# School of Planning and Architecture, Vijayawada Department of Planning

Studio Title : Preparation of Master Plan

Studio Name : Master Planning Studio (MURP301)

M.Planning (URP) : 2018 Odd Semester

Total marks : 400 (Internal Assessment: 200 and External Jury: 200)

Studio Faculty : Mr.D Magbool Ahmed, Ms. Suzana Jacob

### 1.0) Introduction

The studio is aimed to understand the components of regional planning and Impart techniques, tools and methods for the preparation of a urban ecological regional plan for Kolleru lake. The key objective of the studio is to prepare a proposed land cover map, keeping in view the economic growth of the district as well as region. In line with this objective, the students would be provided with the exposure to the process of preparation of regional plan based on the identified parameters. The sub-objectives are to enable the students to study regional characteristics, demographics, socio-economic, spatial characteristics, infrastructure status, urban governance, agriculture, irrigation, tourism etc.

### 1.1 Background

The concept of the regional plan came into force post second World War. With the increasing concerns towards the protection of the engulfing environment, provision of adequate physical and social infrastructure along with the inclusion of all the sectors of the society. It can be ascertained that the development of the region has to be holistic in nature. A region cannot merely evolve in isolation and has to be driven by the evolution. In India, the concept of regional plans has existed as an independent unit administratively, but it still holds consummate importance in terms of functionality in the present context of planning itself. However, with a focus on the specialized regional plans prepared these days, the need for a proper planning at district/regional level is important. In this context, a studio exercise on regional plans focussing on lake development in Indian cities becomes necessary.

### 2.0) Study Area

For the purpose of the academic exercise, baseline studies will be taken for the study of in the identified region. A urban ecological regional plan is the integrated development plan prepared for the region. Given this background, a urban ecological region will be chosen as the study area. Identified sites in the study area will be considered for future development of the region considering its potentiality through sectoral analysis.

In the identified region, an existing land cover analysis will be analysed through conduction of primary surveys, collection of secondary data from district authorities, traffic surveys, participatory consultations with the people and officials of the district and town. This would be conducted and their assessment is gauged accordingly. On the basis of this theoretical learning, the students would be required to plan for the future population consequently. This will enable them to apply and test their theoretical skills in the real case scenario. The students would be divided into different sectors in the class, and be made to gauge the performance of the respective sectors and plan for it accordingly for the future projected population.

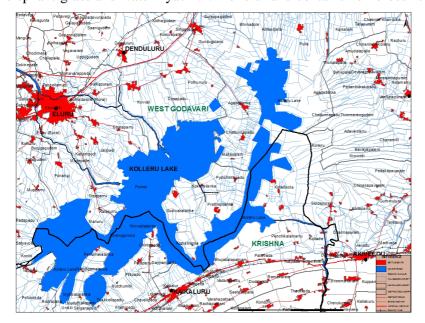
## Significance of the Region

Kolleru Lake is one of the largest freshwater lakes in India located in state of Andhra Pradesh and forms the largest shallow freshwater lake in Asia, 15 kilometers away from the city of Eluru. Kolleru

is located between Krishna and Godavari deltas. Kolleru spans into two districts - Krishna and West Godavari. The lake is fed directly by water from the seasonal Budameru and Tammileru streams, and is connected to the Krishna and Godavari irrigation systems by over 67 major and minor irrigation canals. This lake is a major tourist attraction. Many birds migrate here in winter, such as Siberian crane, ibis, and painted storks. The lake was an important habitat for an estimated 20 million resident and migratory birds, including the grey or spot-billed pelican (Pelecanus philippensis). The lake was declared as a wildlife sanctuary in November 1999 under India's Wildlife Protection Act of 1972, and designated a wetland of international importance in November 2002 under the international Ramsar Convention. The wildlife sanctuary covers an area of 308 km2

## Rationale for choosing Kolleru for Regional Plan studio

Thousands of fish tanks were dug up effectively converting the lake into a mere drain. This had great impact in terms of pollution, leading to difficulty in getting drinking water for the local people. This is in addition to the loss of ecological diversity and intrusion of sea water into the land masses and its fallout in terms of adverse influence on the rainfall pattern in this region. This imbalance has an adverse effect on the thousands of acres of crop in the upper reaches of sanctuary in view of stoppages water flow into the sea because of obstruction by bunds of the fish tanks that appeared illegally. Satellite images taken on 9 February 2001 by the Indian remote sensing satellite found that approximately 42% of the 245 km2 lake was occupied by aquaculture, while agriculture had encroached another 8.5%. The area under aquaculture consisted of 1050 fish ponds within the lake and 38 dried-up fish ponds, which together covered an area of 103 km2. The agricultural encroachments were mostly rice paddies. Surprisingly no clear water could be found in the satellite image. The rest of the lake is being diminished by water diversions or was infested with weeds like elephant grass and water hyacinth. Kolleru lake contains numerous fertile islets called lanka's, many



the small ones submerged during floods. The origin of unusual depression which forms the bed of the lake is unknown, but it was possibly the results of an earthquake. Therefore, many ancient villages are precepted in the bed of the lake as a result of floods and earthquake.

#### 3.0) Pedagogy

The studio shall be carried out in the following stages:

- i. The students would initially be imparted with a knowledge on conceptual understanding of master plan. It involves an understanding of various theories, approach to prepare master plan, terminologies and definitions of master plan.
- ii. Additionally, various baseline studies will be conducted to preparation of land cover plan at regional level and various components associated with it would be taught as well.
- iii. The students would be equipped with the knowledge of the importance of a regional plan or land cover plan for the city. The focus of the studio exercise shall be to teach the students, the importance of having such plans for the development concomitantly.
- iv. A concept of 'inclusive approach' as prevalent in many diverse-multi-ethnic western cities across world which have the characteristics resonating with that of many Indian cities, shall be applied in the study.
- v. Existing land cover plan will analysis of various sectors, transport connectivity, infrastructure, disaster proneness, tourism, economy, agriculture, irrigation, urban governance.
- vi. The students would be required to study the region and critically gauge its performance based on the parameters to the indicators of the 'inclusive growth'. In this way, they shall be able to develop the skills which are required by them as planners when they plan at a regional level.
- vii. In the final stage, they will be able to test their theoretical learning and apply it to the real case scenario.

## 3.0) Tentative Studio Schedule

Stage	Date	Description	Marks	
			Review	Report
First	30 <sup>th</sup> July 2018	Conceptual Understanding and	15	5
		Literature Review		
Second	13 <sup>th</sup> - 17 <sup>th</sup> Aug 2018	Contextual understanding and study	15	5
		area profile		
Third	27 <sup>th</sup> Aug 2018	Data Collection	20	10
Fourth	17 <sup>th</sup> - 21 <sup>st</sup> Sep 2018	Data Tabulation and Processing	20	10
		(Preliminary analysis)		
Fifth	8 <sup>th</sup> - 12 <sup>th</sup> Oct 2018	Analysis and Inferences	40	10
Sixth	$29^{\text{th}} - 02^{\text{nd}} \text{ Nov } 2018$	Findings and Proposals	40	10
Total			150	50

## 4.0) Outcome

The outcome (which is in form of a spatial plan) of this studio exercise envisions in developing a sound theoretical base about the importance of a region and its relevance to the context. It endows students with necessary concepts for planning for the region in view of the inclusive planning. It also develops in them technical, analytical and decisive skills needed by a spatial planner keeping in view socio-economic and politico-ethical requirements in the region.