Challenges of Implementing Urban Master Plans: The Lahore Experience

Rizwan Hameed and Obaidullah Nadeem

Abstract—Master plan is a tool to guide and manage the growth of cities in a planned manner. The soul of a master plan lies in its implementation framework. If not implemented, people are trapped in a mess of urban problems and laissez-faire development having serious long term repercussions. Unfortunately, Master Plans prepared for several major cities of Pakistan could not be fully implemented due to host of reasons and Lahore is no exception. Being the second largest city of Pakistan with a population of over 7 million people, Lahore holds the distinction that the first ever Master Plan in the country was prepared for this city in 1966. Recently in 2004, a new plan titled 'Integrated Master Plan for Lahore-2021' has been approved for implementation. This paper provides a comprehensive account of the weaknesses and constraints in the plan preparation process and implementation strategies of Master Plans prepared for Lahore. It also critically reviews the new Master Plan particularly with respect to the proposed implementation framework. The paper discusses the prospects and pre-conditions for successful implementation of the new Plan in the light of historic analysis, interviews with stakeholders and the new institutional context under the devolution plan.

Keywords—City District Government, Implementation of plan, Lahore Development Authority, Master Planning.

I. INTRODUCTION

MASTER plan is a tool to guide and manage the growth of cities in a planned manner. Its origin lies in the English Town and Country Planning Act of 1947. While it has long been discarded in UK, the Master Planning approach is still being followed in many developing countries including Pakistan. Unfortunately, Master Plans prepared for several major cities of Pakistan could not be fully implemented and Lahore is no exception. This paper provides a detailed account of the inadequacies of preparation and implementation of master plans for Lahore. It also discusses the latest Integrate Master Plan for Lahore-2021 [1] and provides a prognosis for its successful implementation. The methodology entails review of literature on master planning concept, critical review of the plan making process and implementation frameworks of master plans for Lahore, and interviews with officials of the concerned agencies and eminent planners.

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The next two sections discuss the concept of master planning and tools for implementation. This is followed by a brief historical account of master planning in Pakistan. The experience in case of Lahore about preparation and implementation of master plans is then presented in an analytical manner. The next section discusses the progress and prospects of successful implementation of the latest Integrated Master Plan for Lahore. The final section presents the conclusions.

II. MASTER PLAN AS A FRAMEWORK TO GUIDE AND MANAGE URBAN GROWTH

Planning consists of making choices among the options that appear open for the future, and then securing their implementation, which depends upon allocation of necessary resources [2]. All this planning exercise takes the form of a document called master plan which is one of the important tools to guide and manage future growth of the cities in a planned manner. Since its introduction in UK under the Town and Country Planning Act 1947, master plan has been widely prepared for many cities of both the developing and developed countries. It is a long term plan and usually prepared to guide the future growth of a city for the next 20 years mainly consisting of a report, land use maps, and programme of action. Conceptually, master plan is based on study of existing situation of each and every component of a city comprising land use, socio-economic and other facilities' surveys, based on analysis of existing situation, forecasting of future trends, and finally making proposals for the growth and management of the city.

This concept of planning prevailed in UK until the publication of Planning Advisory Group (PAG) Report in 1965, which suggested a new type of plan referred to in the report as development plan comprising of structure and local plans [3]. Although Master planning is an outdated concept replaced by structure planning (and more recently by unitary planning in UK), yet it is still being practiced in many developing countries including Pakistan. Reference [4] identifies various reasons why despite of several weaknesses master planning approach continue to dominate the urban planning systems of many developing countries. These include: professional training and ideology of planners at the top of their profession emphasizing planning standards difficult to attain in real world situation; vested interests of donor agencies, consultants, professionals, administrators, city managers, and politicians; and inappropriate legislative basis for planning in terms of plan preparation and implementation.

III. TOOLS FOR IMPLEMENTATION OF MASTER PLANS

Only the preparation of master plan for a city does not ensure implementation of the proposals as conceived by the plan. A comprehensive implementation framework based on judicious allocation of financial and institutional resources in a coordinated manner is a must for the successful implementation of a plan. After completion of all the elements of the plan, special attention is needed to focus on implementation tools. These tools include legal protection of the plan, capital improvement programme, zoning regulations, land sub-division regulations, building regulations, and urban renewal programme [5]. Other tools include tax policy, institutional re-organization, and purchase of land for public purposes, incentives for private sector and various other specialized tools to deal with particular elements. Effective utilization of the full range of implementation tools increases the likelihood that the development proposals of the plan will be implemented. However, the plan making and implementation is a continuous process and not a one time activity as indicated in fig. 1 (see Appendix-A).

IV. MASTER PLANNING IN PAKISTAN – A HISTORICAL PERSPECTIVE

A. Legal Framework

There has been no Town and Country Planning law at national level in Pakistan. In the beginning, the only legislation with provision for the preparation of master plans by local councils was the Municipal Administration Ordinance (MAO) 1960. However, this Ordinance did not say anything about plan sanctioning and implementing authorities. Nor it contained any provisions requiring the revision of the plans as and when needed. The MAO 1960 was replaced by Provincial Local Government Ordinance (PLGO) 1979. It simply carried forward the provisions of MAO 1960 about master planning in almost the same words. Like the MAO 1960, only the urban local councils were required to prepare master plans for their jurisdiction under the PLGO 1979 and it was also not mandatory to do so. Thus rural areas of the country received no planning attention even under this Ordinance. However, it was in 1997 when the rural local councils were also given a nonmandatory task to prepare and implement master plans for areas under their jurisdiction. Unfortunately, none of the rural local councils could prepare any master plan due mainly to lack of interest of decision makers, and weak institutional capacity.

Recently, the Local Government Ordinance 2001 has replaced the PLGO 1979 as part of the devolution plan of the current military regime. Under the 2001 Ordinance, a new system of Local Government has been established, creating three tiers of local government administration. Each province has been divided into Districts by eliminating the previous rural-urban divide. Each district comprises a few Tehsils/Towns which are again divided into areas of Union Councils. Staff at each administrative

level has been appointed by abolition and merger of different existing institutions functioning at provincial and local levels, for better governance at the local level.

Thus the Tehsil Municipal Administrations (TMA) has replaced the urban (e.g. Municipal/Town Committees) and rural (e.g. Zila Councils) local councils. All the TMAs in a district are administratively linked with District Government. However, in case of provincial capitals, a City District Government (CDG) has been established by dividing the city into different Town Municipal Administrations. Under the 2001 Ordinance, all the TMAs are required to prepare a master plan for their respective areas and get it approved from their respective Councils. However, this Ordinance does not provide for spatial planning at the district level.

Provisions for master planning can also be found as one of the function of various development authorities or planning agencies in their respective Acts / Ordinances under which these authorities or agencies were created primarily in large cities. For example, these include Karachi Development (KDA) Authority Order 1957, Lahore Development Authority (LDA) Act 1975, and Quetta Development Authority Ordinance 1978. Until recently these development authorities have been working in parallel with local government institutions often with overlapping jurisdictions and duplication of planning powers. Since the reorganization of local government in 2001, these development authorities have been made part of the District Government but as a separate entity.

B. Preparation and Implementation of Master Plans

Recognizing the need to arrest the ugliness and haphazard growth of big cities of Pakistan and to guide the future development in a planned planner, the Government of Pakistan envisaged in the second five year plan (1960-65) the need of preparation of master plans for eleven major cities in the then West Pakistan. Lahore being the provincial metropolis of the biggest province topped the list of selected cities. Hence, the preparation of Master Plan for Greater Lahore marked the beginning of master planning in Pakistan in 1961. The second Master plan was prepared for Karachi during 1970 to 1974 [6]. Afterwards a number of master plans have also been produced for various cities of the country including, for instance, Quetta, Peshawar, Rawalpindi, Faisalabad and Multan. A brief review of some of these master plans suggests that these have adopted the most conventional notion of planning process by Patrick Geddes [7], that is,



Fig. 2 Planning Process by Patrick Geddes

Most of these plans were prepared with foreign assistance. Besides, a large number of what may be termed as minimaster plans have also been prepared under the name of Outline Development Plan (ODP) using local technical and financial resources. For instance, in case of Punjab province, the defunct Housing and Physical Planning Department

(Recently reorganized as Punjab Housing and Town Planning Agency (PHATA) at the provincial level) has prepared around 125 ODPs for various towns of the Punjab. Similarly, the Project Management Unit (PMU) of Housing and Physical Planning Department undertook 'Feasibility Studies and Urban Master Planning of Ten Cities of Punjab' Project during 1993-94 through a consortium of foreign and local consultants under World Bank funded Third Urban Development Project [8]. More recently, a new master plan for Lahore titled 'Integrated Master Plan for Lahore – 2021' (IMPL) has been approved.

Whatever the institutional set up and plan preparation approach have been, the dilemma is that all these types of plans could not be and still are not being fully implemented [9]. Hence, billions of rupees, time and human resources are wasted on this master plan making exercises in the country. And there seems to be no end to it. For instance, various sections of the Provincial Local Government Ordinances promulgated in 2001 provide for preparation of master plans for areas under every Tehsil/Town Municipal Administration (TMA) in all the provinces. This is encouraging and does point towards intention of the Government to manage and guide the growth of urban and rural settlements in a planned manner. But lack of implementation of the earlier plans really poses a challenge for all the stakeholders particularly for the concerned government agencies and the professionals involved in the plan making process to avoid failures of implementation with the new plans. A thorough investigation aimed at determining the root causes of implementation failure and pre-conditions for the successful implementation of master plans is need of the hour and can be helpful for improving master planning in Pakistan in the years to come.

V. MASTER PLANNING-THE LAHORE EXPERIENCE

Lahore is a metropolitan city with the administrative status of a provincial seat of Pakistan. It is located on a flat alluvial plain on the left bank of River Ravi. The present extents of Lahore Metropolitan Area (LMA) cover 2306 sq. km. currently inhabiting approximately over 7 million human beings. Owing to its strategic location and being a hub of civic and business opportunities, Lahore is also facing enormous pressure of physical development and land speculation. Several efforts have been made by various development controlling agencies to arrest the haphazard development and growth of the city. For this purpose, three master / structure plans have also been prepared since 1966 to manage and guide the growth of the city in a planned manner. But, disintegrated development, inefficiency and acute shortage of urban infrastructure and services present a complex scenario in the presence of plans, development agencies and community leaders. In order to find out the weaknesses in the plan preparation and root causes of lack of implementation, an analytical review of all the major development plans prepared for this city is presented below.

A. Master Plan for Greater Lahore – 1966

On the recommendation of Second Five Year Plan (1960-65) of the Government of Pakistan, the preparation of Master Plan for Greater Lahore was started in 1961. For this task a master plan committee was set up by the Punjab Government realizing that neither the Lahore Municipal Corporation (LMC) nor the Lahore Improvement Trust (LIT) was equipped to undertake this job. This plan preparation process took five years and was submitted to the Provincial Government for vetting and approval in 1966. However, it was not until 1972 when the Master Plan, after remain pending for more than six years due to administrative bottlenecks and legal lacuna, was sanctioned by the Punjab Government. By the time this Plan came into force on 1st September 1972, the circumstances had changed and the data on which its proposals were based got outdated. Further, unplanned development continued to take place in the areas proposed in the Master Plan for planned development. So excessive delays in approval rendered the Master Plan outdated by the time it was put into operation and this became the key reason due to which this Plan could not taste the flavour of successful implementation. A critical review and interviews of concerned professionals indicate following weaknesses in the preparation process and constraints involved in implementation of this Plan:

- Land use plan for the city was prepared using old settlements maps of 1939-40 as base maps and land use information was updated only through partial land use surveys.
- Majority of the members of the Master Plan Committee were bureaucrats. Very few technical experts with only five town planners participated in the studies and plan preparation process.
- Analyses of the existing situation and proposals were predominantly based on secondary data, which led to unrealistic projections for future requirements.
- No formal public participation seems to be ensured except socio-economic surveys during the plan preparation process.
- There were no adequate numbers of planners both in the Lahore Municipal Corporation (LMC) and in Lahore Improvement Trust (LIT) to understand, interpret and implement the Master Plan.
- The MAO 1960 lacked appropriate provisions for the sanctioning, implementation and updating of Master Plans. Hence, without effective legal powers for implementation, the 1966 Master Plan proved to be of no practical value. It is worth noting that the 1966 Plan itself commented on the absence of appropriate legal cover for Master Plans in the MAO 1960 and called for rectification of this lacuna but to no avail [10].

The Master Plan emphasized on the creation of single planning authority out of Lahore Municipal Corporation (LMC) and Lahore Improvement Trust (LIT) to manage and guide the development of city and act as custodian of the Plan. However, after three years LIT was transformed into Lahore Development Authority with functions and powers similar to LMC. The LMC continued following the already out-dated Plan. But LDA soon perceived that the Master Plan was not useful to it and got prepared in 1980, a so called Structure Plan under the title of Lahore Urban development and Traffic Study (LUDTS) and started following it [11]. The LMC, which was controlling most of the built-up parts of Lahore, however never owned and implemented this new Plan. Thus the city of Lahore was having two separate plans been followed by two different organisations with overlapping functions and territories and having no appropriate mechanisms for coordination. This situation has improved only recently following the approval of the new Master Plan for Lahore (see sections V-C).

B. Lahore Urban Development and Traffic Study –1980

The LUDTS was conducted as a joint team of foreign and local consultants for LDA. The study was financed by a credit from the International Development Agency (IDA), World Bank. The intention of this urban planning study was to provide a structure plan or guiding framework to act as a background for action programmes in the metropolitan areas of Lahore for 20 years time horizon (1981-2000). The justification given for this 'Structure Plan' was that the Master Plan -1966 was drafted on the basis of information collected almost a decade earlier. This study declared the Master Plan as an inadequate document for rigid adherence and implementation.

The LDA started implementing the Structure Plan after it was ready. It would be interesting to note that the said Plan itself had no legal status except as a guiding document for LDA. Further, a critical account of preparation process and implementation of this Plan and interviews with concerned officials revealed the following facts:

- Like the 1966 Master Plan, the new Structure Plan was also based on incomplete land use surveys and using very little amount of primary data.
- Those involved in the plan preparation process stated that people were not consulted while formulating the plan's policies for future development. Hence, citizens of Lahore do not own the plan and even the majority remained unaware about the existence of any such plan.
- Since the LMC continue following the outdated Master Plan in its areas, the proposals of 1980 Structure Plan for the areas under LMC were never implemented with the exception of a couple of

- projects proposed by the Structure Plan under its 5 year investment programme and for which donor funding was available.
- LDA was not provided with sufficient financial resources to acquire land for implementation of proposed development schemes nor even to meet its own expenditures. The LDA really started to feel financial crunch from 1985 onwards after the repeal of Land Acquisition (Housing) Act, 1973 and the restoration of Land Acquisition Act 1894, requiring payment of market value on compulsory acquisition of land to the private land owners. As a last resort to generate revenue for its survival, LDA started allowing conversion of residential properties into commercial against lofty fee under the umbrella of commercialization policies. By doing this LDA has been violating its own planned residential schemes and encouraging establishment of unplanned commercial ribbons.
- Since its inception, LDA has been facing shortage of planners and other technical staff to undertake implementation, monitoring and review of Structure Plan. Limited staff available with LDA has been engaged in merely processing applications filed with the Agency for building plan approval.
- Because the 1980 Plan had been formulated on Structure Plan approach, local plans in the light of objectives of this plan should have been drawn by the LDA. But no local plan has been prepared during the plan period and ironically, the high officials of LDA claim every housing scheme as a local plan.
- The successful implementation of 1980 Plan appears to be development of private housing schemes toward south of Lahore along the proposed direction of the said Plan. But these housing schemes present a scenario of disintegrated development as these are "...scattered and their linkages in terms of trunk infrastructure are missing" [12]. However, the right-of-way of several of the major roads proposed by the Plan and called as Structure Plan Roads passing through various public and private housing schemes in the south of Lahore has been secured.
- The 1980 Plan vested LDA with the responsibility to lead the process of implementation in a coordinated manner. To this end, the Plan proposed comprehensive measures under inter-agency coordination programme with the view to initiate and sustain a coordination process between agencies. However, those measures could not be fully implemented and lack of coordination seriously hampered the effective implementation of the Plan.

C. Integrated Master Plan for Lahore-2021

As the 1980 Structure Plan was drawing close to expiry in the year 2000, the LDA realised the need for the preparation of a

new Plan for Lahore and entrusted this task to a local consulting firm in 1997. The first draft of the new Plan was completed in July 1998 and the consulting firm submitted it under the title 'Integrated Master Plan for Lahore-2021' to LDA for comments and review. The draft Plan received severe criticism on various accounts not only from the concerned staff of LDA but also from technical experts, eminent professionals and academicians. The consulting firm revised the Plan in the light of numerous comments and submitted the revised version to LDA in November 2002. During this process, the status of LDA and Local Government set up of Lahore changed due to the implementation of the Devolution Plan of the military regime in August 2001. A New City District Government (CDG) was set up in Lahore by dividing the city into six towns, each governed by a Town Municipal Administration. Initially, the Devolution Plan proposed merger of LDA in CDG but later, due to some political pressures and vested interests, LDA remained as a separate entity of CDG through LDA Ordinance 2002. Under this scenario, the new Master Plan had to be thoroughly revised. But after few changes mainly in the proposed institutional set up, it was approved by the Lahore District Council for implementation on October, 2004.

1) Form and Content

The form and contents of new Integrated Master Plan for Lahore (IMPL) appears to be quite comprehensive as compared to the previous two plans prepared for Lahore. It is comprised of 3 volumes of written report, an executive summary of the Plan, and various existing and proposal maps. For the first time the new Plan has given due importance to environmental issues and includes a separate chapter on `environmental concerns.'

Volume-I consists of 15 chapters on various aspects of existing scenario and 9 annexures to different chapters.

Volume-II embraces the detailed analysis and proposals aimed at creating working and living environment while improving the quality of life of the people of Lahore. It also has 15 chapters addressing different aspects of urban planning and management in the context of Lahore like development potentials and constraints, urban growth strategy, urban environment, socio-economic features, housing and transportation, community facilities and infrastructure development, institutional and financial framework, and zoning regulations. Five annexures to three chapters have also been included in this volume.

Volume-III proposes implementation phasing programme in the form of short, medium and long term plans. Financial allocations, sector-wise allocations, projects identified and public private financial split have also been included in the report.

It is beyond the scope of this paper to comment on all the policies and proposals of this Plan and to judge how far these are realistic and stand chance for successful outcome since this will require a thorough analysis keeping in view the ground realities. However, a critical review of the implementation framework proposed for this Plan has been done with the view to assess how far this will really facilitate overall implementation of the Plan.

2) Critical Review of Proposed Implementation Framework

Critical review of the proposed implementation framework of the new Plan and interviews with the concerned officials and professional town planners revealed the following:

- This plan preparation process repeated almost the same 'methodology' as was adopted for the previsions plans. It involved greater reliance on published data, minimum collection and use of primary data and inadequate participation by the general public. However, public participation has been secured through invitation of comments from various professionals and experts on the draft Plan as well as through a series of presentations made to various government agencies, technocrats, administrators and builders.
- The organizational set up and distribution of planning activities in proposed institutional framework for CDG are comprehensive and much better as compared to those conceived in the earlier plans. But, the proposed framework do not suggest specific role of LDA in implementation.
- ➤ The Plan does lay down implementation framework for planning, land use and development control. Besides, roughly 70% of the Plan's reports discuss existing data and proposals about different urban sectors such as education, health, environment, transport and infrastructure. But in the later case, the Plan neither provide for implementation mechanism for those sectoral policies which largely fall in the domain of various departments of CDG and some other government agencies nor bounds them to follow the new Master Plan.
- Coordination with some line government agencies (not fully devolved) has been emphasized but no coordination mechanism is given indicating how it should be achieved for effective implementation of the Plan. However, a good coordination mechanism for effective working relationship among the various Departments of the CDG with regards to the implementation of Plan proposals has been suggested in the form of a Master Plan Committee.
- ➤ The new Plan assigns responsibility of overall implementation with respect to land use and strategic planning to CDG and preparation of local plans and their implementation to TMAs. But there is no provision of hierarchical plan making either in PLGO 2001 or in LDA Ordinance 2002. Therefore, it is contradictory to existing legislative framework. Moreover, it clearly gives the impression to the reader that the proposed implementation framework has mixed the two different

development plan approaches viz. Master Plan and Structure Plan.

Some of the proposals contained in the Plan are generally vague and contradictory. For instance, on one hand the Master Plan criticizes the Commercialization Policy of the Punjab Government and says that commercialization in general should be discouraged and the Policy should be more stringent. But on the other hand, it identifies 133 roads of Lahore (including those roads where commercialization has not fully taken place) and recommends that commercialization should be allowed 'only' along these roads [13].

3) Progress and prospects

Interview with the officials of LDA, CDG and TMAs revealed that some progress has been achieved regarding implementation of the new Plan. For instance, a Plan Implementation Committee headed by Chairman Planning and Development has been constituted and entrusted with the task to prepare strategic plan for implementation of the new Plan in the next five years. However, it is to be noted that the said committee is different from what was proposed by the new Plan. Other areas of progress include: initiation of different projects proposed by the Plan such as those related to improvement of traffic conditions in Lahore; revision of building bylaws; and formulation of new rules for private housing schemes and commercialization.

In general the new Plan is being implemented gradually by the concerned agencies but there appears to be no sincere effort to overcome the key problem of coordination. For instance, the new Plan proposes that the CDG should be networked with the Revenue Department which is responsible for registering the sale/purchase of land and has a vital role in controlling the illegal land sub-divisions. The Plan proposes that the Revenue Department should process registration of title documents only after obtaining the permission from the concerned TMA. This will help achieving adherence of these sub-divisions to the provisions of the Master Plan. However, no such networking arrangements have been made as yet.

Similarly, actions still need to be taken regarding proposals of the new Plan to strengthen institutional capacity of the CDG and the TMAs without which the implementation of the Plan is most likely to be hampered. Further, it is vital to clarify the role of LDA in implementation of the new Plan since it is still working under its own parent law despite being made part of the CDG which has been created under a separate legislation. This institutional fault line must be sealed at the earliest to avoid complexity resulting from duplication of functions and powers between LDA and CDG/TMAs as well as splitting of resources which could otherwise be harnessed for successful implementation of the new Plan.

VI. CONCLUSIONS

The Master Planning practice in Lahore has only partially achieved the objectives of planned development. Key impediments identified relate to excessive delays in plan preparation and approval process, weak institutional set up, lack of coordination among government departments, inadequate financial resources, legal lacunas, lack of dissemination of plans, and above all lack of political will. It would be imperative to eliminate these impediments to ensure that a master plan prepared with great ambitions, time and energy could be implemented successfully. However, failure to overcome these impediments year after years for plan after plans raises fundamental questions like: should we not question the nature and style of development plan? Should we guide and manage our cities through master planning or structure planning or a combination of the two approaches? Should we go one step further and endeavour to devise indigenous type of development plan keeping in view our cultural and institutional context and socio-economic and political realities?

As far as the latest Master Plan of Lahore is concerned, some progress has been made with regards to its implementation, but a lot more concerted effort will be needed to avoid the new Plan meeting the same old fate of the earlier plans. Based on the findings of the critical analysis of the three plans prepared for Lahore, following pre-conditions are desperately needed to be instilled for successful implementation of the latest Plan:

- Rationalizing institutional framework still marred by overlapping jurisdictions and powers of LDA and CDG/TMAs.
- Streamlining legal provisions pertaining to the nature of plan, and plan approval, review and monitoring arrangements.
- Developing institutionalised coordination mechanisms particularly to link the decision making processes about budgets, and infrastructure improvement and development with those of land management. This will also help ensuring transparency as well as accountability.
- Capacity building of agencies responsible for implementation of the new Plan both, by deputing additional technical staff, and through periodic training of the staff.
- Adoption of the strategy to first prioritize the proposals contained in the new Plan and then implement them accordingly. The prioritization of proposals should be done keeping in view the real needs of the people of Lahore, resources available and capacity to implement them.
- Availability of adequate financial resources particularly for smooth and timely acquisition of land for public sector development projects.

- Generating political will to have due regard to the proposals of the new Plan through orientation/briefing to the elected representatives about the Master Plan and its role in achieving quality of life for the present and future generations, dissemination of progress of implementation of the plan, and creating awareness among the communities.
- The pre-conditions cited above are not new but what now really needed is serious thought and sincere effort to ensure effective implementation.

REFERENCES

- NESPAK and LDA., "Integrated Master Plan for Lahore-2021," Lahore Development Authority, Lahore, 2004, Vol. I, II & III.
- [2] M. Roberts, An Introduction to Town Planning Techniques, London: Hutchinson & Co. Ltd. 1974.
- [3] P. Allmendinger, A. Prior, and J. Raemaekers, Introduction to Planning Practice, England: John Wiley & Sons Ltd. 2000.
- [4] N. Devas, and C. Rakodi, Managing Fast Growing Cities: New Approaches to Urban Planning and Management in the Developing World, England: Longman Group UK Ltd, 1993.
- [5] A. K. Bahtti, Town Planning for the Third World, Lahore: Feroze Sons (Pvt.) Ltd. 1993.
- [6] M. I. Mirza, "A Review of the Master Plan for Karachi Metropolitan Region," in Proc. National Seminar on Planning for Urban Development in the Developing Countries with Special Reference to Pakistan, Lahore, 1978.
- [7] B. Philip, The Worlds of Patrick Geddes: Biologist, Town Planner, Re-educator, Peace-warrior, London: Routledge & Kegan Paul Ltd. 1978
- [8] HP & EPD., "Feasibility Studies and Urban Master Planning of Ten Cities of Punjab," Lahore, Housing and Physical Planning Department, Government of the Punjab, 1994.
- [9] W. A. Butt, "An Evaluation of Outline Development Plan with Special Reference to Gujranwala Division," M.Sc. Thesis, Dept. of City & Regional Planning, University of Engineering & Technology, Lahore, Pakistan, 1991.
- [10] H & PPD., "Master Plan for Greater Lahore," Lahore, Housing and Physical Planning Department, Government of the Punjab, 1973.
- [11] LDA, World Bank and IDA., "Lahore Urban Development and Traffic Study," Lahore Development Authority, Lahore, 1980, Vol. 1-A & 1-B.
- [12] O. Nadeem, "Impact of Linear Commercialization on Traffic Flow,"
 M.Sc. Thesis, Dept. of City & Regional Planning, University of
 Engineering & Technology, Lahore, Pakistan, 1997.
 [13] O. Nadeem and R. Hameed, "Haphazard Commercialization: A
- [13] O. Nadeem and R. Hameed, "Haphazard Commercialization: A Potential Threat to Sustainable Commercial Development in Metropolitan Cities? The Case of Lahore," in Proc. Int. Conf. on Environmentally Sustainable Development, Abbottabad, Pakistan, 2005.

APPENDIX-A

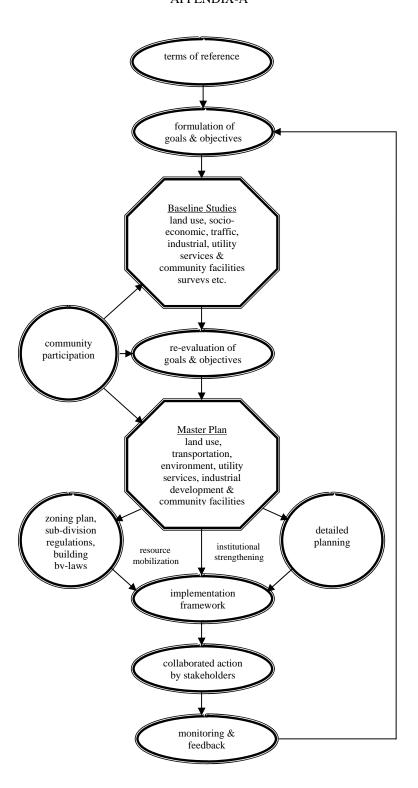


Fig. 1 the Master Planning Process