

**TOWN & COUNTRY PLANNING ORGANISATION**  
**Government of India**  
**Ministry of Urban Development**

**F.No. 83(vi) 1-100/2009-TCPO/UT (Pilkhuwa)**

**APPRAISAL OF CITY DEVELOPMENT PLAN-PILKHUWA**

Pilkhuwa Nagarpalika Parishad has submitted *City Development Plan (CDP)* for consideration under the Urban Infrastructure Development Scheme for Satellite Towns around seven Mega cities. Pilkhuwa is a fast emerging satellite town around the national capital, Delhi and has the potential for infrastructure development. With inclusive development, the town will be able to absorb additional population growth and also help in easing the burden on Delhi.

The City Development Plan has been appraised keeping in view the requirements of revised toolkit for CDP formulation. The CDP has assessed the existing scenario of the availability of infrastructure facilities and services, financial position of the Nagarpalika Parishad and provided a vision for future development. The appraisal comments have been given against each chapter clearly identifying the gaps. The CDP is required to be revised duly taking into the points raised and finalised accordingly.

## CITY DEVELOPMENT PLAN: APPRAISAL REPORT

**Name of Town: Pilkhuwa**  
**Population 66907 (2001)**

**Area 2.92 sq km (291.68 Ha.)**  
**Overall Density 148 Persons per Ha.**

SI No	Chapters/Contents	CDP Analysis	Appraisal comments	Remarks
1	<b>1 City Development framework and process</b>	It has been stated that the CDP is based on Secondary Data collected from concerned departments and reports.  Key stakeholders like ULB, Para-statal and other key departments were consulted.	It is not clear from the CDP whether CDP Policy Committee/Tech Committee/Group were constituted in the process of preparation of CDP  It is also not clear whether workshops for CDP preparation were conducted for taking into account Stakeholder views/observations.	If Stakeholder Consultations through workshops were not done, then the same may be organised.
2	<b>2 Town Profile</b>	The profile is by-and-large descriptive.	Area of the town has not been mentioned. The town profile should briefly touch upon issues of efforts for planned development with respect to the Master Plan.	Year wise area of town needs to be indicated. (refer <sup>[1]</sup> Other issues page 9)
3	<b>3 Demographic Profile</b>	The profile briefly discusses about population growth trend, density, spatial spread, sex-ratio and literacy.	CDP has not depicted the existing <ul style="list-style-type: none"> <li>• Growth trends,</li> <li>• Age sex-Structure, Work-Force participation.</li> <li>• Occupational Pattern.</li> </ul> The projected population for 2011, 2021, 2026 and 2041 need to be rationalised and justified including floating population. refer <sup>[4]</sup> page 9 Work-force distribution -2021 may be included	Population for 1981 & 1991 needs to be corrected as per Census. refer <sup>[2]</sup> page 9 Should include population density map.  Analysis of migration needs to be included.
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4	<b>4 Landuse Pattern</b>	CDP has shown existing Landuse for 2001 and 2007. It also includes a proposed Landuse for Pilkhuwa-2021 as per Master Plan-2021	The landuse analysis should provide an overview of City growth and of predominant uses/functions/activities for the horizon year.  The analysis of future landuse needs to be correlated with the availability of land vis-a-vis	A reasonably accurate Base Map of the Pilkhuwa town as per the guidelines of Tool-kit needs to be included.

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			use suitability and location.	
5	<b>5 Economic Base</b>	CDP has given an overview of the economic activities of the town.	<p>CDP needs to include analysis of broad sectors which constitute the economic base of the city viz. Primary, Secondary and Tertiary.</p> <p>CDP should also visualize future employment pattern in these three sectors.</p> <p>Should include a section on provision for 'Informal' sector.</p> <p>Should incorporate analysis on Investment, Capacity, Production, Employment and industrial infrastructure.</p>	<p>Should propose Policy, Strategy &amp; Planning measures for overall economic development.</p> <p>Strategy towards generating the 'Pull' for establishments in the region and accommodate the 'Push' from the Capital</p>
6	<b>Heritage &amp; Conservation</b>	Has not been included		Chapter on Heritage Conservation should be included.
7.	<b>6 Water Supply</b>	The CDP has made a limited analysis of the availability of existing water supply and deficit along with the future demand.	<p>CDP has laid down provision @ 155 lpcd. as per CPHEEO recommendation.</p> <p>In order to provide for the future demand, the report needs to assess the availability of surface and underground sources and their capacity. The introduction mentions perennial rivers and a network of canals in the region.</p> <p>Table 6.3 indicate details of proposed supply zones in the town and coverage of 650.32 Ha. which needs to be corroborated with the proposed landuse.</p>	<p>CDP should clearly highlight intra-town water supply distribution and should also discuss cost-recovery mechanisms to recover the operation and maintenance costs.</p> <p>CDP should also mention service level benchmarking for water supply.</p>

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			<p>CDP has not included transmission &amp; distribution losses in supply and to what extent they can be reduced.</p> <p>CDP should also include the existing coverage of area and population &amp; highlight the intra-town disparities in distribution of water.</p>	
8.	<b>7 Rain Water Harvesting</b>	The chapter only gives an overview of the techniques of rain water harvesting.	<p>CDP has not mentioned whether any rain water harvesting techniques are being adopted or encouraged in Pilkhuwa. Substantiation required in nos. / Percentage.</p> <p>There is no mention of the rate of recharge of ground water, or any plans proposed towards this end.</p>	The report needs to mention about adopting provisions for rain water harvesting in Pilkhuwa.
9.	<b>8 Sewerage</b>	CDP has indicated that there is no existing sewerage system in the town, however, 100% coverage is proposed by the end of the plan period.	<p>The systems of existing collection, treatment and disposal have to be included in the CDP.</p> <p>While the supply rate is taken @155 lpcd, the sewerage generation is taken as 80% of @135 lpcd. This requires reconciliation.</p> <p>Sewerage coverage to slums and industrial areas to be elaborated.</p> <p>CDP has not indicated plans for the cost-recovery mechanisms.</p> <p>Section 8.4.10.Strategies has a paragraph describing the spatial strategy proposed by Sonapat Municipal Council which has to be</p>	<p>CDP to include Time-Schedule of Coverage Plan. Table 8.3 of such coverage is not in sync with the calculation shown for the plan period of 2011-2041.</p> <p>CDP should also mention service level benchmarking for sewerage</p> <p>Section 8.5 on financial implication needs to be justified by estimating cost in terms of per km.</p>

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			corrected w.r.t Pilkhuwa.	
10.	<b>Drainage</b>	CDP has not included chapter on drainage.	CDP should clearly identify the areas which require strengthening of drainage network / augmentation of existing drains & nallahs.	CDP should include a chapter on Drainage.
11	<b>9 Solid Waste Management</b>	CDP has mentioned about the existing generation of solid waste, present practices and future needs of solid waste management.	<p>The Chapter should tabulate solid waste generation as per various sources</p> <p>In CDP, projected solid waste generation @ 0.6Kg/c is not in accordance with CPHEEO norms of 0.25Kg/c for medium towns.</p> <p>CDP has complete requirements framed as per the necessity of manpower, transport etc. Similarly, location of land fill sites has to be done on scientific basis correlated with the proposed site as per the Master Plan.</p>	<p>CDP should also mention service level benchmarking for solid waste management.</p> <p>Sustainable long term SWM systems along with cost recovery mechanisms are also to be discussed.</p>
12	<b>10 Electricity</b>	CDP has given the existing status of electricity consumption, demand-supply gap and tariff structure.	<p>CDP needs to discuss the strengthening of distribution, operation and maintenance of power supply. Future demand of power has to be correlated with population projection and trends in power consumption.</p> <p>A section on possibility of using non-conventional energy sources in the city may also be included.</p>	<p>Requirements and Peak Load as in Table 10.1 are not in sync with the plan period as projected for the population growth in 2026 and 2041.</p> <p>refer <sup>[3]</sup> Other issues page 9</p>
13	<b>11 Traffic and Transport</b>	CDP has discussed existing status of transport linkages, traffic facilities, characteristics and issues of traffic management.	CDP should analyse modal split of Pilkhuwa using latest data. It should clearly highlight the extent of roads which require augmentation / strengthening. It should also mention whether intra-town trip demand is catered to by the existing transport system.	CDP should include an existing Road Network map along with a map for proposed network clearly indicating the road hierarchy.

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			CDP may recommend preparation of Comprehensive Mobility Plan for the city.	Visions, Policies, Objectives, Targets and Proposals with reference to Traffic and Transport to be stated in the CDP.
14	<b>12 Social Infrastructure</b>	CDP has analysed the availability of social infrastructure and future requirement as per UDPFI Guidelines.	<p>CDP specifically indicates dependence on larger towns for technical &amp; higher education.</p> <p>In Table 12.2, health facilities in 1991 have been given however for 2001 there is no indication which needs clarification.</p> <p>Fire services, should be provided for.</p> <p>Community centres, cinema halls/ commercial complexes, crematoria should also be included</p>	<p>Map indicating the location of social infrastructure facilities may be included.</p> <p>Proposals based on additional necessary social infrastructure may be included.</p>
15.	<b>13 Services to Urban Poor</b>	CDP has made analysis of existing status of urban poor, socio-economic characteristics of slums, location and existing basic infrastructure & environmental conditions of slums	<p>Strategic interventions required to upgrade living conditions in slums need to be highlighted.</p> <p>Economic and dwelling characteristics of slums and implications of informal sector economy for other urban poor may also be included.</p>	Identify other Investment needs to provide basic services for the poor.
16.	<b>14 Financial Profile</b>	The existing financial status of Pilkhuwa NPP in terms of income and expenditure has been discussed.	<p>From the analysis it is evident that the ULB is in a poor financial position.</p> <p>Hence, CDP should also undertake an assessment of revenue sources under all heads to explore areas of possible increase in tax &amp; non-tax revenues for the Nagarpalika Parishad.</p> <p>Against the expenditure of Rs 51.16 lakhs, Rs</p>	<p>Table 14.1 gives the Income &amp; expenditure details from 2004-2009.</p> <p>Another table should give the break-up of income from various sources in percentages to identify the constraints and prospects.</p>

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			10.79 Lakhs has been shown as income. This needs clarification that how Nagarpalika Parishad is coping with such deficit.	
17.	<b>15 Urban Environment</b>	CDP has mentioned about areas of environmental pollution - air, water, noise and land	CDP has not mentioned the extent of air, water, noise and land pollution in quantitative terms which may to indicated.	CDP to Formulate Policy with Strategy for preservation, conservation & improvement proposals.
18.	<b>16 Disaster Management</b>	CDP has included description about various types of disaster.	It would be desirable that CDP mentions about the areas which are vulnerable to disasters.  It may also be mentioned whether the city authorities have adequate machinery in terms of manpower and equipment to cope with emergency situations on account of both natural and manmade disasters.	CDP may recommend Fire and rescue services.
19.	<b>17 Vision</b>	Vision has been discussed in terms of Strength, Weakness, Threats and Opportunities (SWOT) which is by and large descriptive. It also discusses Investment Plan for the envisaged planning period.	VISION for a town has to be a long term perspective <b>which should strive for excellence in infrastructure and service delivery in a sustainable manner. However, it must meet the aspirations of the people at large.</b> Vision must describe that how city can ensure competitiveness.  The Investment Plan has to be correlated with resource generation so as to enable the Nagarpalika Parishad to assess the various options of cost recovery.	Investment schedule for the plan periods should be in sync with the sectoral plan projections.
20.	<b>18 Plan Monitoring and Review.</b>	CDP discusses about Plan monitoring and review.	CDP needs to mention the institutional mechanisms which may regularly monitor the investments and implementation of the plan	

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			proposals so as to ascertain the mismatch in the provision of infrastructure and services.	

Other issues that need to be considered and incorporated:

1. The area covered in the Pilkhuwa NPP as recorded in different sections of the CDP document are as follows:

As per Landuse 2001	: 291.68	Ha
As per Satellite image NRSA, 2007	: 9267	Ha
As per Landuse 2007	: 1188.88	Ha
As per proposed Landuse 2021	: 2838.99	Ha
Proposed Zones of Water Supply	: 650.32	Ha

2. The Population record for the two years of 1981 and 1991 reported in the document as 37735 and 50218 respectively. However, as per Census, it is 37884 and 50162.
3. Projection of Population has been said to be done on the base year of 2011 extrapolated till 2026 and 2041, while the NCR Plan has been formulated for horizon year 2021. Hence many occasions of reference to the Regional Plan have resulted in a difference of projection and plan formulation between the different sectoral plans of the CDP.
4. In exercising the rationale for Population Projection, a 10% floating population has been added beyond the projected figure by Geometric projection. The factors influencing the 'Floating' figure have not been supported by any of the theories of Migration, Tourism or Pilgrimage.