



Training Programme: Capsule I
under
Atal Mission for Rejuvenation and Urban
Transformation (AMRUT)

for
Senior Municipal Functionaries of Jharkhand
October, 2016



Centre for Good Governance (CGG)
Hyderabad – 500 033, Telangana

PREFACE

AMRUT

In the urban sector, the provision of amenities and basic services, viz., water supply, sewerage and urban transport in cities which improve the quality of life for all, and especially the poor and the disadvantaged is a national priority. It is considered that along with infrastructure creation, the last mile connectivity such as providing taps and toilet connections to all households would have a direct impact on the real needs of the people.

To ensure these objectives, Government of India has launched an ambitious mission “Atal Mission for Rejuvenation and Urban Transformation (AMRUT)” in June, 2015 covering 500 towns which has a population of 100,000 and more. . The AMRUT Mission aims to achieve the following:

- Every household has an access to tap with assured supply of water and sewerage connection;
- Increase amenity value of cities by developing greenery and well maintained parks;
- Reduce pollution by switching to public transport or constructing facilities for non-motorised transport like cycling and walking.

In other words, the Mission focuses on the following thrust areas:

- Water supply
- Sewerage facilities and septage management
- Storm water drains
- Pedestrian, non-motorised public transport facilities, parking spaces; and
- Creating and upgrading open spaces, parks and recreation centres.

These outcomes could be valued by all citizens, particularly women and children; and the standards and indicators would meet the Service Level Benchmarks (SLBs) prescribed by the Ministry of Urban Development (MoUD) in 2011. To sustain the created infrastructure, the Mission Towns need to implement a set of reforms (11) proposed by the Government.

Capacity Building

It was also considered that a sound institutional structure would bring out successful outcomes with the Mission; and capacity building is one of such structures and has been

included in the Mission. The capacity building has two components, (i) individual and (ii) institutional. The capacity building component would be fully supported by Govt. of India.

Centre for Good Governance (CGG), Hyderabad

Govt. of India has identified Centre for Good Governance (CGG) at Hyderabad as one of the National Resource Centres (NRC) for imparting individual capacity building to the officers of state government and urban local bodies (ULBs). The Director, State Urban Development Agency (SUDA), Govt. of Jharkhand requested CGG to take up capacity building programme to the officers of SUDA and ULBs of Jharkhand on (i) Municipal Administration and (ii) Municipal Finance.

Capsule I Programme under AMRUT

CGG, Hyderabad and SUDA, Jharkhand have entered into a Memorandum of Understanding (MoU) for a period of one year starting from May 2016. As per the MoU, CGG has to conduct one Orientation Programme and subsequent two capacity building training programmes termed as Capsule I and II in two subject areas, i.e., (i) Municipal Administration, and (ii) Municipal Finance during 2016-17. Each programme is of three-day duration. After successfully conducting the Orientation Programmes in both the subject areas during 18-20 July, 2016 and 21-23 July, 2016, the Training Programme Capsule I was conducted during 24-26 October 2016 and 27-29 October 2016 at Ranchi, Jharkhand. For the Capsule I Programme, CGG has developed resource material which was provided to the participants during the training. The topics covered in the resource material are as follows:

1. Overview of Municipal Administration in Jharkhand
2. Implementing Reforms under AMRUT
3. Augmenting Municipal Financial Resources for Creating Urban Infrastructure
4. Need, Rationale and Implementation of DEABAS
5. Implementing Municipal Accounting
6. Effective Asset Management
7. Municipal Budget
8. Project Management – Concept, Approach and Process
9. Public Private Partnership in India
10. Communication Strategies and Community Involvement

Urban Management Resource Group (UMRG)

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1. Overview of Municipal Administration in Jharkhand

- D V Rao

Objective of the Session

The participants will be able to have enhanced knowledge on the following areas

- History of local self-government in India
- Municipal bodies in India
- Constitution 74th Amendment Act, 1992
- Jharkhand Municipal Act, 2011
- Major provisions in the Act, and
- Reform measures provided in the Act

History of Local Self-government in India

The Panchayat and Nyay Panchayat system was said to be in existence from the medieval times in India. However, the present form of local self government started from the British rule and real progress was made in the field of local self government with Lord Mayo's Resolution of 1870. The resolution provided for decentralization of finance. Lord Mayo in his famous resolution stated that local interest, supervision and care are necessary to success in the management of funds devoted to education, sanitation, medical, charity and local public works.

The next historic step in the development of local government was taken by Lord Ripon with his celebrated Resolution in 1882. Ripon has been rightly called as the father of Local Self-Government in India. After a review of the results of 1870 Resolution and also the popular opinion, the Government of India thought it desirable to increase the scope of local governments. The two main objects of the reforms were:

- To decentralize more functions to local management; and
- To make local government an instrument of political and popular education. Then only the efficiency of local performance can be improved over official administration.

The Resolution stated that besides cities and municipalities, the least local administrative unit must be the taluka or tahsil. Many provincial governments passed enabling Acts with provision for election, financial resources, etc.

The functions handed over to local bodies under the provincial municipal Act were:

- Maintenance of roads, street lighting, upkeep of municipal property and buildings
- Public health, vaccination, sanitation, drainage, water supply and measures against epidemics
- Education

The principal sources of local revenue were:

- Octroi
- Property tax on houses and lands
- Tax on professions and trades
- Road tolls

- Taxes on carts and other vehicles; and
- Fees for services rendered like conservancy, water supply, markets, etc.

Municipal Bodies in India

The first municipal body, called 'Municipal Corporation' was set up in the former presidency town of Madras in the year 1688, and was followed by the establishment of similar Corporations in Bombay and Calcutta in the year 1726. An attempt was made by passing of India Act XXVI of 1850 to create municipalities in the districts, i.e., outside the Presidency Towns. The next step in the direction was the Madras Town Improvement Act of 1865. The subsequent legislative landmark in the sphere of municipal administration was the Madras District Municipalities Act, 1884. It was amended in 1920 and the Act of 1920 brought about perceptible change in the pattern of municipal administration and it has provided not only a larger proportion of elected members but also an increase in the powers and resources of Municipalities.

Steps in the organisation of local self-government in India

1. Constitution of Municipal Corporation of Madras in the year 1688
2. Constitution of Municipal Corporations of Bombay and Calcutta in the year 1726.
3. India Act XXVI of 1850
4. Madras Town Improvement Act of 1865
5. Lord Mayo's Resolution of 1870
6. Lord Ripons' Resolution of Local Self-Government of 1882.
7. Madras District Municipalities Act of 1884. This Act has introduced the concepts of Municipality for the first time.
8. Madras District Municipalities Act, 1920

Bihar Municipal Act, 1922

The evolution of municipal administration in the country and passing of Municipal Act in Madras Presidency in 1884 and subsequently revised in 1920 prompted other States in the country to pass similar legislations and Bihar enacted Bihar Municipal Act during 1920.

State of Jharkhand and Jharkhand Municipal Act, 2000

The State of Jharkhand came into existence in the year 2000 by bifurcation of the State of Bihar and through Bihar Reorganisation Act of 2000. The State of Jharkhand vide its Notification No.1105B/2001-2755 dated 14-11-2000 adapted the Bihar Municipal Act, 1922 as Jharkhand Municipality Act, 2000. Some other Acts were also governing various municipal bodies in the State like Ranchi Municipal Corporation Act, 2001, Jharkhand Mineral Development Authority Act, 1986 and Hazirabagh Mines Board Act, 1936 were adapted.

Constitution 74th Amendment Act, 1992

The Constitution of India has been amended through 74th Amendment during 1992 (popularly known as Nagarapalika Act). The 74th Amendment Act provided constitutional status to municipalities and made the municipalities as institutions of self-governance and are mandated to prepare plans for economic development and social justice. It also provided uniformity in structure and composition of municipalities and provided reservation in seats for weaker section of

community and the women in the municipal bodies. An exclusive list of functions and responsibilities for municipal bodies has been made. It was also provided for establishment of State Finance Commission, State Election Commission, District Planning Committees and Metropolitan Planning Committees in the States.

Unified Municipal Law

As a measure of urban reform, Government of India suggested to the State Governments to consider adoption of a unified law governing various municipal bodies like Corporations, Municipalities and Nagar Panchayats.

Jharkhand Municipal Act, 2011

In the light of the suggestions made by Government of India, reform agenda contemplated through various urban related projects initiated by Central Government and State Government and also in order to comply the provisions of Constitution 74th Amendment Act, the State Legislature of Bihar enacted Jharkhand Municipal Act, 2011. The Act came into force on 9th February, 2012 and was published in the Jharkhand Gazette No.63. With the coming into force of the Act, the following Acts were repealed.

- Jharkhand Municipal Act, 2000
- Ranchi Municipal Corporation Act, 2001
 - Operation of Ranchi Regional Development Authority set up under the Jharkhand - Regional Development Authority Act, 2001 shall cease within limits of Ranchi Municipal Corporation
- Operations of Mineral Area Development Authority set up under Jharkhand Mineral Development Authority Act, 1986, to the extent notified by the State Government, shall cease to exist and vests with Dhanbad Municipal Corporation.
 - Operations of Hazirabagh Mines Board set up under the Hazirabagh Mines Board Act, 1936, to the extent notified by the State Government, shall cease to exist and vests with Hazirabagh Municipality.

Major provisions of the Act are discussed in the following paras:

Constitution of Municipalities (Section 6)

Government constitutes three types of municipalities

- Municipal Corporation for a larger urban area
- Municipal Council for a smaller urban area
- Nagar Panchayat for a transitional area, that is to say, the one in transition from rural to urban

Different authorities in Municipal Corporation, Municipal Council and Nagar Panchayat are (section 23):

Municipal Corporation	Municipal Council	Nagar Panchayat
<ul style="list-style-type: none">• Standing Committee• Mayor• Municipal Commissioner	<ul style="list-style-type: none">• Municipal Council• Standing Committee• Chairperson	<ul style="list-style-type: none">• Nagar Panchayat• Standing Committee• Chairperson

Municipal Corporation	Municipal Council	Nagar Panchayat
<ul style="list-style-type: none"> The Executive Officer / Managing Director representing the Municipal Corporation establishing or acquiring public transport undertaking or water supply undertaking or any other public utility services 	<ul style="list-style-type: none"> Executive Officer 	<ul style="list-style-type: none"> Executive Officer

While Corporation, Council, Nagar Panchayat, Standing Committee, Mayor or Chairperson constitutes Deliberative Wing, the Commissioner or Executive Officer constitutes Executive Wing. The Deliberative wing is elected by local population, the Executive wing is appointed by Government or the Municipality.

Municipal Corporation/Municipal Council/Nagar Panchayat (Section 15)

For each municipality, a body of members is constituted and it is called as Council, which have authority over the municipalities. The Council Consists of

- i. Elected councillors each ward (number of wards determined by State Government)
- ii. Ex-officio members, i.e., Member of Legislative Assembly, Lok Sabha and Rajya Sabha
- iii. Co-opted members having special knowledge and experience in municipal administration (three to one)
- iv. Co-opted members belonging to minorities (three to one)

However, members referred in clauses (ii), (iii) and (iv) have no right to vote in council meetings

Reservation of Councillors (Section 16)

Fifty percent of total seats of elected councillors are reserved for SC, ST, BC and Women. Number of seats reserved for SC and ST are proportionate to their population to the total population of the municipality. After reservation of seats to SC and ST categories, such number of seats within the overall ceiling of 50% are reserved for BCs. Not exceeding 50% of seats reserved for SC, ST and BC have to be reserved for women belonging to SC, ST and BC respectively. Fifty percent of unreserved seats also have to be reserved for women.

Another important requirement in this respect is that the wards reserved for various categories referred above would be allotted by rotation.

Mayor and Chairperson (Section 26)

The Presiding Officer of the Council, in the case of –

- (a) Municipal Corporation, the Mayor,
- (b) Municipal Council, the Chairperson, and
- (c) Nagar Panchayat, the Chairperson.

The Mayor / Chairperson are elected by all the electors in the municipality. There is a provision of reservation for the office of the Mayor and Chairperson in municipalities. Fifty percent (50%) of total offices of Mayor and Chairperson are reserved for (i) Scheduled Castes (ii) Scheduled Tribes (iii) Backward Classes and (iv) Women.

The number of offices reserved for Scheduled Castes and Scheduled Tribes within the State is proportionate to the population of the Schedule Castes and Scheduled Tribes, as the case may be, to the total population of the State. After reservation of offices for the Scheduled Castes and the Scheduled Tribes, the number of offices to be reserved for the Backward Classes is such number within the overall limit of fifty percent.

Further, fifty percent of the total number of offices reserved to the SC, ST and BC, as the case may be are reserved for women belonging to SC, ST and BC. Fifty percent of total number of unreserved offices also have to be reserved for women.

Reservation of the offices to different categories shall be allotted by rotation. All elections in the municipalities are held under the direction, control and supervision of the State Election Commission

Deputy Mayor and Vice-Chairperson (Section 28)

The elected councillors elect one from amongst themselves to be the Deputy Mayor or the Vice-Chairperson. The election will take place in a meeting of the council.

Standing Committee of municipality (Section 24)

In every municipality, there will be constituted a Standing Committee. The Standing Committee consists of

- i. in the case of Municipal Corporation - Mayor, Deputy Mayor and Chairpersons of Zonal Committees;
- ii. in the case of Municipal Council - Chairperson, Vice-Chairperson and five elected councillors to be elected by Council;
- iii. in the case of Nagar Panchayat - Chairperson; Vice-Chairperson, and three elected councillors to be elected by the Council.

The Mayor and Chairperson, as the case may be, are the presiding officer of the Standing Committee.

Ward Committee, Ward Sabha and Area Sabha (Section 34, 39 and 45)

A ward committee is constituted for each ward of the municipality. Each Ward Committee shall consist of (a) the Councillor representing the ward, who shall be the Chairperson of the Ward Committee; (b) the Area Sabha Representatives of the areas situated in the ward; and (c) not more than ten persons representing the civil society from the ward nominated by the council. Certain functions have been entrusted to ward committees.

Ward Sabha: In the case of a municipality having population less than one lakh, there shall be Ward Sabha for each ward and it consists of all the electors in the ward. Ward Sabha has to meet once in two months.

Area and Area Sabha: In case of a municipality having population of one lakh or more, Government determines the Areas into which each ward is divided. There will be an Area Sabha Representative for each Area to be nominated by council. Area Sabha is constituted for each area and it comprises all persons registered as voters of the area and it has to meet once in two months.

Organisation Structure of Municipality (Section 55)

<p>(a) Municipal Corporation</p> <ol style="list-style-type: none"> i. Municipal Commissioner, an officer of IAS or JAS cadre ii. Chief Finance Officer / Chief Accounts Officer from the office of iii. AG or senior officer of Finance or Accounts Department of Government iv. Municipal Internal Auditor v. Chief Municipal Engineer vi. Chief Town Planner and Municipal Architect vii. Chief Municipal Health Officer viii. Chief Environmental Engineer (for solid waste management) ix. Chief Information and Technology Officer x. Municipal Law Officer xi. Municipal Secretary xii. such number of Additional Municipal Commissioners xiii. such number of Deputy/Assistant Municipal Commissioners; and xiv. such other officers as prescribed by Government 	<p>(b) Municipal Council or Nagar Panchayat</p> <ol style="list-style-type: none"> i. Executive Officer ii. Municipal Finance Officer/Municipal Accounts Officer iii. Municipal Engineer iv. Municipal Health Officer v. Environmental Engineer (for solid waste management) vi. Information and Technology Officer vii. Municipal Secretary, and such other officers as prescribed by Government
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In addition to the officers referred above, other officers and employees constitute municipal establishment. On the recommendation of the Council, the posts will be sanctioned by Government.

Functions of Municipality (Section 70)

There is a huge list of municipal functions they are divided into core functions, general functions and sector-wise functions. It is also suggested that Government may assign additional functions to the municipality. Specifically, the core functions are

- Water supply, drainage and sewerage
- Solid waste management
- Environmental sanitation
- Public streets and lighting
- Public markets and slaughter houses
- Parks, gardens and play grounds

Internal Revenues of Municipality (Section 151 and 152)

The internal revenues of the municipality consist of

- Taxes levied by the municipality
- User charges levied for provision of civic services, and
- Fees and fines levied for performance of regulatory and other statutory functions.

The municipality has power to levy the following taxes

- Property tax on lands and buildings
- Tax on vacant land
- Surcharge on transfer of lands and buildings,
- Water tax
- Fire tax
- Tax on advertisement
- Surcharge on entertainment tax
- Surcharge on electricity consumption within the municipal area
- Tax on congregations,
- Tax on pilgrims and tourists
- Toll on roads, bridges, ferries and navigable channels; and on heavy trucks
- Tax on Trade and Profession:

The municipality has power to levy following user charges

- Water-supply, drainage and sewerage
- Solid waste management
- Parking of different types of vehicles
- Stacking of materials or rubbish on public streets for construction, alteration, repair or demolition work of any type, and
- Other services rendered by the municipality

The municipality has power to levy fees for

- Sanction of building plans and issue of completion certificates
- Issue of municipal licenses for various non-residential uses of lands and buildings
- Licensing of
 - (i) various categories of professionals such as plumbers and surveyors;
 - (ii) various activities such as sinking of tube-wells, sale of meat, fish or poultry, or hawking of articles,
 - (iii) sites used for advertisements or premises used for private markets, slaughterhouses, hospitals, nursing homes, clinics, factories, warehouses, godowns, goods transport depots, eating-houses, lodging- houses, hotels, theatres, cinema-houses and places of public amusement and for other non residential uses,
 - (iv) animals,
 - (v) carts or carriages or vehicles, and
 - (vi) such other activities which require a license or permission under the Act, and
- Issue of birth and death certificates.

The municipality has power to levy fine for committing nuisance or for violating any provisions of the Act.

Controlling Authorities (Section 91-96)

Since municipalities are created by State Government through legislation and are answerable to the Legislature, Government has retained certain powers of control over municipality. They include

- Calling for records of municipality
- Deputing officers to make inspection or examination and report
- Requiring municipal authorities to take action and issue directions
- Cancelling or suspending resolutions
- Removing Mayor, Deputy Mayor, Chairperson and Vice chairperson
- Dissolving the Council

The Municipal Act has introduced and provided various reform measures and they include

- Ward Committees, Ward Sabhas and Area Sabhas as a measure of community participation (Section 34)
- State Chamber of Municipal Councils (Section 50)
- Public Disclosure of municipal activities (Section 52)
- Municipal Ombudsman (Section 63)
- State Finance Commission (Section 97)
- Municipal Accounting Manual (Section 113)
- Accrual Based Accounting (Section 112)
- Municipal Accounting Committee (Section 124)
- Municipal Bonds and Credit Rating (Section 146 and 147)
- Jharkhand Property Tax Board (Section 153)
- Private sector participation (Section 193)
- Private sector participation in water supply (Section 217)
- Private sector participation in solid waste management (Section 252)
- State Municipal Regulatory Commission (Section 263)
- State Municipal Advisory Committee (Section 269)
- Benchmarking of service levels (Section 328)
- District Planning Committee (Section 383)
- Metropolitan Planning Committee (Section 384)
- Preparation of Development Plan (Section 381)
- Preparation of Master Plan (Section 404)
- Municipal Streets Technical Committee (Section 405)
- Right of way for underground utilities and their mapping (Section 410 and 411)
- Building Regulations and Building Code (Section 434 and 441)
- Municipal Building Tribunal (Section 442)
- Disaster Management (Section 480)
- Municipal Magistrate (Section 517)
- State Election Commission (Section 538)

2. Implementing Reforms under AMRUT

- Vaibhav Purandare & Hijam Eskoni Devi

List of AMRUT Reforms with Milestones and Timelines

क्र.सं.	प्रकार	उपलब्धियाँ	कार्यान्वयन की समय सीमा
1	ई-शासन	डिजिटल शहरी स्थानीय निकाय 1. शहरी स्थानीय निकाय वेबसाईट का निर्माण। 2. ई-समाचार पत्र का प्रकाशन। डिजिटल इंडिया पहल 3. डिजिटल इंडिया को सहायता प्रदान करना (डकिटिंग पीपीपी मोड अथवा यूएलबी द्वारा स्वयं किया जा सकता है)	6 महीने 6 महीने 6 महीने
		ई-मास के साथ कवरेज (सॉफ्टवेयर की शुरूआत करने की तारीख से) • जन्म, मृत्यु और विवाह का पंजीकरण, • जल एवं सीवरेज प्रभार, • शिकायत निवारण, • सम्पत्ति कर, • विज्ञापन कर, • लाइसेन्स जारी करना, • भवन निर्माण के लिए अनुमति, • परिवर्तन, • वेतन, • पेंशन।	24 महीने
		• ई-प्रापण, • कार्मिक कर्मचारी प्रबंधन और • परियोजना प्रबंधन।	36 महीने
2	म्युनिसिपल संवर्ग की संविधान और व्यावसायिकता	1. म्युनिसिपल संवर्ग की स्थापना। 2. संवर्ग से जुड़ा प्रशिक्षण। 3. यूएलबी में प्रशिक्षुओं को लगाने और कार्यान्वयन के लिए नीति। 4. राज्य यूएलबी की आबादी, वेतन संबंधी आंतरिक संसाधनों और व्यय के आधार पर म्युनिसिपल पदाधिकारियों की संख्या को ठीक करने के लिए नीति तैयार करेगी।	24 महीने 24 महीने 12 महीने 36 महीने
3	दोहरी प्रविष्टि लेखा में वृद्धि	1. पूर्णतः दोहरी प्रविष्टि लेखा प्रणाली में परिवर्तन करना और वित्तीय वर्ष 2012-13 से लेखा परीक्षा प्रमाण-पत्र प्राप्त करना।	12 महीने
		2. आंतरिक लेखा परीक्षक की नियुक्ति।	24 महीने
		3. वेबसाईट पर वार्षिक वित्तीय विवरण को प्रकाशित करना।	प्रति वर्ष

क्र.सं.	प्रकार	उपलब्धियां	कार्यान्वयन की समय सीमा
4	शहरी आयोजना और शहरी स्तरीय योजनाएं	<ol style="list-style-type: none"> 1. जीआईएस का उपयोग करके मास्टर प्लान तैयार करना। 2. सेवा स्तर सुधार योजनाएं (एसएलआईपी), राज्य वार्षिक कार्य योजनाएं (एसएएपी) तैयार करना। 3. शहरी विकास प्राधिकरणों की स्थापना। 4. 5 वर्षों में शहरों के हरित क्षेत्र को 15% तक उत्तरोत्तर वृद्धि करने के लिए कार्य योजना तैयार करना। 5. अमृत शहरों में प्रत्येक वर्ष में कम से कम एक शिशु पार्क का विकास करना। 6. जन सार्वजनिक निजी भागीदारी (पीपीपीपी) पद्धति आधार पर पार्कों, खेल मैदानों और मनोरंजन क्षेत्रों के रखरखाव के लिए प्रणाली स्थापित करना। 7. सुस्थिर आवास के लिए राष्ट्रीय मिशन में दिए गए मानदंडों का कार्यान्वयन करने के लिए एक राज्य स्तरीय नीति तैयार करना। 	<p>48 महीने 6 महीने 36 महीने 6 महीने प्रति वर्ष 12 महीने 24 महीने</p>
5	निधियों और कार्यों का हस्तांतरण	<ol style="list-style-type: none"> 1. 14वें वित्त आयोग की निधियों और कार्यों का अंतरण सुनिश्चित करना। 2. राज्य वित्त आयोग (एसएफसी) की नियुक्ति करना और निर्णय लेना। 3. समय-सीमा के अंतर्गत एसएफसी के सिफारिशों का कार्यान्वयन करना। 4. सभी 18 कार्यों यूएलबी को अंतरित करना। 	<p>6 महीने 12 महीने 18 महीने 12 महीने</p>
6	भवन उप-नियमों की पुनरीक्षा	<ol style="list-style-type: none"> 1. समय-समय पर भवन उप-नियमों का संशोधन। 2. 500 वर्ग मी. से अधिक क्षेत्र वाले सभी भवनों और सभी सार्वजनिक भवनों में सौर छत बनाने के लिए एक नीति और कार्य योजना तैयार करें। 3. 300 वर्ग मी. और उससे अधिक क्षेत्र वाले प्लॉटों पर निर्मित सभी वाणिज्यिक, सार्वजनिक भवनों और नए भवनों में वर्षा जल संचयन संरचनाओं के निर्माण के लिए एक नीति और कार्य योजना तैयार करें। 4. निर्माण अनुमति के लिए एकल खिड़की मंजूरी सृजित करना। 	<p>12 महीने 12-24 महीने 12-24 महीने 12 महीने</p>
7	राज्य-स्तर पर मध्यस्थ संस्था की व्यवस्था करना।	<ol style="list-style-type: none"> 1. वित्तीय मध्यस्थ संस्था की स्थापना और उसका संचालन - पूल वित्त, बाह्य निधियां प्राप्त करना, म्युनिसिपल बांड जारी करना। 	<p>12-18 महीने</p>

क्र.सं.	प्रकार	उपलब्धियाँ	कार्यान्वयन की समय सीमा
8 (क)	म्युनिसिपल कर और शुल्क में सुधार	<ol style="list-style-type: none"> 1. कम से कम 90% कवरेज, 2. कम से कम 90% एकत्रीकरण, 3. समय-समय पर संपत्ति कर का संशोधन, प्रभार और अन्य शुल्क लगाने के लिए नीति बनाना, 4. वेबसाइट पर कर ब्यौरों की मांग की एकत्रीकरण पुस्तिका (डीसीबी) डालना, 5. गतिशील मूल्य निर्धारण मॉड्यूल के साथ विशेष क्षमता प्राप्त करने के लिए नीति बनाकर विज्ञापन राजस्व की पूर्ण क्षमता को प्राप्त करना। 	12 महीने
8 (ख)	उपभोक्ता प्रभार लगाने और एकत्रित करने में सुधार	<ol style="list-style-type: none"> 1. व्यक्तिगत और संस्थागत आकलनों के लिए उपभोक्ता प्रभार पर नीति को अपनाना जिसमें जल के उपयोग हेतु कमजोर वर्गों के हितों पर ध्यान देने के लिए शामिल किए गए सुरक्षा उपायों हेतु भिन्न दर लगाई जाती है। 2. जल की हानि को 20% तक कम करने के लिए कार्य योजना बनाना और वेबसाइट पर प्रकाशित करना। 3. उपभोक्ता प्रभारों के लिए पृथक खाते। 4. कम से कम 90% बिलिंग। 5. कम से कम 90% एकत्रीकरण। 	12 महीने
9	क्रेडिट रैंटिंग	यूएलबी की क्रेडिट रैंटिंग पूरा करना।	18 महीने
10	ऊर्जा और जल लेखा परीक्षा	<ol style="list-style-type: none"> 1. ऊर्जा (स्ट्रीट लाइट) और जल लेखा परीक्षा (गैर राजस्व जल अथवा हानि लेखा परीक्षा सहित) 2. एसटीपी और डब्ल्यूटीपी को अधिक ऊर्जा सक्षम बनाना 3. ऊर्जा सक्षम लाइटों का उपयोग करके स्ट्रीट लाइटों को ऊर्जा खपत के अनुकूल बनाना और नवीकरणीय ऊर्जा पर निर्भरता बढ़ाना। 4. हरित भवनों के लिए प्रोत्साहन देना (उदाहरणार्थ, भवन अनुमति विकास प्रभारों के संबंध में संपत्ति कर अथवा प्रभारों में छूट) 	12 महीने 12 महीने 12 महीने 24 महीने
11	स्वच्छ भारत मिशन	<ol style="list-style-type: none"> 1. खुले में शौच का उन्मूलन। 2. अपशिष्ट एकत्रीकरण (100%), 3. अपशिष्ट को एक स्थान से दूसरे स्थान पर ले जाना (100%) 4. वैज्ञानिक निपटान (100%) 	36 महीने

Source: AMRUT Guidelines

Implementation and Achievement of AMRUT Reforms in Jharkhand

#	Reforms	Milestones	Timeline	Max Score Possible During Year	Total Score Obtained	Present Status
1	e-Governance	Digital ULBs 1. Creation of ULB website.	6 months	10	10	Website of all 7 AMRUT Cities has been created with newly developed department's portal.
		2. Publication of e-newsletter.	6 months	10	10	e-Newsletters for all 7 AMRUT ULBs have been uploaded on the website.
		Digital India Initiatives 3. Support Digital India (ducting to be done on PPP mode or by the ULB itself).	6 months	10	10	<ul style="list-style-type: none"> • An initiative has taken for common duct policy with the support of TRAI. • High speed internet connection facility through broadband connectivity in all the cities. • Digitization of legacy data of the ULBs. • Pilot project of e-Municipality in Dhanbad for State level software solution of all the municipal services has started. • Online payment facility for collection of various taxes and user charges.
		Coverage with E-MAAS (from the date of hosting the software) <ul style="list-style-type: none"> • Registration of Birth, Death & Marriage, • Water & Sewerage Charges, • Grievance Redressal, • Property Tax, • Advertisement tax, • Issuance of Licenses, 	24 months			<ul style="list-style-type: none"> • Registration of Birth & Death certificates are already implemented in all the ULBs. • Grievance Redressal and e-Procurement is fully functional. • Online Application for Property Tax, Advertisement tax, Licenses are under development. • The rest will be achieved within

#	Reforms	Milestones	Timeline	Max Score Possible During Year	Total Score Obtained	Present Status
		<ul style="list-style-type: none"> • Building Permissions, • Mutations, • Payroll, • Pension, 				prescribed timeline.
		<ul style="list-style-type: none"> • e-Procurement, • Personnel Staff management and • Project management. 	36 months			
2	Constitution and Professionalization of Municipal Cadre	1. Establishment of municipal cadre.	24 months	10	10	Municipal Cadre constituted and requisition given to JPSC/JSSC for recruitment.
		2. Cadre linked training.	24 months			To be fully achieved within prescribed timelines.
		3. Policy for engagement of interns in ULBs and implementation.	12 months	10	10	Policy has been notified
		4. The State will prepare a Policy for Right-sizing the number of municipal functionaries depending on, say, population of the ULB, generation of internal resources and expenditure on salaries.	36 months			
3	Augmenting Double Entry Accounting	1. Complete migration to double entry accounting system and obtaining an audit certificate to the effect from FY2012-13 onwards.	12 months	10	10	All 7 AMRUT Cities have been migrated to double entry accounting system.
		2. Appointment of internal auditor.	24 months			To be achieved within the prescribed time period

#	Reforms	Milestones	Timeline	Max Score Possible During Year	Total Score Obtained	Present Status
		3. Publication of annual financial statement on website.	Every Year	10	10	Annual Financial Statement of all 7 AMRUT Cities has been published on the website.
4	Urban Planning and City Level Plans	1. Preparation of Master Plan using GIS.	48 months			Master Plan with GIS is being prepared and the work will be accomplished within the prescribed time period.
		2. Preparation of Service Level Improvement Plans (SLIP), State Annual Action Plans (SAAP).	6 months	10	10	SLIP and SAAP of FY 2015-16 submitted to MoUD
		3. Establish Urban Development Authorities.	36 months			
		4. Make action plan to progressively increase Green cover in cities to 15% in 5 years.	6 months	10	00	Preparation of action plan is under Process
		5. Develop at least one Children Park every year in AMRUT cities.	Every Year	10	10	Work awarded for development of 1 children park each in all 7 AMRUT Cities.
		6. Establish a system for maintaining of parks, playground and recreational areas relying on People Public Private Partnership (PPPP) model.	12 months	10	10	JHARPARK has been constituted by DEF&CC, GoJ
		7. Make a State level policy to implement the parameters given in National Mission for Sustainable Habitat.	24 months			
5	Devolution of Funds and Functions	1. Ensure transfer of 14th FC devolution to ULBs.	6 months	10	10	1 st & 2 nd Installment has been already transferred to ULBs.
		2. Appointment of State Finance Commission (SFC) and making decisions.	12 months	10	10	3 rd State Finance Commission (SFC) appointed.

#	Reforms	Milestones	Timeline	Max Score Possible During Year	Total Score Obtained	Present Status	
		3. Implementation of SFC recommendations within timeline.	18 months			Partially implemented and will be fully achieved within the Prescribed time period	
		4. Transfer of all 18 functions to ULBs.	12 months	10	10	Already Transferred and provisioned in Jharkhand Municipal Act-2011	
6	Review of Building by-laws	1. Revision of building bye laws periodically.	12 months	10	10	Building Bye laws of Jharkhand-2016 has been approved and notified	
		2. State to formulate a policy and action plan for having a solar roof top in all buildings having an area greater than 500 square meters and all public buildings.	12-24 months			Building Bye laws have been approved and notified already.	
		3. State to formulate a policy and action plan for having Rain water harvesting structures in all commercial, public buildings and new buildings on plots of 300 sq. meters and above.	12-24 months			Provisioned in Building Bye laws 2016	
		4. Create single window clearance for all approvals to give building permissions.	12 months	10	10	Already Existing	
7	Set-up Financial Intermediary at State Level	1. Establish and operationalize financial intermediary- pool finance, access external funds, float municipal bonds	12-18 months			To be accomplished within the prescribed time period	
8 (a)	Municipal Tax and Fees Improvement	1. Atleast 90% coverage,	12 months	10	8.57	90% and above coverage of property tax in 6 AMRUT Cities has completed.	
		2. Atleast 90% collection,		10			0
		3. Make a policy to, periodically		10			10

#	Reforms	Milestones	Timeline	Max Score Possible During Year	Total Score Obtained	Present Status
		revise property tax, levy charges and other fees,				revised and notified
		4. Post Demand Collection Book (DCB) of tax details on the website,		10	10	DCB of 7 AMRUT Cities has prepared and uploaded on website
		5. Achieve full potential of advertisement revenue by making a policy for destination specific potential having dynamic pricing module.		10	10	Advertisement policy 2016 has been notified.
8 (b)	Improvement in Levy and Collection of User Charges	1. Adopt a policy on user charges for individual and institutional assessments in which a differential rate is charged for water use and adequate safeguards are included to take care of the interests of the vulnerable,	12 months	10	10	Policy on Water user charges 2016 has been notified.
		2. Make action plan to reduce water losses to less than 20 % and publish on the website,		10	00	
		3. Separate accounts for user charges,		10	10	7 AMRUT Cities has been opened separate bank accounts of 5 services on Water User Charges, Property Tax, BPA Fees, SWM Fees and Municipal License Fee.
		4. Atleast 90% billing		10	10	More than 90% billing report has been received from all the 7 AMRUT Cities.
		5. Atleast 90% collection.		10	00	Target partially achieved

#	Reforms	Milestones	Timeline	Max Score Possible During Year	Total Score Obtained	Present Status
9	Credit Rating	1. Complete the credit ratings of the ULBs	18 months			Agency has been selected for all 5 clusters. Expected to complete within the prescribed time period
10	Energy and Water Audit	1. Energy (Street lights) and Water Audit (including nonrevenue water or losses audit),	12 months	10	0	
		2. Making STPs and WTPs more energy efficient,		10	0	
		3. Optimize energy consumption in street lights by using energy efficient lights and increasing reliance on renewable energy	24 months	10	10	Sodium Lights are being converted to LED Lights in all the 7 AMRUT cities.
		4. Give incentives for green buildings (e.g. rebate in property tax or charges connected to building permission/development charges)				To be accomplished within the prescribed time period
11	Swachh Bharat Mission	1. Elimination of open defecation,	36 months			
		2. Waste Collection (100%),				
		3. Transportation of Waste (100%).				
		4. Scientific Disposal (100%).				
Total Score				280	218.57	78.06%

Source: SAAP 2016-17; Submitted by Government of Jharkhand to Ministry of Urban Development, Government of India

3. Augmenting Municipal Financial Resources for Creating Urban Infrastructure

- D V Rao

Objective of the Session

The participants will be able to have enhanced knowledge on the following areas

- Functional responsibility of ULBs
- Finances of ULBs
- Mismatch between Functions and Finances
- Resource mobilisation – Reform under AMRUT
- Revenue Improvement Action Plan (RIAP)
- Alternate sources of revenue

Functional Responsibilities of ULB

Urban local bodies (ULBs) in India are traditionally mandated to undertake certain basic civic functions like water supply, roads, drains, street lighting, and sanitation. They cover provision of services as well as maintenance. They also perform certain regulatory functions like issue of trade licences, regulation of land use, issue of building permissions and removal of encroachments etc.

The Constitution 74th Amendment Act (CAA) envisaged that the State Governments may, by law, endow the ULBs with such powers and authority to enable them to function as institutions of self-government and such law may also contain provision for devolution of powers and responsibilities upon municipalities with respect to (i) preparation of plans for economic development and social justice; and (ii) the performance of functions and implementation of schemes as may be entrusted to them including those in relation to the matters listed in the Twelfth Schedule.

The CAA inserted Twelfth Schedule to the Constitution and the Schedule provided an illustrative list of 18 municipal functions which include:

- (1) Urban planning including town planning
- (2) Regulation of land use and construction of buildings
- (3) Planning for economic and social development
- (4) Roads and bridges
- (5) Public health, sanitation, conservancy and solid waste management
- (6) Fire services
- (7) Urban forestry, protection of the environment and promotion of ecological aspects
- (8) Safeguarding the interests of weaker sections of society, including the handicapped and the mentally retarded
- (9) Slum improvement and upgradation
- (10) Water supply for domestic, industrial and commercial purposes
- (11) Urban poverty alleviation
- (12) Provision of urban amenities and facilities such as parks, gardens, and playgrounds
- (13) Promotion of cultural, educational and aesthetic aspects
- (14) Burials and burial grounds, cremations, cremation ghats/grounds, and electric crematoria

- (15) Cattle pounds, prevention of cruelty to animals
- (16) Vital statistics including registration of births and deaths
- (17) Public amenities including street lighting, parking lots, bus stops and public conveniences
- (18) Regulation of slaughter houses and tanneries

These functions covered development programmes along with traditional civic functions. Many State governments have amended their laws and endowed the municipalities with the functions enlisted in the Constitution. Added to this, happening globalization, liberalization and more critically, the urban explosion increased the volume of functions/services to be performed/ delivered by the ULBs. Municipal functional domain is radically changing from infrastructure provision to regulatory and then commercialization.

Finances of ULBs

As we have discussed in another module, the finances of ULBs cover

- Taxes
- Non-taxes
- Assigned revenues
- Grants-in-aid
- Loans/Borrowings.

Even though the 74th Constitution Amendment Act has listed the functions to be performed by ULBs, it did not spell out the Finances to be devolved on the ULBs. This power has been delegated to the State and the State Legislature has to make law and

- (i) Authorise the municipality to levy, collect and appropriate such taxes, duties, tolls and fees (taxes and non taxes)
- (ii) Assign to the municipality such taxes, duties, tolls and fees levied and collected by the State Government (assigned revenues)
- (iii) Provide such grants-in-aid to the municipalities (State Government grants)

Mismatch between Functions and Finances

The financial powers have not been enlarged and they remained static and statutorily restricted. The increased responsibilities and the aspirations of people for greater service levels resulted that the ULBS could not meet the functions with the finances.

While the avenues of income sources are limited, the costs of services have jumped to high side. The cost of staff salaries, administration expenses and other contingencies are also on the increase. Many ULBs are not in a position to pay wages/power bills/petty maintenance expenditure regularly

The abnormal capital costs for infrastructure and services is another factor for high degree of mismatch between functions and finances. The costing of capital projects have been made by various studies. McKinsey (2010) suggests that India would need 5.31 million crore rupees for capital expenditure by 2030. The largest demand for capital funding would come from housing and mass transport. If cost of housing is excluded, it would be 3.54 million crore rupees. The High Power

Expert Committee (HPEC) for estimating the investment requirement for urban infrastructure services projects estimated that India would need 3.92 million crore rupees for urban infrastructure investment over a period of 2012-31.

Studies on service deficiency by ULBs across the country were also made by various institutions and they present a very pathetic state. The water supply, drainage, sanitation, housing, road network - all services are considered inadequate and deficient.

It therefore obvious that the existing finances are not sufficient to meet the functions and become necessary to augment the resources within the existing framework of law and it can be done in the following ways

- Exploit available resources through Revenue Improvement Action Plan (RIAP)
- Tax Reforms
- Revision of rates of fees/service charges
- Maximize recovery
- Rationalize expenditure
- Institutional/Management Reforms through Institutional Development Action Plan (IADP) which include -
 - Computerization
 - Citizen charter
 - Grievance Redressal
 - Performance evaluation
 - Training/Capacity building
 - Transparency/dissemination, like Press meets/Cable TV/Portal/Dial Mayor/Dial Chairperson
- Accounts/Finance Reforms
 - Updating of accounts
 - Auditing of accounts
 - Asset management
 - Expenditure management
 - Accounting reforms
 - Budget reforms

The above measures require (i) Detailed Action Plan (ii) Timely Action (iii) Close Monitoring; and (iv) Commitment/Attitude

Revenue Improvement Action Plan (RIAP)

The following measures to improve revenue in various areas in the ULB and few general measures for overall revenue improvement are suggested.

House / Property Tax

House tax is a major source of revenue and the following plan of action is needed to generate revenue in this area:

- Detection of un-assessed and under-assessed properties and bring them to tax-net
- Since rate of tax on the basis of residential and non-residential properties is different, the properties need be classified correctly
- Since rental values are different among various categories of buildings, the classification on the nature of construction and use of building etc. should be thoroughly verified and classified

- Wherever age of the building is relevant for the purpose of assessment, correct age of the building should be ascertained.
- The revenue officials have to furnish the lists of new constructions and additional constructions for making assessments every month. If there are no new constructions or additional constructions, a nil report may be insisted.

Vacant Land Tax

Vacant land is assessed to tax to discourage the owners on speculating the land values and to encourage construction of houses. The revenue officials have to make a survey of vacant lands and bring all vacant lands to assessment.

Advertisement Tax

Advertisement tax has become a major source of revenue particularly in big towns and cities. The fast increase of business/commercial activities in towns and cities quite naturally leads to increasing advertising of their products. The increasing publicity and advertising are highly advantageous to the ULBs since it automatically increases income from the advertisement tax. All advertisements have to be surveyed and assessed to tax.

Water Charges

ULB should fix the user charges to be equivalent to the maintenance cost of the service. The charges collected from water should ensure that it meets the maintenance cost. The ULB has to examine this matter and take action to revise the water charges suitably.

Market Fees

In case the ULB desires to outsource the collection of fee in the markets/slaughter houses etc., it should conduct public auction of leasehold right to collect fees every year in the month of February/March, to enable to lessee to collect fee from the beginning of the year itself, i.e., April of every year. The ULB has to enter into agreement with the lessee and get it registered.

The ULB collects 3-months rent as deposit and it would be adjusted towards the lease amount of the last 3 months' kist, i.e. January - March of the year. The ULB has to collect monthly kist within the stipulated time, else insist on penal interest. If lease amount for one month falls into arrear, action has to be taken to cancel the lease and re-auction the leasehold right. The ULB should ensure that the lease amount should not fall in arrear under any circumstances and should always be in an advantageous position.

Rents on Shop Rooms

If ULB owns shop rooms/ buildings etc. and desires to let them out, it has to be done through public auction and the lease period should generally last for three/five years. There should be provision for renewal of lease at enhanced rent.

The ULB should collect 3 or 6 months' rent as deposit to be adjusted during the later part of lease period. Every month's rent has to be collected before a fixed date, else, penalty be insisted for belated payments. A lease deed has to be executed and registered. The ULB has to initiate action immediately, if one month's rent falls due and action taken for cancellation of lease and re-auction

of the shop room. The ULB should ensure that the lease amount should not fall in arrear under any circumstances and should always be in an advantageous position.

Trade Licence Fees

Licence fee for various trades is another important source of non-tax revenue to ULBs. If all trades are listed and licences granted duly collecting trade licence fee, it will fetch considerable income to the ULB. The licence fee should be regulated by the public health staff in ULBs.

In the first instance, all trades, for which licence is required as per law, have to be booked through door-to-door survey and listed. This is at the beginning of the year. Trades that have come up later have to be booked through monthly lists. This will considerably improve income to the ULB. Trade licence must be collected from all trades without leaving any trade unlicensed to avoid loss of revenue from this important source of revenue.

Building License Fees

There has been large scale migration to urban areas and this trend results in increasing construction activity. Building license fee is a major source of revenue in Town Planning section. The town planning officials should regularly watch the unauthorised constructions in the city and ensure no building is constructed without permission/license. If any unauthorised construction is noticed, action should be taken immediately either to demolish the construction or ensure issue of permission by collecting compounding fees.

Encroachment Fees

Encroachment fee fetches considerable income to ULBs, if properly monitored. Most of the municipal sites and road margins are encroached upon by business establishments. All such encroachments be booked at the beginning of the year through door-to-door survey and be classified as objectionable or unobjectionable. All objectionable encroachments should be removed and unobjectionable encroachments be allowed after collecting the prescribed fee. Encroachments that have come up during the course of year have to be booked through monthly lists.

Parking Fees

Fast growing cities can generate substantial revenue if parking places are provided, particularly in congested and busy commercial localities like main roads, bus stand area, market area etc. and collect fee there from. The ULB has to identify parking places, fix rate of fee and collect the fee through letting out as in the case of markets.

Service Charges on Central Government Properties

Under the Constitutional provisions, Central Government properties are exempt from payment of property tax. Government of India, however, permitted ULBs to levy service charges on Central Government properties. Levying service charge is limited to Central Government properties only. The central government undertakings are liable for property tax like any other person/institution.

In pursuance of the orders of the Supreme Court, Government of India (2009), have issued guidelines that the Union of India and its departments will pay service charges to the Municipalities

and Municipal Corporations. No property tax will be paid. Service charges will be paid on the basis of services utilized by the central government properties at the following rates:

75% of property tax	Where properties of the central government are provided with all services/facilities as were provided to other areas
50% of property tax	Where central government properties are provided with some of the services/facilities
33.3% of property tax	When properties do not avail any of the services provided by the municipalities

The Municipality has to take the following action in the matter.

- Intensive survey of various central government properties has to be undertaken and head of the office has to be identified. Various services utilized (fully, partially and none) by the central government properties should also be identified.
- The heads of central government properties in the city should be informed about the civic services provided by the Municipality in the vicinity of concerned central government properties and be requested to furnish full data regarding the properties to enable the Municipality to work out the service charges. After receipt of required data, the Municipality has to calculate the service charges payable at 75%, 50% or 33.3% of property tax according to the level of services provided to the central government properties.
- The Municipality has to issue a self contained (speaking) order to the head of central government property indicating the process followed in working out the service charges and the amount of service charges payable per annum.
- The Municipality has to enter into an agreement with the head of central government department for payment of service charge till the next general revision of property tax.
- The Municipality shall not resort to coercive steps like stoppage of service and not resort to revenue recovery proceedings for recovery of service charges

General Measures for Revenue Improvement

ULBs have to take certain immediate measures to improve municipal revenues. One of the reform measures under AMRUT under "Municipal tax and fees improvement" is atleast 90 coverage and 90% collection. To achieve the reform, the measures include

- Updating and computerisation of all tax records such as property tax, advertisement tax, market/shop rents, trade licence fee etc
- Focusing on all major tax payers and benchmarking
- Bringing all tax payers into the tax net and revise the tax periodically
- Assessing all unauthorised constructions to tax and impose penalty (if allowed)
- Plugging of leakages and evasion of tax payments through enhancing collection efficiency
- Instituting rewards for good performance and punishments for non-performance

Other Measures under the RIAP also cover the following:

- Capacity Building to officers concerned on assessment and recovery procedures
- Updating of demand registers (both current and arrear)

- Micro-analysis of arrears
- Intense review of collections
- Attempt to achieve collection of 100 per cent of taxes
- Sharing responsibility of collection work
- Clearing transfer of title applications
- Disposal of Revision/Compliant/Appeal Petitions
- Service of demand notices/bills
- Collection of taxes/dues through collection centres/ banks/online system
- Making use of recovery procedure permitted under the Act
- Institution of prosecutions/civil suits
- Informing the Council/Standing Committee/Tax Committee
- Take the assistance of Mayor/Chairperson/Councillors in collections
- Compromise/taking the assistance of Lok Adalat on pending civil suits

In addition to the above measures, the ULBs may also observe the following modern management practices to improve collection efficiency

- Establishing credibility
- Improving municipal performance
- Improving service delivery
- Responding public grievances
- Maintaining public relations
- Observing transparency, and
- Disseminating information.

Other Alternatives/Strategies

In addition to the improvement of existing resources, the ULBs may consider the following alternate sources of revenue like:

- Privatisation
- Public-Private Partnership (PPP)
- Market borrowings: Banks/Institutions, Municipal Bonds

Privatisation

At the municipal level, privatization may be considered for (i) entrusting the functions/ services like execution of municipal works, sanitation services and street lighting to private institutions for maintenance; (ii) entrusting regulatory functions like advertisements, collection of fees in markets and collection of parking fees; (iii) leasing out municipal assets like guest houses, function halls/kalyana mantapams and parks; and (iv) community contracting. In any case, the Ownership remains with Municipality.

Public-Private Partnership (PPP)

Unlike privatization, PPP applies to new ventures. In the earlier years, taking up high cost projects was governments' responsibility, since private sector could not raise high capital cost. Now, the situation has changed with liberalization, privatization and globalization (LPG). Private sector can generate any amount of capital and they go for construction of airports, roadways, bridges, power projects, water supply etc. Here, the Government would part with land/ asset based on the

arrangement/ mechanism and it would be the Government share. Liberalisation brought in foreign investment also.

Models of PPP

- BOT – Build, Own, Transfer
- BOO – Build, Own, Operate
- BOOT – Build, Own, Operate, Transfer
- BOLT – Build, Own, Lease, Transfer

Requirement for PPP

The agency going for PPP has to consider the pricing/cost recovery, commercial viability of the project, return on investment, competitive pricing, beneficiaries, concessions/cross subsidy/social pricing, willingness to pay, willingness to charge, better collection practices, better service delivery and most importantly, the political will.

Legislative Measures

Since PPP involve high capital investment, long term contractual obligation, various regulatory and legal issues, it should be supported by well laid out legal provisions. Some states like Gujarat and Andhra Pradesh have made separate law to undertake schemes under PPP model. If PPP has to be adopted in ULBs, Municipal laws to be amended to permit the PPP mechanism. Any case, there should be well laid out political will for its operation and success.

Market Borrowing

The next measure is borrowing from banking institutions and financial institutions like HUDCO, LIC, HDFC, IDBI and ICICI etc. In case, the ULB is the borrower, the lending institute insists Government guarantee.

Municipal Bonds

Another area of market borrowing is to raise municipal bonds. The ULB raises loan from market/public. The bonds may be general purpose bonds or specific purpose bonds. Govt. of India may also permit tax-free bonds. In this case, the period of tenure and rate of interest play a major factor. The municipal bonds can be raised with improved finances, working systems and legal and administrative measures. Finally, to raise municipal bonds, establishing the credibility of the municipality is the prime factor.

Credibility/Credit Rating

Municipal Credibility has to be established by RBI approved agencies like CRISIL (Credit Rating Information Services of India Limited) or ICRA (Investment Information and Credit Rating Agency). In India, this is not a popular model and very few ULBs have gone for municipal bonds.

4. Need, Rationale and Implementation of DEABAS

- S N Murthy and D V Rao

Municipal Accounting System

Traditionally, accounting of transactions in municipalities is being done on cash based system. Under this system, receipts and payments are recorded after they are actually received or paid out in cash. This is also called single entry system of accounting. At the end of the year, annual accounts are prepared. The process is simple. All receipts and payments are recorded in the cash book, they are classified into various heads of account in the ledger, classified statement of receipts and payments is prepared; and with the help of opening balance, net closing balance at the year-end is arrived. This closing balance becomes the opening balance for next year. *The municipal account therefore finally means a statement of receipts and payments of the year.* Nothing is mentioned about the financial performance or financial status of the municipality under this system. Andhra Pradesh is not an exception to this model and the municipal laws (municipalities act¹, corporations act² and accounting rules) provide that municipal accounts have to be prepared on cash based system.

No doubt, there are advantages in this system of accounting. It is simple and easy to maintain. After cash is received or paid out, an entry would be made in the cash book and the receipts and payments are classified under various heads of account and cash balance is worked out at the end of every month and finally the year. Another advantage is that the heads of account are similar for receipts as well as payments and they (heads of account – i.e., classification of transactions) have closer reference to functions, programmes and activities of municipality.

There are certain disadvantages as well in the system. The major disadvantage is that the accounts reflect the amounts received and not the receivables. Similarly, the amounts actually paid are reflected and the payables not reflected. Another feature is that the amounts received or paid may relate to the current year, or previous years or future years and actual performance of the current year not reflected. Above all, the accounts do not reflect assets and liabilities, i.e., balance sheet of the municipality.

Since money transactions are done in cash, the cash based accounting system became the logical and accepted system of municipal accounting. Simplicity is one of the main advantages of the system, and its continuance is also influenced by the legal and institutional arrangements. Further, the objective of the municipalities being service-oriented, nothing matters as to the financial performance, financial status, better utilization of resources and/or savings.

Changed Municipal Domain

Municipal functional domain is radically changing from infrastructure provision to regulatory and then commercialization. The 74th Constitution Amendment Act has enhanced the functional domain of municipalities, which even included preparation of plans for economic development and social justice. However, the financial powers have not been enlarged and they remained static. There is

¹ Andhra Pradesh Municipalities Act, 1965

² Greater Hyderabad Municipal Corporation Act, 1955

increased gap between functional responsibilities and available finances. The resources are statutorily restricted necessitating augmentation within existing sources. This process was exhaust and it becomes necessary to look for alternate sources like privatisation, PPP, or capital market. Heavy cost of infrastructure also made the municipality go for commercial borrowing/capital market. These alternate sources, to materialize, require credit rating and interest from potential investors. All these factors necessitate that the accounting system be converted to facilitate determination of financial performance as well as assessment of financial status of municipalities instead of just a statement of receipts and payments.

Accrual Based Accounting System

Determination of financial performance and assessment of financial status can be accomplished through accrual based accounting system. Accrual based accounting is a method of recording financial transactions based on accrual, i.e. on occurrence, in respect of incomes or expenses, assets or liabilities, of claims and obligations based on happening of an event, passage of time, rendering of service, fulfilment (partially or fully) of contract, diminution in value etc., even though actual receipt or payment of money may not take place. In this system, there is change in accounting of transactions and reporting of financial results, so as to provide the municipality with the financial reports, in the form of two important financial statements (i) Income and Expenditure Account to determine the financial performance, and (ii) Statement of Assets and Liabilities. I.e. Balance Sheet to assess the financial status of the municipality.

Accrual based accounting system carries certain benefits and they include

- Revenue is recognized as it is earned and 'income' constitutes both revenue received and receivable
- Expenditure is recognized as and when 'liability for payment' arises and thus it constitutes both the amount paid and payable
- Revenues which are not received and expenditure which is not paid are carried forward and kept under constant review
- Receivables and payables can be effectively followed up
- Distinct difference is maintained between items of ordinary nature and capital nature
- Transactions in respect of 'income' and 'expenditure' relate to the year of accounting; and of other years are suitably segregated
- Presents true picture of financial position and helps in better financial management
- Facilitates credit rating organizations to appraise the financial position of municipality

Further, accrual system has to be recorded through double entry system. In a double entry system of accounting, each transaction consists of two elements, a debit and a credit. Debit must always equal credit because debit equals credits, it prevents arithmetical inaccuracies.

Accrual based double entry accounting is not an invention. It is very well in use in the country. All commercial establishments, big or small adopt this system and arrive at loss or profit account as well as balance sheet at the year end. Since municipalities are not commercial-oriented, they do not adopt the system, but now they felt its need. Apart from the felt need at municipal level, Government also desired to implement accounting and finance reforms in the urban sector as governance reform agenda.

Let us now see how Government intervened in the municipal accounting reform.

Supreme Court Directive

In the year 2001, in response to a writ petition before it, a Bench of the Hon'ble Supreme Court of India ordered that the Municipal Corporation of Delhi and the New Delhi Municipal Council would be required to maintain accounts as per the mercantile system of accounting. The Hon'ble Supreme Court has also directed that the Urban Local Bodies (ULBs) in India should take immediate steps to get their accounts converted from cash basis to accrual basis.

Eleventh Finance Commission

Government of India (GOI), based on the recommendations of the 11th Finance Commission, issued guidelines during 2002 to the Comptroller and Auditor General (C&AG), to prescribe formats of Budget and Accounts for Panchayat Raj Institutions (PRIs) and Urban Local Bodies (ULBs) amenable to computers. Accordingly, a Task Force was constituted by C&AG in February 2002 under the Chairmanship of Deputy Comptroller & Auditor General and members representing Ministry of Urban Development (MoUD), GoI, State Governments and Municipal Corporations. In April 2003, GoI had accepted the Task Force Report and forwarded the same to the State Governments for implementation.

National Municipal Accounts Manual (NMAM)

The MoUD, GoI reviewed the progress made by the States on the Task Force Report in September 2003. During the review, it was agreed that instead of various formats, the CAG may as well prepare National Municipal Accounts Manual with the support of USAID - FIRE (D) programme. It was also agreed that NMAM would be provided to the State Governments based on which, States would develop State Municipal Accounting Manuals according to their specific requirements. It was also suggested that NMAM should provide preparation of municipal accounts on accrual based system. Accordingly, CAG has developed National Municipal Accounts Manual (NMAM) and it was made available to all States in December 2004 for development of state specific Budget and Accounts Manuals conforming the provisions of NMAM to be used by the ULBs.

Andhra Pradesh and Reform Agenda

Like many other ULBs in the country, ULBs in Andhra Pradesh (AP) have been following single entry cash based system of accounting. In early 2000s, Govt. of Andhra Pradesh (GoAP) was contemplating governance reforms as a general policy. It has decided to introduce the reforms in budgeting and accounting in all ULBs and issued an order³ which reads that "the Urban Local Bodies/Corporations adopt with immediate effect the accrual based accounting system within their jurisdiction".

The Municipal Corporation of Hyderabad (MCH) desired to go for municipal bonds and get credit rating. Even though the Act does not permit, the MCH, on the basis of executive orders of Government introduced modified accrual based double entry system of accounting from the financial year 2002-03. The system is still continuing.

³ GO Ms. No.233 MA dated 22-5-2002 (AP Municipal Accounts Manual – www.cgg.gov.in)

Centre for Good Governance, Hyderabad

In this connection, it is necessary to know about Centre for Good Governance (CGG) at Hyderabad. The Centre for Good Governance (CGG), Hyderabad was established by the Govt. of Andhra Pradesh (GoAP) in October, 2001 to help it achieve the goal of Transforming Governance. CGG coordinates and supports the design and implementation of GoAP's Governance Reform Programme. CGG undertakes action research, provides professional advice to, and conducts change management programmes for government departments and agencies to help them implement their reform agenda successfully. CGG works closely with policy-makers like Ministers, senior officials, management experts, institutions and prominent citizens towards ushering in a caring government centred on the people.

The key objectives of CGG is to work with government departments and other stakeholders to analyze key issues in governance, identify solutions, help develop action plans, and support implementation of these plans and the reform agenda.

The Focus areas on which the CGG is concentrating under its current plan of activities include (i) Simplifying Government, i.e. to assist government departments in improving the quality of services and value for money to citizens by simplifying the process of service delivery, reducing administrative and non-productive expenditure and using e-governance tools; and (ii) e-Governance, i.e., to apply tools of information technology to simplify cumbersome processes and procedures of government departments and agencies and to reduce the interface of the public with government officials and to provide domain support covering functions, functionaries, finances and fields for development of meaningful e-applications and to link information systems across departments for improving the efficiency of the government machinery as a whole.

Andhra Pradesh Municipal Accounts Manual (APMAM)

With reform agenda in mind and availability of an institution to support in implementing the reform, GoAP requested the Centre for Good Governance (CGG), Hyderabad in 2005 to prepare state specific accounts and budget manuals keeping the NMAM guidelines in view. Accordingly, CGG with its available expertise developed the Andhra Pradesh Municipal Accounts Manual (APMAM), the AP Budget Manual, the AP Audit Manual and AP Asset Management Manual. The manuals were approved by GoAP⁴ and were published and made available to all ULBs.

Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

In the year 2005-06, Govt. of India has launched JNNURM, a major initiative in the urban sector and the goals are (a) to improve the existing services in a financially sustainable manner and (b) to ensure improvement in urban governance and service delivery. The scheme is extended initially to 3 cities in AP and they are (i) Hyderabad, (ii) Visakhapatnam and (iii) Vijayawada; and later to one more city, i.e., (iv) Tirupati. As a measure of improved governance, JNNURM⁵ proposed 7 mandatory reforms at the level of States and 6 mandatory reforms at the level of ULBs and parastatal agencies. One of the mandatory reforms at ULB level is "adoption of modern, accrual-based double entry system of accounting in ULBs and parastatals". Since Hyderabad has already

⁴ G.O. Ms. No. 619 MA dated 21-8-2007 (AP Municipal Accounts Manual – www.cgg.gov.in)

⁵ JNNURM guidelines (www.jnnurm.nic.in)

introduced accrual based accounting from 2002-03, Visakhapatnam and Vijayawada have introduced accrual based accounting in their respective ULBs with effect from 2007-08 and complied with the mandatory reform to access funds from JNNURM. CGG provided domain support to the two municipal corporations including training the employees.

APUSP – Municipal Reforms

Incidentally, in Andhra Pradesh, DFID funded Andhra Pradesh Urban Services for Poor (APUSP) programme aimed at reducing urban poverty was in operation since the year 2000-01. Besides infrastructure improvement of urban slum areas, the scheme provided reform component which included various institutional reforms. Under this component, the APUSP⁶ proposed to implement accounting reform, ie converting municipal accounting system from cash basis to accrual basis. With the domain support of CGG, the accrual based accounting was launched in 34 project towns during the year 2008-09 and they were in different stages of implementation. The project was closed later and the programme did not continue.

Municipal e-Governance

The municipal accounting reform is two-fold, (a) migration from cash based system to accrual based system (knowledge based) and (b) manual accounting to computer accounting (skill based) in view of emerging technology. Besides domain knowledge, CGG had expertise in developing e-tools for government departments. GoAP therefore requested CGG to develop accounting software, which complies with NMAM guidelines. Accordingly, CGG developed 'Municipal eGovernance'. It is a web based comprehensive software covering

- i. Accounting
- ii. Budgeting
- iii. Payroll and
- iv. Fixed Assets.

The accounting software has been developed on the lines of NMAM and is simple in operation. Any municipal employee who has exposure to computer can enter various transactions in the system and the employee need not have any knowledge of double entry accounting or accrual based accounting. With very little training, the system can be operated and the ULB can generate the financial statements at the end of the year.

Training in Accrual Based Accounting

CGG has also developed training module under accrual based accounting system and supported the Government in training municipal employees of various levels and backgrounds. Various modules have been developed and they include

- i. sensitization workshop to elected representatives (chairpersons and councillors) and senior level municipal officers
- ii. training to middle level functionaries and
- iii. hands-on-training to the accounting functionaries.

⁶ Evaluation of DFID support to Andhra Pradesh – Lessons learnt from municipal service delivery – www.cgg.gov.in

CGG has delivered training not only in its headquarters at Hyderabad, but also in various municipal offices across the state. More than 1,600 persons of various levels have been trained under this programme by CGG. In addition, Dr. MCR HRD Institute of Andhra Pradesh and Regional Centre for Urban & Environmental Studies, Osmania University have also providing training to the municipal functionaries on accounts, audit and finance management.

Thirteenth Finance Commission – General Performance Grant

The Thirteenth Finance Commission⁷, among others, was required to make recommendations (with reference to local bodies) on “the measures needed to augment the Consolidated Fund of a State to supplement the resources of the Panchayats and Municipalities in the State on the basis of recommendations made by the Finance Commissions of the State”.

The Finance Commission has considered the issue at length and recommended Rs.15,098 crores as General Basic Grant and Rs.7,983 crores as General Performance Grant to ULBs. While the General Basic Grant is proposed on certain weightage points on criteria like population, area, index of devolution and FC grants utilization index etc., the General Performance Grant is based on certain incentive framework. Nine conditions were stipulated by the Finance Commission to access General Performance Grant and one of the conditions is “that the ULBs to maintain accounts consistent with accounting formats and codification as per NMAM”.

The XIII FC also recommended that State Governments should appropriately strengthen their local fund audit departments through capacity building as well as personnel augmentation. It is thus evident that XIII Finance Commission has envisioned a comprehensive Accounting and Auditing reform, and not just the accounting aspect of the reform.

Andhra Pradesh’s Initiative

In the background for need for accounting reforms in the municipalities and the Central Government’s intervention, the GoAP⁸ has positively reacted to the issue and ordered that accrual based accounting system be implemented in all ULBs of the State with effect from 1-4-2011 and set up a live real time web based online accounting system in the ULBs. It was also ordered that the accounting be carried out from 2009-10 (backlog operations) using CGG software.

Though the new accounting system is in implementation in certain ULBs like Hyderabad, Vijayawada and Visakhapatnam (JNNURM mandate), and had been piloted in a few ULBs (APUSP initiative), a policy decision has been taken by GoAP to introduce the new system earnestly in all ULBs of the State. Another important part of the decision is to introduce the accounting software developed by CGG. It was decided by the Government that ULBs would start the data entry into CGG software from day one of the reform implementation. A group of Chartered Accountant firms have been identified to support various ULBs in the implementation programme.

⁷ www.fincomindia.nic.in

⁸ GO Rt. No. 287 MA dated 21-2-2011 (www.aponline.gov.in)

Andhra Pradesh Municipal Asset Valuation Methodology Manual

To migrate from cash based accounting to accrual based accounting, preparation of opening balance of the institution with details of all assets and its value and all outstanding liabilities is a must. Since the municipalities are opting to this exercise for the first time, it is felt necessary that there should be a comprehensive guidelines/manual for asset valuation and consequent preparation of opening balance sheet. On the lines of model national manual, CGG developed Andhra Pradesh Municipal Asset Valuation Methodology Manual and it was approved by Govt. of Andhra Pradesh⁹. The manual was published and made available to all municipalities.

Operating and Monitoring of Accounting Reforms

Detailed instructions were issued by Govt. of Andhra Pradesh¹⁰ for operating and monitoring the accounting reforms. The ULBs have been grouped on the basis of population and Chartered Accountant Firms have been positioned at the ULBs through bidding process for each of the groups and Regional CA firms would assist the ULBs in rolling out the accrual based accounting system. The software developed by CGG would be used for the purpose. The Director of Municipal Administration and the Director of State Audit are monitoring the implementation of the reform.

In order to sustain the accounting and auditing reforms, Government constituted

- (i) Municipal Accounts & Audit Reforms Cell (MAARC) and
- (ii) Municipal Accounts & Audit Coordination Committee (MAACC).

MAARC - The nature of work of the MAARC cell consists

- Audit the accounting deliverables submitted by the RCA firms and recommend necessary releases
- Monitoring and evaluation of the accounting reform in AP, during the XIII FC Period (F.Y.2010-15)
- Co-ordination of Training and Capacity Building (accounting and auditing) and other institutional arrangements for ensuring the taking up of a full scale audit of the accounts of the ULBs prepared under the new system
- Reporting to Government, and suggesting mechanisms to ensure the continuity of the accounting reform

The MAARC cell is initially in place during the XIII Finance Commission period.

MAACC - The Committee functions under the chairmanship of Director of Municipal Administration and consists officers of Director of Municipal Administration, Director of State Audit, representative of Finance Department of Government, Andhra Pradesh Urban Finance and Infrastructure Development Corporation (APUFIDC) and CGG as members. The Committee will review

- Progress of accounts and audit of ULBs
- Functioning of MAARC cell including issue of guidelines necessary for the cell

⁹ GO Ms. No.217 MA dated 18-5-2010 (www.aponline.gov.in)

¹⁰ GO Ms. No, 270 MA dated 15-7-2011(www.aponline.gov.in)

- Consider and augment the support and technical staff in the cell
- Strengthening and institutionalization of process initiated in this front and of all accounting & auditing reforms taken up in AP

The MAACC committee is regularly meeting and it is reported that all municipalities have completed preparation of financial statements under accrual system for the years starting from 2009-10 to 2015-16.

The accounts upto 2014-15 have also been audited and the audit of accounts for 2015-16 is in progress. As regards the current financial year, data is being entered on day to day basis.

Municipal Accounts Service

In Andhra Pradesh, there is an organized municipal cadre/service which includes the posts of accountants, who are responsible to maintain municipal accounts and prepare annual accounts of the municipality. The municipal service which includes the posts of accountants however, also covers the posts of managers and revenue officers. Even though all the posts theoretically stand on similar status, people were opting the posts of managers and revenue officers. It was therefore decided to constitute an exclusive municipal accounts service consisting accounts personnel only. This enables expertise in the accounts department and exclusiveness and continuity of knowledge and skills. Accordingly, Municipal Accounts Service¹¹ was constituted and the service covered the posts of (i) Accounts Officer (ii) Junior Accounts Officer, (iii) Senior Accountant and (iv) Junior Accountant. Detailed service rules¹² containing the method of recruitment, qualifications, conditions of service and control etc. were also issued. Some of the salient features of service rules are

- To make the service more accounts-focused, commerce graduation has been made the education qualification for the posts
- To attract more qualified and competent persons, 50% of the posts have been proposed to be filled by direct recruitment through Andhra Pradesh Public Service Commission
- Induction training for a period of four months on accounts including budget, audit and IT applications in accounting has been proposed
- Periodic orientation has been proposed

Around 280 officials have been recruited during 2013 through AP Public Service Commission and have been posted to different ULBs. As detailed in the service rules, induction training was given by CGG to all the accounts personnel.

During the training they have been taught about municipal administration, basics of accounting, accrual accounting, accounts preparation through software, hands on practice with illustrative examples and so on.

The dedicated helpdesk available at CGG has provided the handhold support during the initial days of their working in ULBs. This helpdesk is still continuing and provides support to all ULBs with regards accounting related issues, software entry related queries, accounts finalization etc.

¹¹ GO Ms.No.587 MA dated 31-12-2011 (www.aponline.gov.in)

¹² GO Ms. No.588 MA dated 31-12-2011 (www.aponline.gov.in)

Simultaneously the C&DMA has also taken steps to ensure closure of earlier financial year accounts and updation of current year accounts by way of:

- Refresher training
- Constitution of team with staff from C&DMA office & State Audit Department who shall visit ULBs at random and inspect records
- Conduct monthly meeting of accounts personnel in C&DMA office and resolving the issues reported
- Follow up on status of previous years accounts audit

Legal Framework

As detailed in the earlier paragraphs, the municipal legislations governing municipalities and municipal corporations provide that municipal accounts have to be prepared on cash basis of accounting and the annual accounts should contain the statement of yearly receipts and payments and cash balance at the end of the year.

Unless the acts are amended to provide preparation of accounts on accrual basis, any amount of government directions do not stand to legal scrutiny. In Andhra Pradesh, municipal acts governing the municipalities and municipal corporations have been amended recently¹³ providing preparation of annual accounts with income and expenditure account and assets and liabilities statement. For the sake of information, the text of the amended provision of the municipalities act¹⁴ reads as follows.

- “(1) The Commissioner shall prepare annual accounts in such form with such information, as may be prescribed. In particular, the annual account comprises the financial statements consisting of income and expenditure, assets and liabilities and receipts and payments
- (2) The annual accounts shall be prepared within such time as may be prescribed and be placed before the Council for approval
- (3) On approval by the Council, the annual accounts shall be forwarded to the auditor appointed by the Government for audit.”

Similarly, the text of municipal corporation act¹⁵ reads as follows:

“Subject to the provisions of this Act, accounts of income and expenditure, assets and liabilities and receipts and payments of the Corporation shall be kept in such manner and in such form as may be prescribed”

In the government scheme of things, the law passed by the Legislature does not cover all aspects and role of subordinate legislation, i.e, issue of rules by the Executive, i.e., Government is necessary. In this case also, the detailed accounting rules should be issued.

The rules have been prepared by CGG and draft has been submitted to government for approval.

¹³ Act No.22 of 2011

¹⁴ Section 127A of AP Municipalities Act, 1965

¹⁵ Section 179 of Greater Hyderabad Municipal Corporation Act, 1955

5. Implementing Municipal Accounting

- S N Murthy

Chapter 1

Introduction

What is accounting

An organization undertakes number of transactions, both monetary and non-monetary, depending upon the size and nature of its functions. All monetary transactions have an impact on the financial position of the organization. For example, when an organization receives funds, the receipt of amount increases the funds position of the organization. Similarly, if the organization makes a payment, the funds of the organization reduce.

In its normal course of functioning, an organization makes number of monetary transactions and it is humanly impossible to remember all these transactions in every respect. It is, therefore, necessary that the transactions are recorded in a detailed and systematic manner for reference. This recording and analysis of transactions is called accounting. While book keeping is used synonymously with accounting, these two are different in their approaches as explained below.

Difference between Book-keeping and Accounting

Book-Keeping

Book-keeping tells us how to keep a record of business transactions. It is often routine and clerical in nature. It is important to note that only those transactions related to organization which can be expressed in terms of money are recorded. The activities of book-keeping include recording in the journal, posting to the ledger and balancing of accounts.

Accounting

When one has to make a judgment regarding the financial position of the organization, the information contained in these books of accounts has to be analyzed and interpreted. It is with the purpose of giving such information that accounting came into being. Accounting is a system which collects and processes financial information of an organization. This information is reported to the users to enable them to make appropriate decisions.

Accounting Systems

There are two systems of accounting in practice

Single Entry System

Single entry system of accounting is defined as a method in which transactions are recorded on a single entry basis. Only a single line is entered in the book for each transaction. Each transaction is recorded in one column of an account as either a positive or a negative amount in order to represent the receipt or payment.

Double Entry System

Every transaction, when closely analyzed, reveals two aspects – the debit and the credit aspect. While debit aspect pertains to ‘receiving’, ‘incoming’ and ‘expenses/losses’ credit aspect pertains to ‘giving’, ‘outgoing’ and ‘incomes/gains’. Depending upon the type of account, discussed next, the accounts are either debited or credited.

These two viz ‘Debit’ and ‘Credit’ form the basis for Double Entry System. The basic principle of this system is that, for every debit, there must be a corresponding credit of equal amount and for every credit there must be a corresponding debit of equal amount. In fact, the double entry system is so named since it records both the aspects of a transaction

Method of Accounting

Method of Accounting is also two types

Cash based accounting system

A transaction is recorded only when actual cash has been received or spent. Thus, it can be said that only the movement of cash can constitute a transaction. Under this basis of accounting, funds are recognized as receipts for the period if these are actually received within the period. Similarly, expenses actually paid are recognized as expenses for the period.

Accrual Based accounting System

In accrual based accounting system, revenues and related assets are recognized when earned rather than when received, while expenses are recognized when incurred rather than when paid. There is recognition of receivables and payables built up within a specific period. At the end of the year, two financial statements are drawn, income and expenditure statement showing the financial performance and assets and liabilities statement (Balance sheet) indicating the financial status of the organization.

Accounting Concepts

Entity: Business is treated as a unit or entity apart from its owners, creditors and others. In other words, the proprietor of a business concern is always considered to be separate and distinct from the business which he controls. All the business transactions are recorded in the books of accounts from the view point of the business. Even the proprietor is treated as a creditor to the extent of his capital.

Continuity: the business will exist for a long period and transactions are recorded from this point of view. There is neither the intention nor the necessity to wind up the business in the foreseeable future.

Money Measurement: in accounting, all transactions are expressed in terms of money, i.e., money is considered the common unit of measurement.

Time Period: An essential function of accounting is to provide information for decision making. To accomplish this, it is necessary to establish accounting periods, or systematic time intervals, so that timely accounting data can be developed.

Historical cost: the properties and services acquired by an enterprise are generally recorded at cost (the cash or its equivalent given to acquire the property or service). The cost is spread over the accounting periods that benefit from the expenditure.

Objectivity: Accounting entries should be based on objective evidence to the fullest extent possible.

Consistency: A standard method of treatments from one year to the next is necessary if periodic financial statements are to be compared with one another. Where a different method will state result and financial position more fairly, the change may be made if the effect on the statements is clearly disclosed.

Dual Aspect Concept: Dual aspect principle is the basis for Double Entry System of book-keeping. All business transactions recorded in accounts have two aspects - receiving benefit and giving benefit. For example, when a business acquires an asset (receiving of benefit) it must pay cash (giving of benefit).

Full Disclosure Concept

Accounting statements should disclose fully and completely all the significant information. Based on this, decisions can be taken by various interested parties. It involves proper classification and explanations of accounting information which are published in the financial statements.

Chapter 2

Introduction to Accrual Based Double Entry System of Accounting in ULBs

Accounting is an art of recording, classifying and summarizing in significant manner and in terms of money transactions and events which are, in part at least, of a financial character and interpreting the results thereof.

Accounting is the principle technical process through which the spending allowed in a Municipal Budget is recorded and controlled. A good accounting system can provide confidence the Municipal resources are being used properly and assure the public that the funds have been spent in keeping with adopted budgets, with no misuse of public funds.

The chapter gives a bird's eye view of the types of accounting system, the current accounting system at the ULB and the basic principles.

Current System of Accounting

The accounts of the ULB have traditionally been maintained on cash based single entry of accounting. Some of the major implications have been

- Full picture of Assets & Liabilities are readily 'not available; in one statement
- Inadequate managerial attention e.g. on speedier collection of receivables due to lack of information or delayed information
- Inadequate cash management (several in operative bank accounts)
- Expenses not matched with revenues of the period making determination of surplus/deficit for the period a difficult task

- Certain capital expenditures treated as revenue items e.g. roads, bridges, drainage etc.
- Did not present a “proper” picture of the financial health of the ULB.
- Inadequate managerial attention e.g. on movement of payables/liabilities
- Inadequate information on “to what extent, the assets of the ULB have been used up”

In view of above, Government of India has taken a decision to introduce accrual-based double entry accounting system in ULBs in consonance with the current national policy of introducing this system in the local bodies.

Providing quality of urban services and governance essentially require effective decision making by urban managers. One of the main obstacles is that the urban manager’s face today is lack of accounting data for judicious decision-making. Only with the current information, the following critical questions which are fundamental to municipal financial management cannot be answered.

- i. What do municipal services actually cost?
- ii. Are the revenues sufficient to cover the cost of operating public service?
- iii. How can services be improved without raising taxes and charges?
- iv. Are assets being utilized efficiently?

This shall eventually lead to efficient use of municipal resources, benchmarking for comparison and evaluation of efficiency in civic services as well as better cost recovery of municipal services.

Accounting reforms have also become necessary due to the ongoing reform process initiated by the 74th Constitutional Amendment, the Finance Commissions and also under JNNURM Thus there is a need for the ULBs to move from the existing cash based single entry of accounting to accrual based double entry accounting system. In view of increased workload and availability of technology, it also becomes necessary to shift from current manual system of accounts preparation to computer system.

Benefits of Accrual Based Double Entry Accounting System

- Revenue is recognised as it is earned and thus “Income” constitutes both revenue received and receivable. The accrual basis not only records the actual income but also highlights the level and efficacy of revenue collection, thereby assisting decision makers in taking financial decisions.
- Expenditure is recognised as and when the liability for payment arises and thus it constitutes both amounts paid and payable. In accrual basis of accounting, expenditure incurred on repairs and maintenance shall be recognised as expense of the period in which they are incurred and, if not paid for during the year, shall be treated as a liability (payable) and be disclosed as such in the Balance Sheet.
- Expenses are matched with the income earned in that year. Thus, it provides a very effective basis to understand the true performance of the organisation for the operations that is conducted in that year.

- A distinct difference is maintained between items of revenue nature and capital nature. This helps in proper presentation of financial statements, viz., the Income and Expenditure Statement and the Balance Sheet.
- Costs which are not charged to Income & Expenditure Account are carried forward and kept under continuous review. Any cost that appears to have lost its utility or its power to generate future revenue is written-off.
- The surplus or deficit as shown at the year-end represents the true financial performance of the organisation arising out of the various transactions during that year.
- The “full” cost of servicing is captured and thus helps in identifying financial viability of rendering services.
- Timely and right quality information for planning, decision-making and control at each level of management is made possible.
- Effective follow-up of receivables by the municipal body and proper ascertainment of payables by the municipal body is enabled.
- A true picture of the financial position of an organisation can be presented and that helps in better financial management.
- One of the distinct advantages of adopting accrual accounting system is ease in financial appraisals by financial institutions. It also facilitates credit rating through approved Credit Rating Agencies, which is a pre-requisite for mobilising funds in the financial markets through debt instruments.
- Better management of liabilities, which can further help in better planning for future years.

Chapter 3

Overview of Accounting



Understanding the Accounting Process

Step -1	A transaction arises when the organization either receives money or makes a payment. The first stage of accounting is the preparation of the voucher that documents the transaction
Step -2.	The next stage of accounting is to identify and classify the accounts that need

	to debited and the accounts to be credited in the transaction.
Step -3	Record the transaction in the cash book or journal proper as the case maybe under the appropriate account head. Cash book contains the transactions that involve all cash and bank transactions. Transactions that do not involve any cash/bank are recorded in the journal proper.
Step -4	Transactions noted in the cash book or journal proper are then posted in the ledger. A ledger is opened for each account and the transactions are posted in the ledger
Step -5	The next stage of accounting is the balancing of the accounts
Step -6	At the end of the accounting period, the balances from the ledgers are taken to prepare the trial balance. A trial balance is the first step for the preparation of the final statements. All the credits balances from the accounts are recorded in the right column and all debit balances are recorded in the left column. Both columns of the trial balance should tally. Any discrepancy shows that there is some error or omission in the accounting of the transactions.
Step 7	The final step in the accounting process is the preparation of the financial statements. On the basis of the trail balance, the income and expenditure account and balance sheet is prepared.

STEP -1: PREPARATION OF VOUCHER

Accounting process starts with identifying the transactions to be recorded in the books of accounts. Accounting recognizes only those transaction and events which involve money. In the Accounting process, the first step is the recording of transaction in the books of accounts. The origin of a transaction is derived from the source document.

To learn how to prepare voucher it is necessary to first understand the concept of “Source Document”. While voucher is the documentary evidence of the transaction taking place, the source documents are primaface evidence of the transaction.

Source Documents

Source documents are the primary documentary evidence of the transaction taking place. They provide information about the nature of the transaction, the date, the amount and the parties involved in it. For example, an ULB procures goods from a supplier and makes payment to them. Along with the goods the supplier prepares the bill or invoice that contains all the details of the transaction namely, the particulars of items procured the amount, name and addresses of the buyer and seller. The bill is the source document that establishes the occurrence of the transaction taking place. The following are the most common source documents.

- Cash Memo
- Invoice or Bill
- Pay-in-slip
- Cheque

Voucher

It is a written document that “vouches” the occurrence of a transaction. Vouchers should be pre-printed and should be sequentially numbered as an internal control measure. The accountant prepares the voucher which is then counter signed by an authorized person of the organization.

It is necessary that vouchers are filed according to their serial numbers so that the auditors may easily verify them as these vouchers are documentary evidence of the transaction taking place. Vouchers should be supported by bills/claims, proceedings and other relevant papers. A voucher is not complete until all the requisite support documents are attached.

Characteristics of voucher

Vouchers are serially numbered and the numbering begins a fresh from the beginning of every financial year. Each type of voucher will have a unique series of numbers prefixed by words/letters representing the type of transaction (Receipt, Payment, Journal or Contra). In case of bank vouchers (receipts or payments), the bank name is prefixed to the numerical serial number for each bank separately.

Types of vouchers

There are four types of Vouchers.

- Receipt Voucher
- Payment Voucher
- Contra Voucher
- Journal Voucher

Receipt Voucher

When an ULB receives money from citizens, government and other agencies, a receipt voucher is prepared that contains the details of transaction - from whom the money has been received, how much has been received and what has been the mode of receiving the money etc.

Payment Voucher

Whenever an ULB makes a payment to an external party, a payment voucher is prepared that contains all the details of the amount being paid, to whom the amount is being paid and the mode of payment.

Contra Entry/Contra Voucher

Contra entries mean transactions relating to cash deposits into bank account, cash withdrawals from bank account and transfer of funds from one bank account to another bank account under the same fund. Contra entries have to be entered in the respective heads of account in which a transaction takes place.

Journal Voucher

Wherever a non-cash or non-bank transaction is involved, it would be represented by a journal entry through a Journal Voucher. Generally, adjustment of advances, year-end adjustments and entry of opening balances take place through Journal Vouchers. The journal entry can also be resorted to

rectify errors or omissions. Whenever journal entries are made, there would be both receipt/debit entry and payment/credit entry.

STEP -2: ANALYSIS OF TRANSACTION AND CLASSIFICATION OF ACCOUNTS

One of the most important aspects of the accounting is the identification of the rules of debit and credit. Based on the transaction, the accounts that need to be debited and accounts that need to be credited are identified and the rules of accounting applied to them. This process of identification of accounts and application of rules of debit and credit is called as classification of accounts.

Transaction

Transactions involve transfer of money or goods or services between two persons or two accounts. For example, purchase of stationery, borrowing from banks, honorarium paid and interest received from bank, etc. Transactions are of two types, namely, cash and credit transaction. Cash Transaction is one where cash receipt or payment is involved in the transaction. For example, when Mr X buys stationary from Mr. Z paying the price immediately by cash, it is a cash transaction.

Credit Transaction is one where cash is not involved immediately but would be paid or received later. In the above example, if Mr. X does not pay cash immediately but promises to pay later, it is a credit transaction.

Classification of Accounts

To understand the concept of classification of accounts, we need to understand the types of transactions that take place and that need to be recorded. Transactions can be divided into three categories.

- i. Transactions relating to individuals and firms
- ii. Transactions relating to properties, goods or cash
- iii. Transactions relating to expenses or losses and incomes or gains

Based on the types of transactions, accounts are classified into Personal, Real and Nominal.

a. Personal Accounts: The accounts which relate to persons. These accounts record the transactions that any individual or representative persons will undertake.

Personal accounts include the following.

Natural Persons: Accounts which relate to individuals. For example, Mr. Gopal A/c, Ms Saritha A/c etc.

Artificial persons: Accounts which relate to a group of persons or firms or institutions. For example, Fund received from M/s X Association A/c, APSACS A/c, MEDVAN A/c, State Bank of India A/c etc

Representative Persons: Accounts which represent a particular person or group of persons. For example, outstanding salary account, prepaid rent account, etc.

The proprietor being an individual his capital account and his drawings account are also personal accounts.

b. Impersonal Accounts: All those accounts which are not personal accounts. This is further divided into two types viz. Real and Nominal accounts.

Real Accounts: Accounts relating to properties and assets which are owned by the organization. Real accounts include tangible and intangible accounts. For example, Computers A/c, Furniture A/c, Electronic equipments A/c etc.

Nominal Accounts: These accounts do not have any existence, form or shape. They relate to incomes and expenses and gains and losses of an organization. For example, Accommodation Charges A/c, Honorarium A/c, Rent A/c, Hire charges A/c, XeroxCharges A/c, Stationery Charges A/c etc.

Rules of Accounting

Name of Account	Debit Aspect	Credit Aspect
Personal	The receiver	The giver
Real	What comes in	What goes out
Nominal	All expenses and losses	All incomes and gains

Step – 3: PREPARATION OF CASH BOOK AND JOURNAL PROPER

The books into which transactions are first entered from the source documents are called as books of original entry or prime entry. Journal and cash books are books of original entry in which transactions are originally recorded as soon as they occur. While all cash and bank transactions are entered in the cash book, all those non-cash and non-bank transactions are entered in the journal.

Cash Book

A cash book is a special journal which is used to record all cash and bank transactions. As can be seen in the format given below, the cash book contains cash and bank columns both on the receipts and payments side to record the bank transactions.

The cash book is also a ledger in the sense that it is designed in the form of a cash account and records cash receipts on the debit side and cash payments on the credit side. Thus, **the cash book is both a journal and a ledger.**

Cash Book

Date	Receipts	LF	Cash	Bank	Date	Payments	LF	Cash	Bank

Journal

Journal is a date-wise record of all the transactions with details of the accounts debited and credited and the amount of each transaction.

Format for Journal

Date	Particulars	LF	Debit	Credit

Format for Ledger

Dr		Name of the Account				Cr	
Date	Particulars	J.F	Amount	Date	Particulars	J.F	Amount

Posting

The process of transferring the entries recorded in the journal or cash books to the respective accounts opened in the ledger is called Posting. In other words, “posting” means grouping of all the transactions relating to a particular account. Posting helps in evaluating the net effect of various transactions during a given period on a particular account.

Step -5: BALANCING OF ACCOUNTS

While the ledger accumulates all the transactions that occurs in an account during the period of time, to know the overall balance of the account, it is necessary that the debit and credit balances of the account are calculated. This is called as balancing of accounts. Balancing gives the accurate position of an account at any given point of time.

Balancing of Accounts

Balance is the difference between the total debits and the total credits of an account. When posting is done, there would be debit entries as well as credit entries for an account. The net result of such debits and credits in an account is the balance.

Balancing means the writing of the difference between the amount columns of the two sides in the lighter (smaller total) side, so that the grand totals of the two sides become equal.

Significance of balancing

There are three possibilities while balancing an account during a given period. It may be a debit balance or a credit balance or a nil balance depending upon the debit total and the credit total.

i. Debit Balance: The excess of debit total over the credit total is called the debit balance. When there are only debit entries in an account, the amount itself is the balance of that account, i.e., the debit balance. It is first recorded on the credit side, above the total. Then it is entered on the debit side, below the total, as the first item for the next period.

ii. Credit Balance: The excess of credit total over the debit total is called the credit balance. When there are only credit entries in an account, the amount itself is the balance of that account i.e., the

credit balance. It is first written on the debit side, just above the total. Then it is recorded on the credit side, below the total, as the first item for the next period.

iii. Nil Balance: When the total of debits and credits are equal, it is closed by merely writing the total on both the sides. It indicates the equality of benefits received and given by that account.

Balancing of different accounts

Balancing is done periodically, i.e., weekly, monthly, quarterly, half yearly or yearly, depending on the requirements.

1. Personal Accounts: These accounts are generally balanced regularly to know the amounts due to the persons (creditors) or due from the persons (debtors).

2. Real Accounts: These accounts are generally balanced at the end of the financial year, when final accounts are being prepared. However, cash account is frequently balanced to know the cash on hand. A debit balance in an asset account indicates the value of the asset owned by the business. Assets accounts always show debit balances.

3. Nominal Accounts: These accounts are in fact, not to be balanced as they are to be closed by transfer to final accounts. A debit balance in a nominal account indicates that it is an expense or loss. A credit balance in a nominal account indicates that it is an income or gain.

Note: All such balances in personal and real accounts are shown in the Balance Sheet and the balances in nominal accounts are taken to the Profit and Loss Account.

Step -6: TRIAL BALANCE

The balancing of accounts gives the picture of the position of each account. To understand the comprehensive position of all accounts it is necessary to prepare the trial balance which is a summarized statement of the ledger balances. The trial balance gives the arithmetical accuracy of the accounts and forms the basis of preparing the final accounts.

Trial Balance

A basic rule to double entry accounting is that for every credit there must be an equal debit amount. This means that the sum of all debits must equal the sum of credits in the accounting year. In case, the debits do not equal the credits, then it is evident that an error has been made. The Trial balance is a tool for detecting such errors.

The trial balance is calculated by summing the balances of General ledger accounts and cash book. It summarizes the net effects of all of the debit and credit in an account and generates the basic summary of accounts to facilitate preparation of financial statement.

Step-7: FINAL ACCOUNTS

The final accounts of an organization generally include two parts. The first part is Income and Expenditure Account. This is prepared to find out the Surplus or deficit of business. The second part is Balance Sheet which is prepared to know the financial position of the organization.

Income and Expenditure

In order to ascertain the true surplus or deficit made by an entity in an accounting period, it is necessary that all expenses and income are considered. The Income and Expenditure account considers all expenses and revenues and shows the surplus made or deficit suffered by an entity during a particular accounting period.

Balance Sheet

This forms the second part of the final accounts. It is a statement showing the financial position of a business. Balance sheet is prepared by considering all personal accounts and real accounts (assets and properties) together with the net result obtained from Income and Expenditure account. On the left hand side of the statement, the liabilities and capital are shown. On the right hand side, all the assets are shown. Balance sheet is not an account but it is a statement prepared from the ledger balances. So we should not prefix the accounts with the words 'To' and 'By'.

Balance sheet is defined as 'a statement which sets out the assets and liabilities of a organizations and which serves to ascertain the financial position of the same on any particular date'.

Receipts and Payments Account

The receipts and payments account shows the sources of funds and application of funds during the accounting period. The following steps are involved in the preparation of the statement.

- The opening and closing cash and bank balances as per Cash Book should be ascertained and entered.
- Income accounted on actual receipt basis.
- Expenditure accounted on actual payment basis.
- Receipts and payment entries need be classified under respective head.
- Entries with reference to entries in the Journal register are not recognized

Chapter 4

Understanding Financial Statement

Financial Statements refers to a balance sheet, income statement (income and expenditure), receipts & payment statement or any other supporting statement or other presentation of financial data derived from accounting records.

A typical set of financial statements will include

- Balance Sheet
- Income and Expenditure Statement
- Receipts and Payments Account (detailed as per the account heads)
- Notes to Accounts and
- Financial Performance Indicators

This section discusses above components of the financial statements.

Balance Sheet

The ULB shall prepare a Balance Sheet at the end of each accounting period. The Balance Sheet is a statement, which reflects the financial position of the ULB as on a particular date.

The Balance Sheet is drawn up from the balances of those ledger accounts which remain open after the accounts relating to revenue and expenses have been closed by transfer to Income & Expenditure accounts.

The Balance Sheet may be regarded as a statement which sets out, on the one hand, the sources from which the funds of an ULB have been obtained and on the other, the ways in which these funds are used. *A Balance Sheet will broadly have the following components:*

- Assets that includes Fixed Assets, Investments, Cash and Bank Balances, Receivables, Advance to Employees etc.
- Liabilities shall include Loans taken by the ULB, Payables to Contactors / Suppliers, Government dues like TDS, Sales Tax etc.

Usefulness of preparing a Balance Sheet are:

- Provides a record of the assets (amount owned) and Liabilities (amount owed) by the ULB.
- Provides information on the categories in which various assets are being invested.
- Allows follow up and better management on the amounts receivable and payable by the ULB.
- Allows the financial strength of the ULB to be assessed, based on analysis of assets and liabilities;
- Allows comparability and analysis of financial position over different years.

A typical balance sheet is given in below

Code No	Description of Items	Schedule No	What is Represents?
	LIABILITIES		
	Reserves & Surplus		
310	Municipal (General) Fund	B-1	Municipal fund, excess of income over expenditure
311	Earmarked Funds	B-2	Pension fund, gratuity, provident fund etc
312	Reserves	B-3	Capital contribution, statutory reserve etc
	Total Reserves & Surplus	-	
320	Grants Contribution for specific purposes	B-4	Grant from central & state government received for any specific purpose
	Loans		
330	Secured Loans	B-5	Loan from central, state government, financial institution, funding agencies etc
331	Unsecured Loans	B-6	Loan from central, state government, financial institution, bonds, debentures, funding agencies etc
	Total Loans	-	
	Current Liabilities and Provisions	-	
340	Deposits Received	B-7	Deposits received from contractors, staff etc
341	Deposit works	B-8	Deposits received from Civil works, electrical works etc
350	Other Liabilities	B-9	Creditors, employee liabilities, recoveries

Code No	Description of Items	Schedule No	What is Represents?
			payable etc
360	Provisions	B-10	Provisions for expenses, etc
	Total Current Liabilities and Provisions	-	
	TOTAL LIABILITIES		
	ASSETS	-	
	Fixed Assets		Includes Land, Building, Plant & Machinery etc
410	Gross Block	B-11	The cost of acquisition
411	Less: Accumulated Depreciation	-	Accumulated depreciation on above assets
412	Capital Work-In-Progress	B-11A	
	Total Fixed Assets	-	
	Investments	-	
420	Investments-General Fund	B-12	Investment of general funds in central & state government securities, preference shares etc
421	Investments-Other Funds	B-13	Investment of non general funds in securities
	Total Investments	-	
	Current Assets, Loans & Advances	-	
430	Stock-in- hand	B-14	Stores, tolls etc
431	Sundry Debtors (Receivables)	B-15	Property tax, user charges receivable
432	Less: Accumulated Provisions against Debtors (Receivables)	-	
440	Pre-paid Expenses	B-16	Expenses actually paid in one period, the benefit of which is expected to be realized in future
450	Cash and Bank balance	B-17	Closing balance of cash and bank
460	Loans Advances and Deposits	B-18	Loans and advances to employees, provident fund loan, advances to suppliers etc
461	Less: Accumulated Provisions against Loans Advances and Deposits	-	Provision made on doubtful advances till the balance sheet date
	Total Current Assets, Loans & Advances	-	
470	Other Assets	B-19	Deposits given etc
480	Miscellaneous Expenditure to be written off	B-20	Loans issue expense deferred, discount on issue on loan
	TOTAL ASSETS		

Income and Expenditure

The Income and Expenditure Statement discloses the results of the working of the ULB during the period covered by the statement. It shows incomes and expenditures of the ULB for an accounting period and the excess of income over expenditure or vice-versa for that period.

Since the Financial Statements are prepared under accrual basis, the Income and Expenditure Statement shall include all the income earned during the year whether actually received or not and all the expenditure incurred whether actually paid or not.

The Income & Expenditure contains the following components

- Income – The tax revenue, non tax revenue, revenue grants, income from investments and any other income shall form part of this component.
- Expenditure – This component of Income & Expenditure Statement shall include revenue expenditures like Salaries, Administration Expenses, Maintenance expenses etc.
- Prior Period Items – This component shall include the income or expenditure relating to previous years.
- Transfer to Reserves – The ULB may be required to transfer a fixed portion of their surplus for any specific purpose prescribed by any legislation. The last component of the Income & Expenditure statement has these details.

Usefulness of preparing Income and Expenditure account

- The Income and Expenditure Statement discloses the results of the working of the ULB during the period covered by the statement.
- It helps to analyse the income pattern and contribution of difference source of income to the surplus (Excess of income over expenditure) of the ULB.
- Helps to analyse the expenditures incurred by the ULB thereby enabling the management to take better decisions.
- Allows comparability and analysis of performance of ULB over different years.
- Helps in financial analysis.

A typical Income & Expenditure Statement is given below

Code No	Description of Items	Schedule No	What is Represents?
	INCOME		
110	Tax Revenue	I-1	Property tax, Water tax, Cess etc
120	Assigned Revenues and Compensations	I-2	Tax and duties shared by state/central Government
130	Rental Income from Municipal Properties	I-3	Rental income from office buildings, guest house, amenities
140	Fees and User Charges	I-4	Emplacement charges, license fees, user charges
150	Sale and Hire Charges	I-5	Sale of products, forms & publications, stores & scraps
160	Revenue Grants Contribution and Subsidies	I-6	Revenue grant, reimbursement of expenses
170	Income from Investments	I-7	Interest on investment, dividend, profit on sale of investment
171	Interest Earned	I-8	Interest on bank account, interest on

Code No	Description of Items	Schedule No	What is Represents?
			loans to employees
180	Other Income	I-9	Lapsed deposits, insurance claims recovery, profit on disposal of asset
A	Total Income		
	EXPENDITURE		
210	Establishment Expenses	I-10	Salaries, wages, pension etc
220	Administrative Expenses	I-11	Rent, rates, taxes, office maintenance etc.
230	Operations and Maintenance	I-12	Power & fuel, consumption of stores, repairs & maintenance etc
240	Interest and Finance Charges	I-13	Interest on loans from state & central government and from financial institutions
250	Programme Expenses	I-14	Election expenses, own programme
260	Revenue Grants Contribution and Subsidies	I-15	Grants, contribution, subsidies
270	Provisions and Write off	I-16	Provision for doubtful receivables, provision for other assets, assets written off etc
271	Miscellaneous Expenses	I-17	Loss on disposal of asset, investment etc.
272	Depreciation	-	Depreciation on assets
B	Total Expenditure		
-	<i>Gross surplus/(deficit) of income over expenditure before Prior Period Items</i>	-	
280	Prior Period Item	I-18	For e.g. prior year income from property and other taxes due to revision
-	<i>Net balance being surplus/deficit carried over to Municipal Fund</i>	-	
290	Transfer to Reserve Funds	-	
-	<i>Net balance being surplus/deficit carried over to Municipal Fund</i>	-	

Receipts and Payments Account

The Receipts and Payments Account shows the sources of funds and the applications of funds during the accounting reporting periods.

The Receipts and Payments Account shall be prepared from the Balance Sheet, Income and Expenditure Statement, Ledgers and Cash Book.

A format in which receipts and payments are given below

Receipt and Payment account as on -----

Code	Receipt	Amount	Code	Payment	Amount
	To Opening Balance **		2XX- XX-XX	Revenue Expenditure and Capital Expenditure – on actual payment basis	
	Cash				
	Bank				
	Cheque in Hand		4XX- XX-XX		
1XX- XX-XX	Revenue Receipts and Capital Receipts – on actual Receipt basis			To Closing Balance **	
3XX- XX-XX				Cash	
				Bank	
				Cheque in Hand	
	TOTAL			TOTAL	

6. Asset Management

- D V Rao

Objective of the Session

The participants will be able to have enhanced knowledge on the following areas:

- What asset means?
- Different classification of assets
- Various registers to record the assets
- Identification of fixed assets
- Valuation of fixed assets, and
- Details of current assets

What is Asset?

Asset is a property or right to property. From economic point of view, asset means any item of economic value owned by an individual or an organisation, which can be converted to cash. On the other hand, from acquisition point of view, it means anything which has the capacity of earning or assisting in earning of revenue to the organisation. So asset is a property which has economic value and earning capacity.

Tangible and intangible assets

One way of classifying the assets is the tangibility – whether they are tangible or intangible. Tangible assets are seeable. One can see them and can participate in furtherance of activities of the organization and the examples are lands, buildings or machinery etc. Intangible assets cannot be seen, but plays an important role in furtherance of objectives of the organization. Examples are copyright, goodwill, software projects etc.

Classification of assets

Assets can also be classified into various groups such as land, buildings, vehicles, plant & machinery, furniture & fixtures and infrastructure assets. Infrastructure assets are generally owned by public institutions and they are not sold or purchased. They include roads, lanes & footpaths, culverts & bridges, flyovers & subways, water supply, sewerage & drainage and street lighting etc.

Another classification of assets is Fixed Asset and Current Assets. Fixed Asset is a long term tangible asset held for business use and not expected to be sold. Examples are lands, buildings, furniture, plant and machinery etc. Generally, fixed assets are long term in nature and from which an organisation derives benefit over a period of time. Current Assets are generally cash related or instruments which can be converted into cash immediately like fixed deposit receipts.

Assets can also be classified as Movable and Immovable Assets.

Movable Assets: In the context of municipalities, movable assets include vehicles, water supply tankers, garbage lifters, road rollers etc. They are recorded in Tools and Plant Register. Different sections in the municipality maintain the vehicles and each section will maintain a register.

Immovable Assets: In the municipal context, immovable assets are water supply, drainage and infrastructure, solid waste management infrastructure, commercial complexes, office buildings, residential quarters, market yards and structures, roads and street lighting, open land, burial and burning grounds, parks and open spaces etc. All these assets are entered in Register of Immovable Properties. Here also, different sections may maintain separate registers.

Department-wise registers (Tools & Plant Register and Register of Immovable Properties)

Revenue	Public Health	Engineering	Town Planning
<ul style="list-style-type: none"> • Commercial Complexes • Residential Apartments • Industrial Estates • Market Structures, etc. 	<ul style="list-style-type: none"> • Burial Grounds • Graveyards • Scavenger Lanes • Public Toilets • Slaughter houses • Solid Waste Management System. • Primary & Urban Health Centers • Dispensaries, etc. 	<ul style="list-style-type: none"> • Water Supply • Drainage Schemes • Sewerage Schemes • All types of Roads, like Kutcha, Gravel, WBM, BT and CC roads • Street Lighting • Abandoned roads and lanes • Commissioner's Quarters • Officers/Staff Quarters • Travelers Bungalows • Parks • Community Halls • Marriage Halls • Elementary Schools • U.P. Schools • High Schools • Head Office building • Circle/Ward Offices • Sanitary Inspectors Offices • Revenue Collection Offices, etc 	<ul style="list-style-type: none"> • Vacant Lands • Open Spaces in Layouts • Playgrounds • Agricultural Lands, etc

Current accounting practice in Municipalities

Currently, municipalities are maintaining the accounting system on cash basis. Under this system of accounting, statement of receipts and payments is prepared and at the year end, closing balance of cash is arrived. Assets and liabilities are not reflected in the current accounting system. Statement of assets and liabilities, in other words, balance sheet brings out the financial status of ULB. The ULB, being a service organisation does not require the financial status.

Current practice of recording of Assets

Currently, assets are accounted for on the basis of (i) measurement books (for infrastructure assets) (ii) Tools & Plant Register (for movable assets) and (iii) Register of Immovable Properties (for

immovable properties). The recording is basically meant for payment purpose and not as an inventory.

Need for recording assets

It has been observed that the current resources of ULBs are not sufficient to meet the responsibilities. The resources are limited and responsibilities are increasing. There is a clear mismatch between resources and responsibilities. It is necessary that the ULBs have to look for alternate sources of revenues. As discussed in another context, the alternate sources are (i) Privatization (ii) Public-Private-Partnership (PPP) (iii) Market Borrowing and (iv) Capital Market/Municipal Bonds.

This makes the ULBs to look at alternate accounting system also. To go for alternate sources of revenue, one must ensure that the lenders have to evince interest and it is possible only when the credibility of ULB is known. Credibility of any institution (including ULB) has to be certified by credit rating agencies. The credit rating agencies need, besides governance and administrative factors, all finance relating information including financial status of ULBs. Financial status emerges with balance sheet, part of which is Assets.

Balance Sheet is a statement of assets and liabilities of an institution. To prepare balance sheet, all assets should be identified and valued. Assets include Fixed Assets as well as Current Assets.

Let us discuss about Fixed Assets in the beginning. As discussed above, Fixed Assets in the municipal context include:

- Lands
- Buildings
- Roads, streets, lanes and footpaths
- Bridges, culverts, flyovers, subways and causeways
- Drains including underground drains
- Water works
- Public lighting
- Lakes and ponds
- Plant and machinery
- Vehicles
- Furniture and fixtures
- Office equipment
- Other equipment
- Livestock

At the beginning of the exercise, ULB has to identify all assets. For the purpose, field level teams have to be constituted. Assets have to be grouped under various categories like lands, buildings, vehicles, machinery, furniture & fixtures, roads etc. The details may be collected section-wise and then consolidated at the ULB level. ULB has to form separate teams for collating information in the formats provided within a specific time-frame. Within the section also, teams may be area-specific or category-specific.

There should be a Steering Committee at the ULB level to guide, supervise and coordinate the work of the teams in collecting and collating the information. The Steering Committee should be headed

by Commissioner and should comprise Municipal Engineer, Town Planner, Accounts Officer, Revenue Officer, Estate Officer and Town Surveyor.

Role of Field level teams

The designated team should collect particulars, such as (i) identification number (survey number in case of land, registration number in case of vehicle, name of building etc.), (ii) location of asset (iii) condition of asset (iv) date of acquisition, and (v) value of the asset (if available). At the first instance, assets should be listed on physical verification. The teams may take the assistance of ward members, other departments of government and local residents in its efforts to identify the assets. The information may be recorded in prescribed forms. As far as possible, information may also be collected from the available records and a reference should be made to establish its authenticity. The focus of data collection is to present a true and fair view of financial status of the ULB. After completion of listing and collecting particulars of all assets that could be 'seen', expenditure (sanction) records should be examined to list the assets that might have been missed in the first round, and also to find the values.

It should be ensured that the exercise is physical verification of immovable assets. The information gathered during physical verification should be cross-checked with available records. Secondly, assets owned by ULB only have to be included in the list. The cost of acquisition and the date of acquisition should also be gathered.

Valuation of fixed assets

The next step is valuation of fixed asset. It is very crucial in the context of asset management. The valuation should be the present valuation, i.e., valuation while making the inventory. If the cost and date of purchase or construction are available or ascertainable, the current value is the original cost of purchase or construction less depreciation. Depreciation means decrease in value of an asset due to obsolescence or use and rate of depreciation of various assets depends upon the estimated useful life of various assets. The rate of depreciation and useful life of various assets would be fixed by Government and these figures have to be followed. There would be no depreciation for lands.

If cost is not available, valuation can be ascertained from the Stamps and Registration department in the case of lands.

For the valuation of buildings, a procedure has been prescribed. Suppose the cost of asset is not available or ascertainable, but date of purchase or construction is available or ascertainable. In such case, if the asset has outlived its estimated useful life, then it will be valued at rupee one. On the other hand, if the asset has not outlived its useful life, then valuation will be done based on current schedule of rates (CSR). The CSR would be notified by Government. In order to reflect the cost of the asset in the year in which it was purchased or constructed, the CSR will need to be deflated by an appropriate index. The Index Rates would be notified by Reserve Bank India. This gives us the value of asset at the time of original purchase or construction. Since the value is required at current price, the value will be depreciated on the basis of rate of depreciation.

In case it is not possible to estimate the year of purchase or construction and current estimate value, its valuation has to be done on case by case basis, taking into account the condition of asset and the

obsolescence factor. The Municipal Engineer may conduct the exercise of valuation; else, the ULB may take the services of approved values.

Registers

All assets should be entered in relevant Asset Registers. The Registers should contain all details like description of asset, identification, year of acquisition, useful life period and value etc.

Current Assets

The current assets are cash based balances. They are in the form of (i) cash balance (cash on hand) and bank balance (including fixed deposits). They also include (i) advances paid to contractors/suppliers, (ii) loans and advances to employees, (iii) receivables from local tax payers etc. (Taxes, water charges, rentals etc.), and (IV) grants receivable.

7. Municipal Budget

- D V Rao

Objective of the Session

The participants will be able to have enhanced knowledge on the following areas:

- What budget means and why budget required?
- Legal framework of municipal budget in Jharkhand
- Principles in budget preparation
- Budget preparation process

Budget Estimate

Budget Estimate is a statement of the estimated income and expenditure of an institution for each financial year. It is prepared before the commencement of the year with an object to enable the authorities to watch that the income anticipated is fully realized; and to exercise control over the expenditure. It is also a forecast to show what would be received and what would have to be paid during a financial year and whether the income is sufficient to meet the expenditure.

Revised Estimate

It is an estimate of probable receipts and disbursements for an year framed in the course of the year with reference to the transactions already recorded.

Appropriation

It means the amount provided in the estimate under a regular head of account.

Re-appropriation

It means transfer of funds from the appropriation made from one budget head to that of another budget head.

Municipal Budget

Municipal budget plays an important role in planning and controlling operations of the urban local bodies (ULBs). It reflects the principles, policies, priorities and programmes of the ULBs. It is a tool for optimal deployment of limited resources for the best possible utility and achievement of its felt-needs. It communicates financial objectives and resource requirements to administrators, elected representatives and the public in order to secure their support for planned allocation of resources and for performance of objectives.

Why does ULB prepares Budget?

As per Section 108 of the Jharkhand Municipal Act 2011, the Municipal Commissioner or the Executive Officer has to prepare in each year a budget estimate for the ensuing year, and such budget estimate is an estimate of the income and expenditure of the municipality; and under Section 110, the Council considers and sanctions the budget estimate for the ensuing year with such changes as it may consider necessary.

The budget sanctioned by the Council authorises the Commissioner/Executive Officer to strictly adhere to the realization of revenue and controlling of expenditure as per the budgetary allocations. Budget estimate acts not only as a tool for financial planning and control, but also as a most significant instrument to steer the development of the ULB for achieving the aspirations of the people. The budget of a ULB can be used for effective management and promotion of accountability in service delivery and provision of infrastructure by municipal officials.

How Budget is prepared?

Budget preparation process would be initiated and monitored by the Commissioner/Executive Officer. It would be processed by the Accounts Officer/ Finance Officer. Bottom-up approach has to be followed in budget preparation. Estimates would be made from the lowest unit and then consolidated at Commissioner's level. Basis for preparation of budget would be actual performance of the ULB for the last couple of years, information from Section Heads, Government directions to take up specified activities and requirements proposed by the elected representatives.

Estimates have be made for each of the Account Code. As per Section 112, the accounts of the municipality have to be maintained under Accrual Based Double Entry Accounting System and under Section 113; the State Government prepares Municipal Accounting Manual. The account codes adopted in the Municipal Accounts Manual would be followed for budgeting purpose also. The Municipal Accounting Codes have to be prepared on the basis of National Municipal Account Manual (NMAM). As such, the municipal budget has to reflect estimated revenue income, revenue expenditure, capital income and capital expenditure.

Various steps involved in the budget process are described below:

Step 1

Concerned officers of various sections prepare the budget estimates for the concerned section and the budget estimates are made on the basis of requests from ward members and ward committees, assurances from Mayor/Chairperson/ Standing Committee/ Council and requests from local residents.

Step 2

The accounts section would scrutinise and consolidate the proposals at municipal level. The section would classify the estimates into revenue receipts, revenue expenditure, capital receipts and capital expenditure and prepare the draft budget booklet. The details as to how they are scrutinised and how the budget proposals are made would be discussed in later part.

Step 3

Budget proposals would be reviewed and finalised by the Commissioner/Executive Officer.

Step 4

Budget proposals would be reviewed by the Standing Committee and forwarded to the Council for sanction. After review by the Standing Committee, the budget booklets would be circulated to the ward members.

Step 5

The Budget proposals would be considered and sanctioned by the Council and forwarded to Government in the case of Municipal Corporation and the Director of Municipal Administration in the case of Municipality/Nagar Panchayat.

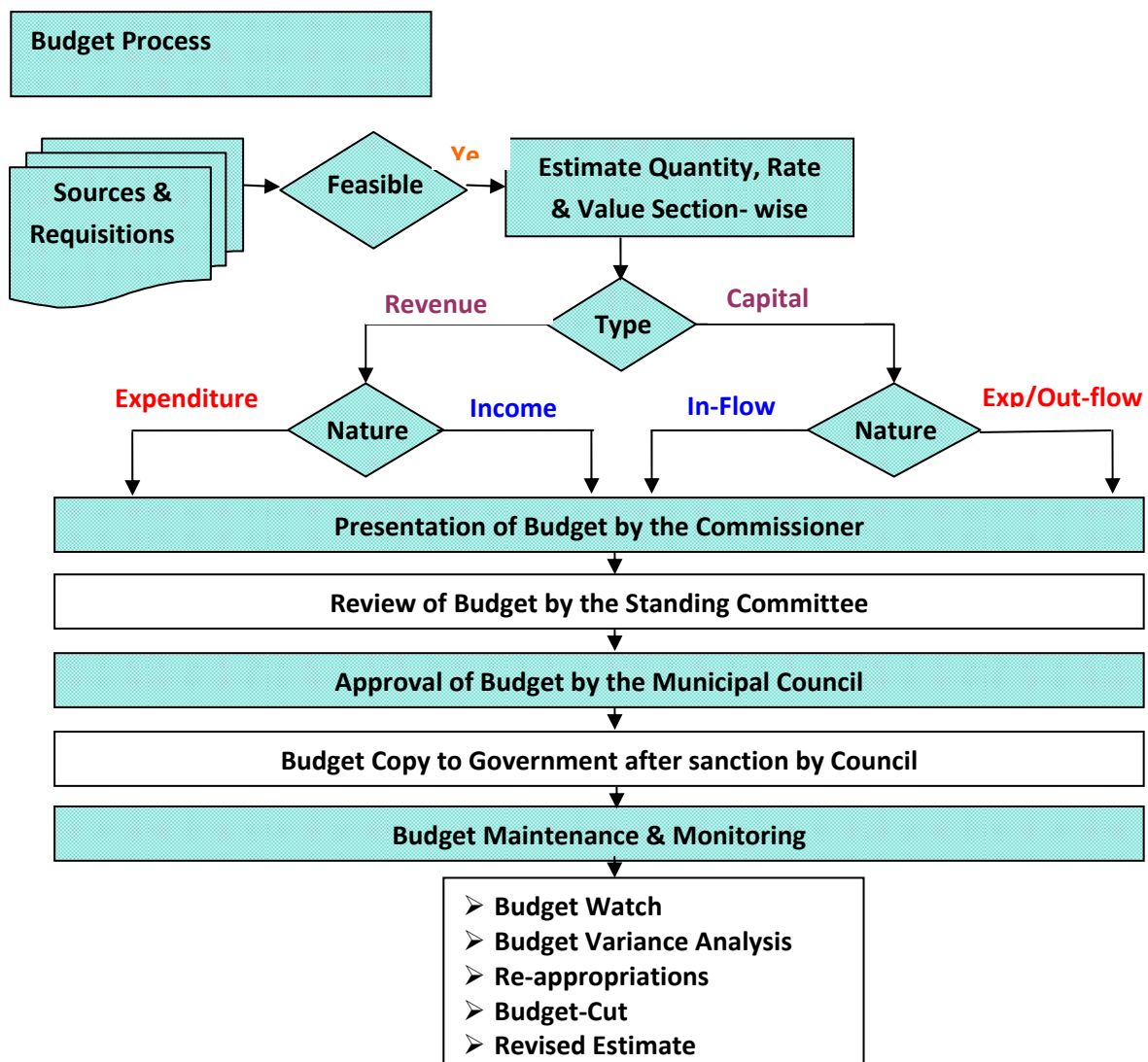
Step 6

Government/ Director of Municipal Administration would return the budget to the Municipality with or without modifications of the provisions relating to grants by Government.

Step 7

The next step is implementation. During implementation, it is necessary to exercise control over the budget proposals and monitor the implementation. It is also necessary to have a watch on implementation, analyse the variance and seek reappropriation of the amounts, if required. This would be done through Budget Watch Register, Actuals versus Estimates, Variance analysis and Re-appropriation and revised estimates.

The process flow of the Budget is shown below:



Legal framework for budget estimate

Sections 108 to 111 of Jharkhand Municipal Act, 2011 deal with preparation of budget by the Council and submission of copy of budget to Government/Director of Municipal Administration.

Section 108

Municipal Commissioner/ Executive Officer prepares in each year a budget estimate. The budget estimate

- Is an estimate of income and expenditure of the municipality
- Contains income and the expenditure of the municipality to be received and incurred in terms of the various heads of accounts
- Shall state the amount of money to be raised as loan during the ensuing year.

It should also contain

- The establishment schedule for the ensuing year
- The rates at which various taxes, surcharges, cesses and fees are levied by the municipality in the ensuing year

The budget estimate has to be prepared and presented in such form and in such manner as prescribed by Government

The Mayor / Chairperson presents the budget estimate to the Standing Committee by 15th February of the year.

The budget estimate has to contain

- Annual financial statements (income and expenditure account and balance sheet) of the municipality of the previous year as examined and audited by Director of Local Fund Audit or an auditor appointed by State Government - [Sub-section (1) of section 117]
- Inventory of immovable property including changes if any as approved by Standing Committee and Council - [Sub-section (2) of section 131]
- Details regarding transfer of surplus funds from any account heads – [Sub-section (1) of section 107]
- Report on environmental status of functions relating to urban environmental management - [Sub-section (2) of section 329]

Section 109

Municipal Commissioner/ Executive Officer has to report details of beneficiaries to whom subsidy is provided, extent of subsidy, reasons for providing subsidy and sources from which subsidy is met in respect of (a) water-supply and sewage (b) solid wastes (c) public transport, and (d) any other service which the municipality or the Government decides. The Standing Committee examines the report and places the same before the Council with its recommendations.

Section 110

The Council considers the budget estimate and the recommendations of the Standing Committee thereon and sanctions the budget estimate for the ensuing year with such changes as it considers necessary. After sanction of the budget, it would be forwarded to (a) State Government, in the case of Municipal Corporation, or (b) Director of Municipal Administration, in the case of Municipal Council and Nagar Panchayat. The budget has to be sanctioned before 15th March of the year.

The budget estimate received by the State Government or the Director of Municipal Administration, as the case may be, has to be returned to the municipality before 31st March of the year with or without modifications of the provisions relating to grants by the State Government.

Section 111 - Reappropriation provisions

The Council, on the recommendation of the Standing Committee, may during the year (i) increase the amount of any budget grant under any head of account, or (ii) reduce the amount of budget grant under any head of account, or (ii) transfer the amount of any budget grant from one head of account to any other head of account, or (b) make additional budget grant for the purpose of meeting any special or unforeseen requirement.

The Municipal Act specified certain dates for various stages of budget process. On the basis of the statutory specification of dates, the budget calendar may be of the following order:

Circular from Commissioner to section heads to prepare budget proposals	31 st December
Submission of budget proposals of various sections by concerned section heads to accounts section	8 th January
Compilation of budget proposals at accounts section	15 th January
Budget finalization by Commissioner to place before Mayor/Chairperson	31 st January
<i>Mayor/Chairperson presents budget to the Standing Committee</i>	<i>15th February (Section 108)</i>
Budget booklets to ward members before Council meeting	One week/ten days before Council meeting
<i>Budget to be sanctioned by Council</i>	<i>15th March (Section 110)</i>
<i>After sanction by Council, the budget estimates to be forwarded to Government or DMA</i>	
<i>Government or DMA to return the budget estimate to municipality</i>	<i>31st March (Section 110)</i>
Observations if any made by Government/DMA to be placed before Council	After receipt of orders from Government /DMA
<i>Re-appropriation proposals to Council by Commissioner</i>	<i>As and when necessary through Standing Committee (Section 111)</i>

The responsibility to prepare the budget estimates rests with the Accounts Officer/ Finance Officer of the Municipality.

Particulars in respect of income and expenditure for Revised Estimate (current year) and Budget Estimate (ensuing year) from various sections of the municipality have to be obtained. The section heads in the municipality, namely (i) Municipal Engineer (ii) Town Planner (iii) Municipal Health Officer (iv) Environmental Engineer (v) Information and Technology Officer (vi) Finance Officer and (vii) Municipal Secretary may be made responsible to give the particulars. The section heads while giving the information should consider

- Promises/Assurances made by Mayor/Chairperson or Commissioner/Executive Officer during visits/inspections of wards
- Assurances made in Council meetings
- Requests from ward members
- Representations from other elected representatives
- Representation from local organizations like Resident Welfare Associations/ Community Based Organisations/NGOs etc.

On receipt of particulars from the section heads, the Accounts/Finance section should consolidate the information, look at the finances available or anticipated and formulate the budget proposals. While formulating and finalizing the budget proposals, the Accounts/Finance section should consider the information received from section heads and Government directions if any received to take up specified activities. The section should also verify appropriate budget heads of account.

Preparation Process of Budget Estimate

The revised estimate for the current year and budget estimate for the ensuing year have to be framed as carefully and realistically as possible. The responsibility to prepare the budget estimates rests with the Accounts Officer/ Finance Officer.

Resources

- All possible resources of income have to be explored
- They should be realistic and need not be over-estimated
- Over-estimating of revenue to show surplus is unwarranted

Expenditure

- They may be provided on a reasonably liberal scale
- Requirement of expenses need not be under-estimated
- Incurring expenditure in excess of allotment be avoided
- Resorting for reappropriation be avoided
- Resorting for additional requirement in revised estimate may be avoided

Balancing of income and expenditure

Generally, the municipal budget should be on a surplus mode. The expenditure should not exceed the income. The income and expenditure has to be balanced accordingly and a minimum 5% working balance be maintained. It should be ensured that

- Bottom-up approach is followed
- Estimates are made at lowest unit and consolidated at Commissioner's/EO's level
- All revenues and expenses are covered and realistic
- All estimates (both income and expenditure) are classified under appropriate account head

The Accounts section should also consider

- Actual performance of ULB for last couple of years
- Actual financial statements of previous year
- Receipts and payments for the first half year
- Estimated requirement for the current year on the basis of Receipts and Payments for the first half year

The Accounts section shall also ensure that provision should be made initially for committed expenditure. Committed expenditure covers

- (i) Establishment charges – Besides pay and allowances, they include pensionary/leave salary contributions. It should be worked out on the basis of establishment schedule, which includes list of sanctioned posts, scale of pay of each post and actual pay drawn by each incumbent on the first day of April of the budget year and increment due etc. during the year
- (ii) Administration expenses including contingent expenditure
- (iii) Operation & Maintenance (O&M) of infrastructure and services
- (iv) Spill-over works, and
- (v) Loan repayment

After making provision for committed expenditure only, provision has to be made for capital /development works. The development works in the municipality includes water supply, roads, drainage, street lighting, markets, public conveniences, parks and play grounds etc. While making provision for capital/development works, it should be ensured that instruction if any given by Government for the welfare of Scheduled Castes, Scheduled Tribes, Backward Classes, Women, Children and Physically Challenged Persons etc. should be followed. Government may also give direction for development of slum areas.

Implementation

After sanction of budget, the next stage is the implementation. During implementation,

It should be ensured that

- Income budgeted for is fully realized
- Expenditure is regulated in accordance with allotments made
- No expenditure after 1st April, unless Budget is approved by Council
- Allotments made in the Budget do not constitute sanctions
- Sanctions/Administrative sanctions have to be obtained from Council/other authorities in usual manner

- All allotments lapse at the end of the year
- Balances not to be brought to Deposits etc.
- No sanction unless included in the Budget or in excess of Budget allotment
- If additional allotment is sought, source (transferee head of account) to be indicated to Council for re-appropriation

Budget booklet

The budget booklet generally would be in the following format and contains seven (7) columns.

S. No.	Head of Account	Actual for previous year	BE for current year	Actual for 1 st half of Current Year	RE for current year	BE for next year
1	2	3	4	5	6	7
a.	Revenue Income					
	<ul style="list-style-type: none"> • Property Tax • Advertisement Tax • Profession Tax and so on 					
	Total					
b.	Revenue Expenditure					
	<ul style="list-style-type: none"> • Establishment Expenses • Operations and Maintenance 					
	Total					

Budget Preparation Process

The Budget Estimate for FY 2017-18 and Revised Estimate for FY 2016-17 is initiated in December 2016. By that time, the Municipality will be having

- Actual expenditure (receipt and payment) for 2015-16
- Budget estimate for 2016-17
- Actual expenditure for first half year of current year (2016-17) ie, April to September, 2016

Therefore, the Accounts section can fill column (3) i.e. Actual for previous year (2015-16), column (4) i.e. BE for current year (2016-17) and column (5) i.e. Actual for first half of current Year (April-September, 2016). On the basis of information in columns (3), (4) and (5), the Accounts section can consider and put figures in column (6), i.e Revised Estimate for current year (2016-17) and column (7), i.e. Budget Estimate for next year (2017-18)

Budget Watch Register

To ensure that the provisions in the budget are properly followed and to monitor the budget provisions, Budget Watch Register can be maintained in the following format.

Code No.	Head of Account	Budget Estimate (Rs.)	Progressive total at the end of each quarter (Rs.)				Variance (Rs.)	Remark
			Qtr. 1	Qtr. 2	Qtr. 3	Total		
1	2	3	4	5	6	7	8	9
110 120	Revenue Income Tax revenue Assigned Revenues & Compensation							
210 230	Revenue Expenditure Establishment Expenses Operations and Maintenance							

By maintaining the register and updating the data, the implementation of budget in Municipalities can be monitored.

8. Project Management – Concept, Approach & Process

- Hijam Eskoni Devi & Vaibhav Purandare

Objective of the Session

The participants will be able to have enhanced knowledge on Project Management in following areas:

- Concept
- Processes
- Phases
- Tools and Techniques – WBS, Gantt Chart, CPM, PERT
- Cause of project Failure/Delays

Overview of Development Projects

India has emerged as one of the fastest growing economies in the world. India could unleash its full potentials, provided it improves the infrastructure facilities, which are at present not sufficient to meet the growing demand of the economy. Therefore, the government's first priority is to rise to the challenge of maintaining and managing high growth rate through investment in infrastructure sector, among others.

The unfortunate part is that very few projects get delivered in time and on cost. The quarterly reports of the Ministry of Statistics and Programme Implementation (MOSPI) clearly point out the reasons for this poor performance. Infrastructure Projects in India are infamous for delays and cost overruns. However, the extent and causes behind these time and cost overruns remain understudied. Therefore, the types of policy interventions required to rectify the malady also remain unidentified. Delays and cost overruns have significant implications from an economic as well as political point of view. Due to delays in project implementation, the public has to wait for the provision of public goods and services longer than is necessary. Services provided by infrastructure projects serve as input for other sectors. The result is that the cost overrun in these projects has a spiralling effect on the entire economy. In nut shell, delays and cost overruns reduce the efficiency of available economic resources, limit the growth potential and reduce the competitiveness of the economy. Thus Project Management becomes very critical for any urban development project.

Project Management – An Introduction

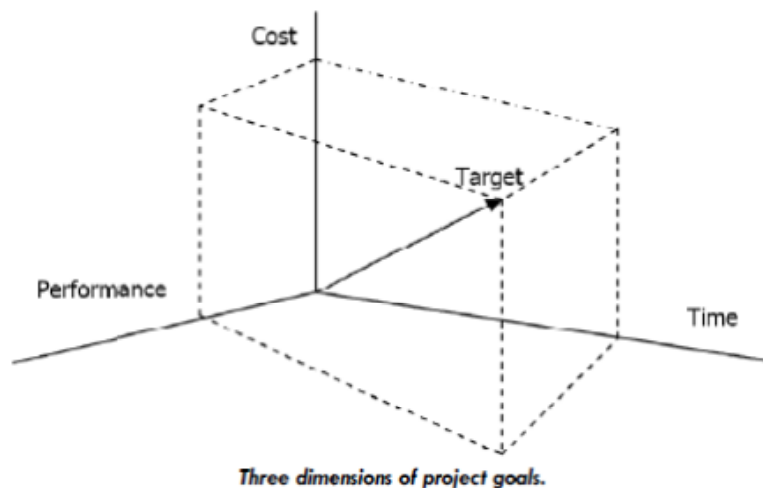
A project as a set of interrelated tasks to be executed over a fixed period and within certain cost and other limitations. It is a temporary endeavor undertaken to accomplish a unique product or service. Examples of projects could range from construction of bridges/toll roads to weddings, company relocation, military campaign, etc. Projects may differ according to the scale and degree of complexity and uncertainty involved.

How does project management (PM) differ from simply "management" and how does project management in the workplace differ from a personal project such as refurbishing a house? PM is essentially aimed at producing an end-product that will effect some change for the benefit of the organisation that instigated the project. PM is the application of processes, methods, knowledge,

skills and experience to achieve the project objectives. It is the initiation, planning and control of a range of tasks required to deliver this end product, which could be a physical product, it could be new software or something less tangible like a new way of working.

A key factor that distinguishes PM from just management is that it has a final deliverable and a finite time span, unlike management which is an ongoing process. Because of this a project manager needs a wide range of skills; often technical skills, certainly people management skills and good business awareness. PM is the adept use of techniques and skills (hard and soft) in planning and controlling tasks and resources needed for the project, from both inside and outside of organisation, to achieve results. The purpose of project management is to achieve successful project completion with the resources available. A successful project is one which:

- has been finished on time
- is within its cost budget
- performs to a technical/performance standard which satisfies the end user.



Source: CEPT University, Ahmedabad, Module 5: Project Management, Regional Capacity Building Hub, JnNURM, MoUD GoI

Because every project will involve some type of change, change management is an integral part of the PM process. And because there is change there are likely to be risks so risk management is also thrown into the project management mix.

Projects that require formal management should have the following:

- Produce something new or altered: tangible or intangible
- Have a finite time span: a definite start and end
- Likely to be complex in terms of work or groups involved
- Require the management of change
- Require the management of risks

The core components of project management are:

- defining the reason why a project is necessary;
- capturing project requirements, specifying quality of the deliverables, estimating resources and timescales;
- preparing a business case to justify the investment;
- securing corporate agreement and funding;
- developing and implementing a management plan for the project;
- leading and motivating the project delivery team;
- managing the risks, issues and changes on the project;
- monitoring progress against plan;
- managing the project budget;
- maintaining communications with stakeholders and the project organisation;
- provider management;
- closing the project in a controlled fashion when appropriate.

Projects crop up in almost all industries and businesses, for instance:

- Transport and infrastructure
- IT
- Product manufacture
- Building and construction
- Regulatory changes in finance and law

There are standard project management processes used to plan and control tasks, budgets and schedules, to communicate between the different people involved and deal with risks. These processes are usually ongoing throughout the project. There are also various phases of a project that will have a defined start and end within the overall project lifespan. For instance, the requirements gathering phase often occurs in the early part of the project. So a project has a range of processes that occur throughout its life (monitoring, controlling, communicating etc.) and a range of phases (initiation, requirements, planning etc.) that occur roughly chronologically.

The construction process can be quite complex, with dozens or even hundreds of different elements involved. These include materials, equipment, subcontractors, clients and inspectors who must interact as a cohesive unit to complete the job. The individual responsible for overseeing this process and facilitating coordination and communication is the project manager. The project manager not only ensures that the project is completed according to the designs & drawings, but that it is delivered on schedule and within a specified budget. To manage these tasks successfully, he must rely on project management techniques and systems that aid in the planning & control of the project.

Project Management Processes

Monitoring

Planning is carried out in the early stages of a project but there should be ongoing monitoring to ensure the project remains on budget and schedule; that resources are available and the expected

benefits can be delivered. Estimates, deadlines and milestones may need to be altered as the project progresses.

Control

No project is without problems but the project manager needs to control them so they do not adversely affect the end result. The control phase also deals with risk management.

Communication

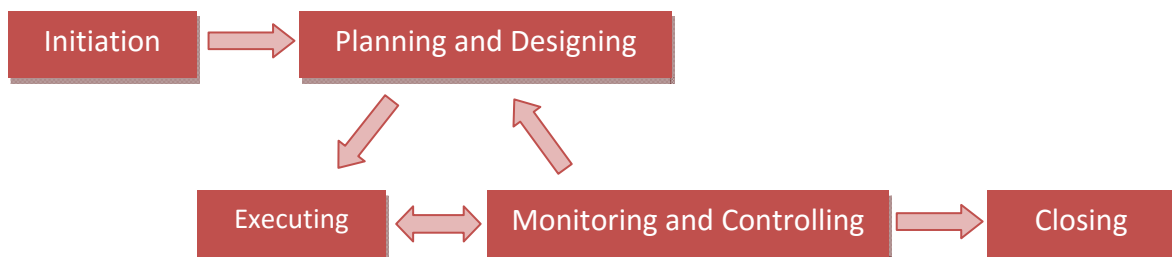
Good communication is one of the most important factors affecting project success. Many problems can be avoided if there is open, honest communication between everyone involved on a project; written and verbal, formal and informal.

People management

A project manager is responsible for managing the individuals working on the project as well as the tasks and risks. In complex projects there may be segregated levels of people management but every project manager will have some responsibility for individuals. That includes motivating people, delivering constructive feedback etc.

Project Management Phases

A traditional phased approach identifies a sequence of steps to be completed. In the "traditional approach", five developmental components of a project can be distinguished (four stages plus control):



Project Initiation Phase

The Initiation phase of the project is the most important phase. The success of the entire project depends on how clearly and completely the Terms of References are established. This first stage of a project defines the business case, the justification for the project, which will be used to ensure the project stays on track. It also states what the project is intended to achieve, how that will be achieved and the scope of the work; this is important for controlling subsequent change requests. In this phase, those involved in the project will be assigned their responsibilities.

A. Project Feasibility Document – identifies the project constraints, alternatives and related assumptions applied to the end product to be developed. It should have problem description, approach, potential solution to problem and preliminary recommendation.

B. Project Concept Document – determine what is to be done, how it will be done and why it is to be done.

C. Project Charter – Communicates the initiation of the project. It consists of Project Scope, project Authority and Critical Success Factors.

Project Planning Phase

The project plan includes details about how the project work will be carried out, how it will be monitored and controlled, how communication will be facilitated and information about costs and timescales. The effort spent in planning can save countless hours of confusion and rework in the subsequent phases. But once a project is underway it is typically the project schedule where most attention is focused. All tasks need to be scheduled in the most efficient order to ensure tasks with inter-dependencies are completed when required and to enable several tasks to be performed in parallel. There are many project management tools available to assist with scheduling.

Project management involves the management of a variety of tasks and the people responsible for those tasks. It includes planning and scheduling tasks and controlling the budget associated with delivering an end-product, in a finite time period. The final outcome will produce a significant change in an organisation or community and that change is what sets project management apart from business-as-usual management.

The project management plan is not just the schedule, although clearly this is an essential item, but is a plan for how the project will be managed so it includes:

1. A summary describing the aims of the project and the expected benefits, including any assumptions or constraints.
2. The processes that will be used to monitor and report on the status, and handle risks, change, quality etc.
3. Documentation of the scope, requirements and budget as well as a time and dependency-based schedule such as a Gantt Chart.

The processes of Project Planning Phase are:

- **Scope Planning** – This specifies the in-scope requirement for the project
- **Preparing the Work Breakdown Structure** – Specifies the breakdown of project into tasks and sub-tasks
- **Organisational Breakdown Structure** - Specifies who all in the organisation need to be involved and referred for project completion
- **Resource Planning** – Who will do what work at which time of the project
- **Project Schedule Development** – Specifies the entire schedule of the activities detailing their sequence of execution
- **Budget Planning** – Specifies the budget cost to be incurred in the completion of the project

Putting together an effective project plan is essential but so too is sticking to it throughout the course of the project or adapting it as needs change, whichever is most appropriate for a particular project.

Project Execution and Controlling Phase

The person or group assigned to carry out a task will need to know, in detail, what the task involves as well as any dependencies and timescales, and will also need to understand the criteria by which each task is deemed complete. The most important issue is to ensure project activities are properly executed and controlled.

Project Closure Phase

Once there is an approved end product the project can be formally closed and a final review held to learn from both the successes and the mistakes and take that experience forward to the next project. This phase is characterised by a written formal project review report containing the following :

- Formal acceptance of final product by the client
- Weighted critical measurement - compare requirement and deliverable
- Rewarding the team
- List of lesson learned
- Release of project resources
- Formal project closure notification to higher management

Project Management Tools and Techniques

There are many different techniques and tools that a project manager can use to control a project schedule on a day-to-day basis and for managing dependencies, change and risks. However, it is important to distinguish between techniques and tools so as to understand the technique before using a software tool. The ability to use a software tool is not necessarily an indication of a detailed knowledge of, or effective use of, the technique behind it. Gantt charts, PERT, CPM and other scheduling techniques have proven to be valuable tools in the management of large and complex projects.

Bar Chart - Gantt Chart

A Gantt Chart is a simple technique that can be used to attach a time scale and sequence to a project. A Gantt Chart is a form of horizontal bar chart and horizontal bars are drawn against a time scale for each project activity, the length of which represents the time taken to complete. The underlying concept of a Gantt chart is to map out which tasks can be done in parallel and which need to be done sequentially. If we combine this with the project resources we can explore the trade-off between the scope (doing more or less work), cost (using more or less resources) and the time scales for the project. By adding more resources or reducing the scope the project manager can see the effect on the end date.

A Gantt chart displays information visually as a type of bar chart in a clear and easy-to-understand way and is used for the following activities:

- Establish the initial project schedule
- Allocate resources
- Monitor and report progress
- Control and communicate the schedule
- Display milestones
- Identify and report problems

To create a chart you need to know all of the individual tasks required to complete the project, an estimate of how long each task will take and which tasks are dependent on others. The very process of pulling this information together helps a project manager focus on the essential parts of the

project and begin to establish a realistic timeframe for completion. Gantt charts, also commonly known as milestone plans, are a low cost means of assisting the project manager at the initial stages of scheduling. They ensure that:

1. all activities are planned for,
2. the sequence of activities is accounted for,
3. the activity time estimates are recorded; and
4. the overall project time is recorded.

They are therefore a simple, rough and ready means of planning a project and assessing progress and are sufficient for most simple projects. However, where projects become complex, it becomes difficult to see relationships between activities by using a Gantt Chart. **For more complex projects Network Analysis techniques are used.** Gantt charts also provide a summary of the project as a whole and can be used as a rough and ready means of assessing progress at the project control phase. At any date, the project manager can draw a dateline through the Gantt chart and see which activities are on-time, which are behind schedule and generally record project status against plan.

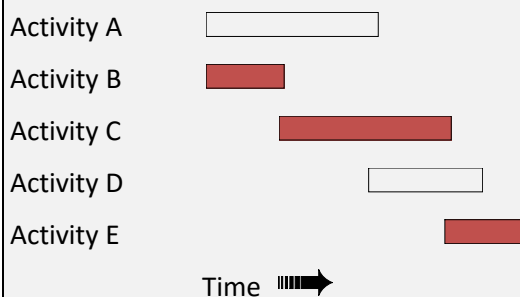
To construct a Gantt chart, the various activities are listed on a vertical axis and the horizontal axis is used to represent time. Activity precedencies are taken into account by starting a horizontal bar to represent the next activity at an appropriate point after its preceding activities, i.e. those activities which must take place before the next activity can start, have taken place. Normally this would be at the earliest time that it could start after its preceding activities had finished.

Example:

Suppose a project comprises five activities: A,B,C,D, and E. A and B have no preceding activities, but activity C requires that activity B must be completed before it can begin. Activity D cannot start until both activities A and B are complete. Activity E requires activities A and C to be completed before it can start. If the activity times are A: 9 days; B: 3 days; C: 9 days; D: 5 days; and E: 4 days,

- i) determine the shortest time necessary to complete this project.
- ii) identify those activities which are critical in terms of completing the project in the shortest possible time.

The figure below indicates the form that a Gantt chart would take from the above information.



Source: http://humphrey_doc.tripod.com/teacher/bused/PM_Text.pdf

The above chart shows that activities A and B have no preceding activities and so can start right away. Activity C requires Activity B to have been completed before it can begin. The chart is then completed using such precedence relationships as listed in the question, with each horizontal bar being

proportional in length to the activity time that it represents. Looking at the chart it is apparent that the project ends when activity E has been completed.

Working back in time from activity E the "steps" which are crucial or critical in order to ensure that the project duration does not extend beyond the planned length are: E, C and B. The shortest time in which the project could be completed from the given information is therefore 16 days. The set of activities B,C and E which together determine the project duration are referred to as the **critical path** through the chart.

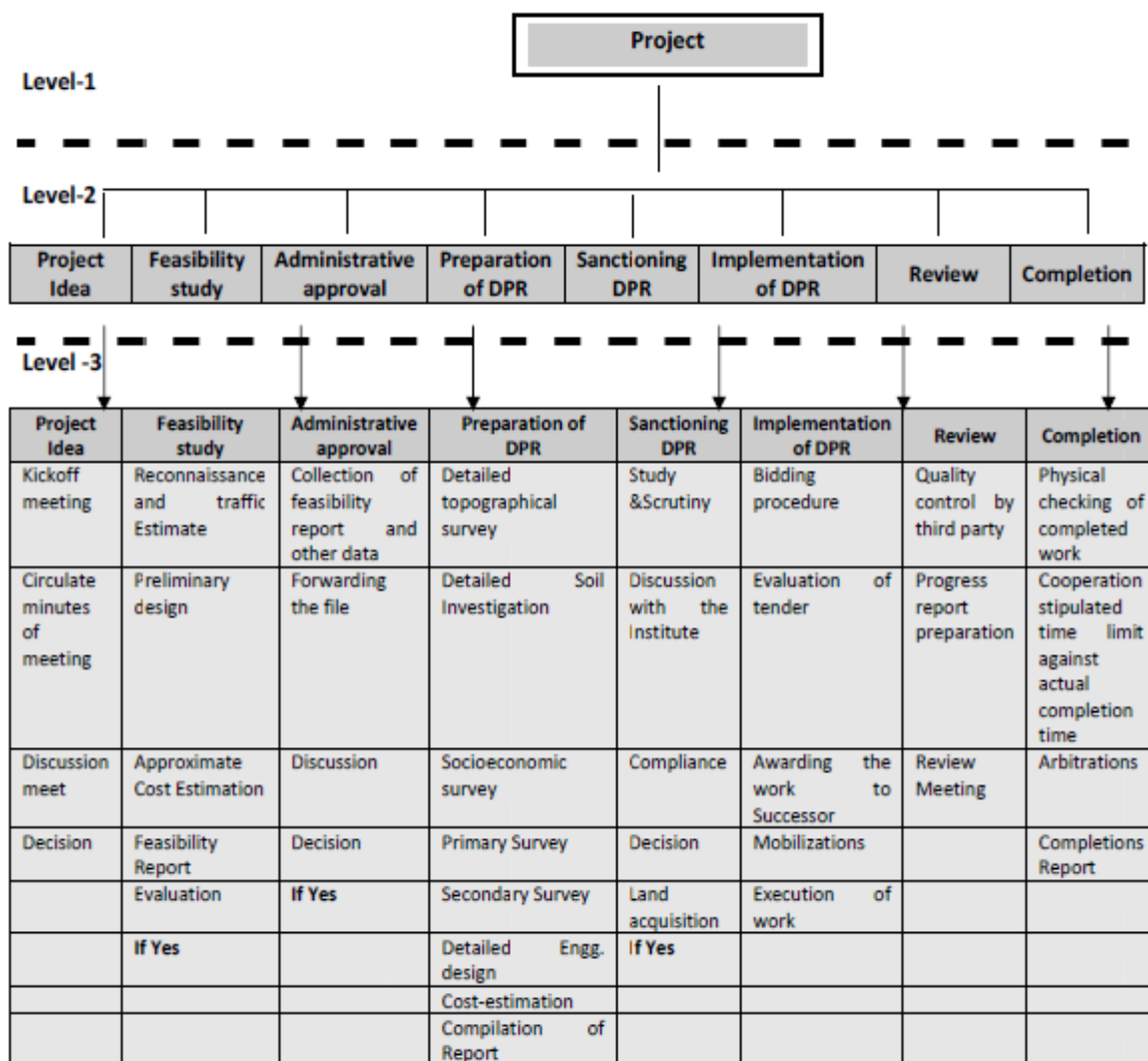
Those activities forming the critical path can be highlighted on the Gantt chart to help the operations manager to give priority to them if lack of resources mean that such decisions have to be made. It is important to realize though that activities not on the critical path can become so if they are allowed to drift too far. How far could activities A and D drift before they affected the duration of the project?

Provided the project is not too complex in its activity relationships or simply too big to be mapped on reasonably sized graph paper, Gantt charts can be very useful tools for the project manager and are graphically superior to the network analysis methods of CPM and PERT. They allow the critical activities to be found, i.e. those activities which must be performed on time if the project duration is not to increase, and any "slack" or "float" in the sequence of activities can easily be shown.

Gantt charts are not perfect and all too often they become overly complex with too many dependencies and activities. Neither are they good at showing the relative priorities of individual tasks and the resources expended on a task. Tasks are prioritised on the amount of float not their importance to the project. For example, they can clearly show the elapsed time of a task but cannot so easily communicate how many people may be needed to complete that task. So if not backed up by other data they can give a misleading impression to stakeholders. This is where using additional techniques such as PERT, for instance, becomes useful.

Work Breakdown Structure

The work breakdown structure (WBS) is a tree structure that shows a subdivision of effort required to achieve an objective—for example a program, project, and contract. The WBS may be hardware, product, service, or process oriented. A WBS can be developed by starting with the end objective and successively subdividing it into manageable components in terms of size, duration, and responsibility (e.g., systems, subsystems, components, tasks, sub-tasks, and work packages), which include all steps necessary to achieve the objective. It provides a common framework for the natural development of the overall planning and control of a contract and is the basis for dividing work into definable increments from which the statement of work can be developed and technical, schedule, cost, and labor hour reporting can be established. The work breakdown structure can be displayed in two forms one in form of a table with subdivision of tasks two in form of an organisational chart. In WBS, each task is broken into smaller tasks that can be managed and estimated and task dependencies are defined. Some tasks must begin at the same time, some must end at the same time and some cannot start until the other tasks have finished. The task durations and cost are estimated.

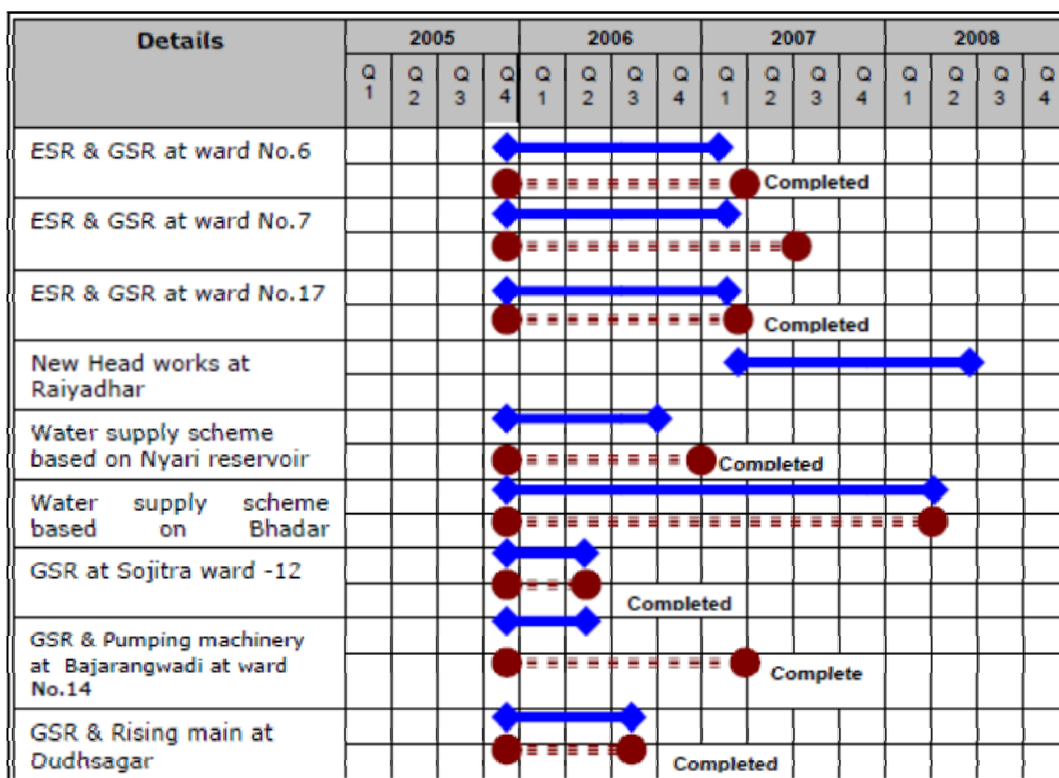


Sample WBS Structure

Example of WBS for Water Supply project

Sr. No.	Name of Project	Sanction Date & Tentative Completion Time	Sanctioned Cost (Rs. in Crore)
1	ESR & GSR at ward No.6	27 /03/2006 & Dec. 2006	6.75
2	ESR & GSR at ward No.7	27 /03/2006 & Dec. 2006	4.31
3	ESR & GSR at ward No.17	27 /03/2006 & Dec. 2006	8.44
4	New Head works at Raiyadhar	27 /03/2006 & Dec. 2008	31.20
5	Water supply scheme based on Nyari reservoir	27 /03/2006 & Sep. 2006	7.41
6	Water supply scheme based on Bhadar reservoir	27 /03/2006 & July 2007	24.70
7	GSR at Sojitra ward -12	27 /03/2006 & April 2006	0.16
8	GSR & Pumping machinery at Bajarangwadi at ward no.14	27 /03/2006 & Sept. 2006	0.90
9	GSR & Rising main at Dudhsagar	27 /03/2006 & June 2006	1.64

Gantt Chart for the Work



Source: CEPT University, Ahmedabad, Module 5: Project Management, Regional Capacity Building Hub, JnNURM, MoUD Gol

Network Analysis - Critical Path Method (CPM) and Program Evaluation and Review Technique (PERT) ¹⁶

The two most common and widely used project management techniques that can be classified under the title of Network Analysis are Programme Evaluation and Review Technique (PERT) and Critical Path Method (CPM). Both were developed in the 1950's to help managers schedule, monitor and control large and complex projects. CPM was first used in 1957 to assist in the development and building of chemical plants within the DuPont corporation. Independently developed, PERT was introduced in 1958 following research within the Special Projects Office of the US Navy. It was initially used to plan and control the Polaris missile programme which involved the coordination of thousands of contractors. The use of PERT in this case was reported to have cut eighteen months off the overall time to completion.

There are six stages common to both PERT and CPM:

1. Define the project and specify all activities or tasks.
2. Develop the relationships amongst activities. Decide upon precedences.
3. Draw network to connect all activities.
4. Assign time and/or costs to each activity.

¹⁶ Source: http://humphrey_doc.tripod.com/teacher/bused/PM_Text.pdf

5. Calculate the longest time path through the network: this is the "critical path".
6. Use network to plan, monitor and control the project.

Finding the critical path (step 5) is a major in controlling a project. Activities on the critical path represent tasks which, if performed behind schedule, will delay the whole project. Managers can derive flexibility by identifying the non-critical activities and replanning, rescheduling and reallocating resources such as manpower and finances within identified boundaries.

PERT and CPM differ slightly in their terminology and in network construction. However their objectives are the same and, furthermore, their project analysis techniques are very similar. The major difference is that PERT employs three time estimates for each activity. Probabilities are attached to each of these times which, in turn, is used for computing expected values and potential variations for activity times. CPM, on the other hand, assumes activity times are known and fixed, so only one time estimate is given and used for each activity. Given the similarities between PERT and CPM, their methods will be discussed together. The student will then be able to use either, deciding whether to employ variable (PERT) or fixed (CPM) time estimates within the network. PERT and CPM can help to answer the following questions for projects with thousands of activities and events, both at the beginning of the project and once it is underway:

- When will the project be completed?
- What are the critical activities (i.e.: the tasks which, if delayed, will effect time for overall completion)?
- Which activities are non-critical and can run late without delaying project completion time?
- What is the probability of the project being completed by a specific date?
- At any particular time, is the project on schedule?
- At any particular time, is the money spent equal to, less than or greater than the budgeted amount?
- Are there enough resources left to complete the project on time?
- If the project is to be completed in a shorter time, what is the least cost means to accomplish this and what are the cost consequences?

The objective of critical path analysis is to determine times for the following:

- **ES = Earliest Start Time.** This is the earliest time an activity can be started, allowing for the fact that all preceding activities have been completed.
- **LS = Latest Start Time.** This is the latest time an activity can be started without delaying the start of following activities which would put the entire project behind schedule.
- **EF = Earliest Finish Time.** The earliest time an activity can be finished.
- **LF = Latest Finish Time.** The latest time that an activity can finish for the project to remain on schedule.
- **S = Activity Slack Time.** The amount of slippage in activity start or duration time which can be tolerated without delaying the project as a whole.

If ES and LS for any activity is known, then one can calculate values for the other three times as follows:

$$EF = ES + t$$

$$LF = LS + t$$

$$S = LS - ES \text{ or } S = LF - EF$$

Analysis of the project normally involves:

1. Determining the Critical Path. The critical path is the group of activities in the project that have a slack time of zero. This path of activities is critical because a delay in any activity along it would delay the project as a whole.
2. Calculating the total project completion time, T. This is done by adding the activity times of those activities on the critical path.

The steps in critical path analysis are as follows:

1. Determine ES and EF values for all activities in the project: the Forward Pass through the network.
2. Calculate LS and LF values for all activities by conducting a Backward Pass through the network.
3. Identify the critical path which will be those activities with zero slack (i.e.: ES=LS and EF=LF).
4. Calculate total project completion time.

The major distinguishing difference between PERT and CPM is the use of three time estimates for each activity in the PERT technique, with CPM using only one time for each activity using CPM.

The three time estimates specified for each activity in PERT are:

- i) the optimistic time;
- ii) the most probable time; and
- iii) the pessimistic time.

The optimistic, most likely and pessimistic time estimates are used to calculate an expected activity completion time which, because of the skewed nature of the beta distribution, is marginally greater than the most likely time estimate. In addition, the three time estimates can be used to calculate the variance for each activity. The formulae used are as follows:

$$t = \frac{o + 4m + p}{6}$$

$$v = \left(\frac{p - o}{6} \right)^2$$

Where:

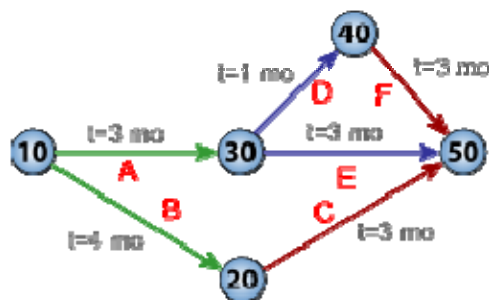
o, m, p - optimistic, most likely, and pessimistic times

t - expected completion time for task

v - variance of task completion time

Knowing the details of a project, its network and values for its activity times (t) and their variances (v) a complete PERT analysis can be carried out. This includes the determination of the ES, EF, LS, LF and S for each activity as well as identifying the critical path, the project completion time (T) and the variance (V) for the entire project.

Normally when using PERT, the expected times (t) are calculated first from the three values of activity time estimates, and it is these values of t that are then used exactly as before in CPM. The variance values are calculated for the various activity times and the variance of the total project completion time (i.e. the sum of the activity expected times of those activities on the critical path) is the sum of the variances of the activities lying on that critical path.



PERT network chart for a seven-month project with five milestones

CAUSE OF PROJECT FAILURE and DELAYS

A project fails due to following reasons:

- Poor project and program management discipline
- Lack of executive-level support
- Wrong team members
- Poor communication
- No measures for evaluating the success of the project
- No risk management
- Inability to manage change

Delays in projects

Many studies have been conducted on capital intensive projects, bringing out a host of factors that cause delay at different stages of projects starting from pre-commissioning to implementation. Some of the points mentioned below are typical reasons why we see delay in capital intensive infrastructure projects in India:

- problems in land acquisition and rehabilitation,
- changes in scope,
- alterations in design & drawings,
- delay in procurement of equipment,
- shortage of materials like cement, steel, bitumen, etc.,
- difficulties in transporting equipments to site,
- shortage of key personnel during the execution stage,

- shortage of trained engineers, skilled man power,
- cash flow issues,
- inadequacies in planning,
- climatic and environmental factors,
- lack of monitoring,
- contractual problems,
- poor performance of both DPR & Construction Supervision consultants, vendors and contractors,
- law and order problems,
- risk assessment at the stage of project implementation,
- Lack of team work, the client, the contractor & the supervision consultants not having mutual trust,
- inadequate infrastructure support, etc

How to Manage Delays in Construction Projects

- The project manager, the consultant & the contractor must work as a team. As soon as the contract comes into being, these players shall cease to be adversaries & should handle the project to achieve the common goal.
- The client must ensure availability of encumbrance free land for execution of the project in the stipulated time frame.
- Various statutory approvals for the project must be obtained in a fixed time frame. A single window clearance may be tried out.
- The Project Manager must be able to analyse the reasons for delay & take well-in-time appropriate corrective measures.
- The client must freeze design changes at a certain point to allow for procurement lead times, approvals etc.
- The client/ project manager must monitor the work done by the earlier contractor or contractors carefully - and make sure delays outside his control are recognised and documented.
- Timely shifting of utilities is very crucial for completion of the project
- The leader of the construction team must keep his eyes open & not blindly follow the drawings provided by the DPR consultant
- Variation orders for the extra/substituted/deviated items must be issued within a reasonable time
- The contractor must keep an eye on what his team is doing that might cause delays - typical examples include starting late, late submission of drawings, mistakes in his drawings.
- The contractor must "Mitigate" the impact of the delays - accelerate work, use up his "float" and redefine the Critical Path
- Negative cash flow is a very major cause for delays. The verification of the contractor's invoices must be done in a time bound manner & the payments released on time.
- There should be timely approvals for the submissions by the contractor for the RFIs.

Reference: Published Articles on the subject matter.

9. Public-Private Partnerships (PPP) in India

- Vaibhav Purandare & Hijam Eskoni Devi

Background

The high economic growth witnessed by India during the last decade was accompanied by realization of the need for enhanced investment in infrastructure. Rapid urbanization and industrial growth led to demand for basic infrastructure such as water supply and sanitation, transportation and energy. In order to augment economic growth, the government initiated several policy and enabling measures to support the creation of high-quality infrastructure and efficient delivery of services to its citizens. The Twelfth Plan projected an investment of Rs.55.75 lakh crores (at current prices) in infrastructure during the Plan period (2012-17). The Plan adopted a strategy of encouraging higher private investment in infrastructure which was projected to rise substantially from 37% in the Eleventh Plan to approximately 48% in the Twelfth Plan.

The use of PPP, an as instrument of procurement for creation of infrastructure assets and delivery of public services, has been recognized globally. Given the enormity of investment required and the limited availability of public resources for investment in physical infrastructure in India, the projected infrastructure requirements have made it imperative for the government to explore avenues for increasing investment in infrastructure through a combination of public investment and the PPP mode of delivery. While augmenting delivery and financing of public projects, PPPs are expected to bring in new and cost-effective technology for creation of infrastructure assets, managerial efficiency, and superior competencies in service standards for the operation and maintenance of public assets. There is a contractual accountability for the private party to guarantee timely and high-quality infrastructure services to end users.

In India, PPP applies to a contractual arrangement between a government or statutory entity, or a government-owned entity on one side and a private sector entity on the other, for the provision of public assets or public services. This is done through investments made and management undertaken by the private sector entity for a specified period of time, with a well-defined allocation of risk between the private sector and the public entity, whereby the private entity receives performance linked revenues that conform or are benchmarked to specified and pre-determined performance standards, measurable by the public entity or its representative.

Definition of Public-Private Partnership (PPP)

A public-private partnership (PPP) involves the private sector in aspects of the provision of infrastructure assets or of new or existing infrastructure services that have traditionally been provided by the government.

While there is no single definition of PPPs, they broadly refer to long-term, contractual partnerships between the public and private sector agencies, specifically targeted towards financing, designing, implementing, and operating infrastructure facilities and services that were traditionally provided by the public sector. These collaborative ventures are built around the expertise and capacity of the

project partners and are based on a contractual agreement, which ensures appropriate and mutually agreed allocation of resources, risks, and returns.

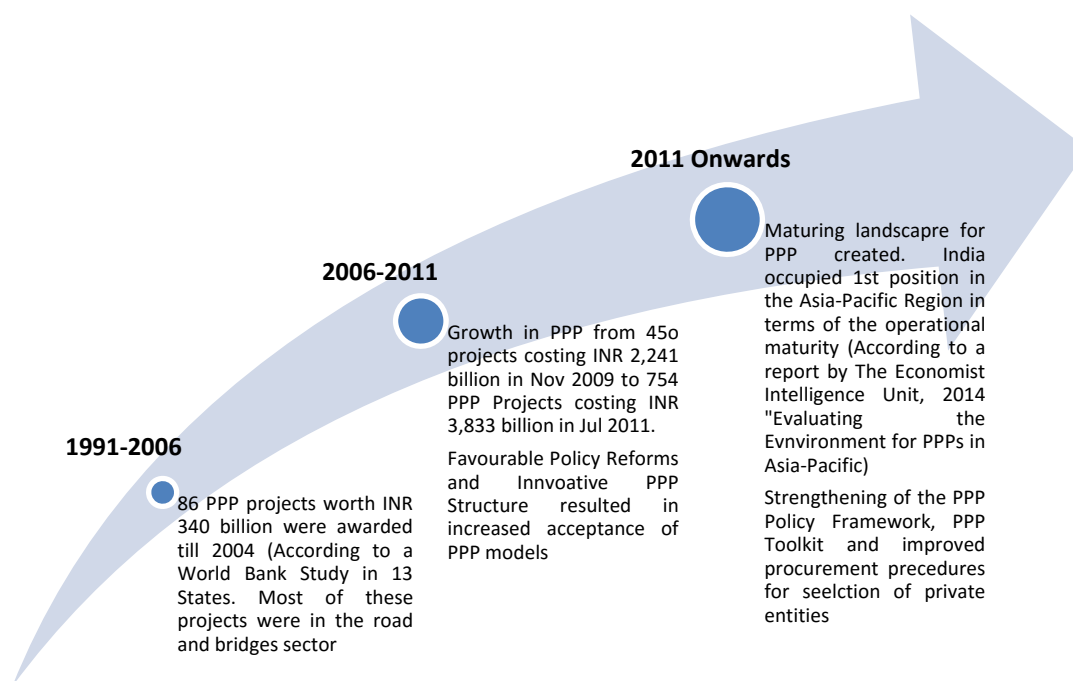
The Government of India defines a Public Private Partnership as:

“Public Private Partnership (PPP) Project means a project based on a contract or concession agreement, between a Government or statutory entity on the one side and a private sector company on the other side, for delivering an infrastructure service on payment of user charges.”¹⁷

This definition provides the broad framework under which different kind of PPP models can be chosen from. A comprehensive listing of various models is discussed in this report.

Evolution of PPPs in India

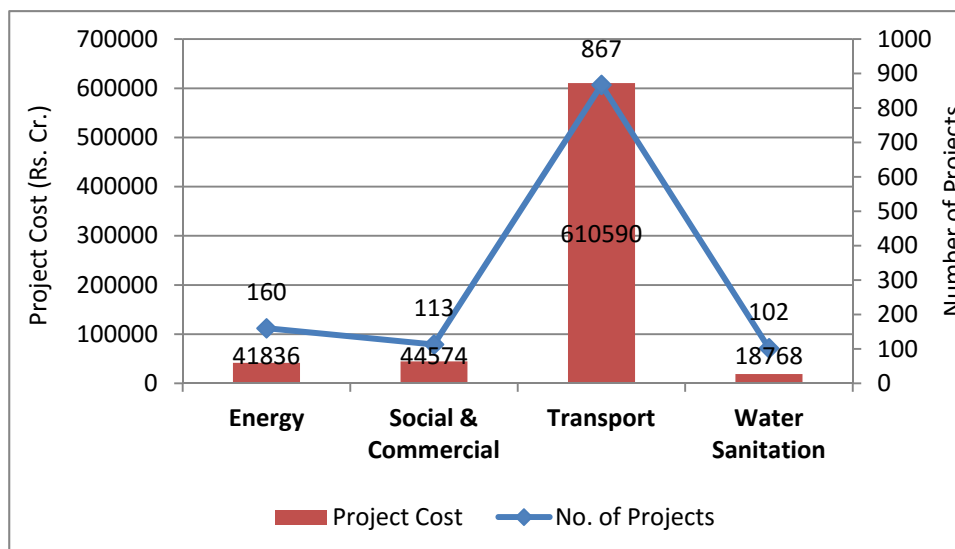
The first decade of the twenty-first century saw a spurt in the number of projects being implemented with private sector participation. The growth was supported by favourable policy reforms and financial support for PPPs. According to the 2015 Infrascope report of The Economist Intelligence Unit, “Evaluating the Environment for PPPs in Asia-Pacific 2014”, India ranks first in the world in “Operational Maturity” for PPP projects, third for sub-national PPP activity and fifth overall in terms of having an ideal environment for PPP projects.



The growth in the number of PPP projects during the last 15 years has made India a leading PPP market in the global arena. The database maintained by the Department of Economic Affairs (DEA), Government of India indicates that there are currently over 1,200 PPP projects in various stages of development and implementation, with an estimated investment of Rs 7.2 lakh crores. The sector-wise break up of these projects and investments is shown in figure below:

¹⁷ Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India. Department of Economic Affairs (DEA), Ministry of Finance, Government of India and Asian Development Bank (ADB). New Delhi : Asian Development Bank, 2006. – Page 17

Sector-wise Public-Private Partnership (PPP) Projects



Source: Department of Economic Affairs, Government of India (Data collected upto Oct 2015: Project with cost > Rs. 5 Crore)

Characteristics of a PPP Framework

PPP refers to the provision of a public asset and service by a private partner who has been conceded the right (the "Concession") for the purpose over a specified period on the basis of market-determined revenue streams that allow a commercial return on investment. The characteristics of a PPP framework include:

- Private sector involvement in building infrastructure assets and in providing services derived from those assets.
- Delivery of superior quality and well-maintained assets that provide pre-defined services with a higher level of accountability.
- Stress on long-term service delivery rather than asset creation.
- Implementation by an entity, which normally has no public sector equity (or minority shareholding by the public sector).
- Asset reverts to the public authority at the end of the concession.

Public-Private Partnership (PPP) Models

The range of options for public-private partnerships has expanded enormously over the past 30 years. Agreements between public and private entities take many shapes and sizes for both new and existing services. At one end of the spectrum is a management or service contract, where a private company is paid a fee for a service. At the other end is full privatization or divestiture (outright sale), where a government sells assets to a private company. Outsourcing has become another popular option; here a private company might handle an aspect of service, such as billing, metering, transport, or even cleaning.

Hybrid models of PPPs have seen explosive growth in recent years, especially with the development of a more diversified pool of emerging market investors and operators with local expertise. These

models often rely on simpler contractual arrangements and blend public and private money to diversify risks. A large variety of PPP formats have been documented:

- **Design Build (DB):** Under this model, the government contracts with a private partner to design and build a facility in accordance with the requirements set by the government. After completing the facility, the government assumes responsibility for operating and maintaining the facility. This method of procurement is also referred to as Build-Transfer (BT).
- **Design Build Maintain (DBM):** This model is similar to Design-Build except that the private sector also maintains the facility. The public sector retains responsibility for operations.
- **Design Build Operate (DBO):** Under this model, the private sector designs and builds a facility. Once the facility is completed, the title for the new facility is transferred to the public sector, while the private sector operates the facility for a specified period. This procurement model is also referred to as Build-Transfer-Operate (BTO).
- **Design Build Operate Maintain (DBOM):** This model combines the responsibilities of design-build procurements with the operations and maintenance of a facility for a specified period by a private sector partner. At the end of that period, the operation of the facility is transferred back to the public sector. This method of procurement is also referred to as Build-Operate-Transfer (BOT).
- **Build Own Operate Transfer (BOOT):** The government grants a franchise to a private partner to finance, design, build and operate a facility for a specific period of time. Ownership of the facility is transferred back to the public sector at the end of that period.
- **Build Own Operate (BOO):** The government grants the right to finance, design, build, operate and maintain a project to a private entity, which retains ownership of the project. The private entity is not required to transfer the facility back to the government.
- **Design-Build-Finance-Operate/Maintain (DBFO, DBFM or DBFO/M):** Under this model, the private sector designs, builds, finances, operates and/or maintains a new facility under a long-term lease. At the end of the lease term, the facility is transferred to the public sector. In some countries, DBFO/M covers both BOO and BOOT. PPPs can also be used for existing services and facilities in addition to new ones. Some of these models are described below.
- **Service Contracts:** The government contracts with a private entity to provide services the government previously performed.
- **Management Contract:** A management contract differs from a service contract in that the private entity is responsible for all aspects of operations and maintenance of the facility under contract.
- **Lease:** The government grants a private entity a leasehold interest in an asset. The private partner operates and maintains the asset in accordance with the terms of the lease.
- **Concession:** The government grants exclusive rights to a private entity to provide operate and maintain an asset over a long period of time in accordance with performance requirements set forth by the government. The public sector retains ownership of the original asset, while the private operator retains ownership over any improvements made during the concession period.

- **Divesture:** The government transfers an asset, either in part or in full, to the private sector. Generally the government will include certain conditions with the sale of the asset to ensure that improvements are made and citizens continue to be served.

A diagrammatic representation of some of the models is given below:

Figure: Public-Private Partnership (PPP) Models

Source: Presentation made by Ferozie, Muneer; *PPPs for Infrastructure development & financing in MENA Region*; at Webinar – 6 October 2015

Need for Public-Private Partnership (PPP)

While many governments have reformed their utilities without private participation, some seek finance and expertise from private companies to ease fiscal constraints and increase efficiency. By engaging the private sector and giving it defined responsibilities, governments can broaden their options for delivering better services.

PPP's can emerge as a win-win for the public as well as the private sector and most importantly, the citizen. PPP's seek to address limitations of both the sectors and the main *raison d'etre* for PPP projects' increased importance are:

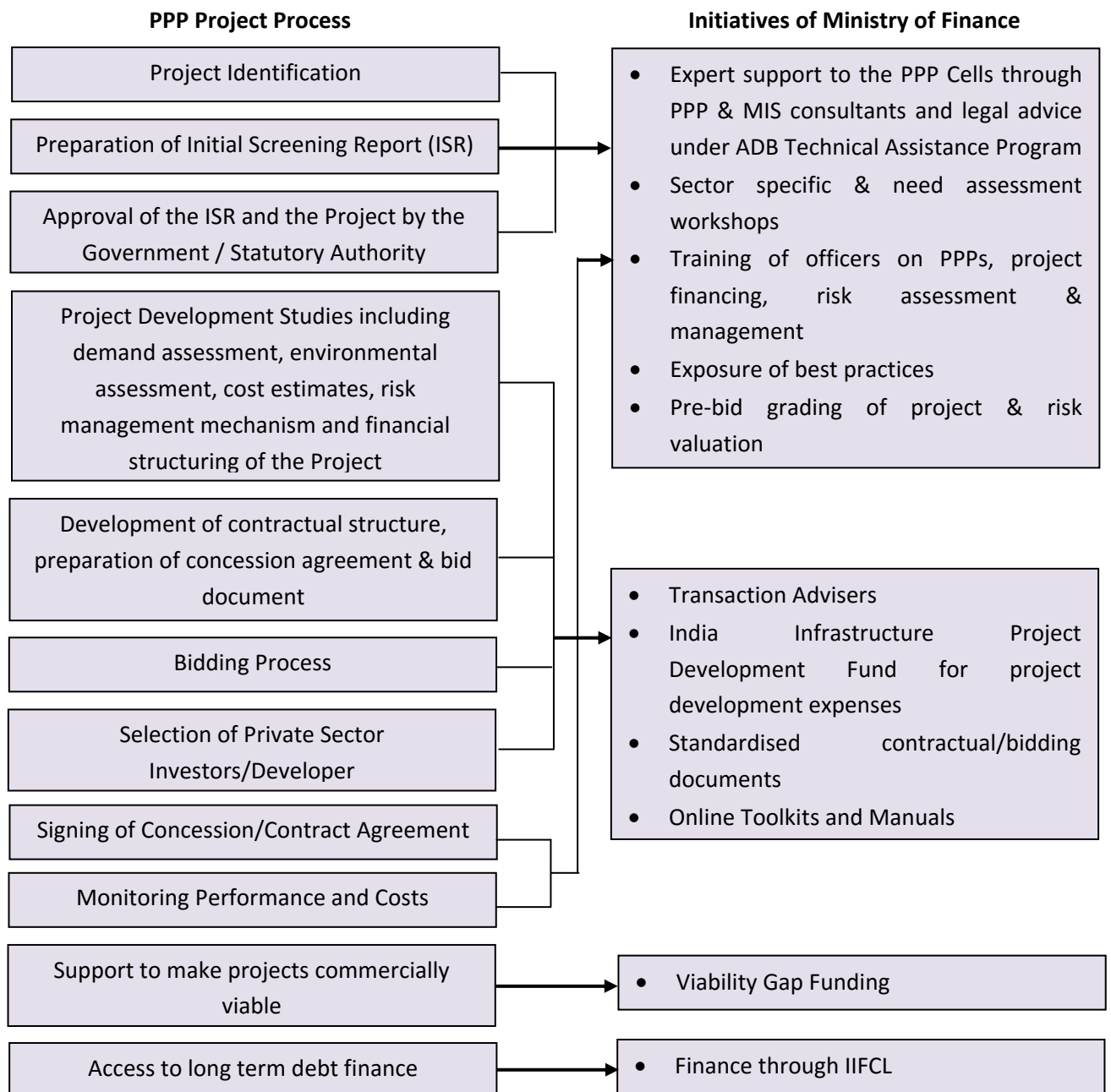
- **Limited Resources and Finances:** Limitations of government resources and limited capacity to meet the infrastructure gap.
- **Need for Different institutional mechanisms:** This includes incorporating the spirit of private efficiency into providing services for the public.
- **Equitable risk allocation and mitigation:** Shared risk allocation is a principal feature of a PPP project. PPP projects allow sharing of different kinds of risks between the private and public sector.
- **Complementary roles and drivers:** Putting it somewhat simplistically, the public sector is predominantly driven by the 'public good', the private sector by 'profit'. PPP projects allow both the sectors to cooperate and make these seemingly contradictory goals work together.

As an example, land acquisition and environmental clearances are best obtained by governments, and the private sector can deliver much faster, if such clearances are handled by the government.

Public-Private Partnership (PPP) Projects Process Management

A fairly detailed process for PPP project management and initiatives taken by the Ministry of Finance, Government of India is given below:

Figure: Public-Private Partnership (PPP) Projects Process Management



Government of India Policy and Programmes

Since the opening up of the economy in the early 1990's, the Government of India and many state governments have taken multiple steps to encourage PPP investment. A few of them are listed as under.

- **Setting up of a Committee on Infrastructure** on August 31, 2004: The committee is chaired by the Prime Minister. Its functions are to initiate policies, develop structures for PPPs, and oversee the progress of key infrastructure projects;
- **Publishing of Documents on PPP** by the Government of India. A list of key documents is attached later in this report.
- **Viability Gap Funding (VGF) Scheme:** The sectors identified for VGF scheme are Roads and bridges, railways, seaports, airports, inland waterways; Power; Urban transport, water supply, sewerage, solid waste management and other physical infrastructure in urban areas. Other sectors can be added on the approval from the Finance Minister. VGF is to ensure funding for large scale infrastructure projects, where commercial viability is difficult to establish, especially at the beginning of the project.
- **Setting up on an Empowered Committee** for speeding up the approval mechanism and process for PPP projects.
- **Setting up of a committee on Knowledge management and dissemination** under Joint Secretary (Infrastructure), Department of Economic Affairs (DEA), to prepare PPP toolkits for various sectors. The toolkit comprises model concession agreements and prequalification criteria for different sectors, standard terms and conditions, and project preparation manual.
- **Assistance for the creation of PPP cells** in various state governments to act as a nodal agency for PPP projects at the state level.
- **India Infrastructure Finance Company Limited (IIFCL)** is a wholly government owned company with an authorized capital of Rs 1000 crore and paid-up capital of Rs 10 crore set up to fill the gap for long-term infrastructure finance that banks are not in a position to address. It caters for the burgeoning gap in long-term financing of infrastructure projects in the public sector, PPP, or the private sector. IIFCL plays a catalytic role in the infrastructure sector by providing long-term debt for financing infrastructure projects in India. IIFCL raises funds both from the domestic as well as external markets on the strength of government guarantees. An off shore SPV, Indian Infrastructure Finance Company (UK) Limited has been set up to utilise part of foreign exchange reserves for infrastructure development.
- **Model Concession Agreements** have been set up for highways, transport, urban and other sectors to make sponsors and officials more comfortable with PPP projects.
- **A portal for PPP activities in India** has been set up - www.pppinindia.com. The website is a one-stop site on information relating to Public Private Partnership initiatives in India. The site provides links to institutions, websites and resources related to PPP and infrastructure, including contact points and referrals about Government agencies.
- **A database of PPP projects by central and state governments in India** is available online at www.pppindiadatabase.com. The purpose of the database is to provide comprehensive and current information on the status and extent of PPP initiatives in India at the Central, State,

and sectoral levels. The database provides essential information on economic sector, host state, collaborating government departments, private investors, capital commitments and total resource commitments.

Challenges for Public-Private Partnerships (PPP)

The key challenges that have been noted by the Committee on Revisiting and Revitalising PPP Model of Infrastructure (November 2015) are summarized below.

i. External factors

- The economic slowdown across the world and the credit crisis slowed the demand for goods and services across the spectrum, affecting the infrastructure sector significantly. The PPP projects were also impacted by this demand slowdown.

- #### **ii.**
- A series of judicial and statutory authority orders (e.g., banning of mining activity) that delayed the progress of development and implementation of PPP projects and revenue flows. New projects are finding it increasingly difficult to attract sponsors and financing (equity and debt) has become strained. Increased perceived risk of projects has further led to pension and insurance funds limiting their exposure to such projects.

iii. Legal and regulatory framework

- While the absence of an independent regulator did not dampen the progress of PPPs initially, sectors such as roads, airports and ports have either no independent regulator or multiple regulators (as in the case of airports). Overlap in the functions of such regulatory agencies has led to problems in certain cases, giving rise to calls for decisions taken at arm's length.
- Some sectors such as the urban sector are yet to evolve regulatory frameworks for sustainable and efficient delivery of PPP projects and services.
- Dispute resolution mechanisms are slow and not very well developed, often derailing project timelines and freezing funds, thus derailing project timelines.
- PPP projects have also been affected by factors such as delays in land acquisition and clearances, shifting of utilities, and right of way issues, leading to time and cost overruns. Delays have often been due to a silo approach to jurisdiction instead of macro assessment of economic, social, and financial risk-reward of a particular project.
- There is a lack of capacity within statutory authorities in understanding how PPPs work, and the attempt to bring corporate functioning under the ambit of standard government oversight, in addition to already applicable Companies Act requirements, has led to uncertainty on regulatory risk.

iv. Financing issues

- Bank appraisal of projects has in many cases suffered from lack of adequate diligence, sometimes due to inadequate appraisal skills. This has affected the quality of lending.
- There is a shortfall in equity capital with local sponsors. Delays in execution of projects further leads to equity getting trapped in ongoing projects, thus not being available for newer projects.

- Balance sheets of most prominent developers in the country are stressed and over leveraged. In the absence of a vibrant takeout market, refinancing of projects has not been taking place at the desired scale and pace.
- Underdeveloped debt markets have been a cause for concern for a while.

v. Multiplicity of institutions and overlap in roles

- Governments at all levels, including urban local bodies (ULBs), line departments, state agencies, are by and large unable to create a steady pipeline of projects due to institutional capacity constraints. This has also led to aggressive bidding by a few developers to garner market share.
- The network of multiple agencies involved in project implementation and an overlap in the functions of these agencies is leading to inordinate project delays.
- Effective co-ordination amongst various government agencies to deliver improved citizen value is cited as a key cause for delay of PPP projects.
- Inadequate capacity in authorities, consultants, financiers, developers, statutory audit and vigilance in the PPP context has given rise to misinformation.
- Lack of urban planning, and clear laws, regulations and procedures has resulted in a slowdown of urban infrastructure projects.

vi. Private sector problems

- Over-aggressive bidding with inadequate due diligence by bidders has sometimes led to unviable offers. Since determining whether a bidder's capital structuring permits such optimistic bidding is difficult for the Authority, despite its own conservatism in its project report, bids were accepted and later failed.
- The private sector did not develop its skills in pricing of risk, despite engaging the best consultants in the field. Coupled with the mistaken belief that the economy was growing at rapid pace in the second half of the 2000s, this led to myopic assessment of possible risk factors and a failure to build in mitigation measures.
- Private sector developers, who were mainly construction experts, found they had no appetite for long-term operations and maintenance (O&M) of infrastructure assets. However, the country is yet to develop a specialist class of O&M developers who can take over during the operations phase.
- The quality of consultancy services in PPPs has not kept pace with the growing need for such services in the country. This is reflected in inconsistent quality of some advisory services.

vii. Contractual frameworks

- Inadequate provisions to address legal and contractual issues such as exit clauses provisions, default by parties, change of scope related events, and connectivity infrastructure, due to inadequate project preparation by authorities and appraisal by lenders have caused delays and projects not taking off as anticipated. Further, older concessions lock in lead sponsor equity, albeit at a reduced level, for the duration of the concession.
- Implementing agencies often adopt model bidding and contract templates as is, with little or none of the project-specific customization that is key to successful project design and implementation.

- Difficulties have been experienced with long-term PPP projects when parties are in dispute or unanticipated events lead to recourse to traditional long-drawn out legal systems for resolution.
- While there have been demands from developers for restructuring of existing contracts to sustain private sector interest, and bank asset quality would also benefit from such restructuring exercise, there is lack of appreciation of the sanctity of contracts and the need to restructure contracts that should be based on the project's revenues and long-term factors rather than temporary illiquidity and insolvency issues.

viii. Support and other issues

- PPPs can bring in the required efficiency and investments in infrastructure projects. For undertaking PPP projects successfully, several factors continue to remain valid and intact - need for the project, appropriate project development, adequate project preparation, equitable risk allocation, transparent competitive procurement and an administrative, legal and regulatory ecosystem that promotes better value and services to the citizens and the public authorities, which result in better and cheaper long-term services.
- Fundamental design flaws in PPP projects need to be tackled.¹² For instance, contracts need to focus more on service delivery instead of fiscal benefits, better identification and allocation of risks between stakeholders, prudent utilization of VGF where user charges cannot guarantee a robust revenue stream, improved fiscal reporting practices and careful monitoring of performance. Rigidity in concession documents has triggered renegotiation of long-term contracts. Developers of a few road PPP projects, that are currently in dispute, have approached the government to consider rescheduling of premium payments, which is currently under the scanner. Since the PPP landscape is in its maturing phase, the government needs to carefully consider the moral hazards and risks in allowing post-award changes.
- It has been observed in many delayed and stalled projects, that the framework to assess project risks and allocate them between stakeholders suitable to best manage the risks, has not been effectively developed. This has resulted in projects ending up in disputes, stretched project timelines and increased costs. Commercial and operational risks need to be passed on to the private sector under appropriate frameworks. Liabilities, direct and contingent, that would devolve on parties in a PPP concession along with risk-allocation needs to be ensured upfront by the parties to the concession and, where relevant, by the lenders.
- Most contracts in the PPP arena are under the construction and operations framework, while the need for model contracts for O&M and services is increasingly being perceived. There is a need to develop a new breed of O&M operators to take on projects that have been completed. The move to enable complete exit of promoters from the projects after a defined period, provides this flexibility.
- It is difficult to sometimes foresee upfront the likely demand for the project, especially in new and green-field developments. Contracts should build in these uncertainties.

- ix. Overall, the Committee noted that inadequate and inconclusive stakeholder consultations are often observed in PPP project design. It is important to consult and obtain buy-in of stakeholders to ensure the smooth implementation of projects, especially with regard to access, willingness to pay and dispute resolution. Going forward, it is possible to better manage the various risks that have plagued the Indian infrastructure sector with a more involved and participatory role of the private sector, and the allocation of risks in a manner that allows for flexibility to address concerns and reflect the interests of stakeholders. Such measures will also attract greater inflows of external debt and equity capital and thus lower the overall cost of capital for financing the infrastructural needs.

10. Communication Strategies and Community Involvement

- Hijam Eskoni Devi & Vaibhav Purandare

Objective of the Session

The participants will be able to have enhanced knowledge on following areas:

- Effective Communication Management for urban infrastructure project
 - Components of Communication
 - Type of Communication
 - Strategising Communication
 - Channels of Communication
 - Principles of Effective Communication
 - Funding and Budget Design
- Participatory Planning
 - Stakeholders
 - Levels of Participation
 - Method for Effective Community Participation

Background

With urbanization, there is need for new infrastructure creation and upgradation. There are wide range of stakeholders in urban infrastructure projects depending on the scale of project and also the sector. Stakeholders vary from individuals or groups and they play a very important part as they can positively or negatively affect a project. Project stakeholders have a stake in, or expectation of, the project's performance and include clients, project managers, designers, subcontractors, suppliers, funding bodies, users and the community at large. For the success of any project it is very important to focus on the stakeholders' participation in different stages of the project.

Communication Management is a knowledge area of project management and successful project completion is attributed to its effectiveness. Communication is not confined to the media or to messages, but to their interaction in a network of social relationships. Researchers have emphasized the importance of project manager's ability to communicate with a diverse set of people at every stage of project life-cycle to ensure communication platform-preferences and non-recognition of all stakeholders. Untimely and inadequate information leads to dissatisfaction and resistance, resulting in project delays at execution stage, increase in project cost and inadequate quality management. Hence, there is a need for an effective communication process that recognizes each stakeholder's information requirement for different project stages and adopts suitable communication technologies. There is a research gap regarding study of effective communication with diverse stakeholders.

Along with communication, it is also now widely accepted that a parallel investment in human resources through education and training of adults is essential for project success. Awareness raising, knowledge acquisition, attitude change, confidence building, participation in decision making

and action, all require processes of education and communication. And all are essential for effective project development; they are not just desirable options.

Development of urban infrastructure projects affects day-to-day lives of a large segment of local population and changes their established area usage pattern. Therefore, public engagement is considered a key determinant of success for infrastructure projects, as the satisfaction of citizens is becoming increasingly important and there is growing tendency of stakeholder groups to influence the implementation of these projects according to their individual concerns and needs. Thus, keeping local people informed about the project often helps to soften the impact of dramatic changes associated with these projects. Infrastructure creation/upgradation for development requires effective communication management that facilitates communication between all stakeholders, internal as well as external. Public relations play an important role in service provision. It is defined as the strategic communication used by organizations for establishing and maintaining symbiotic relationships and effective engagement with culturally diverse public segments. Relationship Management is the ongoing process of engaging in cooperative & collaborative activities & programs with immediate and end-user to create or enhance mutual economic value at reduced cost. Policy makers should solicit public participation to evoke citizen's power through partnership, power delegation and citizen control.

Effective Communication Management for Urban Infrastructure Projects

Project communication management is defined as processes that enable generation, collection, dissemination, storage and disposition of project-related information. Collaboration and Cooperation between stakeholders is a requirement for project success which can be achieved through effective communication management. In all project stages, communication is most effective when the four 'Cs' are covered: Clear, Concise, Complete, and Correct communication is at the required time.

Communication plan development is a function of stakeholder management strategy being proactive or reactive and whether it works on a collaborative or power based approach. A combination of push and pull communication methods is suggested. Designing a communication plan catering to stakeholder requirement and sensitive to assimilation capabilities would assist the project team to manage expectation and establish project priorities, fulfil needs of stakeholders and reduce unpredictable risks, mitigating chances of project failure and paving way for innovation and improved technical solution.

Components of Communication

Communication builds trust through dialogue, transparency, mutual respect, and strong evidence. It uses a mix of communication techniques, channels, and approaches to advance positive individual and social change. It also engages and empowers multiple stakeholders (that is, individuals, the community and mass and interactive media) to achieve greater participation in the development process and to make interventions sustainable. Three basic components of communication are **advocacy, social mobilization and behaviour change (or behaviour development) communication**. Advocacy informs and motivates leadership to create a supportive environment to achieve programme objectives and development goals. Social mobilization engages and supports participation of institutions, community networks, social/civic and religious groups to raise demand

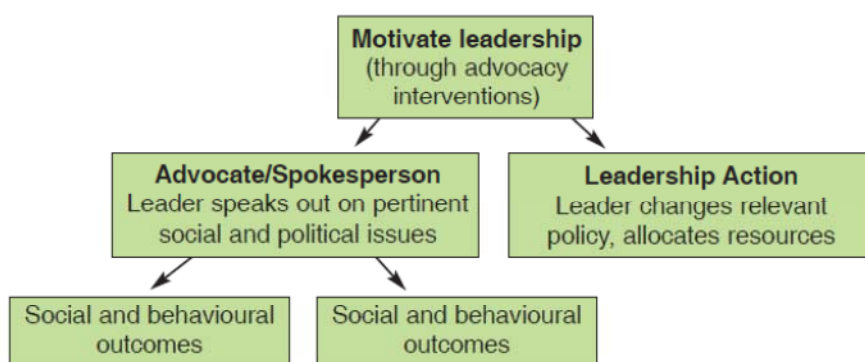
for or sustain progress toward a development objective. Behaviour change communication involves face-to-face dialogue with individuals or groups to inform, motivate, problem-solve or plan, with the objective to promote and sustain behaviour change.

Advocacy

Advocacy is communication targeted at leadership and the powers that be to take actions to support programme objectives. Possible results of an advocacy intervention can be targeted leaders taking actions such as:

- Legal reform, or enactment of new law(s), or rules of business;
- Policy decisions, formulation of and/or reform;
- Administrative directives, rules; and
- Resource mobilization, financial allocation.

Figure: Advocacy Objective to Create Supportive Environment



Source: UNICEF, 2008, Writing a Communication Strategy for Development Programmes

Social Mobilisation

Social mobilization is a process of harnessing selected partners to raise demand for or sustain progress toward a development objective. Social mobilization enlists the participation of institutions, community networks and social and religious groups to use their membership and other resources to strengthen participation in activities at the grass-roots level. The backbone of developing the social mobilization component of a communication strategy comes from a combination of data, participant and behavioural analyses and community input. The chapter on Community Participation is relevant here in that the voice of the community should help direct social mobilization objectives and activities. Consultation will be needed with the community to ascertain which institutions; social, political and religious groups will have the most influence on the primary participants.

Behavioural Change Communication

Behaviour change communication involves face-to-face dialogue with individuals or groups to inform, motivate, problem-solve or plan, with the objective to promote behaviour change. Indeed, many prefer the term “behaviour development communication” or “interpersonal communication” for this component—all labels are correct, and all refer to the same process.

Types of Communication

In a project, communication can be of two types:

Internal – for the People involved in project planning and implementation like ULB, elected representative, etc. to create joint ownership

External – for the larger public for having clarity of the project and also create awareness and achieve behavioural change in case of certain project like toilet construction, water supply, etc.

Communication strategy is required mainly for internal and IEC is very necessary for external.

Strategizing Communication

In each phase of urban infrastructure projects, communication with stakeholders is required for different purposes and in different formats:

- In project initiation phase, complex negotiations need to be done with key stakeholders to determine project purpose and scope. This is a process that requires flexibility and multidirectional synchronous communication and can be conducted through workshops including virtual workshops.
- In project planning and design phase, project expectations among stakeholders need to be aligned, awareness about the project and its general purpose needs to be created and relationships need to be built. Impersonal push communication could be appropriate for marginal stakeholders and instructional videos for resourceful people.
- In the project execution phase positive stakeholders need to be kept informed, their contribution needs to be acknowledged and relationships need to be maintained. This requires both personal and impersonal communication.
- Even after the project is finished, team leaders and project sponsors need to communicate with end users and the team about what was accomplished and the value the project brings to the system.
- In redevelopment stage similar communication structure is required as in the planning stage.

Adopting a sustainable communication management system for stakeholder management in projects, specifically in public projects like urban infrastructure projects helps in understanding information requirements of stakeholders, generating positive image of projects, and avoiding or minimizing negative impact of stakeholders on projects. Thus, through adoption of such a system, all stakeholders would get the required information in the required format and at the specific stage of project when it is most useful for them. A proactive communication management system is more effective than a reactive system.

Channels of Communication

Technical communication between project team stakeholders flows through documents like contracts, specifications, reports, manuals, schedules, calculations, drawings, photographs, agenda and minutes of meetings. Standardization of these documents is required for increasing communication efficiency and can be achieved through a better plan, communication flow, instrument and structure. Advanced IT tools can be utilized for this purpose. Often, project opposition is a consequence of insufficient or incomprehensible communication. Stakeholders with differential understanding of technical aspects, varied communication preference and impact level

require multiple and diverse communication methods. The commonly used communication methods could be television and newspaper advertisements, poster announcements and exhibitions at public spaces, road shows, public forums, focus group meetings, school- student meetings, telephonic poll and written submissions. Public discussions conducted through focus groups and discussion meetings; workshops; community advisory groups; citizens’ juries are suggested. Web-based social media tools have a wide reach. Project models and TV campaigns may help non-literate groups and computer games and social networks can encourage young people to express their views, become project ambassadors and provide information about the projects needs and challenges. ‘Visioning’ is a specific method considered important in making people come to terms with the economic, social and environmental consequences of their ideologies and to focus on practically achievable outcomes whilst still providing for different values and priorities to be addressed. Project website can be created for regular information and updates and uploading photographs to allow people to get a visual feel of the project.

Selection of proper channel of communication is very important. The matrix below describes the reach of each channel, whether it is suited to simple or complex messages, how adaptable is it to accommodate variation within an audience group, production and access cost and whether it can be used in an interactive way.

Table: Channel Characteristics

Channel Type	Reach	Type of Message (simple/ complex)	Adaptability	Cost	Possibility for interactive use
Television	Can reach very large audiences simultaneously if electricity and sets are available and reception is adequate. Reach differ between government and private channels, terrestrial and satellite channels. Availability of electricity key factor.	Because of broad scope primarily used to provide general information/ news/ entertainment to nation-wide audiences. Simple message preferable for spots, PSAs. Relatively more complex messages can be sent through drama, infotainment and talk show formats.	Caters to commonality of wide ranging dispersed audiences. Difficult to adapt to smaller and specific cultures, languages etc. Immediate audience feedback not available except phone-in shows, quizzes, letters, etc.	Production facilities expensive to install, operate. Production costs can be high. Buying air time to place contents can be prohibitive. At users’ end, buying and running TV sets is costly in low income societies but watching often is free.	Quite high. Documentaries, Community based programmes, live call-in shows, discussions participated by cross sector of audiences are some of the possibilities.
Radio	Can reach very large audiences simultaneously if sets and batteries are available. Also depend on electricity. Radio is cheaper than TV. Availability of electricity key factor.	Primarily general information / news/ entertainment as above. Information can be more focused where multiple bands, local FM band and regional or community radio stations exist.	Same as TV except regional radio broadcast may cater to native issues in local language. Audience feedback available only through phone in programmes, letters etc.	Prices for radio sets are low but still considered an investment beyond everyday necessities for poor rural population. Buying batteries is a problem. Listeners’ Club can lower costs.	Quite high. Through phone in programmes, community based participatory programmes, discussion programmes, reading and answering listeners letters etc.
Film	Can reach medium-sized audiences depending on availability of projection facilities (cinema halls, audio-visual mobile vans) Availability of electricity key factor.	Can be used/made for general or specialized audiences. General or very specific topics. Complex messages and scenarios can be depicted.	Once produced, not adaptable. Delayed audience feedback can be available. But with technological advancement, changing, editing, adaptation is easier.	Lengthy, costly production process. Viewing is reasonably priced through buying tickets to movie halls. DVDs relatively cheaper for middle, upper class audiences.	Variable. Generate discussion following screening. Q&A may be built into the programme.

Channel Type	Reach	Type of Message (simple/ complex)	Adaptability	Cost	Possibility for interactive use
Video/DVD	Can be used for broadcast or "home" viewing. Appropriate for both small and large audiences.	Can be used/made for general or specialized audiences. General or very specific topics. Complex messages and scenarios can be depicted.	Once produced, not adaptable. But with technological advancement, changing, editing, adaptation is easier.	Initial outlay variable according to quality of production desired. Copies of videos cheap to reproduce.	Quite high. Generate discussion after screening. Organize informal community viewing with dialogue. Q&A may be built into the programme.
Slides	Can be used effectively in interactive situation discussion groups, etc. Not suitable for rural and remote settings.	General or specific topics with small scale reach. Good advocacy tool for focused messages.	Audience and feedback available in small group settings. Easy to adapt.	Relatively inexpensive to produce with access to computer and accessories.	Quite high. Use of slides can make discussion points visible.
Newspaper	Can reach broad literate audiences rapidly.	Specific technical information/news/information.	Once printed, not adaptable. But changes daily and web editions update constantly and are read by large numbers.	High publishing cost. Advertisements expensive. But information/news materials may be placed free.	Medium. Discussion of big news stories naturally takes place in the market places etc. Readers' forum.
Magazine	Can specifically target literate segments of public.	Can explain more complex health issues, behaviours.	Once printed, not adaptable.	Similar as newspaper.	Similar as newspaper.
Poster	Can have a good reach depending on numbers disseminated and placement.	Suitable for short and focused messages. Do not convey complex messages effectively.	Once printed, not adaptable.	Good design and graphic may be expensive. Usually reasonable prices for printing. Distribution may be costly.	May be used to generate discussion on a topic.
Leaflet, flyer, brochure	Depends on number and distribution.	Can explain more complex health issues, behaviours.	Once printed, not adaptable.	Similar as poster.	May be used to generate discussion on a topic.
Billboard, wall painting	Depends on placement.	Cannot convey complex messages effectively.	Once printed, not adaptable.	Inexpensive. Could be expensive if billboard needs to be installed	Limited.
Interpersonal Communication (IPC)	Groups or other individuals.	Good for specific, complex intimate information exchange.	Generally interactive with immediate feedback.	Cost factors include training, equipment, transportation, etc.	Highly interactive if not made top down.
Folk media including Interactive Popular Theatre (IPT)	Small to medium scale reach. With mobile units, the reach can be higher. Good for areas hard-to-reach for general media.	Simple, easily understood messages with local flavour and with entertainment.	Adaptable when interactive. Form may be too flexible and risk slipping from main messages.	Inexpensive. Cost factors include scripts, rehearsal, props and performance etc.	Quite high. Discussion with audience during or at the end of performance. Generate community dialogue.
'Miking' and other mobile media	Depends on mobility and regularity. Can reach people in inaccessible areas.	Simple, easily understood messages.	Easily adaptable.	Inexpensive.	If accompanied by leaflets, more information and can answer questions.

Source: UNICEF, 2008, Writing a Communication Strategy for Development Programmes

Some of the ways to use channel are as follows:

- Many of the media/channels (poster, flyer, video, folk theatre) when combined with interpersonal communication (IPC), can become more effective behaviour change interventions. After the materials or a drama have been shown, a facilitator can lead an interactive session with the audience to reinforce the messages. Thus, these components of a communication strategy should be linked with ongoing programme activities.
- Mass media can reinforce localized IPC activities. (E.g. The nationally televised countdown before the upcoming NID for polio eradication helps local volunteers going house to house to mobilize families on the day of the campaign.)
- With its broad reach, mass media can promote positive social norms. (e.g. drama serials model empowered adolescent girls and women participating in family decision-making; a

documentary shows communities that have eliminated child marriage; radio broadcasts of testimonials of successfully using family planning methods.)

- Folk theatre can dramatize sensitive issues that people are unwilling to discuss directly. During interactive sessions after the performance, beliefs and behaviours can (safely) come into public view and begin social change at the community level.
- Broadcast media can broaden the reach of print materials to illiterate audiences. A poster can be shown on TV, read aloud and commented upon.
- Gender equity, rights, and ethnic groups can be represented in the creatives used in mass media in order to break stereotypes and include all participant groups.
- Folk theatre/songs can be used in areas where other channels cannot reach. Television will not reach areas with no electricity or where the national language is not readily understood; in sparsely populated areas, household visits are not cost effective ways to provide information, yet many people will easily gather to watch a performance on market days.
- For folk theatre to have maximum impact, local theatre groups, performers and singers can be selected and involved in the creation of scripts. This will ensure local context and the use of appropriate language and dialect.

Communication with public can be routed through especially trained Public Relation Officials possessing formal theoretical education and practical knowledge while public meetings can be arranged for interaction between technical experts, project managers and external stakeholders. However, social, economic and environmental issues require equally thorough consideration and interaction sessions. It is suggested that in public Interactions conducted through third party team of academic/university research teams, or public relations firms will lead to independence and impartialness and public may be more willing to express their opinions freely.

The 'environment' for public relations varies from region to region based on five key variables – culture, media environment, the political system, the economic system and level of development, and activist. It would be appropriate to use best practice global public relation and communication strategies but adapted for local culture.

Community participation methods should be sensitive to the local profile and the project nature. All interest groups should be identified and consulted and different communication methods should be integrated to ensure that broad process and outcome objectives are achieved and that the full range of stakeholders – including the silent majority are reached.

Public consultation process should be conducted with clarity around objectives, implementation methodology, mapping of actors and their characteristics, call for participation, instruments for logistical support, and materials for distribution, workshop timetable, date and place of consultations. Conducting Group Communication can be critical as group members are seen as individuals, yet they act from within a group where Influence factors range from members' roles (formal and informal); levels of maturity and expertise; and all kinds of noise (language differences; varying frames of reference; physical noise (like plant and machinery). Regular reviews and evaluations should be carried out during and after the public engagement process to ensure the views of different stakeholders remain unchanged over time.

Principles of Effective Communication

The key principles of effective communication with stakeholders can be summarized as below:

- Providing meaningful information in a format and language that is readily understandable and tailored to the needs of the target stakeholder groups. Community representatives need status reports regarding major events and project milestones such as completion of the project's design, estimated taxpayer costs, outages or planned closure of roads and highways, environmental impacts, local hiring and community outreach. Information needs to be explained so that each diverse group can relate with it. For example, website documenting World Trade Centre reconstruction work in New York displays information in a format and expression that general public can also relate with. Like, information on One WTC indicates that over 200,000 cubic yards of concrete has been cast, enough concrete to make a sidewalk from New York to Chicago.
- Providing information in advance of consultation activities and decision-making and in ways and locations that make it easy for stakeholders to access it. For some stakeholders a close dialogue and continuous interactions are needed and others may just need to be informed about the project's progress. Interested stakeholders could be communicated through one to one interviews or consultations through a focus group or workshop. There may also be a requirement to utilize multiple channels.
- Respect for local traditions, languages, timeframes, and decision-making processes.
- Two-way dialogue that gives both sides the opportunity to exchange views and information, to listen, and to have their issues heard and addressed.
- Inclusiveness in representation of views, including ages, women and men, vulnerable and/or minority groups and processes free of intimidation or coercion or incentivisation.
- Prioritising stakeholder communication with respect to constraints concerning budgets, legislations and contractual agreements.
- Clear mechanisms for responding to people's concerns, suggestions and grievances, and incorporating, where appropriate and feasible, feedback into project or program design, and reporting back to stakeholders.
- Maintaining stakeholder communication records and adopting grievance processing system.

Funding and Budget Design for Communication

It is important to identify funding sources and to design a strategy which will keep within the budget. Funding is an important issue for the programme's communication committee to address before designing a communication strategy. The analysis of participants, behaviours, and communication channels should provide the information about where to spend the budget most effectively. For example, if some participants in the programme cannot read, but listen frequently to the radio and believe it is credible, the most effective to use the budget would be on radio interventions rather than brochures to deliver messages. The Channel Characteristics Matrix in the earlier section can give an indication of the costs of different channels, as well as what reaches who most effectively. All this information should be taken into consideration in the budget design.

Urban Infrastructure Projects and Participatory Planning

Urban Infrastructure Projects can be divided into different phases like Initiation, Planning and Design, Construction, Operations and Maintenance, Redevelopment. Stakeholders in urban infrastructure project include groups/community affected by the project, project participants, non-governmental organizations (NGOs), academics and experts, local government officials, etc.

In construction industry, stakeholders can be classified as:

- i. internal stakeholders, who have legal contract and are clustered around the client on the demand side (employees, customers, end-users and financiers) and supply side (architects, engineers, contractors, trade contractors and material suppliers); and
- ii. external stakeholders, comprising private actors (e.g. local residents, landowners, environmentalists, and archaeologists) and public actors (such as regulatory agencies, and local and national government)

It is important to understand their interests, involvement, interdependencies, influence and potential impact on the project so as to develop appropriate focus for each group. While some may have a limited influence, others classified as key stakeholders may have significant influence on the project and its expected outcomes. End users are recognized as key stakeholders. Conflict between stakeholders is expected as each stakeholder group has its own history, character, gender, culture, values, beliefs, and behaviours influencing its actions and motivation. All stakeholders, including local community or Project Affected People should be consulted for viewpoints and common understanding needs to be achieved at early stages of a project. This is very important as it would:

- minimize the amount of revisions needed later to accommodate any radical and surprising feedback,
- reduce the chance of failure or confrontation between decision-makers and local citizens,
- lead to better decision making and
- would positively influence quality as perceived by stakeholders.

Some of the stakeholder management strategies are agreement, negotiation, avoid, challenge and control, lead, cooperate, involve, protect, educate and monitor or control; defensive, reactive, proactive and accommodative, all of which are operationalized through communication tools and methodologies.

Stakeholder impact is dynamic and changes over the course of the project. When project teams keep customers and stakeholders updated on progress, risks and possible issues, it creates trust that the team is delivering to expectations and makes it easier to solve problems when they arise. A proper communication strategy plays a very important role in relationship maintenance with the stakeholders.

Community plays a very important role in any development project and hence its participation is the key to the success of a project. The community should be involved in all aspects of development-assessment, planning, implementation and monitoring. This is a well-established principle for successful development, and it is equally relevant to communication. Community engagement and input must be integral parts of all aspects of strategy development, implementation and monitoring.

This means that community participation should be built throughout the strategy as a long term support system for sustainable behaviour change and not merely used as another channel for information dissemination or as another strategic approach.

In many communities, there are a number of groups - especially women, children, adolescents, the poor, the unemployed, the sick and disabled - that are unable to communicate effectively or to participate in decision making because of social biases against them, and/or their limited access to information and communication technology. They are excluded when the control of the development and communication processes are held by small, elite groups. A good communication strategy therefore, will create opportunities for those outside the elite circles of power to express themselves and to take part in the solutions which affect their own lives. For example, a good communication strategy will make sure that the community meetings held to plan the location of, and access to, new water pumps will include the participation of the women who use the pumps, as well as the poor, low caste, and other minority groups whose lives all depend on good access to clean water.

Community input in the communication process is when a small sample of participants is heard (such as through focus group discussions, coming to a planning workshop, or a community meeting) and their views inform strategy or message design for an entire programme. Community participation, on the other hand, is when community members' involvement results in activities they do in their own community.

There are different stages of participation which is shown in table below:

Table: Community Participation Levels

Participation Levels	Leadership	Community Organization	Mobilization Resources
<p>Level 4 Communities lead the process to identify project priorities. They play a major role in the implementation of activities and occasionally seek the advice of development agencies.</p>	<p>Community leaders and women play an important role. Community leaders independently identify needs and plan and implement community health activities.</p>	<p>The community organizations are highly skilled in all phases of the community health activity: planning, management, and evaluation. They effectively manage all community activities, participants, and resources.</p>	<p>The communities are capable of foreseeing the resources needed to implement the activities, and they can mobilize the resources effectively, inside as well as outside the community. They effectively manage community resources.</p>
<p>Level 3 The community and development agencies jointly define project priorities. Community leaders and groups play the principal role, and development agencies provide support and technical advice.</p>	<p>Community leaders include representatives from all community groups. Women leaders play an important role in administering all the community health activities. Community leaders assume principal responsibility and seek technical advice from development agencies.</p>	<p>Community organizations have sufficient skills to identify needs for managing and evaluating community health activities. The development agencies provide support and help build community capacity.</p>	<p>Depending on circumstances, the communities are capable of mobilizing human and material resources within the community and of obtaining resources from institutions outside the community.</p>
Participation Levels	Leadership	Community Organization	Mobilization Resources
<p>Level 2 Development agencies define priorities. The communities are involved in all phases, but the development agencies play the principal role.</p>	<p>The communities are involved in designing the health activities. They are aware of the needs and interests of diverse community groups (ethnic groups, women, etc.). Community leaders rely substantially on the guidance of the development agencies.</p>	<p>The community organizations have limited skills for identifying needs and for planning and evaluating the health activities. They depend on health workers to provide guidance in all project phases.</p>	<p>Depending on circumstances, the communities are capable of mobilizing human and material resources within the community and of obtaining resources from institutions outside the community.</p>
<p>Level 1 Development agencies develop and administer the project. The communities are involved in the project only at the implementation stage.</p>	<p>Project staff assume leadership of project's health activities. Community leaders involved are mainly men who represent the community's traditional power structure.</p>	<p>The community organizations do not exist or they are weak; they are rarely involved in community health activities.</p>	<p>The communities rely primarily on resources that the project provides. Community contributions are generally limited to labor resources.</p>

Source: UNICEF, 2008, Writing a Communication Strategy for Development Programmes

Method for Effective Community Participation

Community participation should be guided during the development of the communication strategy in order to fully engage the primary participants. These methods are effective ways of doing so:

- Shift emphasis from delivery of messages to or by community members, to dialogue and linkages with service delivery and/or local government. Advocacy at the local level for example, needs to be driven by community input.
- Shift from problems to appreciation. Approach the community engagement process from an appreciative perspective so that the local knowledge system is learned, understood and valued instead of perceived as an obstacle that must be overcome. For example, mothers-in-law often perpetuate traditional practices that undermine exclusive breastfeeding. A good communication strategy will learn about their role in the family and work with the strengths of this group to support exclusive breastfeeding in their family and community.
- Adapt expert solutions to the community reality. Value traditional wisdom and experiential knowledge alongside technical/scientific information and practices. The outcome (in action plans, behavioural objectives, messages, etc.) should be a blend.
