

1. Background

Cities are the generators of economic momentum. They play a vital role in the development of the nation. In order to sustain the high economic growth, cities have to be efficient and competitive. In our country, urban population growth is almost 2 ½ times that of the population growth at national level. We also have an increase in the total number of urban poor. In order to cope with the massive problems that have emerged as a result of rapid urban growth, it has become imperative to formulate strategies for selected cities on a priority basis.

Improving the physical and financial bases of the city, which necessitate additional urban investments, can equip the city to face the challenges of urbanization. The strategy should include provision of basic amenities and services and the introduction of a proper and efficient system to manage these. Improvement of the living conditions of the urban poor is considered crucial in the strategy for the overall improvement of the Quality of Life, which is the fundamental purpose of City Development Plan.

Kochi, the commercial capital of Kerala had recognized the need for planning and taking into account the responsibilities vested with the local bodies as a consequence of 73rd and 74th Constitutional Amendment Act, steps have been taken from 1997 onwards to obtain and consolidate the suggestions and aspirations of the different sections of the society with a view to arrive at a vision for the city. Sector wise workshops were held in environment water supply, heritage, poverty alleviation etc. Aspirations of the people's representative viz. the M.P, M.L.A.s, Corporation Councillors, Elected Representatives of Municipalities and Panchayats, Members of Residents Associations, Neighbourhood Units, Ward Committees and Gramasabhas were consolidated and a vision workshop was held in 2002 and arrived at a Vision Document. Institutions like KILA, CUSAT, CESS, Chambers of Commerce and news papers like MalayalaManorama and Mathrubhumi also held seminars considering the growth potential of the city. In addition to this, the suggestions and proposals derived from representatives of various sections of society, the recommendations evolved during the workshops and seminars and the studies conducted by M/s.RITES, NATPAC, Rajagiri Institute of Social Sciences, Kerala Road Fund Board, Esteem Developers, Cochin Port Trust, Greater Cochin Development Authority, Goshree Island Development Authority, Roads and Bridges Corporation , the papers presented by experts in various fields and the guidance given by Sri. S.M. Vijayanand I.A.S, Sri. T.K. Jose I.A.S., Dr. Jayathilak IAS, Sri. Anand Singh I.P.S., Sri. Muhammed Haneesh I.A.S. had been made use of in finalizing the vision.

Recently several meetings and meetings with experts and stakeholders were held to finalize the City Development Plan formulation. The Jawaharlal Nehru National Urban Renewal Mission is expected to give the Kochi City an opportunity to translate the people's vision into concrete proposals and programmes to be implemented in a time bound manner.

1.1 City Development Plan Frame Work And Process

1.1.1 City Development Plan- Objectives:

The CDP aims at achieving equitable development by addressing the issues of economic growth, infrastructure, poverty, good governance and service delivery to all through a consultative process of strategizing and visioning. The action plan aims at improving urban governance and management, increasing investments to ensure employment potential and expand services including systematic and sustained urban poverty reduction.

The C.D.P. comprises of plans for the identified sectors of development with in a period up to 2026 AD, outlining the policy framework and investment interventions with in a 7 year period to achieve the vision . The objectives of CDP are:

- To develop a city development framework for Kochi City and environs.
- To formulate a Strategic Action Plan (SAP) and City Association Programme (CAP) based on the city development framework.
- Prioritization of sectors and identification of short, medium and long-term goals, and
- Preparation of implementation plans.

1.1.2 Scope of CDP

The C.D.P. outlines the strategic policy and investment interventions to achieve the vision for Kochi including formulation of plans for the identified sectors. The scope of work is to:

- Assess the present state of the city in respect of demographic and economic growth, infrastructure, services, finance etc...
- Identify the gaps in service delivery
- Identify the issues faced by the urban poor.
- Prepare a vision and strategic framework outlining the goals, strategies, interventions and projects to achieve the vision.
- Formulate a city investment plan with appropriate financing strategies and an implementation action plan and;
- Focus on the reforms to be carried out on local level and state level in accordance with the vision and a strategic plan outlined to sustain the planned interventions.

1.1.3 The Process

The CDP outlines the critical issues of city development, undertakes a deficiency analysis and formulates a management framework outlining strategies and guidelines for future growth. The plan provides a distinctive thrust introducing restrictive regulatory mechanism through realistic planning and management interventions within the overall regulatory and institutional framework. A development implementation action plan comprising of implementation schedule, role of stakeholders, regulation and institutional strengthening mechanism are formulated. It also aims at regular and effective monitoring mechanism. The CDP takes into account the current status of municipal services; its fiscal status, and operational and management procedures. The CDP also considers the works and plans of other Govt. and Semi-Govt. organizations and agencies contributing towards the growth and development of the city. The CDP is prepared after undertaking the following tasks.

- Visioning exercise
- Formulation of goals and strategies
- Situation analysis
- Stakeholder discussions
- Sectoral group workshop
- Capital investment plan and project scheduling
- Action and operating plan and reform.

The entire exercise is carried out with stakeholders' participation in various stages as explained earlier.

Orientation to key stakeholders

The Secretary to Local Self Government Department, Govt. of Kerala, initiated discussions to familiarize to the key stakeholders the process and the expected outcome of the CDP and build enthusiasm, understanding and commitment to the CDP. One-day session was organized for this. This activity helped in familiarizing the process of evolving a structured programme.

1.2 Kochi Profile

Kochi, the commercial capital of Kerala lies at 9°58 ' N latitude and a longitude of 76°16'E. The development of Cochin as the commercial capital of Kerala is closely linked with the political and administrative history of Malabar Coast.

1.2.1 Early History

Cochin Port was formed in 1341, when the heavy floods of that year silted up the mouths of the Musiris harbor and the surging waters forced a channel past the present inlet into the sea. The old merchants of Musiris shifted to Cochin as soon as the new outlet became more or less stable.

As the harbour gained prominence, the then ruler of the region shifted his capital also to Cochin, giving impetus to the growth of the town.

The early settlement of Cochin was at Mattanchery, facing the protected lagoons in the east, which provided safe anchorage to country crafts in all seasons. Mattanchery was linked to the entire coastal stretch of Kerala through this inland waters. Thus gradually it grew into a busy settlement. Nicolo Conti recorded that, by 1440, Cochin was a city 5 miles in circumference and that Chinese and Arabs carried on brisk trade with the natives of this town.

1.2.2 Colonial settlement Fort Cochin

From 16th Century, Cochin witnessed the rapid changes through the trading and colonizing attempts of European powers. Portuguese were the first to arrive in Cochin. They founded Fort Cochin established factories and warehouses, schools and hospitals and extended their domain in the political and religious fronts. The fall of the Portuguese in Cochin came with take over of the Fort by Dutch in 1663. The Dutch East India Company tried to persuade the local rulers into giving them monopoly in pepper trade. In this attempt, they came across varied interests of other forces viz. English, French and the Dutch. For hundred years therefore Cochin became the center of political and commercial battle. In 1795, The British took over Cochin from the Dutch. Fort Cochin thus became British Cochin. It became a Municipality in 1866.

1.2.3 Market Town- Mattanchery

Mattanchery, meanwhile, had developed as a typical oriental market town, with commercial activities distributed along the waterfronts. The agricultural produce from the vast hinterland flowed to its markets to be sold or exchanged for textiles, metals, and other products of European Countries. Jews and Muslims had their settlements here. The trading communities from Gujarat and the emigrants from Goa too established themselves in Mattanchery along with the native Hindus and early Christians. As far as the rulers were concerned, this helped to strike a balance of economic power with the European traders.

1.2.4 Administrative Centre – Ernakulam

By 1840, Mattanchery was so much crowded that the Cochin rulers shifted their capital to Ernakulam on the eastern side of the backwaters. Public buildings and educational institutions were set up in Ernakulam befitting the splendor of Maharajas. Roads were laid out. Markets were established. Temples were renovated. Railways came to Ernakulam in 1905. Ernakulam thus gradually started developing as an administrative town. Mattanchery rose to the status of Municipality in 1912 and was followed by Ernakulam in 1913.

1.2.5 Development of Cochin Port

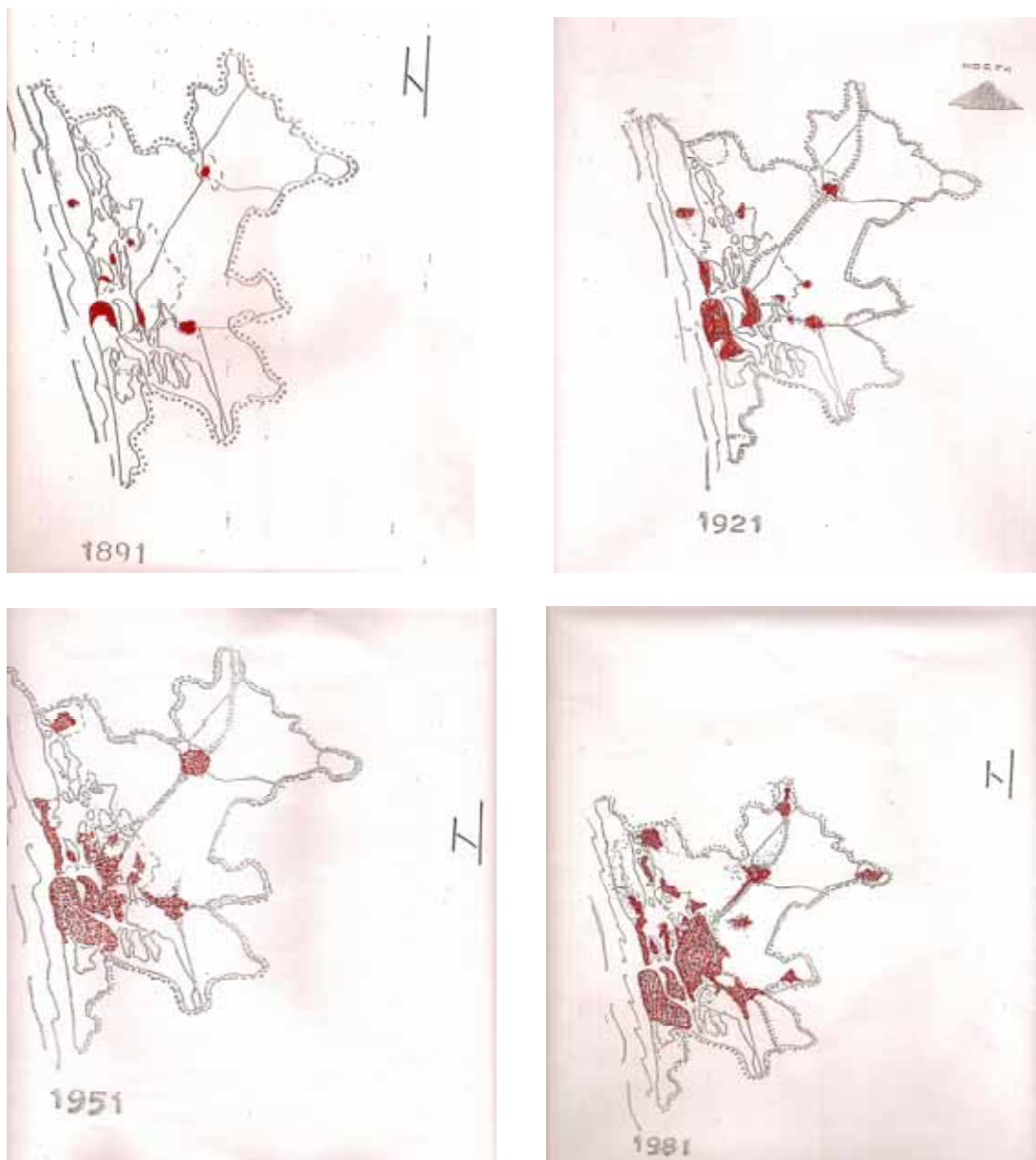
In those decades the existence of a sand bar in the sea mouth prevented large ships from entering safely into the backwaters of Cochin. With industrialization in the west there came the revolution in overseas trade with the wrought iron ships of greater draught and the consequent need for deeper and safer harbours and stronger moorings. The opening of Suez Canal in 1869 further emphasized the importance of this port as a coaling station for this route. The idea of making great harbour, out of the unique lagoons in Cochin was thus originated as early as 1870. But Cochin presented a case for dredged channel leading to the inland harbour, unfortunately the science and art of dredging was not fully developed in this period. Hence it was only in 1920 that the port works were initiated. Under the direction of Sir Robert Bristo, the sand bar at sea mouth was cut open and a deep shipping channel was dredged to the backwaters. The spoils of the dredging was used to the reclaim Wellington Island from the backwaters. Road connection to the main land on the west and road-rail connection to the east from the island was completed in 1940 when Cochin was declared as a major port by the Government of India. Wellington Island developed with its wharfs, quays and other infrastructure as terminal complex of transportation.

Cochin port gradually became the focus of the city. Centered around the port facility grew large number of business and commercial establishments providing the economic base to the city and the environs.

1.2.6 Genesis of Cochin Corporation

The industrialization in turn resulted in population increase and consequent urban growth. Cochin thus witnessed unprecedented trends of urbanization during the past four decades. The growth of population and activities has necessitated efforts to tackle urban problems, to regulate city building and to guide future development. While the Municipal Govt.s of Fort Cochin, Mattanchery and Ernakulam were able to exercise their powers and evolve schemes in their respective areas of jurisdiction, they were not in a position to perceive the problems of urban growth as a whole and to plan for it. In order to streamline the municipal administration, the Cochin Corporation was formed in 1967, incorporating the three Municipalities (Fort Cochin, Mattanchery and Ernakulam). Wellington Island and few surrounding areas in the suburbs.

Figure 1.1 Maps – showing growth of settlements in Cochin



1.2.8 Regional Outlook

A comprehensive approach to the planning of the urban areas of Cochin and its environs was initiated after the Kerala state was reorganized (1956) and the Department of Town Planning was constituted (1959). The Region was scientifically delineated to include the primary influence zone of Cochin City consisting of 6 municipalities and 33 panchayaths. The Development plan for Cochin Region was formulated in 1976, as a comprehensive policy document to stimulate balanced growth of the Region with respect to its long term needs.

Figure 1.2

Greater Cochin Region



1.2.9 Concept of the Development Plan for Cochin Region

Cochin Region as conceived in the Regional Development Plan was primarily an Urban Vicinity Region delineated to encompass settlements lying within the primary influence zone of Cochin City. The core area of Cochin Region is the Cochin City. Consequently urban development has been more rapid in the City and in its immediate suburbs. Five other Municipal towns included in the Region are small urban enclaves, as compared to the core City. They are linked to the core city through the transportation corridors. Spatially the intervening villages separated them.

The villages in the region present a dispersed settlement pattern with high density of population. Many of the urban characteristics have diffused in these villages.

The Development Plan laid emphasis on evolving a settlement structure for the region. The pattern conceived a central city confining concentrated urban development within its limit. The central city was to be surrounded by a peripheral belt of planned panchayaths. The secondary urban centers were to function as growth centers absorbing the overspill of urban population of the region. A Structure Plan for the Central City was prepared and the same was published and sanctioned by Govt. in 1991.

1.2.10 Delineation of the Kochi city for the purpose of CDP

Urban expansion during the past decades outgrew the limits of the central city. Census reveal that growth trend of settlements of the region have been different from what was anticipated. Primarily the population growth in some of the rural areas and the Municipalities adjacent to the city Corporation

exceeded that of the urban areas. The suburbs showed higher growth rates than the city proper. Cochin Urban Agglomeration, as per 1981 census included the Cochin Corporation, Trippunithura Municipality and census towns of Eloor and Kalamassery and Thrikkakara an urban outgrowth. 1991 census showed a larger area of Urban Agglomeration. The Urban Agglomeration as identified by the 2001 census consists of the following local bodies.

Table 1.1. Population of Kochi Urban agglomeration

2001 Census	
Urban Agglomeration	Population
Kochi (UA)	1355406
Kochi (M.Corp.)	596473
Kakkanad (OG)	22486
Aluva(M)	24108
Choorikkara (CT)	36998
Edathala (CT)	67137
Paravur (M)	30056
Chennamangalam	21729
Kottuvally (CT)	37884
Alangad (OG)	40585
Varapuzha (CT)	24516
Kadungaloor (CT)	35451
Eloor (CT)	30092
Cheriyakadavu (OG)	8326
Cheranallur (CT)	26330
Mulavukad (CT)	22845
Kalamassery (M)	63176
Vazhakkala (CT)	42272
Thiruvankulam (CT)	21713
Thripunithura (M)	59881
Maradu (CT)	40993
Angamali (M)	33424
Chengamanad (CT)	29775
Chowwara (CT)	13603
Kadamakkudy (CT)	15823
Kureekkad (CT)	9730

Urban agglomerations with population ranging between 1 million and 4 million are eligible for funding under JNNURM.

Kochi Urban Agglomeration as identified by the census of India in 2001 comprises of the urban local bodies i.e., Cochin Corporation, 5 Municipalities, 15 full Panchayath areas and part of 3 Panchayaths. This extends up to Angamali in the north, Chowwara and Edathala in the east, Maradu and Cheriyakadavu in the south. No part of the Vypin group of Islands is included.

The previous studies and the 'Structure Plan for Central City Cochin 2001' had identified a smaller area covering 275.85 Sq. KM than the present Urban Agglomeration as the proposed 'city growth area', based on the concept adopted in the Regional Development Plan. The structure plan prepared was published and sanctioned by the Govt. This area comprised of Cochin City, 2 Municipalities and 13 Panchayaths lying contiguous to the Cochin Corporation area.

Central city Delineated in the Structure plan

Name of Local Body

1. Cochin Corporation
2. Tripunithura Municipality
3. Kalamassery Municipality
4. Thrikkakkara Panchayat
5. Thiruvankulam Panchayat
6. Maradu Panchayat
7. Elamkunnappuzha Panchayat
8. Njarakkal Panchayat
9. Kadamakkudy Panchayat
10. Cheranalloor Panchayat
11. Varappuzha Panchayat
12. Eloor Panchayat
13. Mulavukadu Panchayat

Figure 1.3 Structure Plan Area



1.2.11 Norms Adopted for the Re-delineation of Kochi City

The proposed Kochi City for the purpose of the CDP is to include the entire area of the designated 'Central City' as per the Government sanctioned structure plan plus the area lying contiguous to this core urban area and having potential for the urban development due to the additional infrastructural inputs already planned and the large scale investments already committed which are likely to increase the urban characteristics and considering the administrative/ geographical boundary. The major investments proposed by Cochin Port Trust with a vision to emerge as the International Maritime Gateway of the Indian Ocean Region are listed below.

Table No.1.2 Major Investments Proposed in Port Area

Sl.No	Project	Investment (In crores)	Mode of execution
(A) TERMINAL AND SERVICE FACILITIES			
1	International Container Transshipment Terminal (ICTT)	2118	B.O.T
2	LNG Re-gasification Terminal (LNGT)	2050	To be funded by PSU (PLL)
3	International Bunkering Terminal	195	License
4	International Ship Repair Complex	315	B.O.T
5	Crude Oil Handling for Kochi Refineries Ltd.	720	To be funded by PSU (KRL)
6	International Cruise Terminal	55	Public - Private
7	Port based Special Economic Zone	1510	Public - Private
8	Land Acquisition For Special Economic Zone	320	Public - Private
9	Reclamation For Streamlining Of Flow in The Port Channel for Reducing Siltation and for Future Development Works	120	Public - Private
	Sub Total of (A)	7403	
(B) COMMON USER INFRASTRUCTURE FACILITIES			
1	Capital Dredging of Navigational Channels	464	CoPT
2	National Highway Connectivity (17.2 kms)	374	NHAI
3	Rail Connectivity (8.86 kms)	246	Railways
	Sub Total of (B)	1084	
GRAND TOTAL		8487	

All the above investments fall within the areas in the Central City

As the JNNURM lays emphasis on rejuvenating the decaying parts of the urban agglomeration and the core city and on instilling new development thrust to areas, which would otherwise deteriorate, the proposed

Constituent areas of the Re-delineated Kochi City.

Constituent areas

**Reasons for inclusion in
the proposed Kochi city.**

<p>Present Cochin Municipal Corporation</p> <p>Kalamassery Municipality</p> <p>Thripunithura Municipality</p> <p>Elamkunnapuzha Panchayat</p> <p>Njarakkal Panchayat</p> <p>Mulavukad Panchayat</p> <p>Kadamakkudy Panchayat</p> <p>Cheranallur Panchayat</p> <p>Eloor Panchayat</p> <p>Varapuzha Panchayat</p>	<p>Core city forming part of UA</p> <p>Part of UA lying contiguous to the present Corporation</p> <p>Part of UA lying contiguous to the present Corporation</p> <p>An island panchayat lying close to the city and linked by new Gosree bridge. New developments and investments planned by the Cochin Port Trust& Kochi Refineries renders new impetus to the development of this panchayat. Was part of the designated Central City Cochin 2001.</p> <p>An island panchayat brought closer to the city by the new Vypin Bridge. Forms part the designated Central City Cochin 2001 A coastal panchayat with potential for urban growth.</p> <p>An island panchayat brought closer to the city by the new Vypin Bridge. Forms part of the designated Central City Cochin 2001. Part of UA 2001. International Container Transshipment Terminal, Vallarpadam is proposed here.</p> <p>An island panchayat forming part of UA 2001 and part of the designated Central City Cochin 2001- Geographically contiguous to the city.</p> <p>Forms part of UA 2001. Was part of the designated Central City 2001</p> <p>Forms part of UA 2001. Was part of the designated Central City 2001 and many large scale industries are located here.</p> <p>Forms part of UA 2001. Was part of the designated Central City 2001</p>
---	---

Thrikkakara Panchayat
Thiruvankulam Panchayat
Maradu Panchayat
Kumbalam Panchayat
Kumbalangi Panchayat
Chellanam Panchayat

Forms part of UA 2001. Was part of the designated Central City 2001. District Head Quarters. An urban out growth with vast potential for development. Centre of IT & ITES development.

Forms part of UA 2001. Was part of the designated Central City 2001

Forms part of UA 2001. Was part of the designated Central City 2001. Fast developing commercial center.

Lying contiguous to the city, separated by a water body. The only Panchayat in between the Corporation and the District boundary.

Lying contiguous to the city, though it does not form part of UA. It has a great potential for the tourism & is already developing. This lies between the Corporation and the District boundary.

Lies contiguous to the Cochin Municipal Corporation. Part of the Panchayat already included in Kochi UA2001. Coastal Panchayat with necessity for infrastructural upgradation.

A few panchayats/ Municipal areas on the northern parts of the region, which form part of UA 2001, have been excluded in the CDP. The concept adopted here is to identify the future Municipal Corporation area and to equip this area, which will be designated as Kochi City for concentrated urban development.

As explained elsewhere in the report, Kerala is marked by a rural- urban continuum and the smaller urban centers have their influence over the surrounding 'urban villages'. The major cities are to function as specialized centers for higher order services. There is no distinct boundary, which segregate this dependency. The population growth trend is showing increase in north, northeast and western directions. Considering the need for additional infrastructural inputs to sustain the developments envisaged, the proposed city limit is redefined excluding certain areas on the north & north east portions of the urban Agglomeration as these areas show a greater dependency on the secondary urban centers closer to them than to the core city, the central business district.

The constituent areas and population of the proposed “ Kochi City” are, thus,

1. Cochin Corporation Area	596473
2. Kalamassery Municipal Area	63176
3. Thripunithura Municipal Area	59884
4. Thrikkakara Panchayath	65984
5. Thiruvankulam Panchayath	21717
6. Maradu Panchayath	41012

7. Mulavukadu Panchayath	22842
8. Kadamakudy Panchayath	15824
9. Varapuzha Panchayath	24524
10. Cheranalloor Panchayath	26316
11. Eloor Panchayath	35573
12. Elamkunnappuzha Panchayath	50563
13. Njarakkal Panchayath	24166
14. Kumbalam Panchayath	27549
15. Kumbalangi Panchayath	26661
16. Chellanam Panchayath	36209
Total Population of the above area comes to	11,38,413
(Based on 2001 Census)	

1.2.12. Major thrusts given in the CDP

Cochin Corporation has implemented Urban Poverty Alleviation Programme through slum improvement with support from the DFID, Govt. of U.K. This programme is now continuing as a part of the Kerala State Poverty Alleviation Mission.

In continuation of its citizen friendly and pro-poor approaches, the Cochin Corporation has prepared this City Development Plan (CDP) for the above area enabling poverty reduction and comprehensive developments up to 2026.

Cochin Corporation is on the way to incorporate and implement Information Technology as a tool for providing better services to the citizens and to improve the administrative efficiency.

The quality of life of the citizens is a major concern, thus emphasizing the need for dependable urban services. The CDP proposals are evolved mainly for the **urban basic services sector**, which includes **Water Supply, Sewerage, Drainage, Solid waste disposal system, Traffic and Transportation** with special emphasis to the **urban poor**, at the same time preserving the character and the heritage of the city. Considering the natural assets, human resources, medical facilities available and cultural heritage of the area, priority is given to develop Cochin as a world health care center, tourism destination and an IT and ITES center.

As Cochin has developed from a small market town to its present stage, it has a historic past and the urban core areas are characterized by narrow lanes flanked by old buildings. **Urban renewal programmes** are essential to rejuvenate the central core, at the same time conserving its heritage value. Most of the markets in all the constituent areas of the Kochi city need renovation and improvement. The urban renewal programme is also an important component of the CDP. The spatial growth trend of the city has been analyzed and the need for a Master Plan for the CDP area is felt with in the framework of a Perspective Plan for the Greater Cochin Region in order to achieve the goals envisaged in the CDP.

The co-ordinated effort of the following departments/local bodies is needed to implement the proposals in the CDP.

- 1) All local bodies in the CDP area
- 2) Greater Cochin Development Authority

- 3) Gosree Island Development Authority
- 4) Kerala Water Authority
- 5) Kerala Public Works Department & NHAI
- 6) Residential Associations
- 7) Kudumbasree
- 8) State Town Planning Department
- 9) Kerala State Pollution control Board