A National Workshop on ‘Metropolitan Planning Committees as Engines of Co-ordinated Planning and Development’ was jointly organized by Kolkata Metropolitan Development Authority (KMDA) and Institute of Town Planners, India (ITPI), New Delhi, on 3rd September, 2004, at Hyatt Regency, Kolkata.

Shri Asok Bhattacharyya, Hon’ble Minister-in-Charge of Urban Development and Municipal Affairs, Government of West Bengal, mentioned in his inaugural address that decentralized planning is a second generation planning, being followed in the country as centralized planning could not bring the desired results. The conceptual basis of this new approach is that people are not simply the recipients of the benefits of the development programme. In fact, planning in India has assumed a new significance after the 74th Constitution Amendment Act (74th CAA). However, Government of West Bengal was attaching a great deal of importance to local self-government in both rural and urban areas before 74th CAA. West Bengal is the first state in the country to set up Metropolitan Planning Committee (MPC) by enacting enabling legislation in 1994. KMPC was set up in October 2001, under the chairmanship of the Chief Minister and consist of 60 members. The Executive Committee is headed by the Minister-in-Charge of Municipal Affairs and Urban Development Department, Government of West Bengal. Once the Draft Development Plans are prepared by the municipalities and panchayats, the KMPC would consolidate the Draft Development Plans of the entire Kolkata Metropolitan Area and forward to state government for implementation in the spirit of the 74th CAA, he opined.

Shri Alapan Bandyopadhyay, Chief Executive Officer, KMDA, in his keynote address mentioned that decentralized planning in West Bengal was initiated in the 1980s; however, 73rd and 74th Constitution Amendment Acts, 1992, solemnized this process and made decentralized planning a national mandatory activity. DPC is a reincarnation of an old pattern of Zilla Parishads but MPC is a unique model with Chief Minister presiding over a planning committee that includes the representatives of municipal corporations, municipalities and even the panchayats which fall within the territorial limits of a metropolis. For detailed deliberations of the delegates he raised various issues like evolving its own organic character by MPC, intensity of co-ordination of planning and development, integration between rural and urban local bodies, co-ordination of intra-town schemes / projects with...
proposals of MPCs in relation with State Planning Committee and the State Government and operation of MPC in a State Capital Region.

Sri D.S.Meshram, President, ITPI, in his presidential address opined that the 74th CAA, is the first step in the process of devolution of power to the people at the grassroot level. Municipalities and panchayats have been called upon to play a more active role in Urban Planning and Development. As a follow-up of 74th CAA, the constitution of MPCs by the State Government is mandatory; therefore the role and functions of the existing urban development authorities and special function agencies need to be reviewed to avoid any conflict in operational jurisdiction. For the deliberation of the participants in the Workshop he raised the issue of interface / co-ordination between various agencies like DPCs and MPCs, DPCs and panchayats and municipalities, MPCs and development authorities and MPCs and State Town Planning Departments. He was of the opinion that if the provisions of the 74th CAA, are followed in the spirit it has been conceived MPCs would act as engines of co-ordinated planning and development for not only of metropolitan area but for the state as a whole.

74th CAA, 1992 provides the supremacy to the power of the people and makes it mandatory on the state governments to constitute MPCs and DPCs. In spite of lapse of 12 years, MPCs are non-entities and are not functioning and are not ground realities. Therefore, Shri P.K.Pradeep Kapoor, Secretary General, ITPI, stressed the need for adoption of new role in addition to their existing functions to revise the Town Planning Act to bring it in harmony with the functions of MPCs.

The inaugural session was followed by two Technical sessions i.e. (i) ‘Role and functions of MPCs : General policy issues’ which was chaired by Shri P. K. Pradhan, IAS, Joint Secretary, Ministry of Urban Development and Poverty Alleviation, Government of India; and (ii) ‘Actual working of MPCs: The specific functioning issues’ chaired by Shri Manoj Mujumdar, Member, KMPC. In both the technical sessions 13 key papers were presented.

While extending the vote of thanks Shri Pradeep Kapoor, Secretary General, ITPI, stressed the need for adoption of the system of plan preparation and implementation as envisaged in the provisions of 74th CAA.
Globalization, Reforms and Settlement Strategy

Regional Science Association, India is organizing its 36th Annual Regional Science Conference on “Globalization, Reforms and Settlement Strategy” on 18 – 19 November, 2004 at SPA, New Delhi.

The Conference will provide a forum to discuss the problems at settlement and regional levels so as to arrive at suitable development strategies to reduce, spatial disparities in development. The researchers, governments and non-government officials / institutions are invited to deliberate.

The main theme of the conference is “Globalization, Reforms and Settlement strategy”, with sub-themes on:

• Urban Policy and pattern of urbanisation;

• Liberalization and its Impact on Urban and Regional Economies;

• Environmental Planning and Tourism (Global and Internal) in Urban and Regional Development; and

• Application of GIS and Remote Sensing in Urban and Regional Planning and Development.

For further details and enquiries, contact:
Organizing Secretary
36th Annual Regional Science Conference
Department of Urban Planning
SPA, 4- Block – B, I.P. Estate
New Delhi-110002
Tel. : 011 26828369
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ITPI NEWS

Challenges in Planning Education: Institute - Industry - Interface

On the occasion of the Annual General Meeting of ITPI, Delhi Regional Chapter organized a workshop on the theme “Challenges in Planning Education: Institute - Industry - Interface” on 27 September, 2004 at ITPI Conference Hall, New Delhi. Prof. Subir Saha, Chairman DRC, welcomed the members while Shri D.S. Meshram, President ITPI gave the opening remarks.

Prof. A.K. Maity charied the Technical Session – I on “Institutional Interface” in which head of the departments of Planning Schools participated, followed by Technical Session – II on “Industry Interface” which was chaired by Prof. E.F.N. Ribeiro in which senior professionals from various parts of the country participated.

More than 150 members participated besides student members.

Annual General Meeting

In the Annual General Meeting held on 27th September, 2004 at 1400 hours, the Report of the ITPI Council 2003-2004 was approved along with Auditors Report of ITPI. In the meeting scrutinizers also declared the result of ITPI Council Election for 2004-2005. The names of elected council members are given in the next column:

Council 2004-2005

- Shri Aniyan Mathew
- Shri A.N. Sachithanandan
- Shri B.C. Datta
- Shri B. Mahendra
- Shri Dharam Singh
- Shri D.S. Meshram
- Shri H.S. Sancheti
- Shri Minaketan Das
- Shri N.K. Patel
- Shri Parag Date
- Shri Pradeep Kapoor
- Shri P.V. Deshmukh
- Shri Sanjay B. Verma
- Shri S.B. Khodankar
- Shri S. Chattopadhyay
- Shri S. Satyanarayana
- Shri S.S. Dalal
- Shri Subir K. Saha
- Shri Tapas Bhattacharya
- Shri V.K. Gupta
- Shri V.P. Kulashrestha

In the first meeting of the Council, held on 28th September, 2004 the following office bearers have been elected unanimously for the year 2004-2005.

A.N. Sachithanandan - President

Dr. A.N. Sachithanandan completed Bachelor’s Degree in Architecture in the year 1964, and Master’s in Town Planning in 1966 from School of Architecture and Planning, Chennai and Ph.D. (Housing) in the year 1987, besides, having undergone advanced practical training in housing in 1984 in University of London, UK. He started his carrier in Town and Country Planning Department, Government of Pondicherry.
in 1967, and shifted to School of Architecture and Planning, Anna University, Chennai as lecturer in Planning and since then he has been working in various capacities and retired as Director in the year 2003. After that he has taken over as Dean MEASI Academy of Architecture, Chennai. He guided number of scholars for successfully completing Ph.D. He has authored more than 30 technical papers for national and international conferences. He received the Dr. Radhakrishnan Award of Government of Tamil Nadu for the best college teacher in town planning education. He was chairman of Tamil Nadu Regional Chapter for 6 terms. He was Council Member of ITPI for number of times and also the Vice-President of ITPI in the year 1987-88. Besides, he was also the Chairman of Educational Standing Committee of ITPI and Chairman of Editorial Board of ITPI in the year 1987-88. He was also member of Expert Committee of AICTE for preparing undergraduate curriculum and syllabus of B. Planning course in the year 2003. Dr. A.N. Sachithanandan has been elected as President of ITPI for the year 2004-2005.

V.P. Kulshrestha - Vice President

Shri V.P. Kulshrestha is working as Joint Director, Town and Country Planning, Government of Madhya Pradesh since 1998, and presently stationed at Indore. He completed his Master’s in Regional Planning from IIT, Kharagpur in the year 1967, worked with Prof. V.N. Prasad - a doyen in the planning field – in the first ever Diagnostic Survey and Report on comprehensive and Integrated Development of Damodar Valley Region. He was the Chief Regional Planner of National Capital Region Planning Board (NCRPB). He also served the central Town and Country Planning Organisation as Town and Country Planner. He was sent to London as a British Council study fellow twice for senior level training in Urban Land Use Planning and Urban Transportation Planning and Management. He has widely travelled in Mediterranean and other European countries, Libya and Ethiopia to get first hand knowledge of urban planning and development. He worked in Libya as a Grade-I town planner in the seventees and also worked on World Bank and DFID projects.

After retirement he is working as a visiting faculty in School of Planning and Architecture, New Delhi. He has authored more than 45 technical papers encompassing various aspects of urban and regional planning and traffic & transportation.

He has served the Institute in various capacities, being Chairman and Secretary of Delhi Regional Chapter, Council member and Chairman of various committees. Shri B.C. Datta has been elected as Secretary General ITPI for the year 2004-2005.

The following committees have also been constituted in the first meeting of the council:

**Executive Committee**

*President:* Dr. A.N. Sachithanandan

*Vice President:* Shri V.P. Kulashrestha

*Secretary General:* Shri B.C. Datta

*Members:* Shri D.S. Meshram, Shri Minaketan Das, Shri Pradeep Kapoor, Dr. Ashok Kumar (Secretary Publication), Shri R. Biswas (Secretary Examination)

**Professional Standing Committee**

*Chairman:* Shri S.C. Karigowda

**Educational Standing Committee**

*Chairman:* Prof. A.K. Maitra

**Regional Chapters Building Committee**

*Chairman:* Shri A.R. Patharkar

**HQ Building Committee**

*Chairman:* Dr. S.P. Bansal

**Information Technology Committee**

*Chairman:* Shri S.C. Mahagaonkar

**Library Committee**

*Chairman:* Shri S. Muzaffar Husain

**Finance Committee**

*Chairman:* Shri Pradeep Kapoor
Introduction
As sustainable development is the need of the hour, the concepts of reuse, redevelopment, redeployment, recycling, refurbishing, rejuvenation, etc.; need to be included in the planning process. A country with limited natural resources and ever-increasing population, where man land ratio is as high as 324 people per square km (as per census 2001), can not afford to waste resources. Water is one of the most precious resources, which is available in abundance in certain parts of India and West Bengal is one of those fortunate regions which enjoy an abundance of this resources in the form of lakes, canals, waterways, river – “Ganga” being most significant one and the Bay of Bengal.

Kolkata Metropolitan Area (KMA), in the state of West Bengal is situated in the Ganga river basin, which is one of the most fertile and densely populated river basins in the world, covering an area of about 10,000,000, sq km. The river flows through 29 cities each having population over 1,00,000; 23 cities with population between 50,000 and 1,00,000, and 48 small towns. KMA is the largest metropolis with an area of 1,785 sq km, and a population of 12.52 million, located in the Ganga river basin. It is located close to the Bay of Bengal and the “Sundarban” - the famous tidal forest which is protected as conservation area by both Indian and Bangladeshi laws.

Like the state of West Bengal, KMA is also blessed with a wealth of water resource in the form of lakes / water bodies, rivers, canals and waterways - most of which are navigable. Unfortunately, these vast wealth of water resource remain highly under-utilized. Special efforts need to be made to utilize these water resources in an effective way to accrue multiple benefits. With this background in mind, this paper makes an attempt to examine the possibility to revitalizing the ‘North Canal System’ on the east bank of river Ganga, within the KMA for navigational purpose.

Existing Water Transportation System
Existing water transportation system in KMA comprises of the following:

- Kolkata Port System;
- Inland Water Transport System; and
- Passenger Ferry System.

Kolkata Port System: Despite the handicaps generally associated with riverine ports located up-river and close to city centres, Kolkata Dock System has bagged a couple of achievements, during the last decade, like drastic reduction in turn-round time and average ship day output since 1991-92 (in fact it is rated first in terms of percentage improvement of output per ship during 1998-99). Besides, availability of equipment supplied per shift has also become better. Tendency to switch over to container terminal from the conventional system is also a sign of moving with times. According to 9th Five-Year Plan, Kolkata dock is poised to take multidimensional measures to improve its operation. Unfortunately, though importance is being attached to riverine transport through Ganga, the canals and rivers within KMA are neglected.

Inland Water Transport System: Inland water transport system within KMA includes various canals and the Ganga flowing through KMA. The Central Inland Water Transport Corporation (CIWTC), a Government of India undertaking, was set up in 1987 in Kolkata (the then Calcutta), and operates river services between Kolkata and Assam, via Bangladesh. It also operates river services between Kolkata and Farakka, Kolkata and Cachar, etc. The total amount of goods carried by CIWTC, on nine routes was about 0.251 million tones in 1999-2000.

Passenger Ferry Service: The passenger ferry services are operated at 58 ferry crossing points on river Ganga (Hooghly) within KMA. Out of 58 ferry crossing points, motorized launch operated from 30 points and mechanically operated country boats operated from 28 points in the year 2000.

Travel Growth Trend in KMA:
‘Vision 2025’, perspective plan of the KMA, prepared by Kolkata Metropolitan Development Authority (KMDA), provides the following statistics:

By the year 2025, KMA will cover an area of 1,785 sq km, and will have a population of 22 million. The future travel demand will depend on anticipated distribution of future metropolitan structure. The future scenario of the likely travel demand during the period 2001-2005 is highlighted in Exhibit - 1.

Potential for Water Transportation:
The future trend shows that there will be tremendous growth in travel demand for both passenger and goods which can be met by various mode of transportation system (refer Exhibit - 1). The neglected canals and inland waterways within KMA can make significant contribution.
It is observed that future growth rate of fast transriver traffic is as high as 118%. However, lately the potential of inland water transportation of KMA has been recognized and there are moves towards revival of the canal system for navigation. IWIN and WBIDC are working on this project with technical support of the British Waterways.

Presently, most of these canals serve the purpose of surface drainage within KMA, whereas in the recent past they were used for dual purpose of drainage and navigation both. The metropolis of Kolkata depends on pumped drainage. On the eastern side of Ganga, a vast network of drainage channels carry sewage and storm water which is pumped into major drainage facility for the entire metropolitan area. The canals discharging into river Ganga from east bank are Churial, Monikhali, Tolly’s Nallah, Circular Bellighata canal, Khardah canal, Anti-Malaria canal, Ichapur canal, Bagher canal, etc.

The Nawai Canal, Bajjola Canal, Kolkata storm water flow channel, Bangur Kata Canal and Kestopur Canal discharge into Kulti-Haora gang which discharges into Bidhyadhari river, which finally discharge into the estuaries of Bay of Bengal.

Among the above canals, the North Canal System (Kestopur canal, Bangur Kata Canal, Circular Canal) has been selected for navigation purpose.

Possibility of the ‘North Canal System’ for Navigation:

Historically, inland waterways in the form of man-made canals in and around Kolkata were extensively used for navigational purpose from Kolkata up to the North East and travel to what is presently Bangladesh. The layout of the North Canal System is given in Exhibit - 2. The Kestopur, Bangur Kata and Circular Canals were used for moving goods to and from the hinterland of KMA (then CMA) even during the late sixties. A survey in 1967 indicated that about 7,500 boats moved through this canal in the area to carry goods comprising of vegetables, building materials, food grain, fish, straw, etc. However, due to years of neglect, these canals have been reduced to mere drainage systems, which has been highly polluted, silted and heavily encroached upon, resulting in their hydraulic capacity being adversely affected. The present performance of water transportation is rather weak. The system has great potentials because it can provide low cost bulk movement as well as passenger movement.

It is proposed to excavate these heavily silted up channels to their designed drainage capacity and expand the inadequate waterways under some of existing bridge and repair the damaged sluices and drainage structures. The proposed silt clearance of the Upper Bagjola Canal and its tributaries and the re-excavation of the Lower Bagjola Canal to a larger section and the proposed construction of two large pumping stations, one at the V.I.P Road crossing and the other at the outfall end of Kulti will substantially improve the drainage of storm water from the upstream municipal areas of Panihati, Kamarhati, Barangar, North Dum Dum municipality areas and South Dum Dum including Bangur, Lake Town, Sreebhumi, etc. The proposed works in the circular Beliaghata New Cut - Kestopur-Bhangar Kata Canal will help in better drainage of Bidhan nagar and adjoining areas of Kolkata Municipal Corporation (KMC). The re-excavation of the heavily silted up-storm water channel will make possible quick evacuation of the pumped storm water of the Kolkata sewers.

Reclamation of these canals will reduce pollution and improve the overall environment. If made navigable, then it will further help in reducing pressure on the city’s road, transport system, bringing about economic development of South Bengal / Sunderbans (by reopening a much shorter route to this area) and provide a major boost to tourism sector.
A Preliminary study by IWIN (submitted to the Transport Department) observed that:

- Among all the canals, the 43 km. long North Canal System (Circular New cut -Keshtopur -Bhangar Kata Canal, starting from Chitpore Lock on river Hooghly and ending at Kulti lock on river Kulti) is relatively easy to reclaim for inland navigation purpose.
- The project is not capital intensive (estimated at Rs. 40 crore) in comparison to the cost for building alternative transportation infrastructure (Roads / Railways).
- The Project can be structured to be viable and financiable. It can be implemented through private sector expertise but shall need adequate support from the government.

The detailed project report is under preparation.

Government support and initiatives, critical to the success of the project shall have to include (a) rehabilitation of the inhabitants settled on the canal bank; (b) diversion of sewage discharge away from Canal; (c) replacement of the low height bridges / temporary crossovers, with new bridges having adequate clearance; (d) formulation of plans to segregate Circular Beliaghata Canal from the North Canal System; and (e) formation of an authority, with executive powers, to supervise the work of reclamation. The Task Force recommends that the work on this laudable project should be pursued vigorously. Rehabilitation of the inhabitants settled on the canal bank should be given top priority.

**Infrastructure Development for Implementing the Project:**

To make the project successful the following issues need to be addressed:

- For desiltation and excavation of canal systems, modern earth moving equipment should be used. The traditional manual labour based practices should be gradually replaced.
- The excavated earth to be disposed of locally instead of being carried to distant areas for disposal. The excavated earth can be used for making bricks or land development by the local municipalities (local self-government)
- Encroachments on the canal land is a sensitive issue and should be handled with care and displaced inhabitants should be rehabilitated. Without proper rehabilitation of the affected people, any investment will become infructuous.
- Dumping of municipal, domestic and industrial garbage and sewage in the canals should be discouraged and stopped.
- Proper terminals for loading and unloading of goods and passenger traffic are to be provided along the canal system at certain intervals.
- Proper interlinking between the water transportation terminals and roadways is essential.
- The technical factors such as current velocity (flow rate), volume (discharge rate), depth, configuration, gradient, clarity, etc.; need to be taken care of according to norms and standards.
- The land on both sides of the canal should be used for urban agro-forestry by planting fruit trees. Besides cost reduction, this will improve the quality of landscape along the canal, help in managing the land and reduce pollution, thus improving the total environmental quality.

**Conclusions:**

It is likely that changing human needs and capabilities in regard to water transportation will be reflected in the introduction and development of different water transport vessels of the future. The rejuvenated age-old traditional waterways will thus provide path to modern innovative water transport vessels. Besides, meeting the travel / transportation demand in a cost effective way, the revitalized North Canal System will generate multiple benefits such as reduction in pollution, better environment, etc. If passenger movements are allowed along the canal, it will attract tourists to Sundarban areas.

**References**

1. Preliminary Project Report, Scheme for Improvement of Beliaghata-Kestopur-Bagjola Khal including Pumping Station at Chitpore; Sewerage & Drainage Sector, CMDA;
2. Perspective Plan for Traffic and Transportation for KMA, 2001; KMDA; and
3. Vision 2025, Perspective Plan of KMA; KMDA

Continued from Page 8

joined the School of Architecture and Planning, Chennai in 1965 and worked there as Assistant Professor and Professor till 1978 and became Director, the post he held for more than 10 years till his superannuation in June 1993.

After his retirement as Director in 1993, he joined the Consultancy Engineering Services (India) Private Limited, New Delhi as Advisor and continued there till 2000.

In Municipal Corporation of Madras, Prof. Raj was involved in design and supervision of construction of a number of infrastructure maintenance and improvement projects; while in School of Planning and Architecture, New Delhi, he was engaged in teaching assignments to graduate and post-graduate students in the department. While is Anna University, School of Architecture and Planning, Chennai as Director and Professor of Town and Country Planning, Prof. Raj was involved in teaching and research assignments, covering local areas settlement plan to metropolitan and regional plans, delineation of goals and objectives, development control and management, monitoring and evaluation, specific issues on shelter, transportation, development of infrastructure, resource mobilization and utilization, rural planning and development, economic base analysis, etc. He also acted as member of the review committee for graduate and post-graduate thesis.

During his tenure of service, Prof. Raj attended a number of training workshops, seminars and published various planning problem related papers at national and international levels.

Professor Raj was soft-spoken and kind hearted teacher and was endeared by his pupils coming to the School from every corner of the country. He was broad minded and never differentiated from among his students on grounds of region or religion, cast or creed.

Professor Raj died on 26th May, 2002. He was 70.

Contributed by Shri Abdul Qaiyum, Former Town and Country Planner, TCPO
To 12 August 2004
Editor
Institute of Town Planners, India
I.P. Estate, New Delhi –110 002

It is some years since I was last in touch with the Institute.
My purpose in writing now is to thank you for the July-September issue of the Journal which I have just received, as well as for all the journals, etc.; you have sent me over the years. Also, I wish to compliment the Institute on the quality of its Journal, as well as the broad and interesting range of subjects and issues which it covers.

I wanted you to know that your ‘overseas’ members appreciate the Institute keeping in touch with them in this way, enabling them to know something of the state of town planning, and of the profession itself, in India today.

Once again my grateful thanks, and my best wishes and warm regards to all members of the Institute.

Yours sincerely.

George Franklin,
(A.547) The Manse
SUTTON VENY, Warminster
Wiltshire BA12 7AW, United Kingdom

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**KNOW YOUR PRESIDENT**

**Prof. S.D. Raj**

Professor Srinivasan Durai Raj, Fellow of the Institute of Town Planners, India and its President during 1986-87, was one of the leading educationists in town planning in India. During his long span at School of Architecture and Planning, Chennai (1968-82), he produced a large number of urban and regional planners to participate in the shaping of modern urban India.

Professor Raj was born on 7th July, 1932. He did his Bachelors, Degree in Civil Engineering from Madras University in 1954; post-graduate Diploma in Town and Country Planning from the School of planning and Architecture, New delhi in 1961 and Master of Science (Urban System) from North Western University, Evanston, Illinois, USA in 1975.

He was Member of the Design Advisory Committee (MMDA); Member, Regional Technical Committee (HUDCO); Member, Zonal Technical Committee (HUDCO); Member of Jury, Prime Minister’s National Award for Excellence in Urban Planning and Development (Completed and Concept), Ministry of Urban Affairs and Employment, Government of India.

He served as technical expert for Staff Selection Committee, UPSC, New Delhi; Tamil Nadu Public Service Commission; Regional Engineering College, Trichy; Mysore University and Bangalore University.

Prof. Raj organized a number of workshops, seminars at international and national, state and institutional levels. Workshops and seminars organized at international level were Data Management for Urban System supported by UNCHS for training the senior professionals of development authorities in Asian Region; A two-week programme, supported by UNCHS on UNCHS developed urban information system and its use in developing countries; Fifth International Congress on Human Settlements, supported by UNCHS; and International Seminar on Shelter and Environment supported by UNCHS.

At the state level, Prof. Raj organized a number of MMDA sponsored seminars and training packages with support from ODA, Government of Great Britain as part of the Madras Urban Development Project, implemented with the financial assistance from the World Bank. Important projects were Housing Policy; Evaluation of Sites and Service Project; Evaluation of Slum Improvement Programme, Management of Urban Growth; Delivery and Maintenance of Social Service; Manpower Planning and Training; Project Planning; Planning and Development of Information System; Shelter and Community Development; Project Management Group (TNUDP) programme under World Bank financial assistance – Urban Civic Services; Site Planning and Planning related issues for Southern Railway Engineers, Planning and Implementation of Urban Civil Services (TCPO); Management of Urban Development, Greater Cochin Development Authority; Fullbright Training Programme for 15 Professors from USA on Urban and Regional Planning in India.

Apart from this, six members of academic staff were identified and sent to UK for short-term training programmes in urban management, housing, etc, as part of training and skill up-gradation with assistance from ODA, Great Britain.

After qualifying in Civil Engineer in 1954, Prof. Raj joined the Municipal Corporation of Madras, as Supervisor/Assistant Engineer and worked there till 1962. He joined the School of Planning and Architecture, New Delhi as lecturer in 1962 and continued there till 1965. He...