional arrangement to facilitate PPPs in the State, a dedicated PPP & Project Monitoring (P.M.) Cell has been set up in the Planning & Coordination Department. The State PPP & P.M. Cell provides one-stop support to line Departments in project identification & prioritisation, feasibility analysis, project structuring, identification of financing options including central VGF and bid process management for selection of private partners. It also coordinates with Government of India for fast-tracking of approvals and clearances for large investment projects. “Odisha PPP Technical Society” (OPPPTS) was also created to assist the State PPP & P.M. Cell.

Various Departments have either designated Nodal Officers or constituted Project Management Units to oversee and fast-track infrastructure projects in their sectoral domains. Such initiatives have been taken by Commerce & Transport Department, Housing & Urban Development Department, Tourism Department, Works Department, Bhubaneswar Development Authority, Bhubaneswar Municipal Corporation and Odisha Industrial Infrastructure Development Corporation (IDCO).

Infrastructure projects entailing an investment up to Rs. 500 crore are approved by Empowered Committee on Infrastructure (ECI) under the chairpersonship of Chief Secretary. Projects entailing an investment in excess of Rs. 500 crore are considered by a High Level Clearance Authority (HLCA) chaired by Hon’ble Chief Minister.

The ECI is the nodal agency to co-ordinate all efforts of the State Government regarding development of infrastructure sectors, involving private participation and funding from various sources. The ECI is assisted by the State PPP & P.M. Cell in undertaking the functions specified under the PPP Policy and functions under the direct supervision of Chief Secretary.
## PPP Process

### Project Identification/Conceptualization

| State Government Departments identify projects in consultation with State PPP & PM. Cell and submit for approval of ECI | ECI prioritizes projects based on demand and supply gaps and creates project shelf |

### Preparation of Preliminary Feasibility Report (PFR)

| State Government Departments prepare PFR with assistance of State PPP & PM. Cell | PFR establishes the need for the project, cost estimation and commercial viability of the proposed project |

### Approval of Projects under PPP mode

| ECI reviews project proposal based on its merit, grant in-principle approval or suggests modifications in the proposal | Projects with investment more than INR 500 crores are recommended to HLCA for approval |

### Preparation of Detailed Project Reports (DPR) and Selection of Developers

| After ECI approval, DPR is prepared by Departments or project developer | State PPP & PM. Cell assists Departments in selection of the project developer |

### Approval of Developer

| Selected project developer/concessionaire requires a final approval from ECI/HLCA | In case of VGF assistance from GoI, a final sanction from the GoI is required |

### Development through Special Purpose Vehicles (SPVs)

| SPVs are formed as and when required to speed up the clearance process of the projects |

### Review and Monitoring of Projects

| ECI reviews and monitors the progress of PPP projects regularly | All Departments keep the State PPP & PM. Cell informed regarding the status of the projects |
B) Challenges faced in scaling up PPPs

There was limited understanding of PPPs until recently amongst many Government officials. The distinction between PPP and privatisation was unclear and as a result PPPs were only adopted selectively and after hesitation. The State Government realised the need for sustained capacity building amongst its officials to acknowledge that PPPs are a means to provide much needed infrastructure and improved service delivery for the public at large. The State PPP & P.M. Cell works with the Departments to create an enabling environment by training key officials in PPPs and by introducing implementation tools such as PPP related provisions in the Odisha General Financial Rules (OGFR) and Rules of Business.

A key prerequisite towards mainstreaming and scaling up PPPs was to demonstrate a bouquet of successful PPP projects in Odisha. The State now has a number of successful pilots in the areas of education, healthcare, industrial infrastructure, transport, urban development, roads, tourism, etc that have boosted the overall outlook on PPPs.

The need for a “process oriented approach” to project development also remained under-appreciated by most officials in Odisha till projects began to fail on account of limited private sector interest, mis-pricing and implementation delays. The protocol for due diligence at the project preparatory stage has evolved over the years
under the guidance of Empowered Committee on Infrastructure (ECI). Project preparation activities such as detailed feasibility study, land acquisition, environment/forest clearance, comprehensive mapping & documentation of risks and interventions and monitoring by senior levels of Government are now intrinsic to all PPP projects undertaken in the State.

Private sector capacity is another key challenge that several PPP projects are beset with, especially in the context smaller & localised projects. Recognising that financing availability is often a constraint, the State Government has established budgetary provisions for viability grants. The Odisha Urban Infrastructure Development Fund (OUIDF) was established to extend a line of concessional credit to urban centric projects. This has addressed constraints in the development of relatively smaller size solid waste management projects, bus terminals, city bus service projects, etc through local private sector.

C) Capacity Development

The Government of Odisha has participated in the DEA – Asian Development Bank (ADB) technical assistance programme for mainstreaming and catalysing PPPs. The programme has been meaningfully leveraged to strengthen the State PPP & P.M. Cell and enhance the quality of design and rollout of PPP initiatives across sectors. As a part of it, the State Government has submitted project development proposals under the Pilot Projects Initiative and adopted best practice monitoring frameworks for post contract award process management. This technical assistance has been one of the pivots in improved functioning of the State PPP & P.M. Cell.

Government of Odisha has also signed a tripartite agreement with DEA and IDFC Foundation for PPP capacity building in the State under the National PPP Capacity Building Programme (NPCBP). The Programme envisages creating a cadre of trainers through selection and training and subsequent roll out of training programmes on PPPs in different modules to suit various target groups at the State level, through State Administrative Training Institutes with the help of these trainers.

There has been an increased awareness in the last year on the need to create internal capacities of officials and strengthen institutional arrangements for handling PPP projects through their entire life-cycle. Over thirty training programmes on PPP have been organised since May 2008. Under the NPCBP, the State PPP & P.M. Cell has assisted and provided budgetary support to Gopabandhu Academy of Administration in conducting trainings of different modules on PPP since 2012.

Additionally, State level workshops are conducted intermittently with the support of partners like International Finance Corporation and Department for International Development, UK. These workshops are also platforms for Departments to identify a bouquet of projects that could be implemented through PPP route.

As part of the Memorandum of Understanding that Government of Odisha has executed with International Finance Corporation in June 2013, a comprehensive two-year capacity building workplan is under formulation through consultations with other development partners.

D) PPP Plan for the 12th Five Year Plan Period

The State Government has targeted to attract investment of at least Rs.5,000 crore in public infrastructure through PPPs during the 12th Five Year Plan period (2012-17). There shall be an effort to encourage PPPs and undertake projects in socio-economic sectors such as agriculture, water supply, health care, education, municipal services,
warehousing, roads, power transmission, etc. Strengthening and capacity building of State PPP & P.M. Cell and line Departments implementing PPP projects will be undertaken on a continual basis.

Apart from other initiatives, the following funds are available to enable the State Government to realize this target:

**Odisha Infrastructure Project Development Fund:**
For undertaking different technical studies and engaging transaction advisors

**Odisha Viability Gap Fund:**
For providing matching support to Central Viability Grant Funding (VGF)

**Project Development & Facility Fund for Roads Sector:**
For project development activities of State Highways and Major District Roads through PPP

**Odisha Urban Infrastructure Development Fund (OUIDF):**
Trust fund with corpus of € 58 million

In 2012 and 2013, several Departments have initiated plans for implementing projects through PPP in remote districts and not confining infrastructure development to only urban areas. There is improved technical capacity in Departments to appropriately design, appraise, approve and manage transaction process of projects under the overall guidance of ECI. There is now a clear emphasis on service level standards and delivery mechanism while drafting concession agreements.

Successful demonstration of pilot projects has encouraged Departments to design a programmatic approach in certain sectors. The energy efficient public street lighting project in Bhubaneswar has
prompted the Housing & Urban Development Department to replicate the project in other large municipalities of the State. Similarly, a programmatic replication has been planned for municipal solid waste management projects, city bus service and O&M of bus terminals. Such initiatives will go a long way in improving the geographic spread and impact of PPPs during the 12th Plan period.

A mechanism for periodic review of power transmission and road sectors and other vital PPP projects has been institutionalised to track project status, transaction process, future development milestones, time-lines and address bottlenecks in the rollout.

In the next 2-3 years, the State Government shall continue to undertake initiatives to further enlarge the ambit of PPPs in Odisha and close marquee transactions in a variety of sectors to enable spin-off effect. All ongoing initiatives and programmes will be continued with a view to realize the investment target of Rs. 5,000 crore through PPP route during 12th Plan period and carry forward commitments made in the State PPP Policy. The following budget provisions have been made in the Annual Plan: 2013-14 to support PPP initiatives:

<table>
<thead>
<tr>
<th>Programme</th>
<th>Budget Provision for 2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odisha Infrastructure Project Development Fund</td>
<td>10.00</td>
</tr>
<tr>
<td>Odisha Viability Gap Fund</td>
<td>40.00</td>
</tr>
<tr>
<td>Support to State PPP &amp; P.M. Cell</td>
<td>2.00</td>
</tr>
<tr>
<td>Support for PPP Road Projects</td>
<td>53.00</td>
</tr>
</tbody>
</table>
3. **PPP PROFILE OF ODISHA**

About 100 PPP projects cutting across varied sectors such as healthcare, education, water supply, warehousing, urban management, tourism, power transmission, roads, ports, etc are in different stages of planning and implementation. Many of these projects are in socially desirable sectors and their success will enable replication across the State. The sector wise summary is given below.

### PPP Projects in Odisha as on 30th September 2013

(\textit{Costs in Rs. crore})

<table>
<thead>
<tr>
<th>Sector</th>
<th>Particulars</th>
<th>Operational</th>
<th>Under Implementation</th>
<th>In Pipeline</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Development</td>
<td>Number</td>
<td>3</td>
<td>6</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Cost</td>
<td>150</td>
<td>500</td>
<td>1240</td>
<td>1890</td>
</tr>
<tr>
<td>Health</td>
<td>Number</td>
<td>11</td>
<td></td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Cost</td>
<td>62</td>
<td></td>
<td>518</td>
<td>580</td>
</tr>
<tr>
<td>Finance &amp; Revenue Related</td>
<td>Number</td>
<td>1</td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Cost</td>
<td>72</td>
<td></td>
<td>128</td>
<td>200</td>
</tr>
<tr>
<td>Transport</td>
<td>Number</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Cost</td>
<td>4861</td>
<td>10379</td>
<td>500</td>
<td>15740</td>
</tr>
<tr>
<td>Industrial Infrastructure</td>
<td>Number</td>
<td>2</td>
<td>3</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Cost</td>
<td>165</td>
<td>720</td>
<td></td>
<td>885</td>
</tr>
<tr>
<td>Roads</td>
<td>Number</td>
<td>1</td>
<td>1</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Cost</td>
<td>48</td>
<td>1293</td>
<td>2135</td>
<td>3476</td>
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<tr>
<td>Tourism</td>
<td>Number</td>
<td>5</td>
<td>10</td>
<td>2</td>
<td>17</td>
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<tr>
<td></td>
<td>Cost</td>
<td>52</td>
<td>25</td>
<td>162</td>
<td>239</td>
</tr>
<tr>
<td>Education</td>
<td>Number</td>
<td>14</td>
<td></td>
<td>3</td>
<td>17</td>
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<tr>
<td></td>
<td>Cost</td>
<td>35</td>
<td></td>
<td>47</td>
<td>82</td>
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<tr>
<td>Power Transmission</td>
<td>Number</td>
<td>1</td>
<td></td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Cost</td>
<td>108</td>
<td></td>
<td>1526</td>
<td>1634</td>
</tr>
<tr>
<td>Total Number</td>
<td></td>
<td>40</td>
<td>26</td>
<td>34</td>
<td>100</td>
</tr>
<tr>
<td>Total Project Cost</td>
<td></td>
<td>5445</td>
<td>13025</td>
<td>6256</td>
<td>24726</td>
</tr>
</tbody>
</table>

The concerted effort of all stakeholders is to ensure successful transactions and implementation of the projects in pipeline.
A) Innovative Sectoral Initiatives in PPP

**Equity Participation in Railway Corridors through PPP**

State Government has partnered with Rail Vikash Nigam Limited and large private sector user industries to undertake development of two corridors:

1) Paradeep – Haridaspur over 82 kilometres entailing a project cost of Rs. 1,559 crore

2) Angul – Sukinda over 104 kilometres entailing a project cost of Rs. 1,207 crore

State Government has decided to take 26% equity in both projects and provided Rs. 87 crore from its budget during the financial year 2012-13. The strategic participation by Government of Odisha has been highly appreciated by Ministry of Railways and other stakeholders and has become a showcase for other States to replicate. Both the projects are under construction and shall yield substantial economic returns to the transport sector.

For the coal belt of Angul-Talcher-Chhendipada, Odisha Industrial Infrastructure Development Corporation has begun the development of a common corridor for rail, road and water pipeline. The railway line will have a track length of 465 kilometres with an estimated cost of approximately Rs. 7,500 crore. M/s SBI Capital Markets is the advisor for project structuring and financial closure. It is amongst the largest railway corridor project in the country to have been taken up by a State Government entity through PPP.

**Odisha Emergency Medical Ambulance Service (OEMAS)**

The objective of OEMAS was to set up a comprehensive pre-hospital emergency medical service to provide quality emergency care transport within the shortest possible time in an emergency. The project is being implemented in two phases on the basis of feasibility, equity and need. In the first phase, 280 ambulances have been launched across 15 districts in March 2013 with a focus on the trauma corridor in Odisha across National Highways. In the second phase, an additional 140 ambulances are under procurement and shall be put to service by December 2013.

The average response time of 20 minutes for urban, 25 minutes for semi-urban and 35 minutes for the rural areas are the performance parameters for the service provider. The ratio of ambulances of one per one lakh population has been kept as per the standard of WHO. The fleet has both ‘Basic Life Support’ and ‘Advanced Life Support’ ambulances.

The Government has financed the capital assets under the project, while the private partner provides necessary technical and managerial support including trained manpower and required software (Call Centre, Advance Vehicle Tracking using GPS technology) to implement and operate the service in the manner set out by the Government. M/s Ziqitza Health Care Limited is the concessionaire for a period of 5 years.
Municipal Hospital & Health Care Network in Bhubaneswar

To address the healthcare needs of the urban poor and to provide superior quality service at affordable rates, Bhubaneswar Municipal Corporation (BMC) has initiated a project that includes establishment of a greenfield hospital and upgradation of 5 existing dispensaries through the PPP mode. The upgraded dispensaries shall become satellite centers/clinics and referral centers for the 300-bedded greenfield hospital.

It is the first health network project being structured on PPP basis in India and provides solutions for care at all levels, i.e. primary, secondary & tertiary and hence has an opportunity for replication across the country. The project is uniquely structured with the convergence of National Urban Health Mission and public insurance schemes like Odisha State Treatment Fund, Rashtriya Swasthya Bima Yojana, Biju Krushak Kalyan Yojana and Janani–Shishu Suraksha Karyakram.

The estimated project cost is Rs. 188 crore and the concession agreement is scheduled to be signed by January 2014 after conclusion of the ongoing bidding process.

Energy Efficient Public Street Lighting Project in Bhubaneswar

It was essential to improve the street lighting quality in the city of Bhubaneswar while reducing energy use, costs and greenhouse gas emissions through energy efficient retrofits and improved operation & maintenance practices. Bhubaneswar Municipal Corporation has selected M/s Shah Investments as the energy service company (ESCO) to provide energy efficient street lighting on the basis of sharing of energy savings which will compensate for the upgrades and maintenance done by the ESCO.

Under the project, the ESCO has the responsibility to install energy efficient street lighting equipment and monitor the city-wide street lighting system for which it shall receive a fixed monthly fee.

The project is the largest ESCO project as on date in the country and entails a 10 year concession period. In view of its complexity in implementation, IFC is providing post-bid capacity building and handholding support to BMC and the electricity distribution company.

The project is being replicated in Berhampur, Cuttack, Rourkela and Sambalpur in the first phase.
**Four-laning of Sambalpur – Rourkela Road**

The project entails 4-laning of the existing two-lane road linking NH-23 in north and NH-6 in south which was constructed by M/s Larsen & Toubro during 1993 under a loan programme of ADB. The road passes through three districts, i.e. Sambalpur, Jharsuguda & Sundergarh and connects the mining region of Sundergarh with the industrial areas of Jharsuguda and Rourkela. The proposed four-laning shall include two bypasses near Rengali & Jharsuguda, three rail over bridges and one rail under bridge. Additionally, six new major bridges and thirty nine numbers of new minor bridges are also part of the scope of four-laning.

The PPP structuring is based on the Design-Build-Finance-Operate-Transfer model with VGF based bidding. With an estimated cost of Rs. 1,293 crore and a concession period of 22 years, M/s Larsen & Toubro has been selected to implement the project with a VGF requirement of 36% of total project cost of which 20% shall be borne by Central Government and the balance 16% by the State Government.

This is the first project in Odisha to have been successfully awarded under the Central VGF scheme.

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**E-registration System (e-dharani)**

Revenue and Disaster Management Department has undertaken e-dharani programme through PPP mode to deliver all movable and immovable property registration related services to the citizens in a timely, transparent and sustainable manner through streamlined processes and trained workforce. The Department built significant capacity in terms of physical and technology infrastructure to implement e-dharani through computerization of all 182 registration offices across the State.

The facility ensures accountability in registration of deeds and helps in issuance of encumbrance certificates, certified copy of land documents and property valuation based on benchmarks.

The estimated project cost was Rs. 80 crore and was implemented by a Special Purpose Vehicle with M/s IL&FS in the year 2010. The services rendered through the project in the last three years have been well appreciated by the general public. It has received e-World 2011 award for “Best Electronic Delivery of Services” in August 2011.

The successful delivery of this initiative has now encouraged the Government to undertake modernization of seven major commercial tax check-gates across the State through PPP with an objective to provide hassle-free services to public at large.
Municipal Solid Waste Management Project in Berhampur

The solid waste management project at Berhampur was conceptualised to meet local demand for an integrated solid waste management system. The project was designed with access to concessional lending from Odisha Urban Infrastructure Development Fund and bid out on parameter of minimum grant required. Extensive private sector consultations were undertaken and advance steps taken pertaining to landfill site, access road construction, environment mitigation measures and approvals / clearances. Exposure visits were organized for the municipal corporators and officials.

M/s UPL Environmental Engineers Limited is the developer for a 20-year concession to undertake collection & transportation of waste, development of a segregation line and composting facility, a greenfield sanitary landfill and the decommissioning of the existing dumpsite.

The estimated project cost is approximately Rs. 70 crore and has become a model for replication in other towns of Odisha.

Affordable Housing Project in Bhubaneswar

As per the 2001 census estimate of National Housing Board, Odisha has a total housing shortage of 3.6 million units. The Government is constrained to deliver housing facilities to the targeted sections due to escalation in construction costs linked to construction delays and the lack of housing finance available for the economically weaker segments.

Consequently, the State Government has formulated an Affordable Housing Policy under which Bhubaneswar Development Authority is planning to structure and bid out a PPP project to provide affordable housing facilities to the poor. The project is set on about 20 acre of land and will result in 1,500 dwelling units for the benefit of low income households with an estimated cost of Rs. 100 crore.

The project is a first-of-its-kind in the sector in India and is a transformational initiative with a potential for wide replication to address the large housing supply shortage for the poor. The successful implementation of the project is expected to result in the mobilization of private sector investment in the affordable housing sector and access to improved housing services, with a focus on the poor, in Bhubaneswar. The availability of housing finance for the beneficiaries is crucial for the success of the project.

The project structuring and transaction process commenced in September 2013.
Driving Training & Safety Institute at Chhatia

As part of its vision to boost employment in vocational sectors, Government of Odisha has established a Heavy Motor Vehicle Driving Training Institute through PPP mode. It was operationalised by the concessionaire, M/s Ashok Leyland in April 2013 with an investment of Rs. 20 crore. The project has a concession period of 15 years and a capacity of 2,400 trainees per annum. While the fee structure is regulated by Government, there is a revenue sharing arrangement between the private partner and the State Transport Authority.

It is unique in its convergence with State Employment Mission and other ongoing livelihoods programmes of the Government. Many of the industries in Odisha have made tie-ups with the institute for training and recruiting their manpower. The facilities are spread over 40 acre and include simulators and driving track of 5 kilometre length.

The initial results in successful placement of trainees have prompted the State Government to set up similar institutes through PPP at other locations in the State. The second project is coming up in Ganjam district with participation of M/s Tata Motors.

Common Infrastructure Development Project in Plastics & Polymers Park at Balasore

The industrial units at IDCO’s industrial estates around Balasore were gradually transforming to a cluster for plastic & polymer industries in the year 2009. The cluster had an inherent potential of being globally competitive considering the product profile and its strategic location, but required upgradation of certain common infrastructure in power, water supply, road network and development of new facilities like tool rooms, logistic infrastructure, business promotion center, warehouses, etc.

The local industries mobilized themselves together as a Special Purpose Vehicle (SPV), namely M/s NOCCI Balasore Infrastructure Company and developed a comprehensive plan for common infrastructure development. The capital investment requirement of Rs. 82 crore was jointly met by Central Government (under the IIUS scheme), State Government and the private sector SPV which contributed approximately 15%.

The project was commissioned in 2012-13 and the different infrastructures are operated & managed by the SPV through user fees for the common facilities. Some of the common infrastructure includes - 11 KV electric distribution, 10 kilometre road, 60 MLD water supply, a railway siding, a training academy, machine & tools room, etc.

This project has received rave reviews as a demonstration of sustainable development of common infrastructure through the user participation PPP model. The State Government plans to replicate this at other locations in Odisha through its own budgetary contribution in lieu of the Central Government share.
B) Partnering with Government of India for VGF Support

**Bulk Water Supply to Satellite Towns of Bhubaneswar and Institutional Areas**

The project includes a 22.5 kilometre transmission pipeline, pumping stations and treatment plants with capacity of 50 MLD to cater to satellite areas of Bhubaneswar and entails a project cost of Rs. 188 crore. The private partner shall develop and maintain the facilities over a 25 year concession period.

In-principle approval has been received for a maximum Central Government contribution of Rs. 37.54 crore towards VGF.

**Model Residential Public Schools in Tribal Districts**

The State Government has taken up the development of three model residential public schools as pilot projects in Keonjhar, Koraput and Mayurbhanj districts. Each school would have a capacity of at least 700 students with 50% of them belonging to the SC/ST community and is estimated to have a project cost of Rs. 16 crore.

In-principle approval has been received for a maximum Central Government contribution of Rs. 9.30 crore towards VGF for the three schools put together.

**Medical College & Associated Hospital in KBK Region**

As part of the holistic development plan for the undivided Kalahandi – Bolangir – Koraput (KBK) region, the State Government proposes to establish a medical college and associated healthcare facilities in Bolangir through the PPP route. The estimated project cost is approximately Rs. 330 crore.

The project proposal is currently under consideration of DEA for VGF support.

Techno-economic studies have also been taken up for replication of the project at Rayagada and Parlakhemundi. The establishment of medical colleges at the identified locations shall have a significant impact on the healthcare front in the entire western region of Odisha and lead to improved human development indicators.

**Intra-State Power Transmission Corridors**

Power evacuation infrastructure is considered a vital peg in the chain of quality electricity supply. Consequently, Odisha Power Transmission Corporation Limited (OPTCL) has initiated the development of two packages consisting of 400KV transmission lines and 400 KV gas insulated substations under the model transmission service agreement framework. The packages have been designed as part of a western corridor and a coastal corridor.

The unitary charges are under consideration of the Odisha Electricity Regulatory Commission after which the projects shall be posed to DEA for VGF support.
4. PARTNERS OF ODISHA IN PPPs

While the State Government has taken significant steps to combat poverty and to ensure social justice, there are still significant challenges that the State faces in the areas of agricultural productivity and providing access to infrastructure and public services. To address these issues, the Government has been collaborating with various multilateral and bilateral development agencies for facilitating the achievement of these goals. The support from these partners has been vital in the State’s quest to enhance private sector participation in infrastructure development and improved delivery of public services. The collaboration with development agencies in the form of financial and technical assistance has enabled Government to bring about significant development impact.

A) Development Assistance Agencies

Asian Development Bank (ADB)

ADB is a regional development bank established in 1966 to facilitate economic development of countries in Asia. Currently, ADB has 67 members, of which 48 are from within Asia and the Pacific and 19 outside. ADB’s core skills are in delivering large-scale infrastructure projects in middle-income countries.

In 2011, ADB projects provided access to electricity and modern fuels for 7.7 million households. 27 million people are expected to benefit from improved access to safe drinking water supply and improved sanitation from loans approved in 2011.

In 2006, the ADB-Government of India PPP Initiative was undertaken as a joint programme between ADB and DEA to mainstream PPPs by focusing on activities such as capacity building of officials, process standardization, sector tools, development funds and project development. The initiative involved ADB’s largest technical assistance spread across multiple Central line Ministries and more than 15 State Governments.

The DEA-ADB assistance was the architect of PPP institutions and facilities created for implementing the commitments made in the Odisha PPP Policy 2007. It was the main instrumentality for the State Government to strengthen State PPP & P.M. Cell and provide quality support to line Departments in their PPP initiatives. It has brought in the much needed technical capacity within the State Government to appropriately design, appraise, approve and manage transaction process of projects. There is now a clear stress on service level standards and delivery mechanism while drafting concession agreements, which may not have been evident earlier. A team of experts were posted in the State PPP & P.M. Cell with an objective of creating a pipeline of bankable PPP projects and their structuring. It resulted in the first set of proposals from Odisha for Central VGF support and IIDP assistance. The initiative is a perfect example of close collaboration between DEA, ADB and the State Governments across India.
Department for International Development, United Kingdom (DFID, UK)

DFID was set up in 1997 as a United Kingdom Government Department with an aim to promote sustainable development and eliminate world poverty. Its priority areas include education, health, social services, water supply & sanitation, Government & civil society, economic sector (including infrastructure, production sectors and developing planning), environment protection, research and humanitarian assistance.

As part of the Industrial Policy Resolution technical assistance programme, DFID had assisted the State Government in formulating its PPP Policy in 2007. Under the Odisha Modernizing Economy, Governance and Administration Programme (OMEGA), DFID supports transaction advisory works in about ten PPP projects in pro-poor sectors. Some of the significant projects include:

- Bulk water supply project to municipalities of Khordha & Jatni and institutions like IIT, NISER, Infocity - II
- Model residential public schools in tribal districts
- Medical college and associated healthcare facilities in KBK region
- Roads in tribal districts and mining corridors

Apart from OMEGA, two major programmes funded by DFID are:

- Odisha Girls Incentive Programme (OGIP) to enable 250,000 SC/ST girls to complete secondary education
- Odisha Support to Urban Infrastructure (OSUI) aimed at improving cities' infrastructure particularly in low income settlements to enable them to attract investments and develop them as engines of inclusive economic growth

German Development Cooperation (KfW Development Bank)

KfW Development Bank finances investments and advisory services in developing countries on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ). It is committed to the primary goal of sustainably improving the economic and social conditions of the people in developing countries.

Odisha is among the pioneering States to introduce Odisha Urban Infrastructure Development Fund, a funding mechanism for the creation of urban infrastructure. It has been set up as a fully owned trust by the State Government under Housing & Urban Development Department and includes a loan component of € 52.5 million and State Government contribution of € 5.5 million.
The trust fund has been set up with the goal of developing sustainable financial structures that will effectively link external, non-budgetary sources of finance and capital markets with the financing needs of Urban Local Bodies. The Municipal entities, Development Authorities, Odisha State Housing Board and private developers will be able to access the fund, which also provides for viability gap funding upto 50% in case of any gap in the commercial viability of a project. The fund shall encourage private investors to avail themselves of this funding to set up projects on PPP basis.

**Private Infrastructure Development Group (PIDG)**

PIDG is an innovative multi-donor organization that was constituted in 2002. Its aim is to mobilize private sector investment to assist developing countries in providing infrastructure required to boost their economic growth and combating poverty. The members of PIDG include Austria, Germany, Ireland, Netherlands, Sweden, Switzerland, the UK, The World Bank and the International Finance Corporation.

PIDG has founded a range of specialized financing and project development companies designed to overcome the obstacles to generating private sector investment in infrastructure projects in poor countries by providing custom-made solutions. Some of these companies include DevCo, GuarantCo, ICF-DP, InfraCo Africa, InfraCo Asia, Technical Assistance Facility and The Emerging Africa Infrastructure Fund. These companies work on a wide range of infrastructure areas including energy & power, transportation, telecommunications, agribusiness, housing, industry, urban infrastructure, water and sanitation.

PIDG is supporting PPPs in Odisha through its DEVCO and TAF vehicles.

**THE WORLD BANK**

**The World Bank Group**

Established in 1944, the World Bank Group is comprised of five institutions:

- The International Bank for Reconstruction and Development (IBRD)
- The International Development Association (IDA)
- The International Finance Corporation (IFC)
- The Multilateral Investment Guarantee Agency (MIGA)
- The International Centre for Settlement of Investment Disputes (ICSID)

IBRD and IDA have been supporting different development programmes in Odisha since mid-1990s through projects in irrigation, power, health, roads and education by the way of technical assistance, policy-based loans and credits. The nearly 20-year partnership has resulted in remarkable development gains for the State. Odisha’s experience in forging a growth path, both inclusive and sustainable, would provide important lessons for other countries and States that are rich in natural resources but face deep pockets of poverty. IBRD and IDA have a USD 600 million program in Odisha with primary focus on water management, urban water, roads, coastal zone management, etc.
The Odisha State Road Project is a USD 322 million programme supported by an IBRD loan and State Government share in 80:20 pattern and 461 kilometres of road works have been taken up in the first phase.

Under the Integrated Coastal Zone Management Project, an integrated solid waste management project in the port town of Paradeep with scope from collection to scientific treatment and disposal is being undertaken through the PPP route.

**International Finance Corporation (IFC)**

IFC, a member of the World Bank Group, was established in 1956 and is the largest global development institution focused exclusively on the private sector in developing countries. In 2013, IFC’s investments climbed to an all-time high of nearly $25 billion, leveraging the value-addition of private sector to create jobs and tackle the world’s most pressing development challenges.

The State Government entered into a Memorandum of Understanding (MoU) with IFC in June 2013 which would enable access to best global practices in the PPP domain and ensure transfer of knowledge & technology for improved design, structuring and configuration of Odisha based projects, especially complex PPP mandates.

The key objectives of the MoU are to strengthen:

- improved project identification, design and implementation while building capacities of officials involved in PPP projects
- innovative project structuring, bidding assistance and replication across the State

The initial PPP projects bid out successfully with the assistance of IFC include an integrated municipal solid waste management project in Berhampur on the basis of VGF from OUIDF and energy efficient street lighting project in Bhubaneswar. This has prompted the State Government to launch energy efficient street lighting in a programmatic mode through PPP across four other cities in Odisha to start with.

Some other projects that IFC is advising are:

- Municipal hospital and health care network in Bhubaneswar
- Warehousing infrastructure for rice storage across the State
- Solid waste management in Puri
- Rooftop solar in Bhubaneswar and Cuttack
- Affordable housing in Bhubaneswar

IFC has also executed an agreement with the Finance Department for “Odisha Inclusive Growth Partnership” for a three year partnership to streamline regulations for investment, identify areas for improvement and tap into opportunities in the private sector. Agri-business and tourism are focus areas under the partnership agreement.
B) Project Management Units (PMUs) in Government of Odisha

**Commerce & Transport Department with PricewaterhouseCoopers**

The Department has the PPP projects of port sector in its ambit. The port at Dhamara is fully operational and the one at Gopalpur completed its first phase of development. The ports at Astaranga and Kirtania are currently under implementation. Technical studies are underway for a greenfield riverine port project at Paradeep with the technical assistance of Planning Commission.

A new scheme for rural connectivity has been formulated by the Department in 2013 which is to be rolled out through PPP.

PricewaterhouseCoopers (PwC) provides PMU support to the Department in its PPP schemes and projects.

**Housing & Urban Development Department with Administrative Staff College of India (ASCI)**

The Department has the largest number of upcoming PPP projects being implemented through Municipal entities and Development Authorities. Many of those projects entail novel structuring thereby having learnings for future replication.

The Department operationalised its PMU through ASCI in year 2009 under JnNURM, but the scope of which was later expanded to include PPP projects. The PMU’s role has been critical in capacity building programmes for municipal cadres and advisory to Municipal entities on user charges and incorporation of project-specific SPVs.

The PMU has provided valuable technical inputs to the Department’s policy and administrative formulations on affordable housing and urban sanitation.

**Works Department with Ernst & Young**

The Department has put in place an institutional arrangement to streamline and facilitate project preparatory and procurement process for PPP projects. Ernst & Young (E&Y), under the OMEGA programme, functions as the PMU of Works Department in identification of projects, preliminary feasibility assessment, technical studies, preparation of bid documents and stakeholder consultations – for both PPP and very large EPC projects in roads and bridges sectors.
The PMU is currently handling project development activities for 8 roads and 16 ROBs through PPPs with estimated cost of approximately Rs. 4,000 crore. It has analysed a core road network of over 9,000 kilometres of road and identified 33 projects to be implemented through BOT (Toll), BOT (Annuity) or EPC mode.

**Bhubaneswar Development Authority (BDA) with Jones Lang LaSalle (JLL)**

The PMU was established in BDA with JLL in the year 2010 to support in the areas of business & investment planning, project conceptualization, procurement advisory and PPP advisory.

The PMU has played a valued role in supporting BDA in increasing the housing stock of the city through PPP initiatives which had a certain percentage of built-up area reserved for dwelling units for the economically weaker and lower income segments.

It has also extended a helping hand to Bhubaneswar Municipal Corporation, Cuttack Development Authority and Berhampur Development Authority in their PPP projects.

**Bhubaneswar Municipal Corporation (BMC) with Aarvee Associates**

The PMU was functionalized in BMC through Aarvee Associates under Basic Service to the Urban Infrastructure & Governance component of JnNURM to effectively co-ordinate implementation of projects and reforms.

The PMU has notably prepared a comprehensive housing beneficiaries database with physical and financial Status for better monitoring of Basic Services to the Urban Poor. It is responsible for implementation of BMC’s 7-point charter covering provision of basic services to the urban poor including security of tenure at affordable prices, improved housing, water supply, sanitation and ensuring delivery of already existing universal services of the Government for education, health and social security – many of which are implemented through Public Private Community Partnership (PPCP) models.

**Odisha Industrial Infrastructure Development Corporation (IDCO) with IL&FS**

IDCO has a Project Development Promotion Partnership with Infrastructure Leasing & Financial Services (IL&FS) for development of infrastructure projects and private sector participation in the same since 2005. A dedicated & revolving corpus fund of Rs. 4 crore has been set-up with equal contribution from both partners for meeting project development expenses.

Under this arrangement, a number of significant projects have been successfully commissioned which include the common infrastructure development project in plastics &
polymers park at Balasore and the driving training institute at Chhatia.

The ongoing initiatives include the re-development of Konark spinning mill at Kesinga and development of aluminium park at Angul.

**Odisha Power Transmission Corporation Limited (OPTCL) with E&Y and PwC**

OPTCL undertakes the business of transmission and wheeling of electricity in the State. It is scheduled to successfully commission the first PPP project in power transmission in the country developed through the BOT (Annuity) route for the Ib-Meramundali 400 KV D.C. line through private partner M/s Sterlite Energy Limited. The project cost is Rs. 108 crore.

OPTCL has established a PMU for managing two transmission project packages through PPP entailing an investment of approximately Rs. 1,500 crore. The PMU is assisted by E&Y and PwC. The packages are being structured under the model transmission service agreement framework of Central Government.
Vision of Team Odisha

To usher in balanced socio-economic growth of Odisha that hinges on sustainable development with strong fundamentals of industrial & infrastructural growth, right harnessing of natural resources and actualization of employment potential.