## MIXED (AB)USE

## IMPLICATIONS OF MIXED USE DEVELOPMENT IN THE CITY

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MIXED LANDUSE DEVELOPMENT Source: TPG Town Planning and Urban Design

Mixed Land use refers to co-existence of more than one land use on a common ground, be it a floor, building or street.

Mixed use has been a part of our cities since historic times. It is a pattern, how our cities and communities grow. It has been globally proven that mixed use development cuts down on travel time, cost and fuel consumption by bringing facilities closer. It is a potential tool for sustainable development. Therefore cities world-wide are publishing toolkits and guidelines to develop and redevelop mixed use areas. Mixed Land use as development pattern and planning strategy will therefore be a major issue in the future of cities and for Indian urbanization.



Source: www.slideshare.com

NOW: present situation of historic mixed Draft redevelopment plan for Special area, REPL 2012

The point of concern is the way mixed use development is taking shape in our cities. As mentioned earlier cities all over the world are developing detailed guidelines to introduce mixed use while in cities like Delhi mixed used has been rather permitted on a 'what is where it is' basis.

The study of four different mixed use areas led to the conclusion that the type and intensity of mixed use determines the nature of the problem and its magnitude



AS A COMPARATIVE: mixed use streets in western countries



BUILDING CONST MAT/ AUTOMOBILE REPAIR 📃 HH Industry

Lajpat Nagar has a mix of mostly retail with residences, and faces problems related to vehicles. The excess of vehicles leads to air and noise pollution, which further causes health problems. It causes congestion on the roads due to which emergency vehicles like ambulances and fire brigades are delayed.





Noise Level in Different Land Uses Source: Status of Ambient Noise Levels in Delhi, CPCB, 2006

> The first recommendation is an integrated planning for new upcoming mix used areas.

> The guidelines include all possible aspects like setbacks and landscaping to cut down noise, ground setback for parking, rainwater harvesting and solar power for environmental protection.

> Secondly developing an assessment methodology for infrastructure on streets, which have been notified as mixed use, is recommended. For this assessment a demand-supply equation for the present and future situation is the best tool.

> In Naraina the current capacity of Dhalos meets the generated waste but in 2021 more supply will be needed. In the case of water, the present demand is higher than the supply thus water supply needs to be augmented immediately before giving permission to more non-residential establishments.



Naraina has a mix of residences with guest houses, nursing homes and banks. It faces problems related to infrastructure due to the fact that activities like guest houses and nursing homes consume more water and generate more waste than a residence.



NARAINA: Use Premises 2008

NARAINA: Use Premises 2013



Source: Standrads from cpheeo and urbanindia.nic.in



For commercial spaces required in an area, a **need based calculation** is proposed as the best option. Based on this calculation a control mechanism has to be developed to prevent the random and unplanned establishment of these spaces.

In Naraina commercial space required for the present population is adequate. With the extra commercial space provided by mixed use even more space than required is available. This amount will not be adequate for the projected population of 2021. For fulfilling the future need approximately 99 plots of 300 sqm on any floor with non-residential activity will be required.

One of the prime objectives of mixed use development is to meet the daily needs of residents. Therefore it is not enough to provide commercials spaces but planning the type of activities is required.

Thus activities like an automobile showroom - buying a car is not considered a daily need - permitted under the ambit of mixed development may defy the purpose of this type of development as a tool for sustainable and inclusive urbanization.



Solid Waste: Demand Supply Assessment

**Uttam Nagar** is a mix of residences with home based industry in the form of pottery. The major problem is the smoke that arises out of burning kilns. The smoke causes air pollution and thus health related problems. The proximity of the kilns to the houses makes them vulnerable to fire



Smoke from Pottery Kilns

**Dwarka** on the other hand is an example of planned mixed use development and here almost all the before mentioned problems are negligible. Not only does it have adequate parking spaces but it has enough space for loading and unloading activities. People commute mostly in cycle rickshaw indicating an adequate area-based transport planning. Public facilities like toilets and drinking water are provided. Separate infrastructure lines for sewerage, electricity etc. according to the commercial load have been established. This relieves stress on residential facilities. Last but not least it provides spaces for all formal and informal activities that keep the spaces alive throughout the day.

This shows that the approach toward an area decides whether mixed use is a boon or a bane.





Commercial Space

- Commercial SpaceRequired Available through planned commercial spaces Available through Mix Use
- Total Available

Need Based Calculation

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The recommendations can only be implemented if all the stakeholders have a clearly defined role to play. Service providers like the Urban Local Body keep a constant check on the demand-supply equation and develop strategies accordingly. Residents and **Residential Welfare Associations** (RWA) participate in defining the need of the area. Like RWA's are working on maintaining the neighbourhood parks similarly they can play a decisive role in deciding about mixed use streets and its components

Furthermore policies like 'Transit oriented Development' by UTTIPEC are in the pipeline, which will definitely steer the future of mixed use towards utilizing its full potential. Until then we need concrete assessment of existing mixed used streets and an action plan to manage their shortfall.

The credit for the term of "Mixed Ab(use)" goes to Dr. Mahavir, Department of Environmental Planning, SPA New Delhi









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