

REGISTERED No. M - 302
L.-7646

The Gazette  **of Pakistan**

EXTRAORDINARY
PUBLISHED BY AUTHORITY

ISLAMABAD, FRIDAY, FEBRUARY 14, 2020

PART II

Statutory Notifications (S. R. O.)

GOVERNMENT OF PAKISTAN

CAPITAL DEVELOPMENT AUTHORITY

(Master Planning Directorate)

NOTIFICATION

Islamabad, the 11th February, 2020

SUBJECT:—REVIEW OF MASTER PLAN OF ISLAMABAD (2020-2040)
PREPARED BY FEDERAL COMMISSION (Interim Report)

S.R.O. 110(I)(2020).—In exercise of powers conferred by Section 51 of the Capital Development Authority Ordinance, 1960 (No. XXIII of 1960), read with section 11 thereof, the Capital Development Authority has been pleased to notify with immediate effect till further orders following “**Interim Report on the review of Master Plan of Islamabad (2020-2040)**” prepared by the Commission constituted by the Federal Government of Pakistan and approved by the Federal Cabinet.

[No. CDA-30(15) (Noti)-SCB/2020/275.]

SYED SAFDAR ALI,
Secretary, CDA Board.

(273)


Price : Rs. 150.00

[5152(2020)/Ex. Gaz.]

REVIEW OF MASTER PLAN OF ISLAMABAD (2020-2040)

Government of Pakistan
7 October 2019

PREPARED BY
Federal Commission
IN COLLABORATION WITH
Capital Development Authority, Islamabad



NEED FOR REVIEW

The Capital needs reformation and regeneration

The capital city has had only one master plan made by Doxiadis Associates in 1960. Afterwards it was reviewed a couple of times but no substantial changes or reforms were made.

The world has changed rapidly and the capital is facing numerous problems concerning the way it is growing. There is a dire need of making significant changes to push the capital in the right direction to make it a city that is responsive to the needs of people for future living.

The Government of Pakistan decided to review Master Plan for Islamabad and this is the first draft for this purpose.

TABLE OF CONTENTS

Executive Summary	1
I. Background	5
II. Constitution of Federal Commission for Review of Master Plan of Islamabad	6
III. Terms of References for Federal Commission	6
IV. Further Steps	7
Chapter No. 1	8
1.1 Introduction	8
1.2 Constitution of the Commission	15
1.3 Terms of Reference of the Commission	16
1.4 Amendment in the Commission and TORS	16
1.5 Limitations of the Federal Commission	17
1.6 Proceedings of the Commission	18
Chapter No. 2	19
2.1 Proceedings of the Commission	19
2.1.1 First Meeting of the Commission	19
2.1.2 Second Meeting of the Commission	20
2.1.3 Third Meeting of the Commission	20
2.1.4 Fourth Meeting of the Commission	21
2.1.5 Fifth meeting of the Commission	22
2.1.6 Sixth Meeting of the Commission	22
2.1.7 First Consultative Dialogue	22
2.1.8 Seventh Meeting of the Commission	23
2.1.9 Second Consultative Dialogue	24
2.1.10 Eighth Meeting of the Commission	24
2.1.11 Ninth Meeting of the Commission	24
2.1.12 Tenth Meeting of the Commission	25
2.1.13 Briefing to the MNAs of Islamabad	26
2.2 Questionnaire Survey to assess the Public Opinion	27
2.2.1 Eleventh Meeting of the Commission	31
2.2.2 Twelfth Meeting of the Commission	33



TABLE OF CONTENTS

2.2.3 Thirteenth Meeting of the Commission	33
2.2.4 Fourteenth Meeting of the Commission	35
2.2.5 Fifteenth Meeting of the Commission	35
Chapter No. 3	38
3.1 The Uncontrolled Growth of 'Rural' Islamabad	38
3.2 Federal Commission and the Origins of Islamabad	39
3.3 Main Features of the Original Master Plan (OMP)	39
3.4 Assessment of the Original Master Plan	40
3.4.1 Failures as a Result of Ad hoc Changes and Poor Implementation	41
3.4.2 Failures Owing Poor OMP Conceptualization	41
3.4.3 Main Features of the 1986-1993 Master Plan Review	42
3.4.4 Assessment of the 1986-1993 Master Plan Review	42
3.5 Main Features of the 2005-2008 Master Plan Review	42
3.6 Assessment of the 2005-2008 Master Plan Review	43
Chapter No. 4	44
4.1 Introduction	44
4.2 Islamabad as an Ideal City of the Future	45
4.3 A Metropolitan Plan in a Regional Framework	46
4.4 Sectors, Urban Design, and the Concept of a Human Community	47
4.5 Integration of Nature and the City	49
4.6 Overall Assessment and Recommendations	50
Chapter No. 5	53
5.1 The Original Master Plan of Islamabad	53
5.2 Promulgation of ICT Zoning Regulation 1992	54
5.3 Amendments in Zoning Regulation in 2010	54
5.4 Building Control Regulations	57
Chapter No. 6	58
6.1 Key Achievements of the Federal Commission	58
a) Meetings of Federal Commission	58
b) Summary of Amendments in Modalities and Procedures framed under ICT (Zoning) Regulations-1992.	58

TABLE OF CONTENTS

c) Review of Request for Proposal (RFP) document for hiring of Consultants for Islamabad Master Plan	59
d) Summary of Islamabad Building Bylaws / Regulations 2019	59
e) Regeneration of G.06 Sector of Zone-1 of Islamabad	60
f) Strategy for Solid Waste management System	61
g) Strategy for Proposed Rain Water Harvesting System	62
h) Proposed Ring Road from Rawat to Bahra-Koh ,	63
i) Widening of Old Revenue Roads	64
j) Islamabad Railway Station	65
k) Mass Transit Authority	65
l) Right of Way for Services	66
m) Regularization of E11 Projects	66
n) Regularization of unapproved and illegal schemes	67
o) Restoration of Layout Plan/NOC of a housing scheme	67
p) Estate Management Directorate	67
q) Municipal Tax to Residents and Business	68
r) Central Park, Theme and Recreational Parks	68
s) Regional Links	68
t) Finance and Trade Zone	68
u) Capacity Building and Hiring of Staff	68
v) Zone III - Unacquired Area	69
w) Planned Parking Areas	69
x) Examination of the Problem of Sewerage Contamination for Korang River Upstream of Rawal Dam and Suggest Appropriate Solutions	69
y) Mini Dams	70
z) Contamination of Korang River and Rawal Lake	70
i. Wet Land Construction (WLC)	71
ii. Sewerage Treatment Plants (STPs)	71
iii. Sanitary Landfill Site	72
iv. Establishment of Transfer Stations for Solid Waste Collection	72
v. Construction of Water Channel from Ghazi Brotha to Islamabad	73

TABLE OF CONTENTS

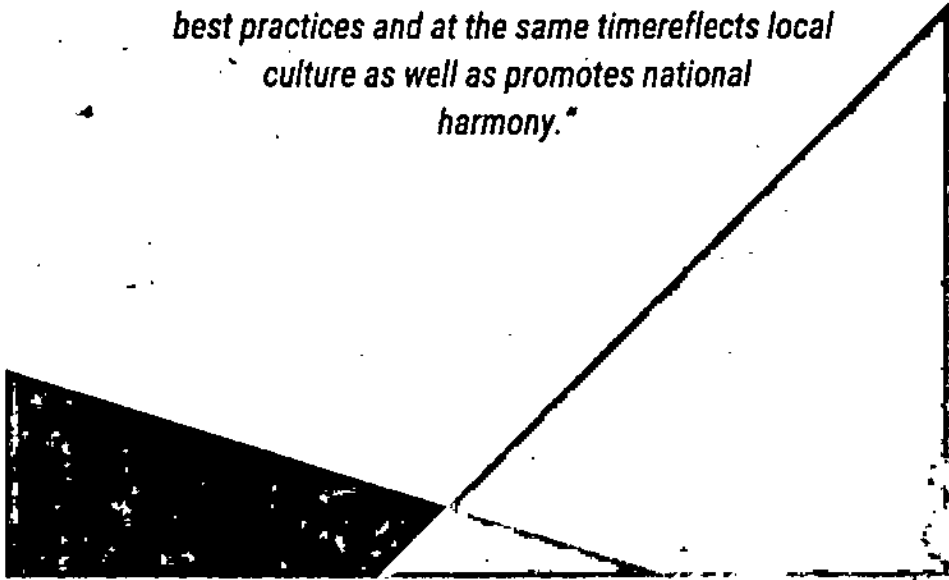
Chapter 7	75
7.1 Islamabad Master Plan (IMP) 2040 Framework and Process	75
7.1.1 Conceptualize sustainable regional and metropolitan development	75
7.1.2 Promote integrated compact development patterns at all scales	75
7.1.3 Think implementation at each scale from the start	75
7.1.4 Monitor	76
7.2 Suggestions	76
7.3. Way Forward	80
7.3.1 Long Range Regional Plan (LRRP) 2050	81
7.3.2 Framework for Islamabad-Rawalpindi Metropolitan Urban Plan (FIRMUP)2050	81
7.3.3 Islamabad Master Plan 2040	81
7.3.4 Time Period	85

LIST OF ABBREVIATION

1. CDA	Capital Development Authority
2. MCI	Metropolitan Corporation of Islamabad
3. ICT	Islamabad Capital Territory
4. RDA	Rawalpindi Development Authority
5. Pak EPA	Pakistan Environmental Protection Agency
6. IJP Road	IJ Principal Road
7. GIS	Geographic Information System
8. MLR-82	Martial Law Regulation 82
9. MHNP	Margalla Hills National Park
10. IT	Information Technology
11. SMC	Suo Moto Case
12. WP	Writ Petition
13. FC	Federal Commission
14. IHC	Islamabad High Court
15. SCP	Supreme Court of Pakistan
16. HRC	Human Right Case
17. DG	Director General
18. PCATP	Pakistan Council of Architects and Town Planners
19. MNA	Member National Assembly
20. SUPARCO	Space and Upper Atmosphere Research Commission Pakistan
21. IMP	Islamabad Master Plan
22. OMP	Original Master Plan
23. COF	City of Future
24. ROW	Right of Way
25. GT Road	Grand Trunk Road
26. NHSRC	National Health Services, Regulation and Coordination
27. PIMS	Pakistan Institute of Medical Sciences
28. NIRM	National Institute of Rehabilitation Medicines
29. WHO	World Health Organization
30. DHS	Director Health Services
31. BHU	Basic Health Unit

VISION

"A charter for development of Islamabad into a city that is responsive to the needs of people. Formulation of an organic design that can adjust to needs of residents with a view to evolve a sustainable smart city. A city that is based on knowledge economy, incorporates international best practices and at the same time reflects local culture as well as promotes national harmony."



GOVT. OF PAKISTAN

EXECUTIVE SUMMARY

Islamabad is the first modern planned city of Pakistan. It was planned and designed to become Capital of Pakistan, constructed away from the business and commercial activity of the Karachi. A commission was constituted in 1958, for selection of a suitable site for the new capital with a particular emphasis on location, climate, logistics, defense requirements, aesthetics, and scenic and natural beauty. The present capital site located at the foothills of Margalla suggested by the commission was approved by the Federal Cabinet.

The Master Plan of Islamabad prepared by a Greek Planners Doxladis Associates and was approved by the Federal Cabinet on 26th October, 1960. The Metropolitan Area of Islamabad was divided into three major parts, i.e. (i) Islamabad, (ii) National Park (Islamabad Park) and (iii) Rawalpindi and the Cantonment. Capital Development Authority (CDA) was created and the Master Plan of Islamabad was given a legal backing by CDA Ordinance 1960 and Pakistan Capital Regulation 1960. CDA was entrusted the task of development of new Capital of Pakistan.

The Master Plan required its revision after every 20 years to make it compatible with the changed physical, technical and socio-economic conditions to meet the future needs. Two attempts were made for review of the master plan during 1986 and 2005 but the revised master plan was not approved by the Federal Cabinet. However some improvement have been carried out through amendments with the approval of the Federal Government, that include Zoning Regulations 1992, Sub-Zoning of Zone IV in 2010 etc.

After the 1979 Islamabad Capital Territory (ICT) Local Government Ordinance, the union councils were formed in the rural area. The elected local body members started carrying out development works and erected buildings without any approval/permission of CDA. It gave rise to violation of the provision of the master plan of the Islamabad. Unregulated unapproved housing settlements started growing like mushrooms in un-acquired areas of all the zones of ICT, along with growing encroachments of acquired areas of Islamabad. In another attempt to review the master plan in 1986, a comprehensive report and summary was submitted to the Federal Government for approval in 1992 that was placed

GOVT. OF PAKISTAN

before the Federal Cabinet in 1993 but was not approved..

In the meantime CDA promulgated the Zoning Regulations 1992 and divided Islamabad into five Zones with the approval of the Federal Government. According to the Zoning Regulations, in the Zone-1 only CDA was authorized to acquire and develop land according to the provisions of the Master Plan. In order to reduce the increasing gap between demand and supply of housing, private sector was allowed to participate in development of housing schemes in Zone-2 and Zone-5.

Zone 3 was reserved for wildlife (Protection, Preservation and Conservation) under the Ordinance 1979. According to which no construction or development activity was permissible in this zone except preservation, conservation, afforestation and recreation covered by Margalla Hills National Park. Zone-4 was allowed to be used for national park, agro-farming, large tract educational institutions and research & development activities as envisaged in the original master plan.

Another review of the Islamabad master plan was carried out in 2005 CDA through hiring private consultants. The consultants after various studies, prepared a comprehensive report on revision of Master Plan of Islamabad. The review was submitted to the Federal Government but once again it could not get approval. Under the directions of the Honorable Supreme Court in 2010, ICT Zoning regulations 1992 were amended and Zone-4 was further divided into four sub-zones from A to D. Metropolitan Corporation was established in Islamabad under Local Government Act 2015 and elected Mayor with his team and union councils started working. The population of Islamabad has now grown to about two million, that include one million living in rural areas.

CDA Board in its meeting held on 17-01-2018 decided to hire services of Consultants to review the Master plan of Islamabad. The Honorable Supreme Court of Pakistan in 2017 took Suo-Moto notice of irregular mushroom growth in Islamabad and directed to place the matter before the government for finding a solution to regularize the settlements with applicable charges and penalties and provide them proper sanitary and sewerage disposal services.

Accordingly a summary for providing one time amnesty to such construction was presented to the Federal Cabinet on 31st May 2018 but was not approved. There are many other court directions about the review of master plan and bringing in control

GOVT. OF PAKISTAN

the irregular/unapproved housing settlements. Islamabad High Court in its judgment on date 09-07-2018 directed federal government to constitute commission to review master plan of Islamabad. The Prime Minister's Office in a meeting held on 13-11-2018 accordingly decided to form a commission for review of the Islamabad master plan. Ministry of Interior on 14.01.2019 issued a notification for the constitution of Commission comprising of thirteen members/local experts headed by the Chairman CDA. The Commission was given six months' time to finalize its report. The master plan Commission in order to know the key issues carried out two sessions of consultative dialogues with general public/stakeholders, carried out questionnaire survey and conducted 10 meetings however, the final report could not be generated.

The Federal Cabinet in its decision dated 30-7-2019 and subsequent directive of Prime Minister of Pakistan in a meeting held on 02-8-2019 made addition/alteration in composition and TORs of the Federal Commission constituted by the Federal Cabinet for Review of Master Plan of Islamabad and the same was notified by the Ministry of Interior vide its Notification dated 03-8-2019. The newly constituted Commission was tasked to evaluate existing reports, information available on record and other data and finalize the report. The Commission was also tasked to examine the problem of sewerage contamination in Kurang river, up stream of Rawal Dam and suggest appropriate solution. The Govt. Departments like Planning Commission, CDA, RDA and Pak EPA would provide full support to complete the task. The consultant shall separately develop execution and implementation plan and sub-plans for the development authority where ever required.

The newly constituted Commission keeping in view importance of the task worked on war-footing and conducted number of meetings, hence generated this report. In this report the Commission has pointed out problem areas like water shortage, sanitation issues, water quality issues, dilapidated water supply and sewerage networks, environmental issues, shortage of land and housing, decreasing green cover, development of slum areas, unauthorized constructions, violation of building bylaws, contamination of natural streams, shortage of educational institutions and health facilities, mass transit system. The commission has given broad guidelines and suggestions to resolve these issues. The Commission worked purely on voluntary basis and had certain limitations like shortage of time and inadequate resources for conducting surveys and studies. The Commission has given a holistic view, broad guideline/parameters and terms of reference for future studies to be got conducted through the Consultants.

GOVT. OF PAKISTAN

The commission reviewed building regulations & bylaws and proposed enhancement in F.A.R and allowable storeys to encourage high-rise development in Blue area, Markaz, Mauve Area, Class-III Shopping centre and I&T centre. In order to compact the city's limit, the concept of vertical housing is added in revised modalities for development of private housing scheme in zone-2 and zone-5. In order to connect Islamabad with neighboring cities, ring road has been proposed around Islamabad, connecting to Rawalpindi. Mechanism for restoration of layout plan/NOC is introduced in revised Modalities. Road widening of existing roads is suggested to cater the traffic demand of city. Mechanism for regularization of illegal and unapproved schemes has been formulated. Concept of municipal tax to residents and business is introduced that will be used for the rehabilitation of roads, sewerage, collection and disposal of solid waste, water supply, rain water harvesting, street lights, provision and maintenance of public buildings and horticulture for parks and roads.

In order to improve regional connectivity and to connect Markaz with neighboring areas at least three more mass transit lines are suggested to construct in phase I. With more car occupancy ratio in Islamabad and region, there is increase in car parking demand. Therefore, designated parking lots in blue area be developed as multi storey car parking on BOT/PPP mode. These parking lot be allowed to use top two floors for commercial purposes. G+5-floors to be allowed.

There is dire need to reassess the institutional capacity of Capital Development Authority. Since the city has expanded and workload has increased along with increased urbanized area, therefor infrastructure for planning and building control needs to be expanded. Separate division is required to provide framework for regional development. Training and development of all staff needs to be carried out on regular basis. CDA one window operation and easy of doing business need to be reassessed.

GOVT. OF PAKISTAN

I. BACKGROUND

Islamabad is a major city of Pakistan, and is Federally Administered as part of the Islamabad Capital Territory. Built as a planned city in the 1960s to replace Karachi as Pakistan's capital, Islamabad is known for its high standards of living, safety, and abundant greenery. With a population of 2,006,572 as per the 2017 census, Islamabad is the 6th largest city of Pakistan, while the greater Islamabad Rawalpindi metropolitan area is the country's third largest conurbation with population exceeding four million. The city is the political seat of Pakistan and local government setup is run by the Islamabad Metropolitan Corporation, supported by the Capital Development Authority (CDA).

First Master Plan for Islamabad was prepared in 1960, prepared by Greek firm Doxiadis associates, divides the city into eight zones, including administrative, diplomatic enclave, residential areas, educational sectors, industrial sectors, commercial areas, and rural and green areas. Currently the capital consists of 906 Sq. KM, in which the urban area consists of 220.15 Sq. KM and rural area is 466.20 Sq. KM respectively having an overall density of 2,207 persons/Sq. KM.

The present population is growing at the rate of 4.91% which is expected to touch 4 million by 2030 and with that, the boundary of the city will fall short of providing shelter to every inhabitant. If the current practices are continued then the future of the capital is quite bleak. At present, the trend is towards keeping the population density low with big residential units in the capital, which requires using more land for construction purposes yet not every inhabitant can either afford or even need such units. What is needed in this time and age, is paradigm shift towards high density, towards small yet spacious residential units and high density commercial and office buildings. There is a dire need to update master plan of Islamabad and revision of building Bylaws on urgent basis. The Islamabad master plan was supposed to be revised after every 20 years, but previous Governments failed to make revision that resulted in poor and haphazard construction and development.

At present, Islamabad, particularly its rural area, is dotted with unauthorized constructions and a lot of encroachment. The requirements of the city's population have multiplied over the years specifically with regard to education, health, the environment, infrastructure and water.

GOVT. OF PAKISTAN

Keeping in mind the above said situation the Prime Minister Imran Khan has directed the concerned authorities to comprehensively revise the Master Plan of the Federal Capital Islamabad. This will be for the first time in 58 years that the master plan of the capital will be revised.

II. CONSTITUTION OF FEDERAL COMMISSION FOR REVIEW OF MASTER PLAN OF ISLAMABAD

In pursuance of the Federal Cabinet's decision vide case no, 690/31/2019 dated 30.07.2019 a Federal Commission on Review of Master Plan of Islamabad was constituted. In compliance of subsequent directive of the Prime Minister of Pakistan in a meeting held on August 02, 2019, Federal Cabinet denotified the old members and replaced them with the following new members.

- i. Mr. Khurram Farid Bargatt (Chartered Town Planner, Managing Director Sheher Saaz (Pvt) Ltd. (Vice Chairman Pakistan Council of Architects and Town Planners)
- ii. Mr. Nayyar Ali Dada (Architect)
- iii. Mr. Ali Asghar Khan
- iv. Mr. Aziz Aslam (Team Leader NESPAK, Civil Engineer)
- v. Mr. Nayyab Hussain Gardezi, (Lawyer)
- vi. Ms. Humaira Qasim Khan (Environmentalist)
- vii. Miss Asma Khalil (Economist)
- viii. Mr. Naveed Aslam (Architect)
- ix. Mr. Salman Mansoor (Architect)

III. TERMS OF REFERENCES FOR FEDERAL COMMISSION

In pursuance of completion of assigned tasks, the Commission has to evaluate existing reports, information available on record and all other data for them and finalize the report. In addition, following tasks were also assigned to the Commission.

- a. Amendment in existing building bylaws/planning parameters of Islamabad.
- b. Review of Modalities and procedure for development of Private Housing Scheme in Islamabad.

GOVT. OF PAKISTAN

- c. Examination of sewage contamination in Korang river. upstream of Rawal Dam and to suggest appropriate solutions. -
- d. Regeneration of G-06 and Relocation or Up-gradation of Katchi Abadis.
- e. Review of RFP documents for hiring of Consultant to review the Master Plan of Islamabad.

IV. FURTHER STEPS

In the light of the TOR given to the Federal Commission for revision of Islamabad Master Plan, the Commission recommends following steps which may be taken by the CDA in achieving the Revision of Islamabad.

1. Hiring of International Consultant for Islamabad Master Plan 2020-2040: An international consultant may be hired in JV with Pakistan based planning firms by the CDA for revision of Islamabad Master Plan that should have prepared master plan for cities of similar conditions, economic and administrative ambitions. The Commission has prepared RFP document to engage the services of such consultant.
2. Hiring of Consultant for Korang River / Rawal Dam Water Treatment and Sewerage Treatment Plants.
3. Regeneration of G-06 and relocation or up-gradation of katchi Abadies: A Local or international Consultant firm may be hired. The incumbent firm must have demonstrated experience of urban regeneration on their credit. This will ensure state of the art approaches in urban planning and urban regeneration.
4. Exercising of strict enforcement of existing building bylaws, modalities and procedures, ICT Zoning Regulations and other relevant laws to stop illegal construction and development activity in the city.

GOVT. OF PAKISTAN

CHAPTER NO. 1

1.1 Introduction

After the formation of Pakistan in 1947, it was felt that a new and permanent capital city had to be built to reflect the diversity of the Pakistani nation. It was considered pertinent to locate the new capital where it could be isolated from the business and commercial activity of the Karachi, and yet is easily accessible from the remotest corner of the country. A commission was accordingly set in motion in 1958, entrusted with the task of selecting a suitable site for the new capital with a particular emphasis on location, climate, logistics and defense requirements, aesthetics, and scenic and natural beauty. After extensive research, feasibility studies and a thorough review of various sites, the commission recommended the area North East of the historic garrison city of Rawalpindi. After the final decision of the National Cabinet, it was put into practice. Master Plan of Islamabad was prepared by a Greek Planners Doxiadis Associates in 1960 and approved by the federal cabinet in a meeting held on 26th October, 1960 under the chairmanship of Field Marshal Muhammad Ayub Khan, President of Pakistan. As per Master Plan, the metropolitan area of Islamabad was divided into three major parts, i.e., Islamabad, National Park (Islamabad Park) and Rawalpindi and the Cantonment.

Following statutory and regulatory framework was put in place for the development and management of the new capital city of Islamabad.

- a. *The Pakistan Capital Regulation (MLR 82) 1960*: Land-use in the capital site is vested with the Authority as per MLR 82 of 1960
- b. *Promulgation of Capital Development Authority (CDA) Ordinance 1960*: Any Construction without the approval of Authority is a violation of CDA ordinance and the regulations framed there under.
- c. *Subsequent Rules and Regulations of CDA*: Violation of the regulations and CDA Ordinance is an offence liable to imprisonment and fine by the Authority.
- d. *Capital of the Republic (Determination of Area) Ordinance 1963*: The specified area in the schedule measuring approximately three hundred and fifty square miles (350 square miles or 906 Sq. Km) within the district of Rawalpindi in the Province of Punjab and Hazara District of the then North West Frontier Province was declared the area of the Capital of the Republic.

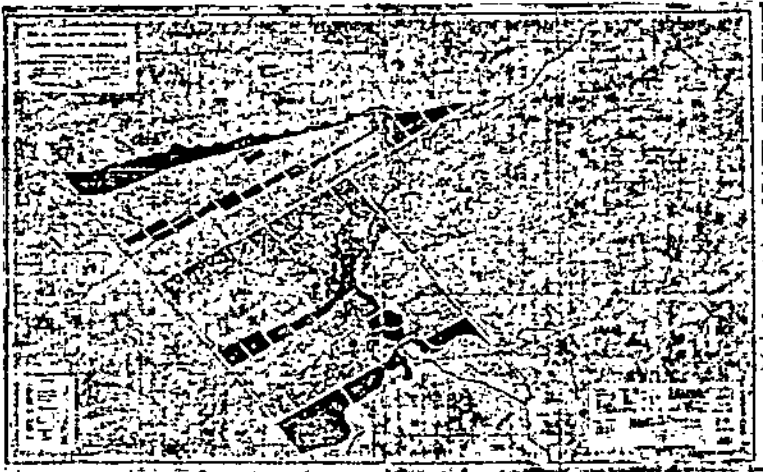
The master plan of Islamabad was given a legal backing by CDA Ordinance 1960 and Pakistan Capital Regulation 1960 (MLR 82 of 1960). No significant development against the prescribed use was seen in the National Park area until 1967 and CDA acquired maximum land (10,661 acres) during this period. After 1967, the local residents started showing grievances against the tough development control regulations and compulsory acquisition. The acquisition and

GOVT. OF PAKISTAN

development control as such became difficult and cumbersome. During this period mostly development took place in government sector and CDA developed sites for model villages, institutional sites. In 1979 the Islamabad Local Government Ordinance was promulgated and the rural area of Islamabad was divided into Union Councils.

In the Master Plan of Islamabad, as indicated in figure below, the area of National Park was allocated for

- a. Educational functions of national importance: National university.
- b. Institutions of a National character, i.e. National Research Centre, National Medical Centre.
- c. National Sports Centre.
- d. National Park functions (preservation of rural life, wild life, forests)
- e. Zoo, botanical gardens
- f. Exhibition grounds



Master Plan of Islamabad 1960

In the Master Plan, it was envisaged that its review would be necessary after 20 years commensurate with the changed physical and socio-economic conditions and resultant needs of the future. There were two efforts to review the master plan; one was in 1986-1992 and the other was in 2005-2008 but neither reached the final approval stage. However, some amendments have been made from time to time with the approval of the federal government. These include Zoning Regulations 1992, Sub-Zoning of Zone IV in 2010 and other amendments.

GOVT. OF PAKISTAN

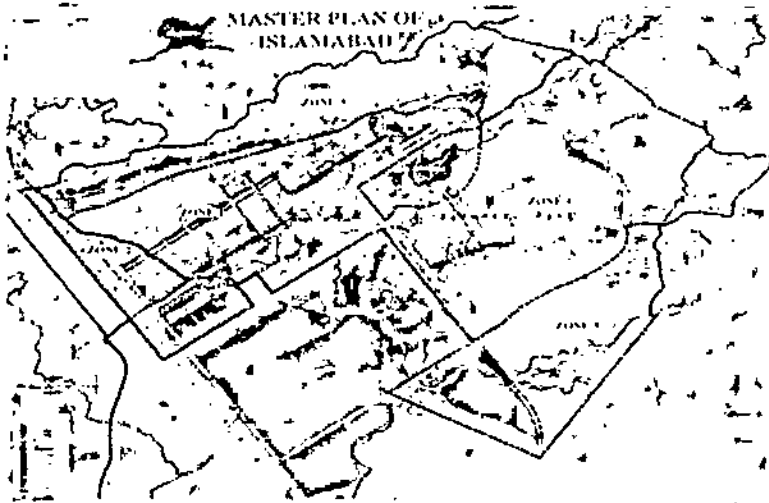
In 1979, Islamabad Capital Territory (ICT), Local Government Ordinance was promulgated and union councils were introduced in the rural area. Chairpersons and Vice Chairpersons of Union Councils were given various powers including preparation of development schemes and erection and re-erection of buildings. The local government in rural areas of Islamabad developed roads and streets, approved building plans in violation of the provision of master plan of the city, and thus unregulated development has been taking place in un-acquired areas of all the zones of ICT, along with growing encroachments of acquired areas of CDA. In 1980, the government established the Chief Commissioner's office in Islamabad with all the powers and duties conferred or imposed on a provincial government under any law for the time being in force in ICT.

In 1986, CDA started a lengthy review of Master Plan and a comprehensive report was submitted to the federal government for approval in 1992 and a summary was submitted to the cabinet in 1993 but it was not approved. In the meantime, CDA promulgated the Zoning Regulations 1992 and divided Islamabad into 5 Zones with the approval of the government. As per provisions of these Zoning Regulations, in Zone-1 only CDA was authorized to acquire and develop land according to the provisions of the Master Plan; private sector was allowed to develop housing schemes in Zone-2 and Zone-5, in order to reduce the increasing gap between demand and supply of housing.

The provisions of Islamabad Wildlife (Protection, Preservation and Conservation) Ordinance 1979 were applied to Zone-3. Subsequently, no construction or development activity was permissible in this zone except preservation, conservation, afforestation and recreation covered by Margalla Hills National Park. In Zone-4 land uses of national park area including agro-farming, large tract educational institutions and research and development activities as envisaged in the original master plan were kept intact.

In 1992, CDA promulgated the zoning regulations and divided Islamabad into 5 Zones. As per provisions of these zoning regulations, in Zone-1 only CDA was authorized to acquire land and make development according to the provisions of the Master Plan. After the enforcement of Zoning Regulations in 1992 private sector was allowed to develop housing schemes in Zone-2 and Zone-5 in order to reduce the increasing gap between demand and supply of housing. Margalla Hills National Park that was established under the provisions Islamabad wildlife (Protection, Preservation and Conservation) Ordinance 1979, was extended to the other areas of Zone-3. Subsequently no construction or development activity was permissible in this Zone except preservation, conservation, afforestation and recreation covered by Margalla Hills National Park. In Zone-4 land uses of national park area including agro-farming, large tract educational institutions and research & development activities as envisaged in the original master plan were kept intact. The Master Plan showing zonation of Islamabad is placed in figure shown on the next page.

GOVT. OF PAKISTAN



Master Plan showing Zonation of Islamabad as per ICT Zoning Regulation 1992

According to this plan, Zone-4 comprises of erstwhile Islamabad Park and rural periphery wedged between Murree Road towards north and Lehtar Road towards south and extending beyond Simli road upto the ICT limits in the north-east. The area falling within 2 kms from the highest watermark in Rawal Lake and sports centre area was made part of Zone-3. In 2005, CDA started another review of Master Plan of Islamabad by hiring private consultants.

The consultants conducted various studies in the capital and prepared a comprehensive report on revision of Master Plan of Islamabad. The report preparation included consultation with various stakeholders. The review was submitted to the federal government but could not get approval.

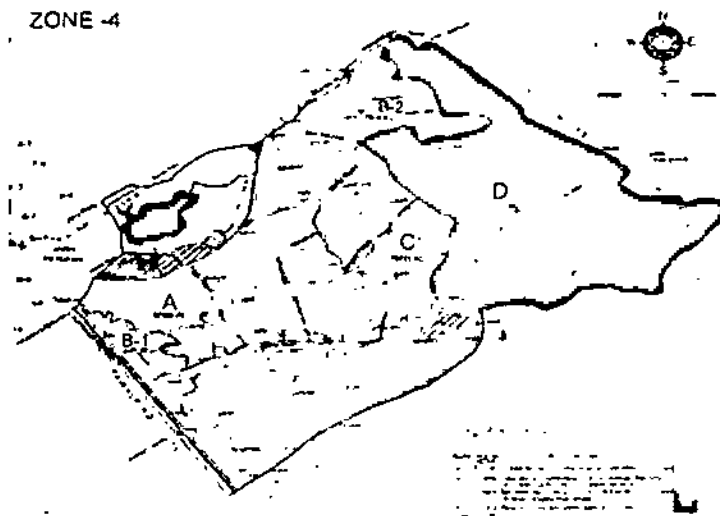
In compliance with the Honorable Supreme Court order in SMC 10 of 2007, CDA in 2010 amended the ICT Zoning Regulations 1992, whereby Zone-4 was further divided into four sub-zones from A to D. The details of its permissible land use are given in table below.

GOVT. OF PAKISTAN

Sub-Zone	Area (Acres)	Permissible Usage
A	12,188	Agro farming/ Orchard Schemes, Institutions, Model Villages and Public Housing Schemes (Row housing, apartments)
B	12,941	Mixed land use, Residential & commercial housing schemes (Public and Private); Apartments, Institutions and regulated expansion of existing villages
C	21,279	Agro farming/ Country Housing /Orchard Schemes, Institutions, (Parks, Public and Private sector Housing Schemes, Village Up gradation and Regulated expansion of villages.
D	23,618	Agro farming/ Orchard Schemes, Reserved Forests, Nature conservation projects, Sports and Recreational zones (Hotel, cultural centers, theater, playground & parks), Golf Courses, Polo Ground, Country Club, Water Sports, Swimming pools, Gliding & jogging tracks

Sub-Zoning and permissible uses in Zone-4

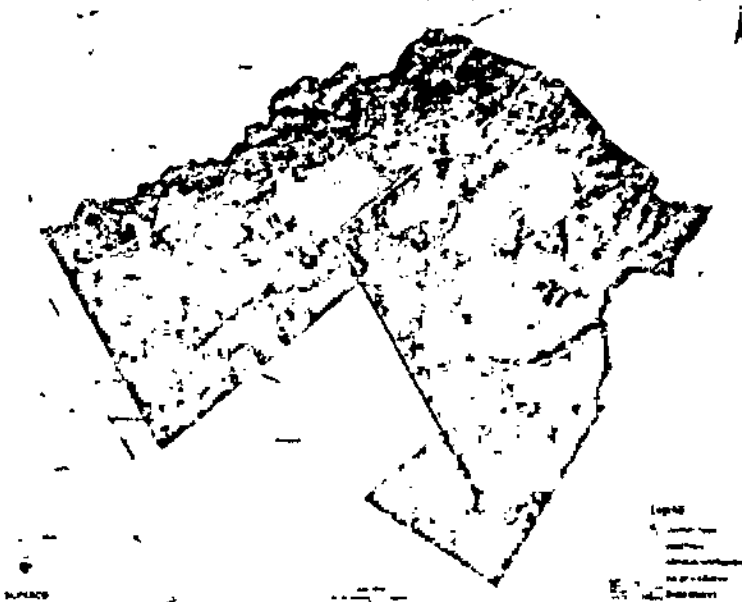
The plan showing the Sub-Zones in Zone-4 is given in figure shown below.



Plan Showing Sub-Zoning of Zone-4, Islamabad

GOVT. OF PAKISTAN

ISLAMABAD CAPITAL TERRITORY



Satellite image showing growth trends of Islamabad in 2016

Current population of Islamabad is more than 2.0 Million and it will touch the figure of more than 4.0 million people by 2030. Housing backlog stands at about 100,000 units with an additional requirement of 25,000 units per year. However, the supply is hardly 2,000-3,000 housing units and that too is primarily being provided by PD/CHS. It was the foremost job of CDA to provide affordable housing to different sections of society but CDA had been unable to launch any new residential sector during the last two decades and the ones that launched had not been developed since 1989. It is believed by the development professionals that this is the last chance to save and develop Islamabad as a planned city otherwise 80% of ICT area will be converted into slums in next 10-12 years. Therefore, all efforts supporting the planned development should be encouraged.

CDA board in its meeting held on 17-01-2018 decided to hire the services of consultants for review of the Master Plan. The Honorable Supreme Court of Pakistan in Suo-Moto Case No.6465 of 2017, directed to place the matter before the government and to propose a solution for the regularization of the subject settlements after imposing applicable charges and penalties so as to provide them proper sanitary and sewerage disposal services.

GOVT. OF PAKISTAN

Year	Population	Growth Rate	Household size	Households	Housing Units	Density (Persons per Sq.Km)
1998	805,000	5.19	6.2	129838	128753	889
2017	2,001,579	4.91	5.9	336182	Not Declared	2207
2020	2,317,572	4.91	5.9	392808		2558
2030	3,746,385	4.91	5.9	634980		4135

Table Showing Population Growth in Islamabad

Accordingly a summary for providing one time amnesty to such construction was presented to the federal cabinet on 31st May 2018 but was not approved. The Honorable Islamabad High Court in its judgment in W.P.676 of 2017 in July 2018 issued following directions pertaining to review of Master Plan and regularization of structures:

- i. As it has become inevitable to review the existing Master Plan and assess its efficacy, we direct the Federal Government to forthwith take steps of constituting a commission, inter alia, of professional experts, preferably of international repute, in the field of town planning, environmental management and finance. The Commission shall make recommendations to the Federal Government. The terms of reference shall also be formulated by experts. The Federal Government is expected to complete the proceedings within six months from the date of receiving a certified copy of this judgment.
- ii. The Federal Government is directed to forthwith constitute the commission under MLR-82.
- iii. The chief commissioner is directed to aid and assist the authority in ensuring that no building or house is constructed in any area of Islamabad.
- iv. No illegal building or construction shall be regularized unless the Federal Government certifies, pursuant to recommendations made by the commission which has been directed to be constituted in clause (i) above, that it shall not in any manner adversely affect the environment or have adverse effects relating to climate change.

The Honorable SCP endorsed the judgement of Honorable IHC, in its decision dated 17-09-2018 and issued directions regarding illegal construction in Zone-3 and Zone-4 and in this connection a committee with specified TOR's and headed by the Interior secretary for devising a legal framework for possible regularization of the existing construction in Zone-3 & this committee has submitted its report on 31-10-2018. The Honorable SCP, In HRC No. 6465-G/2017, vide orders dated on 01-11-2018, directed regularization and planning in Zone-3 and Zone-4 of Islamabad of existing structures and submission of supplementary report.

GOVT. OF PAKISTAN

In compliance to Honorable SCP's order dated 01-11-2018, CDA submitted the requisite supplementary report to the Honorable SCP, regarding possibility of regularization of existing structures and future planning of Zone-4. In the said report, CDA also recommended the establishment of a commission for the long outstanding review of Master Plan of Islamabad. Recently, constitution of a Commission was also decided in the Prime Minister's office in a meeting held on 13-11-2018.

Supreme Court of Pakistan in its judgment dated 04-04-2019 in HRC 6465-G noted that a federal commission was established vide notification dated 28-12-2018 Issued by the Ministry of Interior under MLR-82 to review the Master Plan of Islamabad. One of the key assignments of the commission is to identify illegal buildings/constructions erected in violation of the Master Plan, CDA Ordinance 1960, ICT Zoning Regulations 2005, and other subordinate legislation. After doing that, the commission is tasked to recommend structures that must be demolished or be penalized according to the legal, environmental, urban development and proprietary rights criteria.

1.2 Constitution of the Commission

In order to comply with the orders of Islamabad High Court issued in WP No.676 of 2017, the matter was placed before the government and the federal cabinet constituted the federal commission under, Martial Law Regulation No. 82 and Ministry of Interior issued notification of the commission vide no. F-1-25/2018-CDA-II, on 14-01-2019.

The commission comprised of the following members:

- i. Mr. Syed Ayub Qutub, Executive, Pakistan Institute for Environmental Development Action Research (PIEDAR), Islamabad.
- ii. Dr. Ghulam Abbas Anjum, Dean Faculty of Architecture and Planning, University of Engineering and Technology, Lahore.
- iii. Mr. Asad Mehboob Kayani, Ex-Member (Planning & Design) CDA.
- iv. Mr. Javed Ali Khan, Habitat Program Manager, UN Human Settlement Program, UNHABITAT, Islamabad.
- v. Member Planning & Design CDA.
- vi. Director General, Pakistan Environment Protection Agency (Pak EPA), Islamabad.
- vii. Director General Rawalpindi Development Authority (RDA), Rawalpindi.
- viii. Chief (Physical Planning), Planning Commission of Pakistan
- ix. Chief Metropolitan Officer, Metropolitan Corporation of Islamabad (MCI) Islamabad.
- x. A renowned Architect as nominated by Pakistan Council of Architects and Town Planners (PCATP), Karachi.
- xi. A renowned Town Planner nominated by Pakistan Council of Architects and Town Planners (PCATP), Karachi.
- xii. Director (Master Planning), CDA Islamabad.

GOVT. OF PAKISTAN

The Chairman CDA will act as Chairperson of the commission till such time an eminent private sector person is appointed as Chairperson.

1.3 Terms of Reference of the Commission

The TORs of the Commission are as under:

- o Review of existing Master Plan and proposals for next 20 years i.e. till 2040
- o Assessment of the efficacy of the existing Master Plan.
- o Possible regularization of illegal buildings/construction done in violation of CDA Ordinance 1960, Master Plan, ICT Zoning Regulation 1992 (as amended), Islamabad Building Regulation 2005 and other relevant regulations made under CDA ordinance 1960.
- o The commission shall keep in view the increased private sector participation in health and education sectors and make recommendations.
- o Proposal for the future development in short term, medium term and long terms plans.
- o The commission shall consider the outstanding issues of original owners/affectees of katchi abadis of Islamabad and make suitable recommendations to address their grievances.
- o The commission may further amend the terms of reference with the approval of the government.
- o The commission shall complete its work within 6 months.

1.4 Amendment in the Commission and TORs

One of the member of the commission Dr. Ghulam Abbas Anjum breathed his last and the Ministry of Interior forwarded a copy of the Cabinet Division's Memorandum bearing No. 12/CM/2019-D, dated 21st March 2019 conveying therein following decisions of the cabinet for the review of Master Plan of Islamabad:

- a. Dr. Ahmed Zaib, Chair, Sustainable Architecture & Urbanism, Building Architecture & Town Planning Department, Brussels School of Engineering, Universite Libre de Bruxelles, Brussels-Belgium was included as a member of the Federal Commission constituted and tasked to review the Master Plan of Islamabad.
- b. The Federal Commission was allowed to co-opt suitable persons as member(s) of the Commission as and when required, in the larger interest of the Authority.

The terms of references (TORs) of the commission will inter-alia include the following: "the outstanding issues of original owners/affectees of katchi abadis of Islamabad and make suitable recommendations to address their grievances".

GOVT. OF PAKISTAN

The Federal Cabinet, in its decision dated 30-7-2019 and subsequent directive of Prime Minister of Pakistan, in a meeting held on 02-8-2019 made addition/alteration in composition and TORs of the federal commission constituted by the federal cabinet for review of Master Plan of Islamabad and the same was notified by the Ministry of Interior vide its notification dated 03-8-2019:

The following members of the commission were denotified:

- i. Mr. Syed Ayub Qutub,
- ii. Mr. Javed Ali Khan
- iii. Mr. Jehangir Khan Sherpao
- iv. Mr. Abdul Halim Paracha.
- v. Dr. Ghulam Abbas Anjum

The following additional 09 persons from the private sector were notified as new members of the commission:

- i. Mr. Khurram Farid Bargatt (Chartered Town Planner, Managing Director Sheher Saaz (Pvt) Ltd. (Vice Chairman Pakistan Council of Architects and Town Planners)
- ii. Mr. Nayyar Ali Dada (Architect).
- iii. Mr. Aziz Aslam (Team Leader NESPAK, Civil Engineer).
- iv. Mr. Nayyab Hassan Gardezi, Lawyer.
- v. Miss. Humaira Qasim Khan (Environmental Specialist).
- vi. Miss. Asma Khalil.
- vii. Mr. Naveed Aslam (Architect).
- viii. Mr. Salman Mansoor (Architect).

The commission was tasked to

- o Evaluate existing reports, information available on record and other data for them and finalize the report within one month.
- o Examine the problem of sewerage contamination in Kurang River, up stream of Rawal Dam and suggest appropriate solution.
- o The Govt. Departments like Planning Commission, CDA, RDA and Pak EPA will provide full support to complete the task. The consultant shall separately develop execution and implementation plan and sub-plan for the development authority wherever required.

1.5 Limitations of the Federal Commission

The members of the federal commission worked continuously from 17-01-2019 by giving their precious time and efforts including travelling from other cities for the meetings. The services

GOVT. OF PAKISTAN

provided by the commission members were entirely on voluntary basis. CDA provided to the federal commission office space, access to satellite imagery and available documents. The report is largely based on secondary data augmented by feedback from two consultative dialogues and responses to a questionnaire survey published by the commission on the CDA web portal. Many studies were required to reach conclusions and making key recommendations. Such studies require expertise, time and resources which were not available to the Commission. The allocated time was too short to carry out a comprehensive study and research of key factors for making meaningful conclusions and recommendations.

1.6 Proceedings of the Commission

After the issuance of the notification of the commission, 14 meetings of the commission have been held up till 16th September 2019. The commission prioritized its work according to the TORs based on short term and long term measures as some of the issues require immediate attention. The commission examined and gave solution to tackle the issues of buildings constructed without approval of CDA and nonconforming to Ordinance 1960, Master Plan, ICT Zoning Regulation 1992, Islamabad Building Regulation 2005 and other relevant regulation of CDA as per TORs.

The commission within its limited time examined the following agenda and gave its suggestions:

- a. Review of proposed building bylaws/planning parameters proposed by sub-committee constituted by chairperson CDA.
- b. Review of modalities and procedures for development of private housing schemes in Islamabad and identify grey areas for its improvement.
- c. Examination of the problem of sewerage contamination in Korang River upstream of Rawal Dam and suggest appropriate solutions.
- d. Review of the RFP document for hiring consultants to review the Master Plan of Islamabad.

GOVT. OF PAKISTAN

CHAPTER NO. 2

2.1 Proceedings of the Commission

After the issuance of the notification of the commission, ten (10) meetings of the commission had been held from 17-01-2019 to 11 July 2019. The summary and decisions of these meetings is given in the following pages.

2.1.1 First Meeting of the Commission

The First meeting of the federal commission held in the conference room of the chairperson CDA for the review of Master Plan on 17-01-2019 under the chairpersonship of the Chief Commissioner Islamabad/Chairman CDA, Mr. Amer Ali Ahmed. The meeting started with the recitation of Holy Quran. The chair welcomed all the participants and gave background of the meeting and highlighted the importance and purpose of the activity. He told the house that this was an introductory session intended to set a future framework, direction and way forward in the light of TORs of the commission. No doubt this was a huge task and a great challenge for the participants, however, it was to be completed with joint efforts and teamwork. Director Master Planning, CDA briefed the house about the original Master Plan of Islamabad and its dynamics. He told that Master Plan of Islamabad was prepared in 1960 and its life span was 20 years after that it was to be reviewed.

CDA started first revision in 1986 and a summary was submitted for approval of the government. After approval of the Prime Minister of Pakistan in the capacity of incharge minister, the summary was prepared by the cabinet division on 03-10-1993 for the federal cabinet for its approval but the same could not get finality. CDA started another review in 2005 consultants were hired and draft Master Plan was submitted for approval of the government but again it could not get requisite approval. Now this was the third effort to review the Master Plan.

The government had constituted a commission under MLR-82, which had been given task to review the Master Plan of Islamabad. All members of the commission appreciated the decision of government to review the master plan of Islamabad and deliberated that a state of the art proposal should be prepared keeping in view the original master plan, previous reviews made in 1986-1993 & 2005-2008. The modern techniques should be used to collect the data to identify key challenges, future needs and possible strategies for sustainable development. The process of reviewing master plan comprises three main steps e.g. identification of needs & challenges, vision formulation and strategies development. A large number of studies like demography, environment, water and sanitation, transport, energy, education, economy, public

GOVT. OF PAKISTAN

utilities, municipal services etc. would be required through services of professional consultants.

2.1.2 Second Meeting of the Commission

The second meeting of the federal commission to review the Master Plan of Islamabad was held on 24-01-2019. In this meeting, the members agreed that the original character of grids for future development of Islamabad may be preserved and Rawalpindi may also be included in the future planning of the city and special considerations may be given to the CPEC related Economic Zones. A large number of illegal constructions have been raised in the city in violation of the master plan, which need to be incorporated in the studies. Rawalpindi should not be treated as a separate entity from Islamabad. In this regard, regional plan of Rawalpindi & Islamabad was overdue. Sanctity of the city needs to be preserved as well. It was unanimously decided that a consultant should be appointed to conduct various studies in the city including water supply, sewerage, electricity, socio-economic, cultural, transportation, environment, economic, trade, industry, civic amenities, preparation of base map of existing properties and other relevant studies, and place recommendations before the commission for review of Master Plan of Islamabad. The commission will formulate ToRs for hiring of the consultant.

2.1.3 Third Meeting of the Commission

Third meeting of the federal commission to review the Master Plan of Islamabad was held on 30-01-2019. In this meeting, it was decided that DG RDA will give presentation on proposed review of Master Plan of Rawalpindi. It was agreed to take help of the SUPARCO.

The commission constituted three sub committees to further expedite the work according to their mandated tasks as detailed below.

a. Sub-committee I

This committee will prepare advertisements to be appeared in the press for hiring the services of consultant and other technical documents. First draft will be prepared within two weeks. Composition of the committee will be as under:

- | | |
|--|------------|
| 1. Mr. Asad Mehboob Kyani, Ex-Member (Planning & Design), CDA | (Convener) |
| 2. Mr. Abdul Haleem Paracha, Vice Chairman, Town Planning, PCATP, Karachi. | (Member) |
| 3. Director General, Pak. EPA. | (Member) |
| 4. Chief Physical Planning & Housing, Planning Commission. | (Member) |

b. Sub-committee II

This committee will prepare a list of public hearings to be conducted for taking opinion of various stakeholders. It will also identify issues in the implementation of the previous plans. Time line for this task is two weeks. This committee will comprise of following members.

GOVT. OF PAKISTAN

- | | |
|---|------------|
| 1. Mr. Najaf Syed, CMO, Metropolitan Corporation of Islamabad | (Convener) |
| 2. Mr. Jawed Ali Khan, Habitat Program Manager, UN HABITAT, Islamabad | (Member) |
| 3. Mr. Jahangir Khan Sherpao, PCATP | (Member) |
| 4. Mr. Zafar Iqbal Zafar Director (Master Planning), CDA, Islamabad | (Member) |

c. Sub-committee III

This sub-committee will prepare the list of studies to be conducted by the consulting firm for revision of master plan. Timeline for this task is two weeks. This Sub-Committee will constitute following members.

- | | |
|---|------------|
| 1. Mr. Syed Ayub Qutub, Executive, (PIEDAR), Islamabad. | (Convener) |
| 2. Mr. Jawed Ali Khan, Habitat Program Manager, UN HABITAT, Islamabad | (Member) |
| 3. Director General, RDA, Rawalpindi | (Member) |
| 4. DG, Pak, EPA, Pakistan | (Member) |

2.1.4 Fourth Meeting of the Commission

Fourth meeting of the federal commission was held on 21-02-2019 in the conference room of CDA and in this meeting progress of the sub-committees was discussed. The Director Metropolitan Planning, RDA gave a comprehensive presentation on the Master Plan of Rawalpindi highlighting the urban growth trends, existing situation of urban development, housing, transportation network, infrastructure and ring roads and previous attempts to review the Master Plan and reasons of their failure were also explained.

The commission was apprised that another review of Rawalpindi Master Plan was going to be initiated soon with the concurrence of the government of Punjab. The commission, during the meeting, reviewed and discussed the recommendations submitted by the sub-committees that were constituted in the last meeting. The commission members requested SUPARCO to provide latest imagery and help the commission in monitoring the urban growth, illegal construction, and encroachment on CDA land and green spaces using the available technology.

The proposal for establishment of Islamabad National University in place of Prime Minister House was also discussed at length in the meeting and the participants agreed that Prime Minister House is situated in the area which is Administrative Centre as per Master Plan of Islamabad. Establishment of university in this area would be a departure from the Master Plan as it is an incompatible use. A member of the commission pointed out that perhaps the government was thinking to establish the university in the east of the PM House where Quaid-e-Azam University already exists.

GOVT OF PAKISTAN**2.1.5 Fifth Meeting of the Commission**

Fifth meeting of the federal commission to review the Master Plan of Islamabad was held on 25-03-2019. DG, Pak EPA shared a study on Islamabad showing change in the four factors i.e. bare soil, built-up areas, vegetation and surface water resources over the past years with an interval of 10 years. The study transpired that as the built-up area increased over the past years, vegetation also increased but there was decrease in bare soil and surface water.

Convener of sub committee-III presented a list of the studies, which were to be incorporated in the terms of references being prepared to hire the services of consultants to review the Master Plan. The sub committee- II discussed the public hearings to be conducted for taking opinion of various stakeholders and finalized a list of such consultations. The sub committee- III presented the draft Request For Proposal (RFP) document before the commission as prescribed by Pakistan Procurement Regulatory Authority (PPRA). It was decided to arrange two workshops in order to update the government and general public about progress of the commission and future framework. It was also decided to forward the RFP document to the government for approval.

2.1.6 Sixth Meeting of the Commission

Sixth meeting of the federal commission was held on 15-04-2019. Director Master Planning informed the participants that Ministry of Interior had forwarded a copy of the cabinet Division's Memorandum bearing N. 12/CM/2019-D, dated 21st March 2019 conveying therein following decisions of the cabinet for the review of Master Plan of Islamabad:

- a. Dr. Ahmed Zaib, Chair, Sustainable Architecture & Urbanism, Building Architecture & Town Planning Department, Brussels School of Engineering, Universite Libre de Bruxelles, Brussels-Belgium was included as a member of the Federal Commission constituted and tasked to review the Master Plan of Islamabad.
- b. The Federal Commission was allowed to co-opt suitable persons as member(s) of the Commission as and when required, in the larger interest of the Authority.
- c. The terms of references (ToRs) of the Commission will inter-alia include the following:

"the outstanding issues of original owners/affectees of katchi abadis of Islamabad and make suitable recommendations to address their grievances".

2.1.7 First Consultative Dialogue

The purpose of the consultative dialogue with key stakeholders from the public sector, professional associations and the academia was to secure feedback on the work undertaken and planned by the commission in response to its terms of the reference. The dialogue held

GOVT. OF PAKISTAN

on May 02, 2019 from 1400 to 1630 hours was attended by around 50 participants. The commission presented the historical context of the Islamabad Master Plan, the attempts to revise it, and the genesis and terms of reference of the current federal commission and the proposed scope of studies for the IMP 2020-2040. The audience was asked what they thought about the planned studies. A secondary purpose was to pilot test the draft questionnaire on land use, services and building preferences. The participants were asked to fill out the form individually and submit it with their comments. The participants actively participated in the dialogue and gave their suggestions. The participants also submitted their priorities in the form of a questionnaire which transpired that water is the most prioritized need of the people of Islamabad.

2.1.8 Seventh Meeting of the Commission

Seventh meeting of the federal commission was held on 10-05-2019. Director Master Planning informed the participants the progress of the commission achieved so far. He further explained that the commission in its fifth meeting had approved the Request for Proposal (RFP) and the same were forwarded to the Ministry of Interior vide letter no. CDA 29(36)(95) (75)-Coord/2019/1076, dated 30-04-2019 for approval.

The Ministry of Interior vide office letter No. F.1-25/2018-CDA-II, dated 08-05-2019 had conveyed that CDA may proceed further with the hiring of consultant, in line with administrative and financial powers delegated to CDA as per CDA Ordinance, 1960; TDRs of Federal Commission; Autonomy of CDA ; if any for hiring of consultant for review of Master Plan of Islamabad, as prepared, finalized and approved by the federal commission/CDA, subject to adherence of the following conditions:

- i. The Draft RFP, duly approved by the federal commission, shall be examined by CDA's Procurement Committee/Board, and vetted by PPRA.
- ii. CDA's Procurement Committee/Board shall ensure observance of relevant PPRA Rules, 2004, amended from time to time, in letter and spirit, to ensure transparency.
- iii. The advertisement for hiring of consultant to Review Master Plan of Islamabad shall be floated in leading Urdu and English national dailies, to ensure competitiveness.
- iv. The eventual 'contract agreement' with the successful bidder/consultant shall be got vetted from PPRA by CDA.

The Director Contracts of CDA was requested to thoroughly examine the RFP document and vet in the light of CDA's procurement rules, PPRA Rules. The commission discussed the results of the first consultative dialogue held by the commission on 2nd May 2019 and expressed satisfaction on the proceedings. It was decided to conduct second round of the dialogue with private associations, private scheme developers, international organizations

GOVT. OF PAKISTAN

and NGOs, consulting town planners, architects and engineers working in Islamabad in order to update them about progress of the commission, TORs and future course of action and take suggestions from them.

2.1.9 Second Consultative Dialogue

Second consultative dialogues was held on 16-05-2019 at 11.00 am in committee room, Pak China Friendship Center, Islamabad. Various representatives from private associates, international organizations, NGO's, association of builders, developers, private scheme developers, consulting town planners, architects and engineers actively participated in the event, expressed their concerns and shared their views and comments about the review of Master Plan of Islamabad. The participants were apprised about progress of the commission and future framework. The participants appreciated the incentive of the commission and gave their suggestions.

2.1.10 Eighth Meeting of the Commission

Eighth meeting was held on 19-06-2019. The Director Master Planning apprised the participants with the summary of the progress of the commission and shared results of the 2nd consultative dialogue, which were quite interesting. It was decided to prepare a comprehensive document before 13th July 2019, that contained the TORs and detailed guidelines about each area of work, which might help the consultant to perceive the shape of future master plan. The comprehensive guideline document will contain the draft policy regarding housing, land acquisition guidelines and commercialization of land, proposed future road network, economics of development, green areas, compensation strategies, and detailed land use planning in each zone. This document will also include strategies to control and manage un-regulated and unauthorized development in Islamabad.

2.1.11 Ninth Meeting of the Commission

Ninth meeting was held on 28-06-2019 in which the overall progress of the commission was discussed at length. A presentation regarding Katchi abadis in Islamabad was given by Director Housing Societies, CDA in which a suggestion for Katchi abadis was shared with the commission. Director Building Control shared a draft of building bylaws which had been prepared by a committee of Director Urban Planning, Director Architecture and Director Building Control, CDA after having discussions with architects, engineers, town planners, builders and developers etc. After detailed deliberations, it was decided that the commission was now in its final stages and firming up its findings on certain key matters. These issues revolve around general policies and guidelines for CDA as well as framework for future development in Islamabad. The commission had had several sessions and proceeded with extreme caution so as to incorporate the international best practices in its observations. The interactive sessions with the public have yielded considerable input to the commission,

GOVT. OF PAKISTAN

along with comments revived through social media tools. Reportedly more than 3000 suggestions had been received so far. The commission was finalizing a preliminary draft report as well as guidelines. It is likely that within the stipulated timeline the commission will present its report containing commentary on TORs set by the cabinet. However, the commission is also proposing a technical consultant who would carry out analysis of each structure, each waterway, examine national trends and propose how the city will look in 2040 given the current planning regulations and proposed guidelines set by the commission. The forecast is likely to be not restricted to just 2020 but also be indicative of the next twenty years after that as well. The analysis and studies will provide a guideline for the CDA and city planners once approved and finalized.

The commission report will also comment on the irregular growth in Islamabad and occupation of state land as well as the current drive to clear encroachments. However, it was also decided that no regularization of illegal construction should be allowed in Zone-III and Margalla Hills National Park (MHNP). CDA should discourage qabza mafia and retrieve the state land from encroachers without any compensation.

2.1.12 Tenth Meeting of the Commission

Tenth meeting of the federal commission was held on 11-07-2019 in which overall progress of the commission was discussed and results of feedback received from general public and two consultative dialogues was discussed. It revealed that over 3200 citizens participated in this survey among them 11% were women, 97% participants were either graduates or post graduates, 48% were private employees, 22% government employees, 12% entrepreneurs, 12% students, 1.5% housewives and 4.5% were unemployed. The survey revealed that shortage of water, health facilities, parking, sanitation, open spaces and housing are major priority issues.

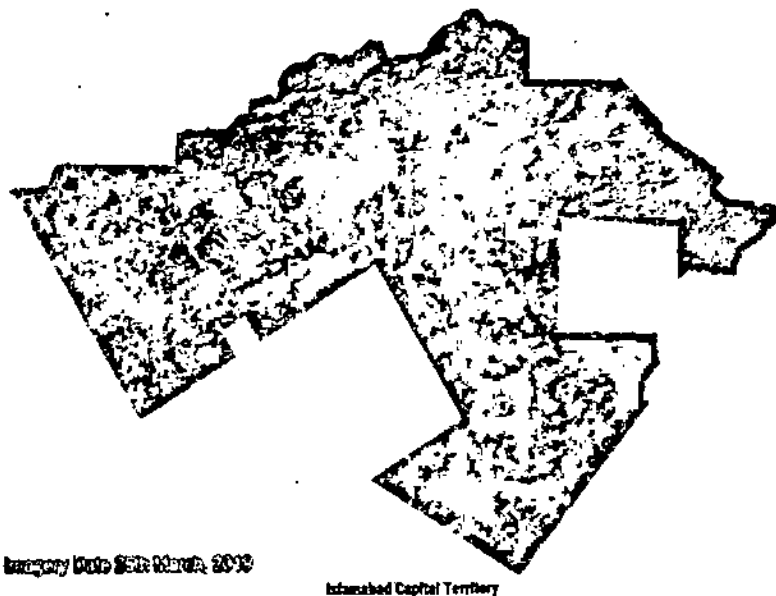
A presentation regarding regularization of Ghouri Town was given by Director Regional Planning which was referred to the commission in compliance of the Islamabad High Court order. The commission after hearing the court order decided that Master Plan, CDA Ordinance, Zoning Regulations and bye-laws already exist. CDA can decide the fate of Ghouri Town at its own under the prevailing laws. Since the commission has decided to hire the services of international consultant to review the Master Plan and TORs of the same have already been approved, therefore regularization of any un-approved housing scheme can be decided by the commission after studies and proposals of the consultant. The second presentation was made by the Director Building Control-I, CDA where in he explained that a summary regarding improvement of existing bylaws Blue Areas, Class-III shopping centres, Marakz, I&T Centre and Industrial Area were presented and preparation of new bylaws for areas where CDA has not previously exercised building control like Astride Major Roads, Zone-2A & 5 of Islamabad.

GOVT. OF PAKISTAN

CDA Board desired to seek opinion of the federal commission on some of the bye-laws. The commission decided that CDA Board is fully competent to frame bylaws therefore it may be decided by the board at its own level. Later on, the commission discussed the reports prepared by various members of the commission and decided to make these reports part of the final report of the commission.

2.1.13 Briefing to the MNAs of Islamabad

The federal commission on 21-06-2019 and 03-07-2019 shared its progress with the MNAs elected from Islamabad i.e. honorable Mr. Asad Umar, Mr. Ali Nawaz Special Advisor to Prime Minister on CDA and Mr. Khuram Nawaz (MNA). The honorable members were apprised about the future framework of review of master plan and RFP document was also shared with them. It was desired to prepare a comprehensive plan keeping in view the ground realities of the city, existing problems and future needs and suggest short term, medium term and long-term solutions.



GOVT. OF PAKISTAN

2.2 Questionnaire Survey to assess the Public Opinion

A questionnaire survey was conducted among the inhabitants of Islamabad to know the extent and weightage of their priorities and issues. The learned members of the master plan commission designed the questionnaire. Responses were received from 3,201 respondents who were selected through random sampling. The respondents were inhabitants of Islamabad living in various zones and sectors of Islamabad with different ages and income groups. Out of them 11% were female and 89% were male.

Gender Proportion in Survey



53% respondents were postgraduates, 44% graduates and only 3% had matric education. Since most of the respondents were well qualified therefore, the confidence level of survey results is very high.

Educational qualification of participants



1,534 respondents (about 48%) pertained to private sector, 22% (716 Nos) were employees of public sector institutions, 12% were entrepreneurs and students, responses were also given by housewives and unemployed youth. It is a well-distributed response and almost represents the population categorization of Islamabad. Therefore, we can confidently rely on the survey results. The plotted survey results are available in the figure.

Profession of Respondents



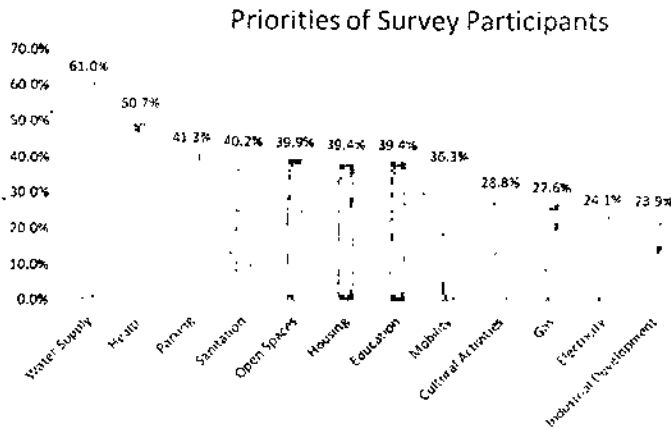
The purpose of survey was to know that how they prioritize their social needs, so that customer satisfaction could be enhanced by addressing their requirements during review of master

GOVT. OF PAKISTAN

plan of Islamabad. The most popular demand or priority of 61% respondents was supply of adequate water followed by health (50.7%). These results also verify the present scarcity of water in Islamabad, and depleting water reserves and resources. We need to find ways and means to increase the water resources to ensure adequate water supply to inhabitants of Islamabad.

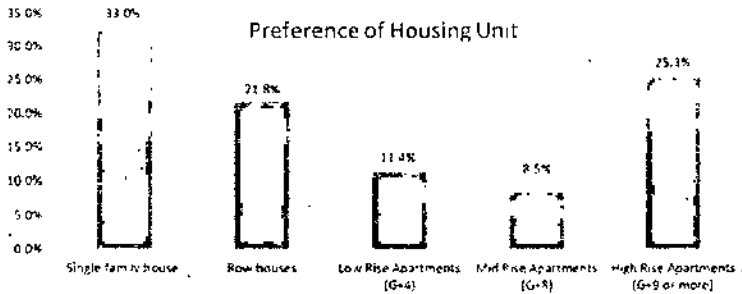
The survey results also highlights the scarcity of health facilities, requiring construction of more hospitals especially in the rural areas. Priority given to parking, sanitation, open spaces, housing and education is almost the same ranging from 39 to 41%. There is big room for improvement in these areas for Islamabad. Priority given to means of transport and mobility is 36.3%, that means about two third of the population does not consider transport as a problem; they already have good means of transport.

However, we also should facilitate the remaining inhabitants who do not have any other option but using the public transport. Preference given to cultural activities is 28.8%, it reveals that either the respondents are mostly satisfied with the existing facilities or they are not aware of its importance. Surprisingly the priority given to gas, electric supply and industrial development is comparatively very low i.e 27.6%, 24% and 23.9% respectively, it shows the satisfaction level of respondents. Although improvement is required in these areas but overall response or level of service seems to be good. The results and comparison in the plotted form can be seen in the following figure:





Views of respondents were also obtained about their preference on the types of housing. One third of the respondents i-e 33% preferred to live in single family houses. About 22% preferred row house and surprisingly about 45% preferred to live in multistorey apartment buildings. It is a big shift among the Islamabad inhabitants. Therefore, we can plan for construction of more apartment buildings in future, compared to single family houses thereby saving the precious land or making better use of land by creating more housing in less land space.



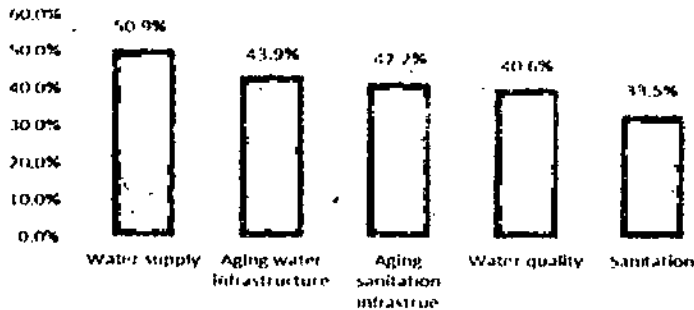
The respondents were asked to give their response about their major concerns. Once again the major concern is inadequate water supply, water is the most important aspect in the lives of Islamabad inhabitants. The Infrastructure/water lines of water supply were laid about 60 years ago, it is now in dilapidated condition with reduced capacity and leakages, due to which more than 40% water gets wasted.

Leaking lines are also the source of contamination, that is why the respondents have given 40.6% preference to water quality. Without adding any other water source, availability of water can be increased to about 40% with the improvement in the existing outlived water supply network, sanitation/sewerage infrastructure is also about 60 years old, with the increase in population and dilapidated out lived sewage network, the capacity has reduced. It is also a source of contamination in natural streams/nullahs. Most of the sewerage infrastructure now requires rehabilitation/replacement to cater for the present and future needs.

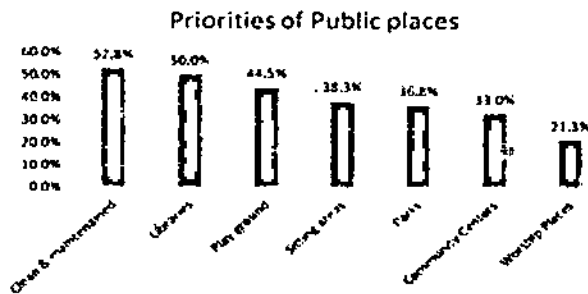
Sanitation has been given preference of 33.5% that means about two third of the population is satisfied with the present conditions. However, we need to satisfy all the citizens of Islamabad, by bringing improvement in the sanitation system by inducting most modern technology and efficient system is municipal waste collection and disposal. The comparison can be seen in the following figure:

GOVT. OF PAKISTAN

Major Concerns of Respondents



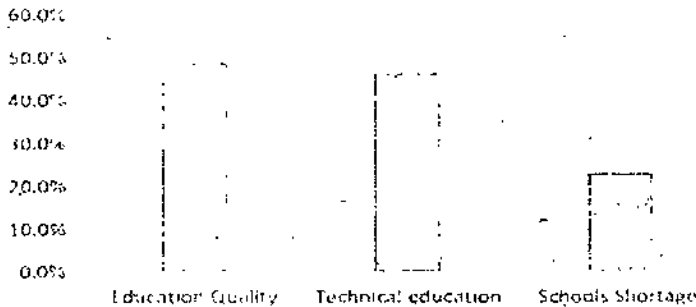
Opinion was also obtained about the preference of respondents regarding public places. About 52% respondents want that public places should be well cleaned and maintained. 50% of them want libraries and 44.5% have preferred playgrounds. About 38% have given preference to parks and sitting areas and 33% view shortage of community centers. Only 21% view shortage of worship places whereas more than 80% inhabitants are satisfied with the available facilities. Comparison is given in graphical form in the figure as under:



According to 23% respondents, there is shortage of schools, whereas about 49% respondents are concerned about the education quality and 46.5% want more institutions for technical education, as seen in the following figure. Moreover, 46.5% respondents want a good public transport system and 43.3% respondents are worried about the congestion of traffic on the existing roads. About 28% respondents want good footpaths to walk on, and 41.5% are concerned about non-availability of cycle/motorcycle tracks.

GOVT. OF PAKISTAN

Education Priorities



2.2.1 Eleventh Meeting of the Commission

The federal cabinet amended the composition and ToRs of the commission and some private members were removed and some were added. After issuance of notification by the Ministry of Interior, eleventh meeting of the federal commission to review the Master Plan of Islamabad was held on 21-8-2019 at 2.00 PM in the conference room of CDA. The meeting was co-chaired by Mr. Asad Umer Khan, MNA, Mr. Ali Nawaz Awan, S.A. to PM and Mr. Amer Ahmed Ali, Chairperson CDA. The following members/participants attended the meeting:-

1. Mr. Khurram Farid Bargat, Vice Chairman Town Planning, PCATP.
2. Mr. Naveed Aslam, Architect.
3. Mr. Aziz Aslam, Engineer, NESPAK.
4. Mst. Humera Qasim, Env't. Specialist.
5. S. Nayab Hassan Gardezi, Advocate.
6. Mr. Zafar Iqbal Zafar, Director Master Planning, CDA.
7. Mr. Faisal Naeem, Director BC-I, CDA.
8. Mr. Faraz Malik, Director HS, CDA.
9. Mr. Khalid Asif, Director BC-II, CDA.
10. Mr. Taimur Chughtai, DD BC-II, CDA.
11. Mr. Abdul Haque Brohi, Dy. Director (HS), CDA.

The agenda before the meeting was as under:

- Discussion on proposed building bye-laws/parameters for Islamabad.
- Discussion on modalities and procedures for development of private housing schemes in Islamabad.

GOVT. OF PAKISTAN

The chairperson CDA/Convener of the commission welcomed all the participants and explained that the federal cabinet in its decision dated 30-7-2019 and subsequent directive of Prime Minister of Pakistan in a meeting held on 02-8-2019 has made addition/alteration in composition of TORs of the federal commission constituted by the federal cabinet for review of Master Plan of Islamabad and the same has been notified by the Ministry of Interior vide its notification dated 03-8-2019. The commission has been tasked to evaluate existing reports, information available on record and other data and finalize the report within one month. The commission has also to examine the problem of sewerage contamination in Kurang river, up stream of Rawal Dam and suggest appropriate solution. The government departments like Planning Commission, CDA, RDA and Pak EPA will provide full support to complete the task. The consultant shall separately develop execution and implementation plan and sub-plan for the development authority where ever required.

Mr. Asad Umer suggested that the commission should prioritize its work according to the TORs based on short term and long term measures as some of the issues require immediate attention. The commission should examine and give solution to tackle the issues of buildings constructed without approval of CDA and non-conforming to Ordinance 1960, Master Plan, ICT Zoning Regulation 1992, Islamabad Building Regulation 2005 and other relevant regulation of CDA as per TORs. The outstanding issues of original owner/affectedees of Islamabad and katchi abadi of Islamabad may also be examined to make suitable recommendations to address their grievances. The Master Plan of Islamabad should be assessed and reviewed for the next 20 years. This exercise may be conducted through engaging the services of private consultants. He further explained that the government had conducted exercise to introduce a health care system in Islamabad and improve education sector. The commission should help the government to increase the effectiveness of proposed health and education program.

Director BC-4, CDA Mr. Faisal Naeem gave a comprehensive presentation on proposed building regulation of Islamabad. The commission thoroughly discussed these bylaws and gave its recommendations for improvement. Furthermore, it was desired to give more time for deliberation on this issue. It was decided that next meeting would be held on 27th August 2019 at 2.00 PM and after more deliberations on building regulation, recommendation would be given by the commission in this meeting.

After detailed deliberations following decisions were made:

I. In compliance of the federal cabinet decision dated 30-07-2019 the commission will finalize its interim report within one month giving short term solutions on the following matters on the basis of the existing reports, information available on record and all other data:

- a. Review of proposed building bylaws/planning parameters proposed by sub-committee constituted by Chairman CDA.

GOVT. OF PAKISTAN

- b. Review of modalities and procedures for development of private housing schemes in Islamabad and identify grey areas for its improvement.
- c. Examination of the problem of sewerage contamination in Korang River upstream of Rawal Dam and suggest appropriate solutions.
- d. Examination of the health care and education system in Islamabad.
- e. Review of the RFP document for hiring consultants to review the Master Plan of Islamabad.

ii. In the light of the RFP document prepared by the commission, the consultant shall be hired by CDA to review Master Plan of Islamabad for preparing long term future development strategies up till 2040.

2.2.2 Twelfth Meeting of the Commission

Twelfth meeting of the federal commission to review the Master Plan of Islamabad had been scheduled to be held on 27-08-2019 at 2:00 PM in the conference room of CDA, CDA Secretariat, Sector G-7/4, Islamabad. The agenda before the commission was as under:

- Further discussion on proposed building bylaws/ planning parameters.
- Discussion on modalities and procedures for development of private housing schemes in Islamabad.
- Discussion on contamination of Rawal Lake, Islamabad.

In this meeting, the commission made comprehensive and detailed discussion on the building bylaws and planning parameters for entire Islamabad and finalized the document. The discussion on contamination of Rawal lake was initiated but due to paucity of time the matter was not concluded.

2.2.3 Thirteenth Meeting of the Commission

Thirteenth meeting of the federal commission to review the Master Plan of Islamabad had been scheduled to be held on 06-09-2019 at 11:00 am in the conference room of CDA, CDA Secretariat, Sector G-7/4, Islamabad. The agenda before the commission was as under:

- Discussion on modalities and procedures for development of private housing schemes in Islamabad.
- Discussion on contamination of Rawal Lake, Islamabad.
- Any other item with the consent of the respectable members of the commission

The Project of Wastewater Treatment (Sewerage Treatment Plants - STP's) along Korang River (Rawal Lake) was presented before the commission by the Project Director BRT/STP, CDA. The project director informed the commission that in order to control contamination, the

GOVT. OF PAKISTAN

engineering design and onsite construction supervision for control of water pollution in authority had in 2011 awarded "Consultancy Services to Carry Out Feasibility Studies, Detailed Streams, Surface Reservoirs and Sewage Treatment Plants in the City of Islamabad" to M/S Osmani & Company (Pvt.) Ltd.

The topography of Islamabad area relatively slopes down from Margalla Hills in the north all towards the I-Series at the south. An STP is already operational in sector I-9 which is treating wastewater of sectors on the east side of the railway track however sectors on the west have no such provision, whatsoever. Moreover, owing to the unique topographic features of the ICT, it is not viable to transport sewerage from these areas to the existing STP.

Furthermore, development of private housing schemes (i/c unplanned and illegal settlements in Noorpur Shahan, Bara Khau, Malpur, Banigalla etc.) is polluting natural streams and surface reservoirs especially the Rawal Lake due to inflow of raw sewage from proximal habitats. The Rawal Lake is presently the main source of water supply for the city of Rawalpindi, hence there is a need to control inflow of pollutants/raw sewage into these natural water courses on the upstream of the lake. The untreated sewage/pollutants from most of the localities including Bara Khau, Muslim Colony, Bari Imam, Shahdra etc. ends at Rawal Lake and Soan River has resulted in poor sanitation condition and supply of highly contaminated water to the residents of the twin cities. The project consultants M/s Osmani had divided the scope of work into 4-phases as under:

Phase-1: Rawal Lake and its surrounding catchment Area.

Phase-2: Zone-1 & 2 (i.e. Sectors D-12, E-12, F-12, F-13, F-14, G-12, G-13, G-14, H-11 to H-16 & I-11 to I-16 etc.)

Phase-3: Industrial Triangle (Zone-5).

Phase-4: All Model Villages.

In order to address this alarming situation (especially contamination of Rawal Lake), the Hon'ble Supreme Court of Pakistan had also vide HRC No. 6465 directed CDA/MCI to take immediately measures to stop contamination including provision of Sewerage Treatment Plants (STP's) to treat wastewater entering the Rawal Lake.

Director gave a detailed briefing on the type of treatment plant proposed by the consultants for treating waste water entering the Rawal Lake. The commission approved the project in principal and further recommended that internal sewerage network (missing in these localities) may also be included, but after fulfillment of due legal formalities so that maximum wastewater can be collected and transported to the STP's for treatment and its disposal. The Director Regional Planning briefed the commission that private sector and cooperative

GOVT. OF PAKISTAN

housing societies were allowed to launch their housing schemes in the designated sectors/zones of Islamabad under the provisions of ICT zoning regulation 1992 (As amended). In order to regulate the development of these schemes, modalities and procedures were framed under these regulations and these were amended/improved from time to time with the consent of CDA Board on representation of all the stakeholders and public in general.

Pursuant to the orders of the court, certain issues have emerged between the members of the schemes and the sponsors regarding revision of layout plans of these schemes in the absence of clear regulations. Moreover, the provision for the disposal of public building areas in approved schemes needed clarity to avoid future complications. Modalities and procedures for development of private housing schemes in Islamabad were also discussed by the commission in this meeting but could not be concluded due to paucity of time.

2.2.4 Fourteenth Meeting of the Commission

Fourteenth meeting of federal commission to review the Master Plan of Islamabad had been scheduled to be held on 16-09-2019 at 11:00 am in the conference room of CDA, CDA Secretariat, Sector G-7/4, Islamabad. The agenda before the commission was as under:

- Discussion on modalities and procedures for development of private housing schemes in Islamabad.
- Discussion on RFP Document for hiring the consultants to review Master Plan of Islamabad.
- Any other item with the consent of the respectable members of the commission

The Director Regional Planning, CDA presented the modalities and procedures for development of private housing schemes the commission made comprehensive deliberations and gave suggestions on these modalities. In the light of these discussions, amended draft of Modalities and procedures for development of private housing schemes in Islamabad.

The RFP document which was discussed by the federal commission in its previous meetings was also placed before the commission for review. The commission made thorough deliberations in this RFP Document and suggested further improvements and the draft of RFP document reviewed by the commission is placed in the report.

2.2.5 15th Meeting of the Federal Commission

A meeting of the federal commission to review the master plan of Islamabad was held on 04-10-2019 at 10.00 AM in the conference room of CDA.

GOVT. OF PAKISTAN

2. The agenda before the meeting was as under:
 - i. Discussion on regularization of illegal housing scheme Ghouri Town
 - ii. Discussion on creation of residential plots in Sector F-11
 - iii. Discussion on health and education in Islamabad
 - iv. Discussion on draft report of the federal commission.

3. Dr. Shahid Mahmood welcomed all the participants and explained that the the federal commission constituted by the federal cabinet for review of Master Plan of Islamabad had completed its task as per given TORs. The commission was tasked to evaluate existing reports, information available on record and other data for them and finalize the report within one month. The commission has also to examined the problem of sewerage contamination in Kurang river, up stream of Rawal Dam and suggested appropriate solution. The commission had also reviewed the TORs to hire the services of international consultant to separately develop execution and implementation plan ad sub-plan for the development authority.

4. Director Urban Planning explained the commission that Honorable Islamabad High Court in its decision dated 28-06-2019 had directed to place the case of regularization of Ghouri Town before the commission and get its recommendations to be placed before the court. The commission deliberated on the issue and said that Ghouri Town cannot be regularized in isolation. CDA has to formulate uniform policy for regularization of all illegal housingschemes developed without approval of the authority. It was decided that layout plans of such illegal private housing schemes should be examined by the authority in the light of the existing regulations and plans of individual buildings be approved as per newly suggested building regulations for such schemes.

5. Director Urban Planning informed the commission that Supreme Court of Pakistan in another case had expressed its concerns over re planning made by CDA in Sector F-11 and has directed to place the matter before the federal commission to examine if there is any violation of Master Plan of Islamabad.

6. Director Urban Planning informed the commission that the Commission was tasked by the government to examine health and education system in Islamabad and give recommendations in the light of Master Plan of Islamabad. The commission deliberated on the issue and gave its recommendations.

7. Mr. Khurram Farid Bargatt, member federal commission placed the draft report prepared in the light of the TORs given to the commission by the federal government and discussions held with the members of the Commission in the previous meetings. The members of the commission gave some suggestions for improvement of the report.

GOVT. OF PAKISTAN

8. After detailed deliberations following decisions were made:
 - i. Layout plans of illegal private housing schemes should be examined by the authority in the light of the existing regulations and plans of individual buildings be approved as per newly suggested building regulations for such schemes.
 - ii. Revision of layout plan of Sector F-11 or any other sector under the provisions of Master Plan is competency of CDA Board and does not entail any change in the Master Plan hence does not require approval of the government.
 - iii. To give suggestions on the education and health system of Islamabad, lot of studies are required which are beyond the scope of the commission due to paucity of times and limited resources. However, the matter will be examined by the Master Plan consultants in depth by involving all the stakeholders i.e. FDE, PEIRA, private education institutions and parents etc for schools.

9. In compliance of the federal cabinet decision dated 30-07-2019 the commission has finalized its report on the basis of the existing reports, information available on record and all other data giving short term and long term solutions.

10. The commission has also deliberated and prepared reports on the following matters:
 - a. Review of proposed building bylaws/planning parameters proposed by sub-committee constituted by chairperson CDA.
 - b. Review of modalities and procedures for development of private housing schemes in Islamabad and identify grey areas for its improvement.
 - c. Examination of the problem of sewerage contamination in Korang River upstream of Rawal Dam and suggest appropriate solutions.

11. The meeting was ended with a vote of thanks from and to the chair.

GOVT. OF PAKISTAN

CHAPTER NO. 3*The 1960 Islamabad Master Plan and Attempts to Update It***3.1 The Uncontrolled Growth of 'Rural' Islamabad**

Islamabad has experienced fairly rapidly population growth since it was founded in 1960. The capital territory has 2 million residents as per the 2017 Census. What is astounding is the phenomenal growth of its so called rural component in the last two decades. The population in the supposedly peripheral ICT Rural Areas has grown at an annual rate of 7% per annum since the previous Census of 1998, as evidenced by Table below.

Area/Population (000s)	1998	2017	AGR (%)
Pakistan	132,352	207,775	2.4
Islamabad Capital Territory	805	2,001	4.9
Islamabad Urban Sectors	529	1,010	3.4
Islamabad Rural	275	992	7.0

Pakistan, Capital Territory, Urban and Rural Populations & Annual Growth

Source: Pakistan Bureau of Statistics

The population of the serviced sectors of urban Islamabad has doubled between the two censuses at a rate higher than the natural increase showing significant immigration. During the same period, the population of rural ICT has grown 3.6 times at a rate twice as fast as the city sectors. Now the urban and rural populations are about equal.

A million people are living in 'rural ICT'. Apart from a few CDA approved and sponsored schemes, and other institutional settings, the settlements in rural ICT are illegal or unregulated extensions of villages. The growth has occurred despite an attempted 'denial' of access to formal services, such as piped water and sewerage, electricity and gas, and metalled roads and street lights.

These settlements are a staggering indictment of the concept of a planned capital city or at least of those responsible for its development and management in the last two decades. This report seeks to uncover the processes through which unregulated development at such scale has occurred in the Islamabad Capital Territory. It is a story, which begins with our predecessor federal commission charged to locate, plan and build a new capital for Pakistan.

GOVT. OF PAKISTAN

3.2 Federal Commission and the Origins of Islamabad

General Ayub Khan staged a coup against the state in October 1958. Karachi, then capital, was a rapidly growing commercial center. He appointed a federal commission (FC) to look into climate and settlement related issues and make recommendations for a new capital, either near the shore in East or West Pakistan or in the northern part of West Pakistan. Maj. Gen. A.M. Yahya Khan was appointed chair of the commission with membership from senior and mid-level bureaucrats in health, meteorology, civil supplies and other administrative sectors.

The FC found Karachi unsuitable owing to the proximity of commercial interests. It rejected the idea of location in East Pakistan, then rejected a site north of Karachi, and opted for a location at two possible sites (A and B) near and including Rawalpindi. In 1959, C.A. Doxiadis Associate was assigned and undertook the job of making the master plan for the capital under the supervision of a reconstituted Federal Capital Commission. In February 1960, Ayub Khan and federal cabinet took the decision to name the capital as Islamabad. Doxiadis recognized the naming as, "a most important milestone in the history of the capital."

The stated purpose of the FC in shifting the capital from Karachi was to avoid lobbying by commercial and other pressure groups and the media. This tendency would be eliminated, the FC hoped, "if the capital were the capital only, without any non-official civilian population pulling in different directions." The vantage point of the early 21st Century, with the experience of gharnas in the Blue Area, D-Chowk and Faizabad has demonstrated this to be a forlorn hope. The FC also had more positive aspirations for the capital city, as administrative center of the nation, as center of culture and education, and as a symbol of the new State and Nation.

3.3 Main Features of the Original Master Plan (OMP)

Volume 1 of Islamabad Master Program and Plan, 1960 (Dox-PA 88) recapitulates the theory of cities expounded by Doxiadis. He wrote, "The settlements we are planning and building today must serve people and functions for several generations to come houses and their facilities may be replaced in one or two generation the basic frame, which we create now, however, will last for several generations and perhaps several centuries" (Para 258). He added that dynamic growth through time was the dominant feature of present cities, growing at 3-5% per annum, and more than doubling in size every 15-25 years (Para 286). The motorcar had introduced a new scale into the synthesis of cities. The cities of the past had been built at human scale, but the city of the future will be built for men, cars, helicopters, planes and rockets.

GOVT. OF PAKISTAN

Accordingly, the OMP envisaged a dynamic hierarchy of functions and forms to cater to the needs of humans and machines over a span of centuries. Doxiadis gave three key concepts to articulate this vision for Islamabad namely, Dynapolis, gridiron pattern, and classes of community centers. Dynapolis is the term he coined to describe unidirectional growth that enabled the orderly expansion of commercial functions beyond their initial core. A gridiron pattern was selected for the main highways and sectors to achieve regular shaped lots, smooth traffic flows and a safe segregation of pedestrian and vehicular movements.

Following the rules of central place theory, Doxiadis prescribed a hierarchy of community centers (Class I to V) for a range of local to citywide needs (Para 283). It is also pertinent to reproduce the views of Doxiadis on three other issues namely, future uses of the rural and park areas around the city, the need for a regional plan and on the relationship with Rawalpindi. Para 408 of Volume 2 of Dox-PA 88 stated that, "The National Park consists of:

- i. The National Park
- ii. The rural areas within the National Park which will gradually be converted to other functions
- iii. Specified functions, such as University town, Research stations and National institutions which should not be built within Islamabad but within its metropolitan area.

In Section 4 of Volume 2, Doxiadis emphasized the need for preparation of a regional plan and program for both for the capital region and its wider area. He pointed out that in Chandigarh and Brasilia, one could already see the development of slums, shanty towns and satellite towns just outside of the city limits. Rawalpindi was seen as the feeder city that enabled Islamabad to be developed in a practical and economical way. The relationship between the two cities would change over time, remaining cooperative but physically separated. A capital highway with 1200' ROW was conceptualized for the physical separation of Islamabad from Rawalpindi all the way from a bypass starting near Rawat to a joining point near Nicholson's Monument (D-PA 1185). The separation has in fact been largely implemented in the form of Islamabad Highway, IJ Principal Road and Kashmir Highway.

3.4 Assessment of the Original Master Plan

After almost 60 years, the OMP has stood the test of time in many ways. It has guided the urban development of Islamabad (in the developed sectors). The gridiron pattern has proved to be an effective spatial framework that is flexible and allows easy and speedy development. The OMP has added economic value to the Pothwar region. Measured broadly, by livelihoods and immigration, and land and rental values, the benefits and assets created for the State and

GOVT. OF PAKISTAN

for home owners and citizens much exceed the costs (that is, the investments in planning and infrastructure). It demonstrates the value of good planning and zoning, and proper land records. In addition, Islamabad has reputedly better urban environmental quality than most cities of South Asia, and is a highly sought after urban living environment. Some of us feel it has already become a symbol of national identity, a source of pride for Pakistanis, and a valuable heritage as the largest planned capital city of the 20th Century.

However, there are also many failures. Some of us think that they have less to do with the OMP and more with the subsequent ad hoc changes and with implementation in general. Others feel that OMP represents an era of technical hubris that has passed forever. It has imposed great costs on human societies and nature. All future development must comply with the goals and limits entailed by sustainability. The following two subsections elaborate these two viewpoints on the main failures.

3.4.1 Failures as a Result of Ad hoc Changes and Poor Implementation

The main implementation failure is the reduction of the OMP to what is called Islamabad urban area (developed sectors). It has left Rawalpindi and the National Park to their own dynamics. The weak institutional capacity to regulate (re the ad hoc changes to zoning regulations) and to enforce has resulted in a range of challenges at different scales that threaten the quality and sustainability of Islamabad. The top-down technocratic model of planning – no matter how benevolent – that underpinned the OMP is no longer tenable in the current environment that requires inclusive and participatory forms of planning for sustainable development. The laissez-faire attitude towards private sector led development has created a cancerous sprawl that requires immediate attention and significant planning effort. Social segregation, exclusion, in-equality, slums and informal settlements, the lack of affordable housing and public transport facilities, and poor quality of public spaces and architecture are glaring failures that needs to be prioritized in any future planning efforts.

3.4.2 Failures Owing Poor OMP Conceptualization

Suburban sprawl was inherent in the linear growth design while the single use zoning and single unit housing models rendered housing unaffordable for most citizens. The metropolitan and regional dimensions of the OMP were set aside because they were impossible to implement. There was no way that the top-down institutional arrangements with CDA as controller and coordinator could have worked in a democratic post One-Unit Pakistan. The efforts at regional planning (e.g. the study by CDA & M/S Dorsch Gollwitzer, 1973) and the attempts to form a high level institutional body were misdirected. Indeed, urbanization in the greater region and the metropolitan area has unfolded in a very incoherent way causing great environmental, social, and spatial challenges for generations to come. Inclusive and participatory multi-level stakeholders forums and partnerships will be needed going forward to limit and rectify the damage in a post-11th Amendment Pakistan characterized by active local

GOVT. OF PAKISTAN

governments,

3.4.3 Main Features of the 1986-1993 Master Plan Review

The review recommended retaining the unidirectional grid based growth pattern of the city, but with the current alignments of GT Road and railway lines, and special institutions in the H-series, no residential plots were to be allowed in the incidental open spaces, and only permitted recreational, cultural, educational and agro-oriented uses in the Park areas. It recommended relocating industry out of the I-series to the Kahuta industrial triangle, and enlarging the diplomatic enclave on adjacent vacant land. It noted that the plan for the main Islamabad railway station had been abandoned earlier, while land had been acquired for the new Islamabad airport to the west. For the rural periphery, it appreciated the JICA integrated rural development master plan. It proposed strategies for zones 1 to V. Finally, it provided 30 planning guidelines. They ranged from over-arching directions, such as retaining the basic character of Islamabad as the national capital down to such details as ensuring the continuity of window shopping opportunities at ground floor shops in the Blue Area.

3.4.4 Assessment of the 1986-1993 Master Plan Review

It was a very conservative effort that sought to minimize alterations to the 1960 Islamabad Master Plan. It sought to retain the structure and direction of growth envisaged by Doxladi, while retaining the alignments of pre-existing major arteries. Its most visionary element was the direction to acquire continuous rights of way (ROW) for Principal Roads in the Islamabad Specified Area [to the west of the ICT boundary] in order to better integrate permitted private development in the overall plan. It gave direction for land use zoning in the Islamabad Park Area and rural periphery, which were largely adopted in the 1992 Zoning Regulations. However, the plan and regulations totally failed to anticipate and make any provision to mitigate the ribbon development along the Islamabad Highway that has taken place in the last 25 years.

3.5 Main Features of the 2005-2008 Master Plan Review

It provided a vision statement for 2030 for "a world class international city" comprised of five zones namely, Urban Area, Rural Area, Islamabad-Rawalpindi Metropolitan Area, Specified Areas for environmental and watershed requirements, and an Influence Zone of the Islamabad-Rawalpindi Region. For meeting the estimated housing requirements in the urban area via a mix of single unit housing and walkup apartments, it proposed 4-5,000 DU per sector in one document and 9,000 DU/sector in another. It envisaged a role for private sector development in making Islamabad a hub for international trade and commerce with two business nodes in the Blue Area and three industrial sectors. It proposed to allot Sector E-14 for another city park but place universities and research establishments outside the planned

GOVT. OF PAKISTAN

sectors for reasons of "land economy". It proposed acquiring land abutting the Margalla Hills National Park (Zone-III) for integrated conservation, but planned the expansion of existing villages, recreational and institutional uses along with private farms in Zone-IV and the merger of existing villages with private housing schemes in Zone-V. It proposed arrangements for linking Rawalpindi with Islamabad through IJP Road at various locations. The 2008 master plan map showed Margalla, Eastern and South-western bypasses for the metropolitan area, but its brief mentioned only the Eastern and South-western bypasses. A transport terminal and a wholesale market were provided at Sector I-17 near the Motorway.

The 2008 final report flagged cases of 'institutional capture' with deleterious consequences for Islamabad. For example, I-8 designated as metropolitan transport hub in the Original Master Plan was converted in 1988 to a residential sector including CDA staff housing. Sector E-10 was re-designated for army housing in 1969. The final report also noted a general fragmentation of authority following the 1967 Supreme Court ruling that CDA regulations could only be applied through Union Councils in rural ICT. The law to extend CDA jurisdiction to rural areas has been pending in a National Assembly sub-committee since 1975. The review linked land speculation and the phenomenal jump in land prices to the 1992 change in CDA practice of sale of individual plots to auction of lots of up to 50 acres at a time.

3.6 Assessment of the 2005-2008 Master Plan Review

Consultants without clear policy directions and guidelines prepared Master Plan Review 2008. They used an outdated master planning approach, with an excessive focus on single use zoning in the planned sectors of the urban areas of Islamabad. Unlike the OMP, MPR 2008 was not grounded in detailed economic analysis and did not give due attention to housing affordability. It was upfront in noting some cases of regulatory capture by special interests but fudged other issues such as target urban densities and by-pass alignments. MPR 2008 would have aggravated the uncontrolled sprawl in the rural areas of Islamabad by its grandiose plans for additional institutional areas. Annex XXV provides a more detailed description of the technical aspects of the 2005-2008 Master Plan Review by MM Pakistan (Private) Limited and our assessment of these aspects.

GOVT. OF PAKISTAN

CHAPTER NO. 4*Efficacy of the Original Master Plan 1960***4.1 Introduction**

This commentary on the original Master Plan of Islamabad (1960) and its efficacy has been prepared in response to

- a) partially cover the Item (i) of the Terms of Reference for the federal capital commission notified on December 28, 2018; and
- b) specific request from the member/secretary of the commission dated June 24, 2019 asking the members for their specifically assigned input to prepare the "Report of the Federal Commission for Islamabad Master Plan (2020-2040)".

The Original Master Plan (hereafter OMP) was prepared by the Greek Architecture, Planning and Development firm 'Doxiadis Associates' (hereafter DA) in response to the wish of the then regime of president Ayub Khan that was represented by the then constituted federal capital commission (chaired by Gen. Yahya Khan). This planning effort spanned over 4 years (1959-1963) and comprises over 4,000 drawings and 8,000 pages of text that form the content of the 100s of reports issued by the DA. Most of these documents, and the personal notes and diaries of the architect-planner Dr. Doxiadis - and other documents related to the planning of Islamabad and shaping of Doxiadis' planning ideals (that consulted at Doxiadis Archives in Athens; and other collections in the Library of Congress, Washington DC, and Ford Foundation Archives, New York; and TU Berlin, etc.) - were analyzed (during 2000-07) and re-interpreted.

In addition, several of these re-interpretations have been validated in subsequent scholarly contributions (articles and book chapters) by myself and by others. Therefore, the comments presented here are a very short and a general summary influenced by this growing body of knowledge about the OMP of Islamabad, and its various interpretations, including the following:

- i. Ahmed Zaib K. Mahsud (2008), Constantinos A. Doxiadis' Plan for Islamabad: The Making of a 'City of the Future' 1959-1963. PhD Thesis, dept. of Architecture, Urban design & Regional Planning, KULeuven, Belgium.
- ii. Publications on Islamabad by myself (references list A), by others (list B), and several technical reviews of the OMP (list C).

GOVT. OF PAKISTAN

The commentary provides an overview of key concepts and ideas embedded in the spatial articulation of the OMP. It also provides a re-interpretation with a view to demonstrate the efficacy of the OMP, highlighting what went wrong and other shortcomings, besides identifying some of the ideas of the OMP that may be worth pursuing/preserving in the framework of developing the IMP (Islamabad Master Plan) 2040.

Accordingly, the commentary is structured in four main headings – 1. Islamabad as an ideal city of the future; 2. A Metropolitan plan in a regional framework; 3. Sectors, urban design, and the concept of a human community; 4. Integration of nature and the city – followed by a brief overall assessment and recommendations. However, it should be noted that neither is this commentary a comprehensive overview, and nor does it cover all the aspects of the OMP due to pressing constraints, such as, only a 2 days' notice to prepare this commentary. An effort is made to avoid technical language, and make the commentary understandable for people with different disciplinary or professional backgrounds.

4.2 Islamabad as an Ideal City of the Future

In the context of post WWII and decolonization, the period of 1950s-60s is an era characterized by the dawn of explosive growth and urbanization the world over. A lot of experimentation unfolded in the field of planning (US Marshall Plan for reconstruction of Europe, Newtown movement, modernization ambitions of the post-colonial states, etc.).

Doxiadis, with a large firm headquartered in Athens and commissions on all five continents, was a leading figure in this period of experimental global urbanism. In Pakistan, his engagement began first in 1954-55 as part of the Harvard advisory group that drafted our first five-year plan (with his contributions for the housing & physical planning chapter of that plan); and then 1958-59 onwards, the Greater Karachi plan and the Korangi township project, Punjab University New Campus in Lahore, and several other projects in both wings of the then Pakistan, giving him a close acquaintance with the regime and the specific context of development that was about to unfold – as in many other developing countries where he was active. After receiving the commission of the Islamabad project, he convinced the regime to couple the planning of Islamabad with a theoretical project (called City of the Future – hereafter, CDF) funded by Ford Foundation, where eminent global urban planning experts were gathered.

These experts and Doxiadis saw the dawn of a global urbanization era (later on theorized as Ecumenopolis – or the global urban condition) that required a complete rethinking of the size, scale, structure and pattern of settlements that can cope with the challenges of explosive growth at spatial, technological, social, economic, political and environmental levels. In short,

GOVT. OF PAKISTAN

the ambition was to theoretically elaborate an optimum settlement of the future (about 3 million inhabitants), and couple that with the design and planning of an actual city (in this case, Islamabad), that can address the challenges of growth in a dynamic and flexible way (a spatial framework), where high urban environmental quality is assured, human scale preserved, and where citizens sense of well-being is enhanced.

The coupling of the OMP of Islamabad as a COF is thus a fascinating synthesis at many levels: on the one hand, it integrated elements from different planning paradigms (linear city model, some ideas of the garden city/new town movement, and re-visioning of the modernist city ideals, etc.) to compose an urban form that is capable of dynamic growth (aka 'dynapolis') through gradual extension unfolding coherent urban development. It also anticipated the then rising critique about modernist urbanism (J. Jacobs, et al.) by rejecting the (modernist) notion of 'the city of towers' (and the rigid functional separation) and integrating the principles of 'human scale', 'locale' (local context), and the flexibility and adaptability of the 'grid structure', as some of the hallmarks of the plan.

On the other hand, the OMP combines the ambition of the regime – to create a new 'capital city' for the functioning of the federal government, and as a symbol of national unity and aspirations of the modern nation state – with that of the COF – a 'model city' that can guide urbanization in Pakistan and elsewhere. This resulted in a unique urban form – as a synthesis of several planning paradigms, a model and a capital city, combining old (Rawalpindi) and new city, nature/agriculture (national park), local vernacular (model villages) and metropolitan urbanity, etc. – that has no precedent in history. Moreover, the design and planning of Islamabad as a COF resulted in the largest planned capital city of the 20th century.

4.3 A Metropolitan Plan in a Regional framework

The OMP was conceived, designed, planned and presented as a Master Plan for the Metropolitan Area (see e.g. the title of the OMP-ISLAMABAD: Master Plan for the Metropolitan Area) spread over 1165 km². The urban form and the articulation of its main axes organized and structured the following four as the constituent components of the metropolitan area:

- Islamabad 220 km²
- Rawalpindi 259 km²
- National Park 220 km²
- Islamabad Rural Area 466 km²

Moreover, this spatial articulation of the metropolitan area in the OMP was framed within a

GOVT. OF PAKISTAN

regional dimension (the specified area: 3,626 km², notified under CDA ordinance 1960, comprising a large part of Pothwar plateau encompassing the tehsils of Rawalpindi, Islamabad, Murree, Taxila, and partially tehsils of Kahuta, Haripur and Abbottabad), which also proposed the planning and coordination of a greater region (comprising 5 districts: Islamabad, Rawalpindi, Attock, Haripur and Abbottabad). Anticipating the potential influence of the development of the metropolitan area, the OMP emphasized the coordination and planning at the greater regional level in order to bring together synergies for a coherent and integrated development. The OMP envisioned this greater regional planning and coordination to effectively organize and manage the flows of energy, water, food, materials, and a coherent socio-economic development of the region, and thus, to facilitate the unfolding of a vibrant development pole in the northern part of the country.

It is to be noted that in parallel to the preparation of the OMP, large scale spatial restructuring and strategic development projects (such as, Tarbela and Mangla Dams, and a series of small dams in Potohar plateau; HMC and POF Wah as industrial base, etc.; the historic G. T. Road and Murree/Kashmir highway that were the basis to define the articulation of the main axes of the metropolitan area, etc.) were integrated in the planning process to define the ambition of the metropolitan area envisaged by the OMP. Despite their importance, however, both the metropolitan and regional dimension of the OMP were set aside. Although, some partial efforts were made (e.g. a regional planning study by CDA & M/S Dorsch Goliwitzer, 1973; and some attempts to form a high level Institutional body to coordinate the regional affairs, and metropolitan planning, etc.), but to no avail.

As a result, urbanization in the greater region and the metropolitan area has unfolded in a very incoherent way causing great environmental, social, and spatial challenges for generations to come. By reducing the scope of the OMP to the implementation of only the sectors of the Islamabad area, a great opportunity for integrated development has been lost. To remedy the situation, deliberations on out-of-the-box solutions with visionary political leadership (e.g. a regional council/authority for the specified area and greater region; creation of a single metropolitan development authority for the whole area of OMP of 1165 km², and possibly declaring it as federal territory, etc.), greater and effective Institutional coordination and governance mechanisms are needed.

4.4 Sectors, Urban Design, and the concept of a Human Community

One of the most original contributions of the OMP is the concept underlying the size, scale and structure of the sector. Like the city blocks as constituent unit/module of most historic cities, the sector in the OMP (across the metropolitan area i.e. both for Islamabad and Rawalpindi) with 2 x 2 km size (4 km² in area) is the basic building block / module of the

GOVT. OF PAKISTAN

metropolitan area. The concept of this was based on the idea of a typical historic city. In the parallel COF research project, a few 100s of historic cities around the world before the industrial revolution were selected for detailed analysis of their size, scale, structure, qualities and processes underlying their evolution and development. Their size was found to be an average of 2 km diameter – a scale with which most historic cities developed, a space that can be traversed from the center to the periphery in 15 minutes walk, where human scale could be preserved, proximity and vitality could be fostered as a human community.

The OMP thus aimed at a rationalized reproduction of the qualities of the historic city by establishing the same size (i.e. 2 x 2 km), and carefully organized spatial structure of the central facilities and public spaces (in Community class – hereafter CC - V center, known as Markaz, down to CC I & II, the corner shops at street level to neighborhood small market) as a coherent urban design scheme. These can be observed in the detailed designs of the few sectors in the OMP, and also witnessed in the areas that were realized according to the OMP (the G-6/1-1 housing area for federal government employees, the design of the markaz in F-6, known as super market, with covered verandahs – evoking the concepts of bazaars, - and public squares as continuous spatial structure).

Moreover, the OMP's urban design implied spatial linkage and a coherent integration of public spaces from CC-I & II of the sectors all the way to the CBD, known as Blue area, with strict principles of vehicular and pedestrian movement separation, with a series of courts – plazas and urban squares, diversity of inhibition types (including residential, commercial, cultural, etc.) to characterize an urban public space continuum in the metropolitan area. The OMP saw the development of the sector as a dynamic process over time: as the overall metropolitan area grows, and the need for densification and regeneration arises, the original footprint (which was largely single to two storey) can be densified and quality of public spaces enhanced.

At the same time, different sectors would develop specific identities and place qualities as they evolved, making diversity of places in the metropolitan area. The fixing of the spatial size (gridiron) was to ensure coherence of the metropolitan area, whereas the content and evolution of the sector within, was to provide diversity of urban places. A range of density was defined: the initial development in the first phase of a sector can start from a population of about 15,000 inhabitants, and through successive regeneration and densification phases over the next 100 years, a sector can reach up to 80,000 inhabitants.

A strong learning dimension was also proposed in the OMP as a 'feed-back' mechanism between the existing / realized sectors and the design of subsequent / new sectors. This implied taking stock of what worked, and what didn't work in the previous sectors; extract that feedback systematically through research and analysis into new urban design guidelines for

GOVT. OF PAKISTAN

the design of new sectors, and also appraise it for the re-generation of existing sectors. This also implied that the building codes were to be re-evaluated and adjusted to reach the overall urban design goal for each sector to become, as much as possible, a compact and self-contained human community with diversity (mixed-use), intensity (high density), and vitality of urban public spaces.

However, as we see in the subsequent development of sectors in Islamabad, that these original ideas and concepts of the OMP were not really acknowledged, understood or implemented. The building codes being reduced to static and rigid control mechanisms (devouring them from their urban design goals) with the resulting poor quality of architecture and public spaces making matters worse. The urban design behind the sector reduced only to the size of the sector, used as a grid-iron pattern for conveniently easing and speeding the development process.

While luckily, at least the spatial framework is imprinted on the ground in the developed sectors, it would require huge and concerted efforts to develop the institutional (including technical, knowledge, management & governance) capacities in terms of urban design to make the vision of the OMP a reality and transitioning the sectors into compact, high-density, mixed-use, low-rise small cities, where human communities thrive, full of vitality and great urban places, within the metropolitan area.

4.5 Integration of Nature and the City

"Nature provides the foundation upon which the settlements are created, and the frame within which they function" – C. A. Doxiadis. One of the major concepts underpinning the OMP is the simultaneous development of LANDSCAPE, TOWNSCAPE and amelioration of local CLIMATE conditions to ensure ENVIRONMENTAL QUALITY seen by Doxiadis as a measure for the SUCCESS of the city of the future (COF). This is achieved through integration of nature and the city in the OMP by incorporating a nature-settlement dialectics that demonstrates a double thought structure: i) nature as part (element) of a whole (settlement), ii) nature, occasionally drawn out as a system in itself, which is formulated at various scale levels.

The OMP demonstrates transcending previous / conventional notions of nature in the city (garden, parks, green belts, etc.) through infiltration of nature in the settlement as a framework with specific design logics at different scale levels. At the same time, the settlement design also transcends the previous notions of functional zoning (work, dwelling, mobility and recreation), which are interpreted as urban ecosystems organized at different scale levels. The OMP shows how urbanization can go hand-in-hand with environmental protection and enhancement, developing a symbiotic relationship between the two ('for enhancing the citizens sense of wellbeing' as Doxiadis calls it), rather than the popular notion

GOVT. OF PAKISTAN

of seeing the two as contradictory elements. In the OMP, it is the multi-scalarity in the nature-city integration that activates the dialectics, and thus, multiple relationships responding to many of the contemporary challenges, such as sprawl, environmental degradation, etc.. Such a multi-scalar integration of nature-city is spatially implemented in the OMP through the following strategies (not a complete, exhaustive or detailed list):

- The articulation of the main axes along the deepest lines of the landscape (the Kashmir & Islamabad highways) and leaving sufficient ROW of green along them and also along all the major streams of the specified area, to connect the metropolitan urban environment with the larger surrounding landscape.
- Each sector to be surrounded by ample green (mimicking historic cities surrounded by landscape) to buffer noise and pollution from the 'utilidors' (the main transportation arteries surrounding the sector / on the 2 x 2 km grid lines).
- Within each sector, the preservation and enhancement of smaller streams (nallas), as vital component of the settlement / sector design for ensuring the environmental quality
- The overlapping of the FORMAL (2x2 km) grid structure over the ECOLOGICAL grid (all the streams organically flowing within the sectors and across the metropolitan area, most of them, draining Margalla hills into the making of the Soan river in the South), and leaving ample ROW of green space for both of them that gives Islamabad its distinctive green character and high environmental quality.
- Dedicated allocation of almost half of the metropolitan area (National Park and Margalla Hills area, wide ROWs, dedicated sectors – like H series – with large open spaces, to open spaces within the sectors) for nature, green space and agriculture to ensure a wide range of ecosystemic benefits encompassing regulating, support and cultural ecosystem services (such as, environmental, air quality, hydrological, food production, biodiversity, cultural-recreational, and so on.).
- Landscape strategies at different scales (large plantation buffer of upto 2 km width along the southern bank of the Soan River for off-loading and cooling the dust laden winds from the south during summer; alternating barrage formation of landscape plantation over Margalla hills to protect the metropolitan area from cold North-Eastern winds during winter; green ROW of both the formal and ecological grids to provide ventilation to the metropolitan area; landscape strategies from Community Class IV down to the CC-I centers and streets for creating ample shade and evapotranspiration based cooling, and so on, etc.) for ameliorating the local climatic conditions of the metropolitan area.

4.6 Overall assessment and recommendations

After almost 60 years, the OMP has stood the test of time in many ways. It has guided the urban development of Islamabad (at least in the developed sectors area) as an effective

GOVT. OF PAKISTAN

spatial framework that is flexible, and ensures the ease and speed of development. The economic value that the OMP has added to this area of Potohar beyond simple arithmetic, which by any estimate would run into 100s of billions of dollars. Comparing the costs (of investments in planning – OMP – land acquisition, and implementation, etc.) with benefits and assets created (for the state and owners /citizens), the OMP demonstrates illustriously the magic of good planning.

In addition to the enormous economic value generation, thanks to the OMP that today Islamabad boasts one of the highest urban environmental quality in South Asia, and is a highly sought after urban living environment for people. It has become a symbol of national identity, a source of pride among Pakistanis, and a valuable heritage as the largest planned capital city of the 20th Century. However, there are also many failures that have less to do with the OMP and more with the subsequent ad hoc manner of changes and implementation in general. Chief amongst them is the reduction of the OMP to what is called Islamabad urban area (developed sectors), and leaving Rawalpindi and the National Park area to its own dynamics.

The weak institutional capacity in terms of urban design and planning during the implementation (from ad hoc changes to zoning regulations) has also unfolded a range of challenges at different scales that threaten the quality and sustainability of Islamabad. In addition, the top-down technocratic model of planning – no matter how benevolent – that underpinned the OMP is no longer tenable in the current environment that requires inclusive and participatory forms of planning for sustainable development.

The laissez-faire attitude towards private sector led development has created a cancerous sprawl that requires immediate attention and significant planning effort. Social segregation/exclusion, in-equality, slums and informal settlements, lack of affordable housing and public transport facilities, and poor quality of public spaces and architecture are glaring failures that needs to be prioritized in any future planning efforts. In addition, and in the light of the IMP 2040, a few broad but strategic recommendations are as follows:

- **Democratic, Inclusive, and participatory planning process:** An integrated approach, complementing top-down planning model with a bottom-up process; active public participation at every stage of the process; Use of the state-of-the art digital tools and a series of workshops and event to have a broad-based engagement of the public, and to stimulate public debate on urban issues.
- **Socially innovative and effective institutional and governance:** arrangement for the metropolitan area and the region: constitution of a metropolitan development Authority (OMP area 1165 km²) and a regional council (for the Specified Area) for effective coordination and implementation.

GOVT. OF PAKISTAN

- Institutional capacity building in terms of urban design & environmental planning: Re-interpretation of the OMP (metropolitan area, CBD / blue area, and the sectors), through scientific analysis, design-based research, evaluation and feed-back mechanisms to develop evidence-based planning, regulations and building codes - and their continuous improvement - for realizing the original concepts, idea of urbanity, and vision of the OMP as a City of the Future.
- Ensuring urban environmental quality: A mandatory proportional ROW of open/ green space implementation along all the nullahs/streams of the metropolitan area (OMP area 1165 km²), including re-evaluation of their eco-systemic benefits as a strategy for their preservation and development; protection of MHNP and other areas of high bio-ecosystemic value as nature reserve; replanning of the national park area to address the current urbanization challenges in a way that keeps the soil-sealing to a bare minimum, and ensures the protection of the environmental, landscape and topographically strategic elements of the area.

CHAPTER NO. 5

Review of Zoning Regulations

5.1 The Original Master Plan of Islamabad

Islamabad was prepared by a Greek Planner C.A. Doxiadis in 1960 and approved by the federal cabinet in a meeting held on 24th May 1960 under the Chairpersonship of Field Marshal Muhammad Ayub Khan, President of Pakistan. As per Master Plan, the metropolitan Area of Islamabad was divided into three major parts i.e. Islamabad, National Park (Islamabad Park), Rawalpindi and the cantonment.

The Capital Republic (Determination of Area) Ordinance was promulgated and the specified area in the schedule measuring 350 square miles (906 sq. Km) or there about within the district of Rawalpindi in the province of Punjab at the site selected for the capital of Pakistan was declared the area of the Capital of the Republic. Thus the area of Rawalpindi and Rawalpindi Cantonment was detached from the Master Plan of Islamabad. As per Master Plan the area of Islamabad was planned in a grid iron pattern and the area was divided into modular square called sector. Each sector was a self-sustainable community measuring 4 Sq.Km (2X2). The Central Business District (CBD) of the city, called Blue Area, was planned in a linear pattern to grow along with growth of the city. Further area was allocated for Diplomatic Enclave, Admin Sector, Public Building Area, Special Institutions, Mauve Area, Light Industries etc. The National Park Area was reserved for recreation, agriculture, R&D Institutions etc.

To develop and Plan the new city, an organization "Capital Development Authority" (CDA) was established through CDA Ordinance 1960, as a statutory body. Main functions of the development authority are as under:

- Planning and Development of Islamabad
- Provision of Municipal Services to the area falls within the municipal limits of Islamabad
- Improvement of Environment and Landscaping
- Development Controls, through enforcement of CDA laws

In 1979, the President of Pakistan promulgated the Capital Territory Local Government Ordinance 1979 which extended to the rural areas of the Capital Territory. Under this Ordinance Union Councils were introduced in Islamabad Capital Territory. Which may, subject to the development schemes of the Authority, prepare development plans relating to any

GOVT. OF PAKISTAN

matter specified in the First Schedule of this Ordinance. According to this Schedule the Union Councils were responsible to the interalia, the following functions:

- Provision, maintenance, improvement and management of public roads, public streets, and public waterways, culverts and bridges and public buildings.
- Regulation of erection and re-erection of buildings in local area.

In 1980, the President of Pakistan promulgated the Islamabad Capital territory (Administration) Order 1980, which came into force in January 1981. According to this order the executive authority of the Federation in respect to the ICT shall be exercised by the President, either directly or to such extent as he thinks fit, through [a Chief Commissioner] to be appointed by him.

5.2 Promulgation of ICT Zoning Regulation 1992

In 1992, CDA promulgated the ICT Zoning Regulations in which the entire ICT was divided into 5 Zones. The Strategies for each Zone were as under:

Zone	Location	Area (Km ²)	Strategies
1	Sectoral area Up to G.T Road and Sectors H-14 to H-17, I-14 to I-17 beyond G.T Road	223.3	CDA's urban schemes
2	Bounded by G.T Road, Shahrah-e-Kashmir & capital limits. G15-G17, F15-F17, E15-E17, D16-D17, C16, B17 & A 17.	39	Private housing schemes on Sectoral Pattern
3	Margalla Hills, other protected ranges, forest areas & un-acquired land between Margalla hills & north of Murree road	193.7	Preservation and conservation Area
4	South of Rawal Lake & East of Islamabad Highway. It excludes part of Margall Hills National Park & Rawal lake.	292.5	Sports, recreation, leisure, institutions, farming, model villages.
5	Around Soan River from PWD Road to Rawal on both sides of G.T Road, Islamabad Highway, Kahuta Road	158.5	Private housing schemes

5.3 Amendments in Zoning Regulation in 2010

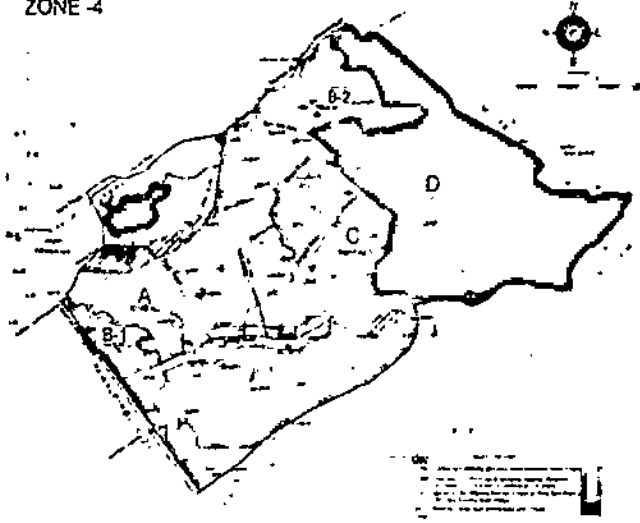
In compliance of the orders of the honorable Supreme Court of Pakistan, CDA prepared sub-zonation plan of Zone-4 with the approval of the Prime Minister of Pakistan, the summary was placed before the Cabinet which was approved on 21-04-2010. In this amendment, the Zone-4

GOVT. OF PAKISTAN

of Islamabad was further sub-divided into 4 Zones. The strategies for each sub-zone are as under:

Sub-Zone	Area (Acres)	Strategies
A	12, 188	Agro farming/ Orchard Schemes, Institutions, Model Villages and Public Housing Schemes. (Row housing, apartments)
B	12,941	Mixed land use, Residential & commercial housing schemes (Public & Private); Apartments, Institutions and regulated expansion of existing Villages
C	21, 279	Agro farming/ Country Housing/ Orchard Schemes, Institutions, IT Parks
D	23, 618	Public sector Housing Schemes, Village Up gradation and Regulated expansion of villages. Agro farming/ Orchard Schemes, Reserved Forests, Nature conservation projects, Sports and Recreational zones (Hotel, cultural centers, theater, playground & parks), Golf Courses, Polo Ground, Country Club, Water Sports, Swimming pools, Gliding & jogging tracks

ZONE -4



Sub-Zoning Plan of Zone-4 approved in 2010.

GOVT. OF PAKISTAN

ICT (Zoning) Regulations 1993 has been reviewed and it has been observed that these Regulations are very comprehensive and are as per the approved Master Plan of Islamabad 1960. This Master Plan (1960) was reviewed in 1987-92 but it could not be placed before the Cabinet for seeking its final approval due to change in the administrative set-up of the Govt.

However, the competent authority approved ICT Zoning Plan along with ICT Zoning Regulations 1992. Later on, in 2005 first amendments in ICT Zoning Regulations were notified vide SRO No. 100 (I) 2005-dated 14.01.2005 that were regarding Zone-2 and Zone-5. According to the amendments the procedure for approval of Private Housing Schemes was improved/streamlined and no change was made in other Zones i.e., Zone-1, 3, and 4 of the ICT. The 2nd amendments were made in 2010 and notified on 8.12.2014 vide SRO No 1005 (I)/2014, according to which Zone 4 was subdivided into 4 sub-Zones i.e., A, B, C and D. According to these amendments, the planning of Zone -4 was totally changed from the approved Master Plan of 1960.

- In fact, these were not amendments in the existing Regulations but seems new Zoning Regulations regarding Zone-IV. The land use of Sub-Zones of Zone-4 was totally deviated from the approved Master Plan of 1960.
- The amendments were made in the form of new proposals without referring any existing Clause of the ICT Zoning Regulations 1992.

In 2nd amendment Notified on 08.12.2014, in first para, it is stated that the Land use of Zone-4 was proposed minimum size agro farm will be 4 Kanal permissible whereas in sub-Zone-A Parameters under Parameter, (4) the minimum size of agro farm is permissible 8 Kanal and in Sub Zone D under parameter (4) the minimum area of farm is 4-20 Kanal Permissible which is a clear cut contradiction to the proposed land use of Zone-4. In paragraph 11 of the amended Zone Regulations 2014, applicability of the Regulations have been given with effect from 29-04-2010.

The thorough study of ICT Zoning Regulation 1992 revealed that there are some omissions like:

- 17th series have been added in the master plan, which was not existing in original master plan, but grids have not been extended in this series.
- The master plan attached with Zoning Regulations shows A series, but in the notification sector A-17 is missing.
- In the original Master plan, administrative area was to be extended along Margalla Avenue, but in 1992, this area was made part of Zone-3 where no construction activity is allowed.
- The boundaries of the zones have not been clearly defined in the Zoning regulations for example clause 3(3) defines Zone-3 as, "Margalla Hills National Park as notified under section 21 of the Islamabad wildlife (Protection, Preservation, Conservation and

GOVT. OF PAKISTAN

Management) Ordinance, 1979, other protected ranges, forest areas and unacquired land falling between Margalla Hills and north of Murree Road shall constitute this zone." The status of land between Margalla Hills and Margalla Avenue which is not included in Margalla Hills National Park has not been defined, though zonal map includes this area in Zone-3.

- With the passage of time a number of amendments in the Master Plan have been made with the approval of the competent authority, but these changes have not been incorporated in the Plan.

All the zoning regulations, modalities and procedures and building control regulations have not been properly documented.

5.4 Building Control Regulations

1. CDA had prepared Building Control Regulations for regulating construction of residential buildings in 1963. These bylaws were reviewed in 1967, 1985, 1993 and 2005. The present building bylaws extend to the entire ICT, but the CDA did not extend its implementation outside CDA planned sectors and schemes. Due to which the about 100000 structures have been raised in the unacquired area of Islamabad without approval. Majority of these buildings do not fulfill the required area, setbacks, covered area and height standards etc. In 2016, CDA established Building Control Directorate-2 to extend building control in above mentioned areas but still this area is not being addressed in true letter and spirit due to lack of bylaws, lack of human resources in building control directorate.
2. ICT Zoning regulations 1992 amended in 2010 clearly mention that existing and proposed structures in Zone-4 may be regularized and approved in the light of building control regulations of CDA and charging scrutiny fee, regularization, development and commercialization charges as determined and levied by the Authority from time to time. Since the preparation of bylaws regulation of building control under the provisions of Master Plan, CDA Ordinance 1960 and ICT Zoning Regulations 1992 & 2010 is responsibility of CDA, therefore the authority should extend regulations of building control in entire ICT.
3. The Commercial buildings are regulated by different bylaws varying for blue Area, Marakiz, Class-III shopping Centres, I&T Centre, Wholesale Markets, Motels, hotels, Hospitals, Clinics, workshops etc. Moreover the building bylaws for Public Buildings, Offices, embassies, institutions, educational buildings, universities, schools, mosques situated in Islamabad also not uniform and not available in any booklet form. There is a dire need to document these bylaws for facility of better regulation.

GOVT. OF PAKISTAN

CHAPTER NO. 6

Key Achievements of The Federal Commission

6.1 Key Achievements of The Federal Commission:

a) Meetings of Federal Commission

Several meetings of federal Commission were conducted and Commission after thorough discussions and deliberations proposed some amendments/suggestions or recommendation in each of the above-mentioned tasks. Some highlights of proposed amendments are reproduced below.

b) Summary of Amendments in Modalities and Procedures framed under ICT (Zoning) Regulations 1992.

Currently in Islamabad ICT Zoning Regulations 1992 are followed for development of private and cooperative housing schemes and projects. These bylaws are now outdated due to changing development scenarios and development challenges. Its planning parameters are same be it a planned development on 400 Kanal, 40,000 Kanals, or 400,000 Kanal

- These regulations did not allow for developing housing scheme below 400 kanal. The minimum area requirement for developing housing scheme was at least 400 kanal.
- There were no set rules/regulations to promote high rise and affordable housing in these zoning regulations.
- These plans lack Solid waste management plan and rain water harvesting plan.

Commission reviewed the existing regulations and proposed necessary amendments, some of the highlights of proposed amendments are prescribed below.

- In order to accommodate the growing population of Islamabad and to fulfill the housing demand, the commission proposed the following hierarchy for developing housing projects and bylaws are set accordingly for each hierarchy

i. Housing Scheme or Farm Housing Schemes for an area 50 acre and above.

ii. Housing Project 200 kanal to 399 kanal

iii. Vertical Housing project 20 kanal to 200 kanal

- In order to compact city limit, the Concept of Vertical housing is added in revised regulations, A developer or sponsor can build a vertical housing project on an area of 20

GOVT. OF PAKISTAN

storeys with 40% ground coverage, and by setting Floor area Ratio as 1:4.5. In order to encourage Affordable housing, minimum of 10% area of housing Scheme or farm housing scheme shall be reserved for economy housing with sizes of plot ranging from 90 Sq yards to 140 Sq. Yards. Minimum street width in economy housing block shall be 30'.

- In order to cater the issues and problems of solid waste management, it would be mandatory for developers or sponsor to prepare a comprehensive Solid waste management system with identification of disposal site and dumping process at the time of submission of Engineering Design.

c) Review of Request for Proposal (RFP) document for hiring of Consultants for Islamabad Master Plan

Previous RFP document was prepared by CDA for hiring of consultants for revision of Islamabad Master Plan. New federal commission reviewed the RFP document and gave necessary suggestions/recommendations to be incorporated in revised RFP. Amendments are proposed in following sections.

- Section "core team of professionals" is amended in such a way that international experts should be added to give their maximum inputs in key sectors, like tourism, smart city concepts, Information technology development sectors, Institutional & capacity development expert etc.
- Section "Instruction to bidders/consultant" is slightly amended where the commission found necessary modifications or amendments.
- Evaluation criteria for selection of consultant is amended.
- Section "Data Sheet" is slightly amended.

d) Summary of Islamabad Building Bylaws/ Regulations 2019

At present Islamabad Residential Sectors Zoning (Building Control) Regulations – 2005 are functional in Islamabad. These regulations were mainly focused on residential buildings. Bylaws are same, be it 4 Kanal plot, 10 Kanal plot, or 40 Kanal plot. Due to insufficiency of present building control regulations and bylaws, growing demand, increased safety, security concerns and technological development, these bylaws need:

- To encourage high-rise development in Blue area, Markaz, Mauve Area, Class-III Shopping centre and I&T centre enhancement in FAR and allowable storeys are proposed by commission.
- Building bylaws for commercial or apartment buildings astride major roads are revised.

GOVT. OF PAKISTAN

- o In order to fulfil water demand, rain water harvesting system is proposed in new building bylaws. The average monsoon rainfall in Islamabad is 780mm (0.78m) and average daily consumption of water inclusive of everything is 80-100 gallons per day, which is 300 to 380 litres per day globally. In Pakistan, it ranges from 30 litres to 380 litres depending on the availability of water and per capita income. To develop a rainwater harvesting system, every household shall have a storage tank on its rooftop depending upon the size of the rooftop. The collected rainwater will be used for the purposes of showering, gardening, laundry and car washing. Size of storage tank has been proposed according to rooftop size and size of residential unit.
- o Special consideration is given to address the environmental concerns through waste water rescue, recycling of waste water, installation of solar rooftop panels.
- o Encourage adaptation of modern construction technology through standard safety and other provisions for high-rise building with parking, peripheral open spaces, including setbacks fire safety.
- o Procedure for approval of plan for commercial building is revised so that the development process may be expedite.
- o Energy efficient building design is encouraged in order to overcome the energy crises.

e) Regeneration of G-06 Sector of Zone-1 of Islamabad

Every city has pockets of underused and underutilized land or distressed and decaying urban areas. These pockets of underused land weaken the city's image, livability, and productivity. They are usually the result of changes in the urban growth and productivity patterns. Urban regeneration is the attempt to reverse that decline by both improving the physical structure, and, more importantly and elusively, the economy of those areas. In all regeneration programmes, public money is used as an attempt to pump prime private investment into an area. Sector G-06 of Islamabad is located in Zone -1 of Islamabad spanning on an area of approximate 5,714 Kanal. The sector is located in close vicinity of CDA office Islamabad, 2 km from zero-point Interchange and South East of blue area. As per existing landuse analysis, 42% of total area comprises of residential, around 5% as commercial including Marakiz, parks only 1.43%, Public buildings 11.54%, and 37% of area as roads and Nallah.

The area is of prime importance with respect to its location, accessibility, government residencies. Presently, there are 4,877 Nos of residential units in G-06. Population of sector G-06 has been increased 1.7 times as compared to population in 1998 but the dwelling units remain the same.

In order to accommodate the growing population and to meet up housing demand and to uplift overall impact and image of G-06. The Commission proposed regeneration of G-06 with following features.

GOVT. OF PAKISTAN

- Conversion of residential built-up area into High rise apartments to achieve following results.
 - i. Maximum use of valuable land
 - ii. Max open air and green spaces.
 - iii. Increase in no of houses 4.74 times.
 - iv. Get a space to add more facilities
- Uplifting of area on both sides of nallah through landscaping and adding recreational features, lights, benches, trees etc.
- Creation of Chinatown in Melody Market with objective to encourage chinese tradition, creating business opportunities for Chinese Investors and to invest in businesses, chinese community to live eat and enjoy.
- Encourage public transport and pedestrian friendly environment by revising existing road cross section.
- Uplifting of parks and green spaces through landscaping and tree plantations.
- Boosting up business and employment opportunities by relaxing FAR and encourage high rise development commercial towers in G-6.

Project Outcomes

- Increment in commercial area from 97 kanal to 517 kanal
- Increment in parks area from 82 kanal to 29 kanal
- Increment in public building and communal spaces for 556 kanal to 700 kanal
- Proposed 16, 515 new apartments on 1297 Kanal of existing residential area
- Enhancement in Employment and business opportunities.

f) Strategy for Solid Waste Management System

Solid waste is a big issue in Islamabad, we want to segregate the waste from the residential buildings or public places or commercial area. For the last four decades, the civic agency had proposed several areas including Kurl landfill to permanently dump the garbage in the city, but the waste is still being dumped in a residential area of I-12 Sector. Solid waste, instead of segregating it at disposal point, will be segregated at the source point (at homes).

To do that, it will be made obligatory on every resident to have three types of bins at his home differentiated through colour. Red colored bins will be for metal and glass, yellow will be for plastic and green will be for organic waste. On average, a person produces 0.74 kg of waste per day so three bins of 80L each should be enough for a family of six persons. The garbage will be collected twice a week instead of daily. The waste collected will be brought to the transfer stations from where after segregation, it will be transported to the landfill site.

GOVT. OF PAKISTAN

Plastic recycling lines, plants and extrusion machines can be installed at different locations in accordance with the needs. Two sanitary landfill sites are proposed in two different directions i.e. near Rawat and Sangjani. Waste to energy plants can also be installed at these landfill sites to dispose the waste and generate energy.

g) Strategy proposed for Rain Water Harvesting System

The average monsoon rainfall in Islamabad is 780mm (0.78m) and average daily consumption of water inclusive of everything is 80-100 gallons per day, which is 300 to 380 litres per day globally. In Pakistan, it ranges from 30 litres to 380 litres depending on the availability of water and per capita income. To develop a rainwater harvesting system, every household shall have a storage tank on its rooftop depending upon the size of the rooftop. The collected rainwater will be used for the purposes of showering, gardening, laundry and car washing.

Dry Season Demand versus supply approach

- Matching the capacity of the tank to the area of the roof
- Matching the capacity of the tank to the quantity of water required by its users
- Choosing a tank size that is appropriate in terms of costs, resources and construction methods

Area of the House	Capacity of the tank
5-Marla	200 Gallons
10-Marla	400 Gallons
1-Kanal	600 Gallons
2-Kanal	800 Gallons

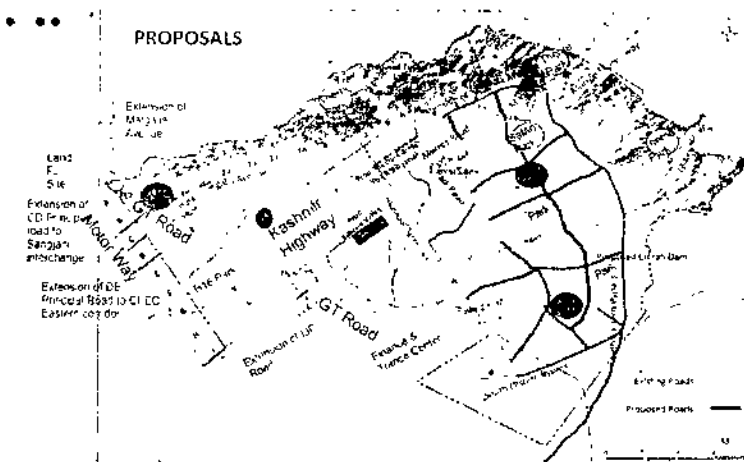
GOVT. OF PAKISTAN

Segregation of sewage water from natural water streams

- Presently, in Islamabad, separate sewerage and drainage lines have been laid. The storm drainage lines dispose of in the adjoining natural streams whereas sewerage lines carry sewerage to the sewerage treatment plant established at sector I-9/4.
- Unfortunately, sewer lines carrying municipal waste do not terminate at the sewerage treatment plant. The raw sewage is directly dumped into natural streams without any treatment causing environmental pollution and damage to ground water and spreading various infectious diseases in the city.
- It is proposed that the collected sewage water should be transported to the sewerage treatment plant at sector I-9/4. Where a transportation of sewerage is not possible, separate sewerage treatment plants should be installed for 2-4 sectors.
- The treated waste water can be disposed into natural streams.

h) Proposed Ring Road from Rawat to Bhara-Koh

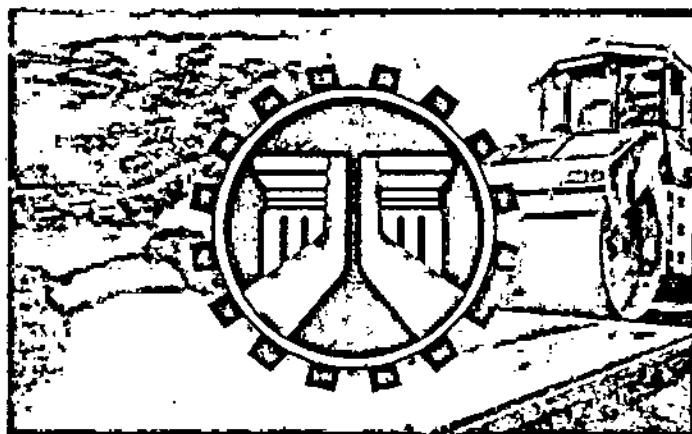
In order to connect Islamabad with neighboring cities, two ring roads are proposed around Islamabad and Rawalpindi, to bypass the through traffic without entering into the cities. Tentative route map is attached.



GOVT. OF PAKISTAN**i) Widening of Old Revenue Roads**

There are several revenue roads with right of way as low as 12 feet. These roads are providing linkages between different areas of Islamabad. In order to provide better linkages to all zones of Islamabad right of way of these revenue roads must be increased from 60 to 100 feet. Following are the necessary steps needed to be taken to secure right of ways.

- Section IV to be applied for compulsory acquisition on all revenue roads with geo referencing map available all the time at CDA website.
- All revenue roads clearly marked at each section that how much land is going to be acquired from center of road.
- In case there is already built up area on one side, acquisition can be made from other side of the road.
- Areas where there is congested built up area, a bypass road can also be developed if there is land available.
- Road where immediate action is required are as: Bhimber Tarar Road, Malot Road, Jaglot Road, Japan Road, Tumair Road, Simly Dam Road, Angori Road, Lakhwal Road, Shahdra Road, Lehtar Road, Kahuta Road, Fateh Jang Road, Kuri Road etc



GOVT. OF PAKISTAN

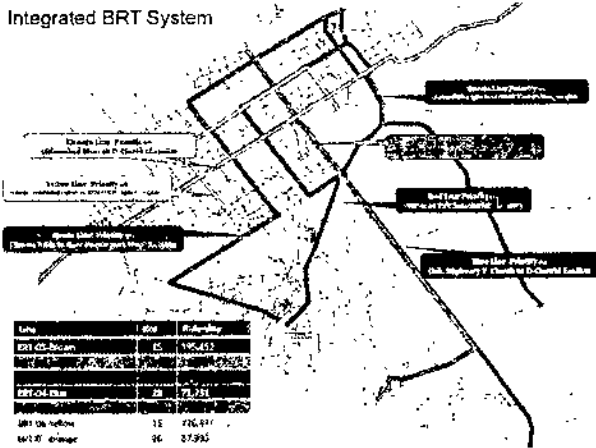
j) Islamabad Railway Station

Islamabad is located on main railway lines connecting Peshawar to Karachi. But unfortunately the main railway station is situated in Rawalpindi due to which people of Islamabad have to face lot of problems. In the original master plan of Islamabad railway lines was to be relaid from Rawat to Sector I-8 along Islamabad expressway. Sector I-8 was to be developed as main transport terminus to serve both Rawalpindi and Islamabad but regrettably this proposal could not be implemented and Sector I-8 was developed as residential sector. Railway track was laid from main railway line to sector I-9 where margala railway station was constructed. This railway station being on branch line is not efficiently working. Moreover tripod has been establish in the right of way of the HI principal road against the provision of master plan.

Railway line is a green mode of transport which is economical, carry more passengers in less time and creates less pollution as compared to the road transport. There is need to upgrade Gorla railway station situated in sector-F 13 and tripod should be shifted near Gorla railway station. The existing railway infrastructure may be improved to promote green transport and linked with the existing BRT system.

k) Mass Transit Authority

With presence of BRT from Rawalpindi Sadar to Islamabad and another from Peshawar Morr to Airport, more mass transit network are required. At least three more mass transit lines are being suggested to connect Marakaz and provide regional connectivity in first phase.



GOVT. OF PAKISTAN

l) Right of Way for Services

Right of way of any road above and below ground can be used for mass transit system, parking, filling stations, Pedestrian under passes and over-head covered bridges can also be used for commercial use (convenience shop and markets) and advertisement.



m) Regularization of E11 Projects

Due to lack of enforcement, hundreds of projects have been executed in Islamabad. There have been several rulings from august courts to take immediate steps in order to provide relief to residents of these projects. There are number of multistorey housing projects constructed in sector E11 without getting necessary approval from CDA. CDA formulated zoning control policy in 2007 to regulate construction of such projects in Sector E-11 which could not be implemented. These multi storey projects need immediate attention as lot of people are living and huge amount of money has been invested over there.

These projects should be regularized after taking compoundable and non-compoundable charges from the developers, subject to thorough health and safety evaluation complete study by the consultants. In conformity with the Pakistan Building Code (Seismic Provisions 2007) and other applicable environmental laws is to be ensured. Provision of amenities, infrastructure, open spaces, parking and circulation of traffic must be developed through cost sharing by the developers.

Latest traffic impact studies, environmental impact studies and urban regeneration studies will provide the way forward for the regularization of E11. All buildings which meet the criteria of recently approved amendments in zoning control policy 2007 and supported by traffic impact and environmental impact studies be regularized with imposition of fee and penalties.



n) Regularization of unapproved and Illegal Schemes

There are more than a hundred schemes without any status of approval from CDA and as a result 100s of millions in revenue couldn't be collected at different stages of development. Moreover, residents of these schemes face problems on daily basis when they need to contact any government institution to avail any municipal services. The sponsor of such schemes should bring layout plans along with other documents to CDA for approval. Where sponsors are not available, the residents associations may approach CDA for approval of layout plans as per given criteria. After the assessment of existing infrastructure and land use of these schemes individually and as consolidated plan of neighboring schemes they should be allowed to obtain NOC from CDA. All duties and fines will be borne by the sponsors or resident associations of these schemes. These scheme be regularized after receiving following fees where required and without prejudice to the right of the authority to acquire the land in public interest:

- a) Development Charges
- b) Fees public amenities plots
- c) Regularization Fee
- d) Commercialization charges (where applicable)
- e) Scrutiny fee of the Layout plans
- f) The individual building plans will be provided by the Corresponding owners for approval procedure.

o) Restoration of Layout Plan/NOC of a Hoosing Scheme.

The layout plan may be restored subject to fulfillment of following formalities:- Fresh verification of latest revenue papers (for disputed area) and public notice regarding revenue record to call objections if NOC was cancelled due to objection on land ownership.ii- Payment of fresh scrutiny fee for the processing of restoration of layout planiii- Submission of undertaking by the sponsor that all codal formalities will be completed within three months of restoration of layout plans of the scheme. Failing which the layout plan approval be withdrawn without any further notice.iv- Land ownership and possession information through Public Notices in national dailies and payments of relevant penalties and 50% of the applicable scrutiny fee.v- Scrutiny fee will be charged at the time of restoration.The subject land can only be considered for processing in the name of another sponsor or with another name provided the previous approval is also referenced in the public notices to verify no objection and claims by any stakeholder with the scheme what so ever.

p) Estate Management Directorate

Management Directorate for ICT to manage CDA Land and areas transferred in the name of



CDA by private or CHS sponsors. This Directorate will insure the status of mortgaged plots, areas under public buildings and fee collection against each transfer of estate from one owner to another. This Directorate will also consolidate rural and farm land and give land owner one developed plot of 1 Kanal against 4 Kanal of land. The land in the jurisdiction of ICT but in the name of original owner may be compensated by CDA against developed plot at the ratio of 1:4. The land record in jamabandi of respective mouzajat defines the tentative owners of all the subject land. The said owners may be offered compulsory acquisition but at the 1:4 ratio rather than the government controlled rate.

q) Municipal Tax to Residents and Business:

Municipal tax from each residential unit (house or apartment) will be charge from the occupant of that unit. It can be charged in yearly installments as well as lump sump. Same is for the businesses they will pay municipal tax. This municipal tax will be used for the rehabilitation of roads, sewerage, collection and disposal of solid waste, water supply, rain water harvesting, street lights, provision and maintenance of public buildings and horticulture for parks and roads. Maintenance of traffic signals, footpaths, pavement markings and signage. Municipal tax changes may be unified along with Conservancy Charges; Road Tax from Excise department.

r) Central Parks, Theme and Recreational Parks

Parks and Theme Parks are proposed to fulfill the demands of residents of Islamabad. Theme and recreational parks will also help to boost the economy of Islamabad and support hospitality business in the Federal Capital.

s) Regional Links

Margalla Hill Ave needed to be developed. Alignment of the route has been proposed to commission. Several links are proposed between ring road and Islamabad Highway.

t) Financial and Trade Zone

Two New Finance and Trade Zones are recommended in zone IV and V, to cater for the population and decentralize economic activity of the city. Summary has been compiled and further discussion is required.

u) Capacity Building and Hiring of staff against vacant posts (CDA)

There is need to fill up existing vacant posts through recruitment process at earliest. Since the city has expanded and work load has increase along with more urbanized area, therefore



infrastructure for planning and building control also needs to be expanded. Separate division is required to provide framework for regional development. Training and development of all staff needs to be carried out of all staff on regular basis. CDA one window operation and easy of doing business need to be reassessed. There is need to develop a system.

v) Zone III Un-Acquired Area

- a) Unacquired land outside MHNP zone III either be acquired or policy may be constituted to give alternatives to the land owners without compromising on the existing character of the area.
- b) Unacquired land inside MHNP zone III should be acquired.

w) Planned Parking Areas

With more car occupancy ratio in Islamabad and region, there is increase in car parking demand. Therefore designated parking lots in blue area be developed as multistory car parking on BOT/PPP mode. These parking lot be allowed to use top two floors for commercial purposes. G+5 floors to be allowed

x) Examination of the Problem of Sewerage Contamination for Korang River Upstream of Rawal Dam and Suggest Appropriate Solutions:

The Project of Wastewater Treatment (Sewerage Treatment Plants –STP's) along Korang River (Rawal Lake) was presented before the Commission by the Project Director BRT/STP, CDA dated 27-08-2019 & 06-09-2019 The Project Director informed the Commission that in order to control contamination, the Authority had in 2011 awarded "Consultancy Services to Carryout Feasibility Studies, Detailed Engineering Design and Onsite Construction Supervision for Control of Water Pollution in Streams, Surface Reservoirs and Sewage Treatment Plants in the City of Islamabad" to M/s Osmani & Company (Pvt.) Ltd.

The Topography of Islamabad area relatively slopes down from Margalla Hills in the North all towards the I-Series at the south. An STP is already operational in Sector I-9 which is treating wastewater of Sectors on the east side of the Railway Track however sectors on the West have no such provision, whatsoever. Moreover owing to the unique topographic features of the ICT, it is not viable to transport sewerage from these areas to the existing STP.

Furthermore, development of private housing schemes i/c unplanned and illegal settlements in Noorpur Shahan, Bara Khau, Malpur, Banigalla etc. is polluting natural streams and surface reservoirs especially the Rawal Lake due to inflow of raw sewage from proximal habitats. The Rawal Lake is presently the main source of water supply for the city of Rawalpindi, hence there is a need to control inflow of pollutants/raw sewage into these natural water courses on the



upstream of the Lake. The untreated sewage/pollutants from most of the localities including Bara Khau, Muslim Colony, Bari Imam, Shahdra etc. ends at Rawal Lake and Soan River has resulted in poor sanitation condition and supply of highly contaminated water to the residents of the Twin Cities. The Consultants M/s Osmani had divided the Scope of Work into 4-Phases as under

- Phase-1:** Rawal Lake and its surrounding catchment Area.
- Phase-2:** Zone-1 & 2 (i.e. Sectors D-12, E-12, F-12, F-13, F-14, G-12, G-13, G-14, H-11 to H-16 & I-11 to I-16 etc.)
- Phase-3:** Industrial Triangle (Zone-5).
- Phase-4:** All Model Villages.

In order to address this alarming situation (especially contamination of Rawal Lake), the Hon'ble Supreme Court of Pakistan had also vide HRC No. 6465 directed CDA/MCI to take immediately measures to stop contamination including provision of Sewerage Treatment Plants (STP's) to treat wastewater entering the Rawal Lake. The Project Director gave a detailed briefing on the Type of Treatment Plant proposed by the Consultants for Treating Wastewater entering the Rawal Lake. The Commission approved the Project in principle and further recommended that Internal Sewerage Network (missing in these localities) may also be included, but after fulfillment of due Legal formalities so that maximum wastewater can be collected and transported to the STP's for treatment and its disposal.

y) Mini Dams

There is Huge potential in terms of water conservation to recharge aquifers. The water reservoirs can be utilized as water sports activities as well. Potential locations are Shahdara, Chirah, Sawan River and Rawat. Desilting or Raising of Rawal lake is also proposed to increase capacity of Rawal Dam Reservoir.

z) Contamination of Korang River and Rawal Lake

Following measures were taken regarding resolution of public importance issues in the entire ICT area; i.e. development of sewerage system, Wetland Construction and construction of sewerage treatment plants, provision of sanitation services including landfill site.

- a. WetLand Construction (WLC)
- b. Sewerage Treatment Plants
- c. Sanitary Landfill Sited.
- d. Transfer Stations for Solid Waste in rural areas



i. Wetland Construction (WLC)

The following three (03) sites have been identified for construction of Wetland Construction (WLC) after joint visits of CDA, MCI, Pak-EPA, ICTA and NARC dated 05.04.2019 & 11.04.2019, 19.04.2019 & 26.04.2019.

S/No	Name & Location	Design/ Drawing submitted	Present Status/ Progress
i.	Muslim Colony Bari Imam Nullah (Pond WLC)	Dated 12.4.2019	75% work completed
ii.	Jinnah Siream/Nullah Quaid e Azam University (NoorpurShahan) (Floating WLC)	Dated 29.04.2019	Drawing issued. Estimation in Progress
iii.	A.Q Khan Road Bari Gala (Pond WLC)		Drawings issued on 30.04.2019

ii. Sewerage Treatment Plants (STPs)

It has been decided to undertake Phase-1 i.e. Rawal Lake and its surrounding catchment area (Water Treatment Plants) on top priority. The CDWP has approved this phase of the project to be undertaken on an EPC (Engineering, Procurement & Construction) mode. Moreover, it has been agreed to undertake this phase in two sub-phases (i.e. Upper & Lower Shahdra STPs as Priority-1). Moreover, on the directions of the Planning Commission for certification of the feasibility study, the consultancy agreement with M/S Osmani & Co. has also been renewed. The consultants have been instructed to review and analyze the design and other parameters before launching the project.

During Site Visit dated 06.04.2019 & 09.04.2019 it was observed that the location of the STPs proposed by the consultants (i.e. Upper & Lower Shahdra STPs) needs to be re-examined as the proposed locations of the STPs are not in possession of CDA, moreover considerable development of unplanned and illegal housing schemes/societies has been found along the Korang River and the downstream of the proposed site's, therefore it is not feasible/viable to have the STPs on these proposed locations. During the joint site visit by

GOVT. OF PAKISTAN

CDA, MCI & Pak EPA it was suggested to have a single STP for the Upper & Lower Shahdrah and also to shift its location near Bani Gala Bridge on downstream Korang River, while transporting sewerage through trunk sewer line. The project consultants have started necessary field survey work required for the purpose (including quality and quantity of wastewater to be treated). Moreover 10-years flood data has also been acquired from Small Dam Organization for finalizing the new site. The consultants are in a process to propose the most suitable and sustainable solution required for Phase-1. Furthermore, in order to proceed further in a fast track manner a pre-qualification notice is being floated to qualify potential national/international firms for the project to be undertaken on EPC Mode. The survey will be completed within one month time.

iii. Sanitary Landfill Site

There is no engineered landfill site available since last 60 years for the final disposal of solid waste in accordance with international standards of health & safety for the preservation of environment. MCI is still dumping the waste collected from the sectorial and partially rural areas of Islamabad in sector I-12, which was allocated by planning wing, CDA on 03.01.2012. A series of meetings has been held in Ministry of Climate Change with the stakeholders i.e. MCI, CDA, Pak-EPA, Punjab Forest Department for selection of the sanitary landfill site in the light of cabinet decision dated 07.03.2019. Accordingly a joint visit of all stakeholders has been carried out dated 04.04.2019 near Nicholson's Monument, Sangjani.

The site is a barren and abandoned quarrying area with more than 100 feet deep ditches with no green cover at all. The land is owned by the Forest Department of Punjab which is being encroached by crushing and asphalt plants. The development of engineered landfill Site will not only provide a solution of solid waste disposal for about next 50 years but the technology use will help to reclaim the green character of the area in future. The site will have potential to integrate with waste to energy power plant. The proposed sanitary landfill site has principally agreed by CDA board and directed P&D wing to put up formal summary for approval of Board. MCI has issued an advertisement for engagement of consultants to undertake Environmental Impact Assessment (EIA) study for the development of engineered sanitary landfill site at Sangjani on the direction of Ministry of Climate Change. An alternate site on G.T road near Mandra has also been proposed for preliminary feasibility study. The tender for hiring of consultant for EIA study will be opened on 10.05.2019.

iv. Establishment of Transfer Stations for Solid Waste Collection

The CDA has allocated the following four sites for transfer stations of solid waste collection to improve the collection of solid waste from the rural areas of Islamabad including Bani Gala:

GOVT. OF PAKISTAN

- I. Transfer station at Lakhwal
- II. Transfer station at Tramri Chowk on Park Road
- III. Transfer station of T-chowk Rawat.
- IV. Transfer station at I-9 near STP

The concept of transfer stations will provide a decentralized collection to minimize the solid waste through segregation, treatment or alternative method before transfer to engineered landfill site. This will reduce the quantity of waste to be shifted to the engineered landfill Site.

Besides these transfer stations the MCI has also placed skips (Large Garbage Containers) at the following locations for secondary collection of waste in rural/suburban areas of Islamabad.

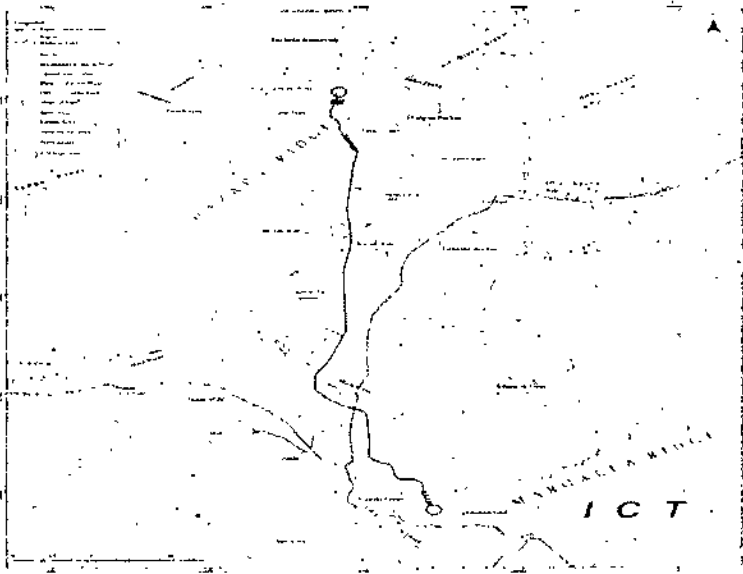
I. Bara Kahu	= 05	VIII. Chatta Bakhtawar	= 02
II. Bani Gala	= 02	IX. Zia Masjid	= 02
III. Sawan	= 01		
IV. Karal	= 01		
V. Khanna	= 02		
VI. Taramri Chowk	= 02		
VII. Iqbal Town	= 01		

Moreover, MCI has prepared RFP document for outsourcing "contract for smart Integrated solid waste management system in Metropolitan Corporation Islamabad" for engaging contractor for permanent services in urban/rural areas of Islamabad as a way forward towards clean and green Islamabad. Moreover, under Corporate Social Responsibility (CSR) program color coded bins are being introduced for handling wet and dry waste (recyclable) in E-7 as a pilot project.

v. Construction of Water Channel from Ghazi Brotha to Islamabad

- Islamabad is face acute shortage of water. There is not enough drinking water to cater for population of over 2.0 million. Current Production capacity is only 72 MGD against a demand of 140 MGD . In order to develop a perennial source of potable water supply for Islamabad & Rawalpindi, which can meet the present as well as future requirements, the Project regarding "Conduction of Water from Indus River System at Tarbela Dam for Rawalpindi & Islamabad" has been Initiated.
- This proposed project has been planned to conduct 655 Million Gallons per Day (MGD) water by the year 2050 in three phases. Under Phase-I, 200 MGD water is to be conducted for the twin cities (i.e. 100 MGD each for Islamabad & Rawalpindi). Estimated cost of the scheme was Rs. 37 billion In 2007. The design is being reviewed and cost estimate is being updated.

GOVT. OF PAKISTAN



CHAPTER NO. 7

Suggestions and Way Forward

7.1 Islamabad Master Plan (IMP) 2040 Framework and Process

The current approach to urban planning is not about images (maps). Rather, it is a policy and planning framework that helps the city leaders transform a vision into reality using space as a key resource for development and engaging stakeholders along the way (UN Habitat, 2014). The four pillars of the framework are:

- i. Address the whole city system, and promote integrated compact development;
- ii. Plan at scale to deal with common issues, such as slums, sprawl and inadequate services;
- iii. Make an impact by implementing demand-led plans; and
- iv. Monitor against established matrices.

Using this framework, the following planning process may be followed for IMP 2040:

7.1.1 Conceptualize sustainable regional and metropolitan development:

1. Engage key stakeholders to identify the:
 - Big regional, conurbation/metropolitan issues holistically;
 - Options to address them;
 - Essential infrastructure for metropolitan functions and connectivity;
 - Institutional and organizational arrangements for their implementation and management
2. Achieve consensus and secure agreements on selected options and arrangements.

7.1.2 Promote integrated compact development patterns at all scales:

- i. Make density the key variable in planning
- ii. Plan for contiguous compact development
- iii. Promote mixed land use, except in selected reserved zones and for incompatible uses

7.1.3 Think implementation at each scale from the start

- i. Make planning simpler, be strategic
- ii. Identify responsibilities and set performance indicators
- iii. Build interdepartmental teams
- iv. Deal with the legal issues at an early stage
- v. Calculate up-front the capital and running costs and its impact on revenues
- vi. Demonstrate the value of urban planning
- vii. Obtain support from national leadership to increase the likelihood of positive impacts
- viii. Phase implementation in terms of space and resources



7.1.4 Monitor

- i. Regularly against established metrics
- ii. Revise periodically
- iii. Review capacities as and when needed

7.2 Suggestions

Based on the meetings, discussions, surveys, consultative dialogues and public consultation the commission has identified some future projects for improvement in the city and suggested proposals subject to the study conducted by the consultants:

7.2.1 CDA has prepared zoning regulations in 1992, amended zoning regulations 2010, residential building control bye-laws, bye-laws for Blue Area, Marakiz, Class-II shopping centers, un-acquired area along IJP Road, modalities and procedures for development of private housing schemes in Zone-2, 5 and E-11, apartments schemes. All these bylaws are not documented and compiled at one place. These documents are available in the form of board decisions or gazette notifications, it is recommended that all these documents should be compiled in the form of one book and the same should also be available on CDA website for awareness of general public. These board decision are review by the commission and have been incorporated.

7.2.2 The commission has recommended for hiring the services of International consultants having experience and expertise in the field of master planning. Request for Proposals (RFP) document has also been prepared by the commission and approved by the Ministry of interior, therefore CDA should initiate process of hiring of consultants as per PPRA Regulations.

7.2.3 Since the revision of Master Plan is a gigantic exercise and will take extensive time, therefore in the meantime CDA should carry on development control according to the existing Master Plan, and zoning regulations.

7.2.4 The commission recommends that zonal boundaries should not be changed prior to the comprehensive study.

7.2.5 As per ict zoning regulations 1992, In zone iii, some of the existing rural settlements, being central and important villages, were to be allowed to stay under controlled program to cater for the basic necessities of the local population. Selection of such settlements should be in accordance with the provision of Margalla hill national park management plan. It has been observed by the commission that CDA has failed to regulate and give controlled program for such villages. The commission recommends that CDA should immediately prepare regulatory framework to control and preserve such rural settlements in accordance with provisions of MHNP.

GOVT. OF PAKISTAN

7.2.6 The commission has observed that a number of posts are lying vacant in ICT, MCI and CDA. There is a need for rationalization and revamping the strength of each and every department according to their function and requirement. There is need to reassess the service structures and creation of new division to effectively develop Islamabad as per Master Plan. Without qualified professionals no master plan can bring any change.

7.2.7 The city is lacking a comprehensive and sustainable mass transit system due to which there is severe shortage of quality public transport. Commission has identified 5 new BRT routes to make Capital well connected with different areas of Islamabad and Rawalpindi. Commission also propose that BRT from Airport to Peshawar Mour must be extended to Bhara Koh.

7.2.8 Construction of second BRT route to link the New Islamabad Airport with Islamabad city, but its construction has been stopped. It is recommended to complete this project immediately for facility of the general public and reduce load on Kashmir Highway.

7.2.9 Railway line is a green mode of transport which is less costly, carry more passengers, take less time, creates less pollution as compared to the road transport. The existing railway infrastructure may be improved to promote green transport. The operational facilities at Margalla Railway Station and Golra Railway Station may be improved and linked with road transport. The operation of railway from Margalla Railway station may be extended and connected with Khayaban-e-Johar Bus Station at Ninth Avenue.

7.2.10 Margalla Avenue segregates the Urban Area from Margalla Hills and provides bye-pass route for the traffic originating from the city moving to Peshawar and northern areas linking with GT Road. CDA started construction of this road but remained stalled for couple of years. It is suggested to complete the remaining work of Margalla Avenue

7.2.11 Islamabad doesn't have its own Bus Terminal due to which the transports have established illegal intercity bus stands along IJP road in sector I-8, I-11 and I-13 for intercity transport which are neither in conformity with the master plan nor have any comfort for the passengers. CDA has allocated a site for construction of state of the art bus terminal in sector I-11 which looks appropriate for this purpose. Construction of this intercity terminal in sector I-11 may be expedited and public transport routes may be planned to link this terminal with other parts of the city.

7.2.12 As per Master Plan of Islamabad 1960, the development of Islamabad was to be completed by 2010. There are 74 sectors, out of which 63 are in Zone-1 and 11 in Zone-2. As per ICT Zoning regulation 1992, land in Zone-1 is to be acquired and developed by CDA

GOVT. OF PAKISTAN

according to the Master Plan, but so far CDA has developed 33 sectors and 4 sectors are under development. It has been observed that population of Islamabad which was 0.8 million in 1998 has crossed 2 million in 2017. The rural population which was 0.275 million in 1998 has become about 1 million in 2017. This shows that due to slow pace of development of CDA Sectors the population pressure has been tremendously increased in rural area. It is suggested that CDA should immediately complete acquisition and development of remaining sectors of Zone-1.

7.2.13 It has been observed that acquired CDA land is under threat of encroachment, moreover illegal and unapproved construction is being carried out in Islamabad. There is need to enhance strict monitoring and watch and ward system to remove encroachments, protect acquired CDA land and stop illegal construction. CDA can also utilize the modern Information and Communication Technology like GIS, Remote Sensing, CCTV Cameras to monitor the urban growth & encroachments. CDA must obtain early Satellite imagery to analyse development patterns and better building control. Land consolidation has been proposed for whole of Islamabad by the commission.

7.2.14 Rawalpindi and Islamabad are two separate big cities both having population of more than 4 million. These cities are interdependent with each other in business, housing, employment, transportation, water, sewerage, commerce and trade etc. Both of the cities cannot be govern with individual policies. There is a need to establish a Joint Metropolitan commission for both Rawalpindi and Islamabad.

7.2.15 Islamabad has a wide road network which is underutilized by development of low density low rise development. In order to optimize the utility of these corridors it is suggested to introduce high rise and high density development along Islamabad Highway, Kashmir Highway and Blue Area with FAR of 1:6 and height clearance of Civil Aviation Authority.

7.2.16 CDA owns precious strips of acquired land along GT Road, IJP Road and Park Road. These strips of land are worth billions of rupees and are un-utilized due to which encroachers occupy this land without any benefit to CDA and CDA has to spend its resources to retrieve this land. It is proposed that medium rise mixed use development may be planned on the acquired strips along GT Road, IJP Road, and Park Road with FAR of 1:5.

7.2.17 As per master plan of Islamabad, graveyards were planned in sector H-8, H-11, H-13, H-15, E-7, D-10 and C-13. CDA has developed graveyards in sector H-8 and H-11 uptill now. There is dire need to develop graveyards for future use. Moreover in rural area of Islamabad, population is growing more rapidly than the urban areas. Old villages have their own graveyards which have become saturated. Private housing schemes have also been failed to provide burial facility to their residents due to which provision of ample graveyards space is required in rural area. Since this is a public facility to be provided by the civic body, therefore CDA should acquire land for graveyards in sector H-16, C-13, Kuri, Bahra Kahu, Farash & Rawat.



The Private housing schemes developers may be directed to extend their share for provision of centralized graveyards at the cost of their development.

7.2.18 Islamabad has an efficient solid waste collection system but there is no proper landfill site for disposal of the solid waste. A landfill site was planned in Zone-4 and CDA made huge investment on it, but this site could not be developed. There is a dire need to immediately develop landfill site. MCI has selected a site near in Dhoke Jandu near Nicholson Monument off GT Road. This site may be developed subject to environmental clearance from Pakistan Environmental Protection Agency, Islamabad. At least 10 Transfer Stations for solid waste may be spread all over ICT. A Waste to Energy plant may be established to generate electricity from the solid waste.

7.2.19 Site for slaughter house has been allocated by CDA in sector I-11. This site may be utilized to construct state of the art slaughter house on healthy planning parameters.

7.2.20 Islamabad had a very good integrated sewerage disposal system in which the sewer lines collecting raw sewage from individual structures were linked with trunk sewers which terminated on a modern Sewerage Treatment Plant. The treated sewage was disposed into natural streams after treatment to avoid pollution in streams. With the passage of time the city expanded, population increased and the sewage network became deteriorated. The raw sewage could not be fully transported to the STP which caused pollution in natural streams. While designing STP it was considered that 80% of the water will be received in STP but due to provision of less input, the STP did not remain functional. Due to which the natural streams passing through the city have become polluted, unhealthy, source of hazardous odors and also polluting the underground water.

7.2.21 This is highly recommended that STP should be renovated and well connected with the city sewerage system. However where due to topography, it is not possible to link the sewers with main STP, mini STPs may be constructed to avoid disposal of raw sewage into natural streams.

7.2.22 Rawal Lake is a source of drinking water for Rawalpindi but illegal and unauthorized construction along Rawal Lake and in the catchment area of Korang River has polluted water of the lake. Supreme Court of Pakistan has also taken serious notice of this open dumping of sewage in Rawal Lake. It is proposed to construct mini STPs around Rawal lake and other water courses to protect polluting drinking water resources.

7.2.23 Today the water supply requirement of Islamabad is 110 MGDs per day but only 60 MGD water is being supplied to Islamabad from Simly dam, Khanpur Dam and Tube wells, due to which huge water crisis is being faced by the residents in Islamabad. As per public survey conducted by this commission, people have given highest priority to the water supply. CDA has already planned a megaproject of carrying water from river Indus which will provide 100 MGD

GOVT. OF PAKISTAN

water to Islamabad and 100 MGD water to Rawalpindi. It is proposed to complete the construction of this project on priority. Moreover the Precipitation in Rawalpindi Islamabad region is highest and the rain water is not properly harvested. There is need to increase storage of rain water and introduce water conservation strategies. The water is a precious natural resource and it should not be wasted. Washing of vehicles, gardening and agriculture with sweet fresh water should be discouraged and reuse and recycling of waste water must be promoted.

7.2.24 Margalla Hills National Park is located in the foothills of the Himalayan range. The topography is rugged, with numerous valleys and many steep and even precipitous slopes. This park is the most accessible park in Pakistan due to its close proximity to Islamabad. This park provides natural habitat for wild life and hiking facility for people all over the country. Major part of Margalla Hills has been acquired by CDA or forest land. The un-acquired pockets in Margalla Hills may be acquired to avoid illegal construction and change of landscape.

7.2.25 Sports, Cultural and Tourism hub in Shakarparian Area is surrounded by Islamabad Highway, Kashmir High way and Murree Road. This area provides International level Sports Complex, Gymnasium, Squash Courts, Tennis Courts, Badminton courts, golf courses, polo grounds, Exhibition grounds, Parade ground, Museums of science and culture etc. In 1980 this area was included in Margalla Hills National Park. It is suggested that this area may be excluded from MHNP by amending Wild life Ordinance 1980.

7.2.26 As per ICT zoning regulations 1992, in zone III, some of the existing rural settlements, being central and important villages, were to be allowed to stay under controlled program to cater for the basic necessities of the local population. Selection of such settlements should be in accordance with the provision of Margalla hill national park management plan. It has been observed by the commission that CDA has failed to regulate and give controlled program for such villages. The commission recommends that CDA should immediately prepare regulatory framework to control and preserve such rural settlements in accordance with provisions of MHNP.

7.3. Way Forward

The Federal Government has therefore decided to review and revise the Master Plan of Islamabad and has setup a Federal Commission for this purpose. The Commission decided to hire services of the consultant and also prepared RFP document including ToRs of the consultant a copy of this document is attached. The Consultants shall provide the necessary planning services required for the final Plans, Regulations & Action programmes as per TOR and this Scope of Work. The services shall include all Investigations, studies, surveys, maps, reports, documents etc. The scope of work shall be carried out in a manner compatible with the sound urban design, planning and management practices and shall include, but not limited

GOVT. OF PAKISTAN

to the scope as stipulated further in this Terms of Reference. The Consultants shall be required to collect and submit such information, data and services as may be necessary for the preparations of Master Plans, Action Programmes and Regulation. The Consultants shall study and verify the maps and documents provided by CDA and carry out further detailed surveys for developing an up-to-date Base Map of Islamabad. The Consultants shall also carry out further research to undertake the following:-

- i. Comparison of actual development outcomes with the existing Master Plans Regulations and vision.
- ii. Forecasting future growth pattern / trends and determine their implications.
- iii. Preparation of proposal for the revised master plan with a view to control and direct overall ICT to an optimal strategy up to 2040.
- iv. Preparation of detailed action programme for Master Plan of Islamabad 2020-2040.

The Consultants are expected to conduct following studies for review and preparation of Master Plan to identify the existing situation and future forecasting:

- a) Long range regional plan
- b) Framework for Islamabad and Rawalpindi
- c) Islamabad master plan 2040

7.3.1 Long Range Regional Plan (LRRP) 2050

- i. Key Diagrams illustrating Options for Strategic Spatial Development.
- ii. Assessment of the Spatial Options by applying Sustainable Development criteria.
- iii. Institutional and Implementation Requirements.

7.3.2 Framework for Islamabad-Rawalpindi Metropolitan Urban Plan (FIRMUP) 2050

- i. Structure Diagrams showing Intensification, Extension and Multi-Nodal Metropolitan Development Patterns along with Trunk Infrastructure alignments and capacities.
- ii. Assessment of the Development Patterns by applying Sustainable Development criteria.
- iii. Institutional and Implementation Requirements.

7.3.3 Islamabad Master Plan 2040

Following broad guidelines and steps are suggested for the master plan of Islamabad till 2040

I. Natural Assets Inventory and Assessment

- a) Maps of Hydrology, Springs, Natural Streams, Wetlands, National Parks, Game Reserves, Wildlife Sanctuaries, and so on in ICT.

GOVT. OF PAKISTAN

- b. Identification of Threats to above and Proposed Protection and Enhancement Measures.
- ii. Cultural Assets Inventory and Assessment
- a. Maps of Archaeological Sites, Art Galleries, Exhibition and Parade Grounds, Iconic Buildings and Public Open Spaces, Libraries, Museums, Sports Facilities, tourism attractions and so on.
 - b. Proposed Protection and Enhancement Measures.
- iii. Demographic Studies
- a. Conduct demographic survey of sample population of entire ICT focusing on age, gender, urban, rural, population, livelihood, tenancy, utilities available, income level, education etc.
 - b. Analysis of the existing population distribution patterns across ICT, and future Population projections under high, medium and low scenarios, by age, sex, and urban and rural residence in ICT.
 - c. Projections of groups with specific interests, such as cohorts seeking higher education, persons with special needs, and so on.
- iv. Demand Forecasts under the demographic scenarios
- a. Livelihoods by economic sector and activity.
 - b. Housing needs and land requirements under high, medium and low FAR and plot coverage. Analysis of existing Government accommodation and future needs.
 - c. Education infrastructure needs under public, private sector and mixed supply.
 - d. Health care, community facilities and utility infrastructure needs by levels and by sector.
 - e. Water supply with and without demand management, conservation, rainwater harvesting, and recycling.
 - f. Sanitation and effluent treatment under centralized and decentralized options.
 - g. Solid waste management under traditional and innovative approaches.
 - h. Trips and traffic generated by mode under compact/multiple use, sprawl and multi-centered metropolitan development patterns.
 - i. Communications (transport, electronic) infrastructure needs under different scenarios.
 - j. Energy needs under different scenarios and examine possible innovative options (smart grid, renewable energy production, etc.).
 - k. Local food production under traditional and innovative approaches (e.g. urban agriculture, etc.).
 - l. Local economy, employment and industrial development options under different scenarios.
- v. Preference and Acceptability Studies
- a. Preferences for housing types among Islamabad youth and likely migrant groups (single and block units, walk up apartments, high rise towers, etc.) in residential and mixed use sectors.

GOVT. OF PAKISTAN

- b. Preferences for neighborhood/central recreational facilities among children by gender.
- vi. Urban Design Studies
- a. Explore urban design options under different scenarios of densification for the existing and future built-up area (central / commercial areas and sectors - new ones and regeneration of existing sectors) with the concept of 'low-rise, high density, compact and mixed-use development'.
 - b. Analyze and assess the potential and value of such urban design options to address challenges in a multi-dimensional way: e.g. increase capacity for absorbing demographic growth in a sustainable way, mitigate sprawl, increasing affordability, increasing revenue / tax base for improving and enhancing infrastructure and services, increasing urbanity and proximity in the urban area, quality of public spaces and social cohesion, protecting the environment and green open spaces, and so on.
- vii. Finance and Value Capture Studies
- a. Market prices for land and housing.
 - b. Willingness to pay/willingness to accept by income classes for housing, water supply, sanitation, and solid waste management services.
- viii. Institutional and Organizational Capacity Building for Master Plan Implementation
- a. Review Islamabad and CDA laws, rules, regulations, and by-laws, and propose amendments therein.
 - b. Proposals regarding institutional mechanisms and organizational capacity building for implementation of the Master Plan, Detailed Action Programmes, and Regulations.
- ix. Models of Re-Development Proposals for Katchi Abadis and slums and unapproved settlements.
- x. Seismic and Micro zonation Study
- a. Identify fault lines
 - b. Impact of fault lines on the existing and future development of the city.
- xi. Flood analysis study
- a. Flood profiling
 - b. Identification of maximum flood level
 - c. Climate change
- xii. Based upon the findings of the aforementioned reviews and analysis, the consultants shall develop a list of strategic issues as part of the Master Plan review.
- xiii. The Consultants shall provide action programme to address the strategic issues for next 20 years. The detailed action programmes must address the following issues:
- a. Strategy for possible regularization of illegal and unauthorized construction and measures to address haphazard urban sprawl.
 - b. Commercial area up gradation using 'compact, high-density and mixed-use' urban design approach.
 - c. Trunk infrastructure improvement plan.
 - d. Sustainable supply and management of water, energy, and food systems at

GOVT. OF PAKISTAN

- different scale levels (household and neighborhood to metropolitan and regional).
- e. Community facilities including parks, playgrounds, graveyards etc.
 - f. Institutional facilities improvement including education, health, social and cultural buildings.
 - g. "Comprehensive Mobility Plan" for the multi-modal development of pedestrians, bicycle, mass transit and vehicular traffic infrastructure. The plan shall also meet the transportation requirement including identification of terminals for various modes of transportation.
 - h. Sustainable Urban design of new and existing sectors (regeneration).
 - i. Tourism development plan including archaeology, art galleries, museums and entertainment centres.
 - j. Detailed Plan for environmental management focusing on solid waste management, protection of natural streams and improvement of air quality.
 - k. Development of smart and sustainable plan incorporating energy efficiency.
 - l. Climate adaptation and Disaster Risk Management Plan.
 - m. Recommendations for conservation and enhancement of local agriculture, flora and fauna.
 - n. Institutional strengthening framework for implementation of the Master Plan.
 - o. Financial Plan including enhanced revenue generation for implementation of the Master Plan.

xiv. The consultant shall also review and propose amendments to the existing laws, rules, and regulations for implementation of the proposed Master Plan.

xv. The Consultants shall coordinate their work with different local agencies /authorities of the area for understanding and assimilating their view point towards formulating their proposals. The consultant shall conduct public consultation with general public, technical experts, developers, builders, media, civil society, ministries, local and national political representatives, NGOs, international organizations etc. The consultation may be held in the shape of conferences, workshops, talk shows, meetings etc. In formulating the future policies opinions of stakeholders may be incorporated.

xvi. Within 15 days from the date of award of the consultancy services, the consultant shall submit a detailed work plan for approval for completion of assigned work within the stipulated Time Period and shall also establish office facilities in Islamabad. The consultant shall also submit Monthly progress report to the Client showing progress of various planning activities.

xvii. The Consultants shall develop three (3) alternative planning proposals with the recommendations for submission to the Client.

xviii. Based on the approved proposals the consultant shall prepare Master Plan, Regulations and Action Programmes incorporating all the pertinent details acquired in the previous stages of the study.



- ix. The Consultants shall engage specialized firms for any aspect for which they do not possess the requisite expertise. The cost of such services shall be borne by the Consultants and it shall be deemed to be included in their financial proposal.
- x. The consultant shall develop a plan for community and stakeholders engagement during the preparation of master plan.
- xi. The Consultant should specify the number of public meetings, open houses, workshops or other events to be held during the project process.
- xii. The consultant shall give presentations and attend meetings with citizens, developers, elected officials and other stakeholders during the planning process.

7.3.4 Time Period

The final proposals and documents shall be completed and submitted within the following Time Period from the date of award of consultancy services:

- | | |
|-------------------------------------|--|
| a. Submission of Preliminary Report | 60 days |
| b. Submission of Draft Final Report | 320 days |
| c. Submission of Final Proposal | Within 45 days of the approval of Final Draft Proposal |

