

# CHAPTER 1: INTRODUCTION

## 1.1 Background:

The Regional Plan of Dadra and Nagar Haveli was prepared and notified in the year 2001. The basic approach towards planning in 2001 was largely guided by three factors namely

- a) Availability of rich natural resources and forest;
- b) Dominant rural and tribal socio-economic development; and
- c) On going industrial process.

With this as the background the objective of the Regional Plan was thought on two extremes which were as follows:

- i) To allow the industrial development to increase beyond the present commitment in tune with the policy of tax concession for industries and to provide for urban infrastructure and facilities accordingly; or
- ii) To restrict the industrial development to the presently committed level and to exploit full irrigation potential with special schemes for the tribal population.

However instead of exclusively committing to either extreme option, the Regional Plan 2001 took a mid path of balanced development of the region with a fair proportion of Industrial, Agricultural and Urban activities. In order to achieve the above objective the following strategies were adopted:

- i) Considering the investment already incurred and being committed to irrigation canal network, the land under the designated command area should not henceforth be diverted to other uses as far as possible;
- ii) Permissions to set up industrial units have been granted outside the identified industrial estates and several of them are found in isolation. This leads to numerous problems for adjoining plots used for agriculture and allied activities. Such developments also cause excessive strain on the local infrastructure and therefore no fragmented industrial units be permitted;

- iii) Road network will have to be upgraded in certain sections of the region to meet the growing demand of tourist and industrial traffic;
- iv) Forest coverage at many places is found dwindling and calls for concentrated afforestation efforts. Further a scope for horticulture activities at some of the suitable location needs to be explored and participation by tribal population in it is to be encouraged;
- v) Silvassa – Dadra, Silvassa – Naroli, and Silvassa – Khanvel are the three emerging corridors along which future urban development is likely to take place at a rapid pace. This means Silvassa would be the core centre that would experience tremendous pressure on its available infrastructure and services that will need augmentation. In addition, it was necessary to develop a few more town centres to distribute the population and other economic activities.

With the above background, the Regional Plan 2001 was envisaged and the population growth rate of 3.95% was envisaged during 2001 – 2011 and 4.01% during 2011 – 2021. The population forecast as per the Regional Plan 2000-2020 is at Table 1 below:

**Table 1: Population Forecast**

Year	2001	2011	2021
Rural	160,260	226,577	319,611
Urban	042,170	072,427	124,668
<b>Total</b>	<b>202,790</b>	<b>299,004</b>	<b>444,279</b>

Source: Regional Plan 2001

For a balanced development, the employment forecast in 2021 was 88,856 in the primary sector, 62,199 in the secondary sector and 26,657 in the tertiary sector. With this kind of background, objective and projection the Land Use planning was undertaken in the Regional Plan 2001.

## **1.2 The need for Revising the Regional Plan 2001:**

It is now more than five years the first Regional Plan for the Union Territory of Dadra and Nagar Haveli was prepared according to the provisions laid in the Goa, Daman & Diu Town and Country Planning Act as extended with amendments to the Union Territory of Dadra and Nagar Haveli. During the ensuing period of five years, there have been

physical, social and economic changes which have occurred in the territory. These changes are due to several factors such as:

- i) Shift in the Govt. of India's policy: During the last five years it has been seen that the Government of India's Policy have shifted further towards liberalized economy thereby opening up the cap of the foreign direct investment and giving opportunities to NRI's for investing within our country. In order to woo the entrepreneurs, the Govt. of India have announced several schemes in different sectors of economy, a few of them are a) Integrated Textile Parks of Ministry of Textiles wherein 40% subsidy or up to 40 crores whichever is less is provided to investors; b) Special Economic Zones of the Ministry of Commerce to encourage exports; and c) Jawaharlal Urban Renewal Mission Scheme of the Ministry of Urban Development in order to bring Administrative and Structural reforms in our local bodies so as to make them efficient, transparent and credit worthy in the market and simultaneously to improve the basic infrastructure in our country. The Government of India is also encouraging investment of the stake holders in various sectors of economy under the Public Private Partnership mode. All such efforts of the Government has put our economy in the fast track and is up to the concerned state governments and Union Territory Administrations to take benefit from the schemes and improve the overall economy of their concerned states and Union Territories. From this point of view, this Union Territory is not lagging behind. As a matter of fact, the Omnibus Industrial Development Corporation (A Government Undertaking) is not only setting up an Apparel Park under the Integrated Textile Park scheme of the Government of India in an area of 120 acres at Velugam, but has also submitted two SEZ proposals to the Government of India for setting up of Gems & Jewellery SEZ and IT/ITES SEZ in Kharadpada in an area totaling around 70 acres. There is also one private industrialist who has already obtained In Principle Approval of the Government of India to set up an SEZ near Surangi. This it self is an ample evidence about the impact of the Government of India policy in this territory due to its locational advantage.
- ii) Huge Development projects: Further besides the government of India's Policy, during the last couple of years there has also been tremendous development in the infrastructure front which has opened up new areas for development Some of the projects which have made structural impact in some areas and in particular our territory is the a) development of the National Highway – the Quadrilateral Connectivity of all Metros, wherein

the travel time to Mumbai and Surat has considerably reduced from 5-6 hours by road to only 2 hours at present; b) Proposed Construction of Expressway from Baroda to Mumbai will further reduce the travel time from Ahmedabad as well and shall open scope of further investment in DnH; and c) Development of a Major Port near Umergaon: The development of a major Port at Umergaon which is located at a distance of approx 30 to 40 kms from the border of our territory shall encourage exporters to invest in our territory.

- iii) High Labour Productivity and Cheap Electricity Rate: Last but not the least, the policy of the UT Administration has also given an advantage to potential investors to invest in our territory. In a recent survey undertaken (an Article published in Economic Times), our territory has been rated on top for High Labour productivity is concerned. As far as availability of electricity is concerned, it is available without major interruptions and the tariff is also the cheapest in the region.

In view of the above situation, obviously the demand for more space for industrial development have been received and further requests from the existing industries have also been received for Industrial land for their expansion. It is also likely that more big industrial groups shall invest in this territory due to its locational advantages as mentioned above. It has therefore become necessary to review the Regional Plan of 2001 and to provide space for such accelerated growth of our territory.

### **1.3 Directions of the Board**

In view of the various observations placed before the Board in its 8<sup>th</sup> Meeting, the need to review the existing Regional Plan was deliberated and it was decided that the existing Regional Plan has to be given a re-look considering the present needs and demand and emphasized that our territory should not lag behind in creating platform for economic and industrial development. Since the land use is a critical aspect for Industrial development, therefore the Regional Plan of DNH be suitably modified to take locational advantage of this territory and attract industrial growth which otherwise would go to the neighboring states. Therefore the Board unanimously resolved that the Regional Plan of DNH should be revised to present industrial development in the territory and land should not become a constraint for development. Further the Board also issued guidelines for Revising Regional Plan as follows:

- (1) As far as possible the command areas should be avoided for major conversions except for those contiguous areas which may be required

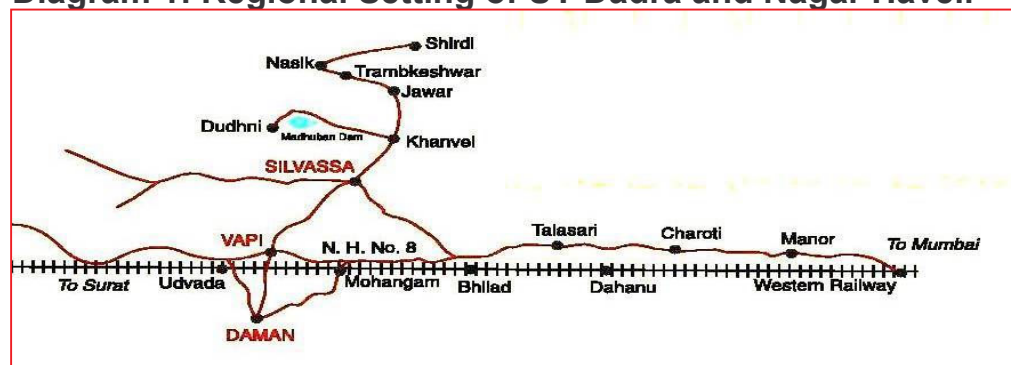
- for expansion by the existing units and thereafter consolidation of those lands which become ensconced;
- (2) There should be a contiguous approach towards development of more industrial areas in such a way that the present industrial areas are consolidated and scope for expansions should be provided which shall also help in providing appropriate common infrastructure easily;
  - (3) The new areas for development should be towards our entry points from the National Highway at Velugam, Kherdi and Naroli where there is a locational advantage and our interior areas are not much touched as far as possible;
  - (4) Only Rocky areas/non cultivable areas shall as far as possible be earmarked for Industrial and other development use; and
  - (5) The hilly areas of Dudhni, Randha, Mandoni, Morkhal etc. shall be specifically emphasized for Tourism and Tourism related purposes only and should not be touched.

## CHAPTER 2: PRESENT SCENARIO

### 2.1 Regional Setting:

The Union Territory of Dadra and Nagar Haveli is a small tribal territory located between the states of Maharashtra and Gujarat in the South and North respectively. The capital city of the Union Territory, **Silvassa** is in close proximity with three major cities viz., Mumbai at a distance of 160 Kms towards the South; Surat at a distance of 140 Kms towards North; and Nasik at a distance of 140 Kms towards East. (Refer Diagram 1)

**Diagram 1: Regional Setting of UT Dadra and Nagar Haveli**



All the three major Urban Centres are well connected by Road and Rail, which makes the Union Territory unique giving it a locational advantage compared with other cities nearby.

### 2.2 Demographic characteristics:

The population of the Union Territory as per the 2001 census is 220,490, which have increased at 59.22% decennial growth rate. Out of the total population, the percentage of Urban Population is 22.89% which has increased from a meager 11,725 in 1991 to 50,463 in 2001 thereby almost increasing by more than four times. This increase can be attributed to the Industrialization that occurred during the period. The overall density of population has also shown a tremendous increase from 282 persons per sq.km in 1991 to 449 persons per sq.km in 2001. Similarly there has been rise in the migration pattern that can be seen from the sex ratio. The overall sex ratio has shown a decline from 952 females per 1000 males in 1991 to 812 females per 1000 males in 2001. This change can be attributed to male migration to the territory from outside in search of employment etc.

## **2.3 Socio-Economic characteristics:**

The literacy rate has shown a significant improvement in the last decade. From only 40.70% literacy in 1991, it has increased to 57.63% in 2001. Similarly there has been improvement in the female literacy, which has increased from 26.98% in 1991 to 40.23% in 2001. The Workforce participation rate has almost remained constant during the decade with 43.90% in 1991 to 43.70% in 2001; although in absolute numbers there is a significant increase from 60801 in 1991 to 96333 in 2001.

## **2.4 Sectoral Development:**

### **2.4.1 Agriculture and Allied activities:**

The agricultural and the allied sector is one of the most important economies at a macro level. However in our territory, which is having an area of 491 sq. Kms, the significance is not that much felt or seen due to the fact that after the declaration of Tax Holiday for the territory, the Government of India intention was to develop this backward territory by providing tax incentives etc. However instead of encouraging such industries, which had forward and backward linkages, other kinds of industries started developing, which required better technology and highly skilled labor force. This resulted in migration of skilled labors from outside and exploitation of the local tribals. Most of the agricultural lands belonging to the tribals were purchased by middlemen and sold to big industrialists at exorbitant prices. The industries also were developed in a quite haphazard manner and most of the fertile agricultural lands eaten away resulting in loss in the agriculture sector. The total area under agriculture in 1998 was 153.64 Sq.Kms, which amounted to 32% of the total area.

### **2.4.2 Industrial Sector:**

This territory has gained in Industrialisation due to the Tax Holiday incentive provided by the union Government during the last decade. From only 411 units with an employment of 7000 in 1989-90, it rose to 835 in 1997-98 providing an employment for 17490 persons. At present the numbers of industries in the territory are 3514 providing employment for approx 47000 persons. Even if the same kind of growth is envisaged in the next decade, it is presumed that the total industries shall be approximately 7900 employing around 106650 persons in 2021.

### 2.4.3 Infrastructure:

The last decade 1991-2001 had seen the growth of this territory in terms of population, urbanization, industries, employment and ultimately leading to better quality of life. However with such a fast growth rate, the provision of infrastructure did not match the speed of development. Till date the urban area is neither having an appropriate sewerage system nor adequate drinking water supply. The secondary cities of Khanvel, Naroli, Dadra, and Rakholi & Masat are also growing tremendously which shall be requiring the basic infrastructure in the immediate future and needs to be thought immediately. The drainage system has always been very poor in the territory. This territory has experienced water logging and floods during the monsoon. Only Silvassa the capital city of the Union territory has been provided with storm water drainage system, although there are still various areas yet to be covered. The territory is also lacking in appropriate solid waste management. Recently the local body of the urban area has outsourced the collection and disposal of solid waste which is the first step towards its better management. Other areas of the territory shall need to adopt such mechanism at the earliest. From health and education point of view, the territory has certainly made an improvement. The Cottage Hospital at Silvassa has increased its bed capacity from only 70 in late 1990's to 170 at present. Under the Sarva Shiksha Abhiyan, various new schools, increasing classrooms in existing schools etc are being constructed to cater to the needs of the growing population. The Road network in the territory has always been good. All villages are provided with all season motorable roads. The Power situation also is quite adequate in the Territory. The tariff rate for electricity consumption is the cheapest compared with all the other states and the per capita consumption is the highest in this territory compared with other states. There are already plans which are in the pipeline to increase the power availability to the territory.

### **2.5 Existing Land use:**

The land use in the territory can broadly be categorized in to the following:

- Reserve Forest comprising 40% of the total area;
- Revenue land comprising 55% of the total area; and
- Remaining 5% under water bodies.

Primarily, the area available for various other activities is within the 55% of the total area which amounts to 273.54 sq.Kms, The Land use distribution of the gross and net area is at **table 2** below:

**Table 2: Land use distribution in 1998**

SI.No	Land use	Area in sq.Kms	%age to Gross Area	%age to Net Area
1	Forest	196.40	40	0
2	Revenue	270.42	55	100
	Urbanisable	8.71	1.64	3.22
	Industries	18.80	3.62	6.95
	Agriculture	160.08	32.72	59.20
	Irr Command Area	73.11	14.15	27.03
	Roads	9.72	1.87	3.60
3	Water Bodies	24.06	5	0
4	Total	491	100	

Source: Regional Plan 2020

From the above table it is seen that the maximum area in 1998 was in agriculture and Irrigation command area together comprising 46.87% of the total area of the Territory, The reserve forest in the territory is 196.4sq.kms amounting to 40% of the total area which shall remain untouched for development purpose permanently. As a matter of fact this forest cover shall always provide a breathing space to the territory in terms of environment sustainability. As far as Industrial concentration is concerned, it is quite scattered and it encompasses an area of 18.80 sq.Kms amounting to 3.62% of the total area of the territory. The Urbanisable area comprised 8.71 sq.Kms constituting 1.64% of the total gross area and 3.18% of the net area. The Irrigation Command area constituted 14.15% of the gross area and 26.73% of the net area. However the strategy of the Regional Plan 2000-2020 notified in 2001 had visualized a mediocre growth, thereby balancing the industrial and agricultural needs of the Territory. The Land use proposed in the said statutory Regional Plan is detailed below in **Table 3**.

**Table 3: Land Use as proposed in the Statutory Regional Plan 2000-2020**

SI.No	Land use	Area in sq.Kms	%age to Gross Area	%age to Net Area
1	Forest	196.40	40	0
2	Revenue	273.54	55	100
	Urbanisable	30.34	6.18	11.09
	Industries	29.18	5.95	10.67
	Agriculture	140.67	28.66	51.43
	Irr Command Area	58.47	11.91	21.38
	Roads	11.76	2.40	4.30
3	Water Bodies	24.06	5	0
4	Total	491	100	

Source: Regional Plan 2020

From the above table, the increase in the proposed area of Industrial needs was almost proportionate to the Urbanisation trend and needs of the territory. The lands under Industrial uses were rather much more scattered and consolidation was attempted in order to have an orderly and planned growth so that provision of Infrastructure would be easier. The actual Industrial development and urbanisation from 1998 to 2006 is shown in **Table 4** below:

**Table 4: Developed Area as on 2006 in Industrial and Urbanisable zones**

Name of Patelad	Industrial Area in sq.Kms				Urbanisable Area in sq.Kms			
	As on 2020	Developed as on 2006	Balance remaining	% developed	As on 2020	Developed as on 2006	Balance remaining	% developed
Silvassa	3.61	3.45	0.16	95.57	8.00	3.36	4.64	42.0
Rakholi	3.55	3.17	0.38	89.30	1.54	1.12	0.42	72.73
Naroli	5.36	4.14	1.22	77.24	4.29	1.13	3.16	26.34
Dadra	3.02	1.82	1.20	60.26	1.62	0.98	0.64	60.49
Randha	0.66	0.58	0.08	87.88	0.70	0.21	0.49	30.0
Kilwani	3.05	2.35	0.70	77.05	0.67	0.34	0.33	50.75
Dapada	2.45	1.73	0.72	70.61	1.01	0.46	0.55	45.54
Amboli	4.46	3.88	0.58	87.00	1.69	0.47	1.22	27.81
Khanvel	3.02	2.71	0.31	89.74	7.96	2.18	5.78	27.39
Mandoni	0.00	0.00	0.00	0.00	1.55	0.35	1.20	22.58
Dudhni	0.00	0.00	0.00	0.00	1.31	0.29	1.02	22.14
<b>Total</b>	<b>29.18</b>	<b>23.83</b>	<b>5.35</b>	<b>81.67</b>	<b>30.34</b>	<b>10.89</b>	<b>19.45</b>	<b>35.89</b>

Source: Town Planning Dept. and Mamlatdar's office

From the above table it is clear that, out of the total proposed Urbanisable area of 30.34 sq.Kms in the RP 2000-2020, only 10.89 sq.Kms has been developed amounting to 36% of the available area. However the Industrial lands have developed tremendously during the last five years. Out of a total area of 29.18 Sq.Kms earmarked in the RP 2000-2020, 23.83 Sq.Kms have already developed amounting to 81.67% of the available land. This shows us the growth trend of the Industries in the territory and it is expected that due to the recent policies and strategies of the Govt. of India, there shall be further growth.

## **CHAPTER 3: PROBLEMS AND POTENTIALS**

### **3.1 Problems:**

The development in the Territory has also brought in various problems, which need to be addressed in the Revised Regional Plan. The problems are:

- The industrial development in the territory has been developed in a very scattered manner and is spread in almost all the Patelads except for a few ones which are hilly;
- Due to the scattered development of industries, the administration has found difficulty in providing basic infrastructure in those area;
- Further due to the scattered growth of the industries, there has been constraints of existing industrial units to expand and there is dearth of vast Industrial zone areas where big units or SEZ's type of Industrialisation could occur;
- In certain areas there is residential development, school and other uses contiguous to the conflicting use such as Industrial areas thereby creating a nuisance to the adjoining land users;
- Over 80% of the proposed Industrial area has been consumed already within a span of five years and therefore; no large chunks of land is available for further industrialization as required under recent policies of Govt. of India.

### **3.2 Potentials:**

The Territory has also several potentials, which need to be tapped for better development and quality of life. A few of them are:

- The biggest advantage of our territory is its location. The territory as described earlier is located between two big states of Maharashtra and Gujarat. It is located at a distance of 160 kms from Mumbai; 140 Kms from Surat and 140 Kms from Nasik The proposed Umergaon port is to be developed which is located around 30-40Kms from the territory will give a further massive boost to Industrial development of the UT.

- The Territory has 40% forest cover which shall always be available as a green cover and would not be disturbed under any circumstances.
- The territory has potential for tourism development with pristine beauty and serene culture. There are several tourist resorts for tourists to relax in this serene environment. The territory has a huge water reservoir, which is being used for water recreation and other activities.
- The territory has the highest Labor productivity.
- The Territory has the cheapest electricity tariff as compared to neighboring states.
- The Road Network density is among the highest and therefore connectivity is quite adequate.

## CHAPTER 4: CONCEPT OF PLAN AND FORECASTING

### 4.1 Concept:

Based on the analysis in earlier chapters, it is imperative that new areas shall need to be developed for creating an economic activity and such activities should be developed in a balanced manner. The settlement pattern should be arranged in such a way that the population does not travel to primary city to avail of basic infrastructural facilities. There could be three alternative strategies for development. They are:

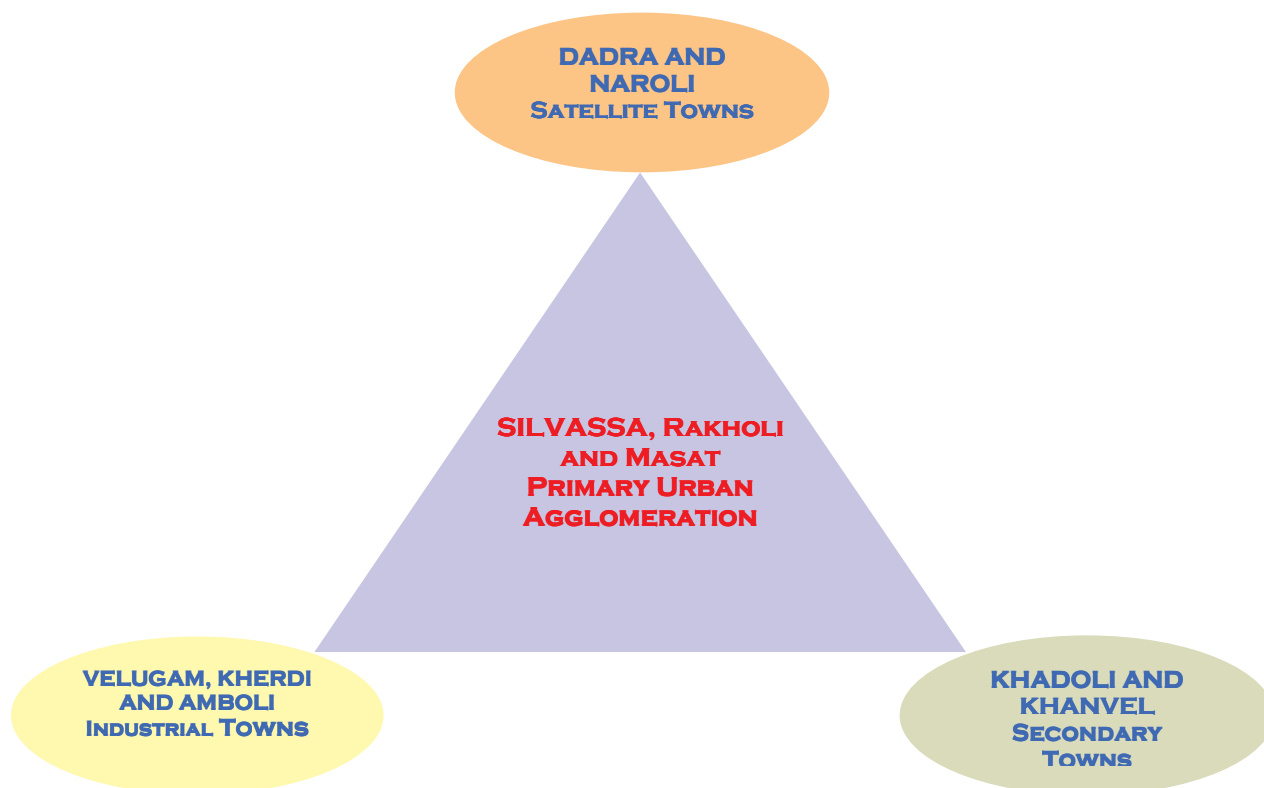
- **Intensive Industrialisation with heavy emphasis on Industrial development;**  
Or
- **Providing little of Industrial development to take care the needs of the expanding units and emphasizing on Agricultural development;**  
Or
- **Emphasis on all sectors vis.a.vis Agriculture, Tourism and Industrial Developemnt with special focus on SEZ's and Industrial Townships.**

Among the three, the third alternative seems to be the best alternative wherein areas for each sector can be clearly demarcated without having any interference or hindrance to their development due to the physical characteristics of the region. Three distinct areas can be identified accordingly. They are as follows:

- 1) Areas nearer to the National Highway No. 8 near the state borders of the territory such as Naroli, Velugam and Kherdi, which can be developed for Industrial development and certain areas in these areas can also be developed as SEZ's and for Industrial Townships;
- 2) Areas such as Dudhni, Mandoni, Randha, Silli, Morkhal, Vasona etc can be developed for Tourism purposes without disturbing their serene environment;
- 3) Rest of the areas within the Irrigation Command areas (excepting a few areas where spaces can be provided for expansion of existing Industrial units and those areas which gets ensconced due to industrial development due to which agricultural activity is not possible) and pockets outside as well can be developed under Agriculture and allied activities.

This concept shall give a balanced development to the region and the settlement Pattern can emerge as depicted in the **Diagram** below.

**Diagram 1: Concept of development**



The above Concept depicts that Silvassa, Rakholi and Masat together shall emerge as a huge Urban Agglomeration; Naroli and Dadra shall function as Secondary towns acting as Satellites to the Urban Agglomeration; and Khadoli & Khanvel shall function as Secondary Towns and Velugam, Amboli and Kherdi shall emerge as huge Industrial Townships. Tourism development shall happen in areas such as Dudhni, Mandoni, Vasona, Silli and Randha. Certain areas in Silvassa and Saily shall also develop as Institutional areas.

#### **4.2 Forecasting:**

With the above concept and the available potentials the population is bound to grow along with growth in the economic activities. The population is expected to grow in a very rapid pace and therefore Industrial Growth Potential method is adopted. Population is bound to increase due to development of Industrial Townships in Velugam and proposed SEZ at Kharadpada and Surangi. This shall also result in migration of Skilled and Semi Skilled workers from outside along with the natural increase in the population. The forecast of Population is at **Table 5** as below:

**Table 5: Population Forecasting through Industrial Growth Potential Method**

Sl.No	Total Area:	491 sq.Kms
1	Indl. Area already developed:	23.83Sq.Kms
2	Share of Indl. Area to total	4.85%
3	Number of Units (2006)	3514
4	Indl. Employment (2006)	47000
5	Employment per Unit 2006	13.4
6	Indl Area per unit	0.68 Hectares
7	Total Indl.Share in %	10.38
8	Total Indl.area	5096 HA
9	Area in SEZ & Townships	100 HA
10	Expected Units with current land excl SEZ's	7347
11	Employment in SEZ projected	35000
12	Other Indl. Employment (15 per unit)	110205
13	Total Employment	145205
14	Indl Employment is 40%, total Employment	363013
15	Local employment (80%)	290410
<b>Total Population in 2021</b>		<b>726025</b>

Thus the population is expected to grow up to 726025 in 2021 due to the proposed development of SEZ's in Kharadpada and Surangi, Textile Park and Industrial Township at Velugam. Tourism is also expected to rise drastically by the development of Golf Course, Convention Centre etc. The territory is already being projected as a destination for Marriage purposes, Leisure, Adventure and Wildlife. The Urban and Rural Population distribution is at Table 6 as follows:

**Table 6: Distribution of Urban and Rural Population 2001 to 2021**

Year	2001	2011	2021
<b>Rural</b>	170027 (77.11%)	226577 (57.41%)	274158 (37.77%)
<b>Urban</b>	050463 (22.90%)	168100 (42.60%)	451867 (62.23%)
<b>Total</b>	<b>220490</b>	<b>394677</b>	<b>726025</b>

It is visualized that the urban population shall have a boom in the ensuing period of this decade and further in the next decade. From 22.9% in 2001, it is expected to rise to 42.6% in 2011 and 62.33% in 2021.

## CHAPTER 5: LAND USE PROPOSALS AND STRATEGIES FOR DEVELOPING INFRASTRUCTURE

The proposals for land use and infrastructure are based on findings and analysis as described in earlier chapters. The land use has been arranged in such a way that there is little or no conflict among non- conflicting uses and further as described in the concept, three distinct areas for development have been identified for which the land use has been proposed accordingly. The detail distribution of the land use is described subsequently. As far as the infrastructure is concerned only the basic infrastructure is described separately whereas for other it is proposed that the concerned line departments have to take the projected population as their base and shall prepare a separate Master Plan for each infrastructure with a perspective of 2021 in sight.

### 5.1 Land use proposals

The overall land use distribution for the perspective year 2021 is at Table 7 as follows:

**Table 7: Land use Distribution 2021**

Sl.No	Land use	Area in sq.Kms	%age to Gross Area	%age to Net Area
1	Forest	196.40	40	0
2	Revenue	270.42	55	100
	Urbanisable	30.28	6.17	11.20
	Industries	50.96	10.38	18.84
	Agriculture	125.92	25.65	46.60
	Irr Command Area	50.74	10.34	18.80
	Roads	12.51	2.55	4.63
3	Water Bodies	24.06	5	0
4	Total	491	100	

From the above table it is very clear that out of the total area of the territory only 55% of land is available for development purposes. Out of this net area, the maximum area is under 65% is under agriculture wherein areas for sugarcane cultivation, multiple cropping and horticulture can be emphasized. As a matter of fact, the entire Irrigation command area, which constitutes 18.80% of the Net area, should be used for sugarcane cultivation so to provide sugarcane as raw material be utilized by the Sugar factory at Surangi. In order to facilitate the access from the Sugar cane belt to the Sugar factory a bye pass road is also proposed which when fully developed can facilitate the

growth and development of the Sugar factory. Agricultural areas such as Morkhal, Kilwani etc should be encouraged for horticultural development since there is tremendous potential for the same. At the same time there is also sufficient local demand at present, which is being catered from Nasik and other areas.

The area under Industry has increased from 29.18% in the RP 2020 to 50.96% of the gross area, which constitutes 18.84% of the Net area. As per the guidelines given by the Board, only the bordering areas such as Velugam, Kherdi and Naroli have been emphasized on Industrial Development. It is envisaged that most of the SEZ's proposed in the Territory, Textile Parks etc are proposed to be developed in these areas only. It is also visualized that due to the setting up of the Sugar factory at Surangi, there is quite a significant potential for development of ancillary units and other commercial development. Kherdi was already an Industrial area but the industries were scattered and therefore they have been consolidated in such a manner that infrastructure can be provided easily. Moreover, there is a potential for this area to further develop since the Umergaon Port is expected to be commissioned due to which export oriented units can take an advantage. Similarly, Naroli also bordering the territory has also the locational advantage and the Kumbharwada area is located very near to Jharoli on NH 8 which is at a distance of only 4 Kms. Hence this area is also provided with Industrial lands.

Combining all these areas together along with development of the Sugar cane factory at Surangi, a bye pass road has been proposed of 35 mtrs ROW so that it takes care of the entire accessibility from Jharoli at NH 8 passing through Naroli industrial area, Kharadpada Industrial area, SEZ area of OI DC at Kharadpada, proposed Airport at Luhari, Sugar factory at Surangi and Textile Park at Velugam and emanating out from Sutrakar Village of Maharashtra State and reaching NH 8. By development of this road, the newly proposed industrial belt shall be cut off from the other conflicting uses area and the traffic shall not affect the internal areas of the Territory. The other areas, which have been provided with Industrial zones, are in those areas where proposals were received from Industrial Units for their expansion. The lands, which were received for expansions are being specifically considered only for those units expansion. No other units shall be allowed to purchase the said lands. Further some areas have been put under industrial zone due to the fact that many areas were seen ensconced with already industrial units and in such areas Agriculture activities are not possible.

Patelads such as Dudhni, Randha, Kilwani, Morkhal, Mandoni etc have been proposed for Agriculture and Tourism purposes. In order to facilitate more tourism activities, the FAR has also been increased from

the present norm at 40% to 50%. This will encourage more tourism activities in these areas.

It is visualized that with such a large development of Industries, there shall also be a rise in the Population of the territory. It has been projected that the population of the territory shall exceed 7 Lakhs in the year 2021. Hence there shall be heavy requirement of housing and other infrastructure. The area of Urbanisation has not been increased and it remains almost the same as it was in the earlier RP 2001. However, the problem of increasing population has been tackled by adopting the following two strategies. They are:

- By emphasizing on housing and other infrastructure in large industrial area. SEZ's and townships shall provide adequate housing and other infrastructure as per the DC Rules within their areas designated for the said purpose.
- Similarly instead of having a horizontal spread of the towns, it is proposed to vertically develop the cities by increasing the FAR from the present 100 in the Urbanisable areas to 120 and further an FAR of 150 on roads having a ROW of more than 20 mtrs in Silvassa Municipal area, Samarvarni, Rakholi, Masat and Saily areas, thereby increasing the density of population and making easy to provide the required infrastructure.

## **5.2 Strategy for Infrastructure Development:**

In order to support the above directions of growth in the territory, the development of Infrastructure also has to be emphasized equally since without infrastructure, no locational advantage of the territory can be achieved. The most important infrastructure, which needs immediate attention, is as follow:

- Outline Development Plan and Comprehensive Development Plan: The Dadra and Nagar Haveli Planning and Development Authority shall need to prepare the ODP and CDP as per the provision of the Act immediately and their base shall be this Regional Plan. This shall ensure planned development of various micro uses and will facilitate easy provision of required infrastructural facilities.
- Road Network and Transport facilities: The territory has already undertaken a study on Roads in 1998 and based on which the ROW's of all the roads had been notified. The entire road stretches shall have to be developed in the territory based on the said notification and its amendments from time to time. There are

also certain stretches which needs to be upgraded depending upon the traffic. Hence it is suggested that traffic surveys shall have to be conducted at least every five years. It is further suggested that appropriate bus terminals shall have to be planned in all the up coming towns viz., Naroli, Dadra, Khanvel, Rakholi, Khadoli etc. Similarly parking areas have to be specifically designated in all these areas immediately. Further it has been observed that many of the roads in the territory have not been planned or aligned properly. It is therefore suggested that before implementation the widening of roads, the alignment needs to undertaken to rectify the engineering defects which are noted at present. Further in order to decongest, Silvassa, the implementation of the Ring Road is very important and further considering the projected traffic, the outer ring road of 30 mtr wide ROW and the bye pass road of 35mtr ROW which has been proposed in this Regional plan also needs to be implemented on priority.

- Power: With the increase in the population and industries, there shall be a demand for more power supply. The norms adopted in Delhi master plan are 2kw per household, which includes domestic, commercial, industrial and other requirements. The total power requirement accordingly for the territory in 2021 shall work out to 322678 kW which shall amount to approximately 350MW. The Electricity department shall have to prepare their Master Plan based on the forecasting done in this report.
- Health and Education; As far as the health and educational facilities are concerned they shall have to project their requirements based on the Norms prescribed in the Volume 1 of the Urban Development Plans Formulation and Implementation (UDPFI) Guidelines released by the Ministry of Urban Development, Government of India in August 1996.
- Water Supply and Sewerage: The basic minimum need of a town is a filtered water availability and appropriate sewerage system to dispose of the night soil. It is proposed that a consolidated Water and Sewerage plan should be prepared immediately for the whole planning area so that this issue is well addressed.
- Storm Water drainage: Any city or region should have a well-planned disposal of rainwater. This territory is prone to heavy floods during the monsoon and hence a detail technical study of storm water drainage is proposed for implementation.

# **DC RULES AMMENDMENT 2007**

**UT Administration of Dadra and Nagar Haveli  
Town & Country Planning Department**

No. TPS/105(61)/2006-07/

/07/2007

**Read :-( 1) Notification No. 13-1(39)/95/PWD-I/2000/752 Dtd. 05.07.2001.**

**NOTIFICATION**

In exercise of the powers conferred under Section-140 of the Goa, Daman and Diu Town and Country Planning Act, 1974 (Act 21 of 1975) as extended to the Union Territory of Dadra & Nagar Haveli vide Notification No. GSR-749(E) dated: 30.10.1984 by Ministry of Home Affairs, Government of India and made applicable from 01.12.1990 vide Notification No. ADM/LAW/ATP/108(7)/90 dated: 29.11.1990, and read along with the contents in the Report of the Revised Regional Plan 2007, the Administrator of Dadra & Nagar Haveli is pleased to make the following amendments/modifications etc. to the Development Control Rules 2001 as notified along with the Regional Plan vide Notification referred to in Preamble (1) above.

1. Short Title: These rules may be called as Development Control (Amendment) Rules, 2007.
2. Definitions: In these Rules, unless the context otherwise requires, the terms and expressions shall have the same meaning as indicated in the D.C. Rules, 2001.  
  
The terms and expressions not defined in those rules shall have the same meaning as in the Goa, Daman and Diu Town & Country Planning Act, 1974 (Act 21 of 1975) as extended to the Union Territory of Dadra & Nagar Haveli and the National Building Code prescribed from time to time.
3. Applicability: These Rules shall be applicable for the entire Union Territory of Dadra & Nagar Haveli till such time the detail byelaws are prepared and notified based on the Outline Development Plan and the Comprehensive Development Plan prepared by the Dadra and Nagar Haveli Planning and Development Authority which has already been constituted under Section 18 of the T& CP Act of DNH.
4. Amendment: The Amendments to the Development Control Rules 2001 shall be as follows.

**After Section 3.78 the following to be added.**

- 3.78A Chief Officer: The Chief Officer appointed by the Govt. for any Municipal Council to whom the duties and functions of the Chief Officer may be assigned within the territory.

- 3.78B Municipal Council: Any Urban Local Body formulated as per the DNH Municipal Regulations.
- 3.78C Planning and Development Authority: means the Authority formed as per the Section 18 of the T&CP Act of DNH.
- 3.78D High Rise Building: All the buildings which are 15 m. and above in height shall be termed as high rise buildings.

**After Section 7. 2 the following sub sections to be added.**

**7.2.1 Obtaining a Deemed Building Permit**

For all residential buildings with a plot area of less than 500 Sq.mtrs which shall be used for his/her bonafide Residential use only, a certificate issued by an Architect/Civil Engineer on Record of the Town & Country Planning Department certifying that the proposed building complies with the Building Byelaws shall be deemed to be a Building Permit granted by the Collector or any authorized officer for the said purpose and shall be referred to in these Building Byelaws as a “Deemed Building Permit (DBP)”. The Architect/Civil Engineer shall submit the copy of the Building Plans etc and other documents specified in Annexure 6 of the DC Rules 2001 along with **Annexure 21** of this Rules.

**7.2.2 Building Permit to Lapse with Change of Ownership**

If the ownership of a plot changes after a Building Permit has been issued or granted and before the completion of building such a Building Permit shall lapse, regardless of whether building construction has commenced or not. A Revalidated Building Permit shall be obtained as per the procedure specified in Section.7.2.1 above.

**7.2.3 Listing of Architect/ Civil Engineer as Architect/Civil Engineer on Record**

The Town & Country Planning Department shall list Architects and Civil Engineers on Record. The applications for listing should be made in the format prescribed in **Annexure 22**. The Minimum Qualification and Competence of the Architect and Civil Engineers on Record shall be as specified in **Annexure 23**.

**7.2.4 Responsibilities of Persons on Record**

The responsibilities of Persons on Record shall be as follows:

1. Verify ownership records of the plot on which building is proposed;
2. Certify that the applicant for the Building Permit is the Owner of the plot for which the Building Permit is applied.
3. Be the Person on Record responsible for ensuring compliance with all procedural requirements specified in these Building Byelaws
4. Scrutinize and verify the architectural design and specifications of the proposed building
5. Certify that the architectural design and specification of the proposed building comply with these Building Byelaws.

6. Immediately inform the Collector or any authorized officer in writing, if in his opinion, the construction of the building is not being undertaken in accordance with the sanctioned design and specifications.

7. Inform the Collector or any authorized officer in writing, within 7 working days, if for any reason he is relieved of his responsibilities as the Architect on Record for the building.

8. The Person on Record shall ensure that there is adequate accessibility available to the proposed site and a certificate regarding the same shall be submitted at the time of submitting the records to the competent authority.

9. The Person on record shall ensure that the 7 /12 extract obtained by the applicant from the Revenue Department shall not be older than Thirty days from the date of him/her issuing the Deemed Building Permit.

### **7.2.5 Building Permit to Lapse with Change in Persons on Record**

The Architect/Civil Engineer on Record based on whose respective certifications the Building Permit had been issued or granted, are respectively responsible for ensuring that the construction of the building is in compliance with these Building Byelaws. After the Building Permit is issued or granted and before the completion of building, if any of the Persons on Record is relieved of his responsibility by the Owner, or, relieves himself of responsibility of the building, the Building Permit shall lapse regardless of whether the construction of the building has commenced or not. In such an event a Revalidated Building Permit shall have to be obtained.

### **7.2.6. Revocation of Building Permit in case of Misrepresentation and Delisting of Person on Record**

The Collector or any authorized officer may revoke a Building Permit if:

1. he determines that false statements were made or material facts were misrepresented for obtaining the Building Permit
2. The Person on Record, based on whose certification the Building Permit has been granted is de-listed by the Town & Country Planning Department.

### **After Section 26.1.2 (m) the following to be added.**

n) Petrol Pumps, Servicing and repair Services & Weigh Bridge.

### **Section 26.3.2, The minimum width of access pathways and access roads shall be substituted as Table-5 below,**

**Table-5 : Width of access pathways and roads for sub-division or layout for residential purpose.**

Type of Access	Length in meters	Width of access in meters	
		Low Rise Bldgs.	High Rise Bldgs.
Pathway	Up to 50	3.0	-
Road	Up to 75	6.0	9.0
Road	75 to 150	10.0	12.0
Road	150 to 300	12.0	15.0
Road	above 300	15.0 or more as required by projected traffic.	20.0 or more as required by projected traffic.

**The Section 26.3.3 shall be deleted and Table 6 shall be substituted as below:**

**Table 6: Minimum Plot Sizes**

<b>Land use</b>	<b>Type of Development</b>	<b>Minimum Plot area (in Sq. Mtrs)</b>	<b>Minimum Public Road ROW required</b>
Residential only	Group housing	Not less than 2000	12.0
	Society	25.0	12.0
	Row Houses Plotted Development	200	12.0
Residential Cum Commercial	Basic Convenient shops in the GF shall only be allowed and Residential units for all other floors. The commercial shops shall be allowed only abutting the main road.	500.0	12.0
Commercial only	Commercial	1000.0	18.0
Service Industries	Semi Detached	200.0	25.0
Others	Detached	800.0	25.0

**Table 7 shall be substituted as specified below**

Table 7

Table 7

**Section 26.3.5 a paragraph below Table 8 shall be substituted as follows.**

For multi-storied group of residential blocks in a single plot, the minimum distance between each block should not be less than 4.5 mtrs width. However for high rise buildings as defined under Rule 3.78D, the distance between two buildings shall be 1/3rd of the height of the tallest building and any building under this category provision of lift shall be compulsory. In the case of sub-division or layout area exceeding 10 hectares or more the government will be entitled to take over 50% of the open space free of cost for catering to public purpose.

**Section 26.3.6 shall be substituted as follows.**

In the sub- division or Layout of land for industrial purpose (i.e. uses as stated in (I) of Rule 26.1.1) admeasuring 0.8 ha or more, an area of 10% shall be provided as recreational open space. In addition, where such land adjoins any existing or proposed residential development / any conflicting development such as school, Institutional & Hospital permitted by the Government, a belt of open land not less than 10m in width shall be provided with in the plot along its boundary to segregate the industrial development to any conflicting development. Trees at a rate of 50 trees per 1000 Sq.mtrs of land area shall be planted in this belt.

**The following section be added after Section 26.3.7**

26.3.8. The Completion Certificate for approved layout plans shall be granted only after completion of the basic minimum works as mentioned below.

- a) Leveling of all the Plots with proper demarcation;
- b) Asphalt road with Storm Water drainage on both sides.
- c) Appropriate Street lighting;
- d) Development of all designated Open Spaces and Parking areas.

**After Section 26.4.2, the following Section shall be added**

For buildings specifically mentioned below, the parking space for vehicles shall be provided as specified:

- |   |  |
|---|--|
| a) <u>Group Housing:</u>                    | One Car parking space per 60 Square meter of covered area.   |
| b) <u>Lodges, Guesthouse, Hotel:</u>        | One Car parking for every 2 guest rooms.   |
| c) <u>Public and Semi Public Buildings:</u> | One Car parking space for every 60 square meters of covered area   |
| d) <u>Auditorium:</u>                       | One Parking space per 5 seats  |
| e) <u>Medical:</u>                          | One parking space for every 60 square meter covered area and one ambulance space for every 300 square meter of covered area. |
| f) <u>Commercial:</u>                       | One parking space for 30 square meter of covered area.   |
| g) <u>Cinema and Video theatres:</u>        | One parking space per 5 seats  |

h) Multiplex:

One parking space per 30 square meters of covered area.

The Table 11 under Section 27.3.2 shall be amended as below:

**Table 11 : Minimum Plot Sizes and frontages & accessibility**

S. No	Use	Minimum plot area in sq.meters	Minimum width of frontage in meters	ROW in Meters Minimum Requirement of Abutting to Road
1.	Multiplexes	4000.00	30.00	20.00
2.	Cinema Theatres and Auditoriums	At the rate of 3 Sq.mtrs per seat OR 1200.00 whichever is higher	20.00	20.00
3.	Petrol Filling Station with out Service bay	600.00	30 m width and 20 m depth	20.00
4.	Petrol Filling Station with Service bay	1200.00	40 m width and 30 m depth	20.00
5.	Service Station	1200.00	40 m width and 30 m depth	18.00
6.	Weigh Bridge	1200.00	40 m width and 30 m depth	25.00
7.	Sports Stadium / Sport Complex	15000.00	200.00	25.00

**After Section 29.1(f) the following clauses are to be added.**

- g) All retail and whole sale business and their accessory uses;
- h) Professional business establishments; offices, banks, financial institutions;
- i) Service industries;
- j) Petrol filling stations with garages and service stations;
- k) Public utility buildings;
- l) Storage of permissible inflammable goods with adequate safety measures;
- m) Sports Stadium, swimming pool and other recreational uses;
- n) Parks and Play grounds;
- o) Hotels, restaurants, cafeterias etc;
- p) Housing for industrial workers.

(Uses specified from (g) to (o) above shall be allowed only in designated places in the Industrial layout Plan and shall be governed by Table 7 as amended in these rules. Use at (p) above shall have to be provided with a separate access and proper buffer from the Industrial areas as specified in Clause 26.3.6 of the DC Rules)

**After Section 29.1 the following to be added.**

29.1.1 :- Industrial Uses as specified in Section 29.1 of the DC Rules shall be allowed only from a Public approach road of not less than a status of a Minor District Road which shall be having a Right of Way of not less than 25.00 Mtrs. The length and width of access from the Public road to the plot shall be governed as follows:

<b>Length of Road in Meters</b>	<b>Width in Meters</b>
Up to 100 mtrs	12.0
101 to 300	15.0
More than 300	Minimum 20.0 or as per projected traffic

**Section 29.2.1 shall be substituted as Table below:**

<b>Sl.No</b>	<b>Sub Division or Layout in sq mtrs</b>	<b>Minimum %age of Area</b>	
		<b>Recreation Open Space</b>	<b>Public Amenity Space</b>
1	Less than 4000	10%	Nil
2	4000 to 8000	12%	5%
3	8001 to 12000	15%	10%
4	Above 12000	20%	15%

**Note:** 1.Public Amenity Space shall include Banks, Canteens, Welfare Centres, Crèches and Guest Houses (not exceeding 10% of the Public Amenity space) and Drivers Rest Room.

2. Recreation Open Space means development of Parks and Garden only.

**The entire 29.5 Section is deleted.**

**Table 13 referred under section 29.5.2.2 shall be substituted as follows**

**Table 13**

### **Section 31.2 Use provisions to be modified as follows.**

The following developments shall be permitted on the lands situated in RTZ, subject to the guidelines in Annexure-19 except for Sl.No. (f) & (g) below.

- a) Hotel, holiday resorts, holiday homes, club Houses;
- b) Religious places; and allied activities;
- c) Parks, gardens, playfields, golf courses, camping grounds, and swimming pools, facilities related to water sports, racecourses, amusement parks, and theme parks;
- d) Botanical and zoological gardens;
- e) Temporary constructions for limited period, such as, during fairs, ceremonies, etc.
- f) Essential public services and utilities, such as, public toilets, water and sewage treatment facilities, electricity sub station, bus-shelters and Airport, etc;
- g) Access roads, bridges, vehicle parking areas, jetties, ropeway;

### **Section 32.1 Use provisions in G1 zone to be modified as follows.**

In the lands designated as G1- zone the following uses may be permitted except the areas declared as "Prohibited Areas" as per the notification No. ADM/LAW/DMG/387(13)/78 dated June 18, 1980; and subject to the guidelines in Annexure-19.

- a) All the uses permissible in RTZ ;
- b) Agriculture and allied activities such as, poultry farms, dairies ;
- c) Farm Building or Houses as defined in Section 3.11.5 for bonafide use as per the details in Section 32.2.
- d) Slaughter houses and facilities for processing and disposal of dead bodies;
- e) Making of clay bricks and tiles including kilns ;
- f) Fish farms, fish drying, storage of boats, servicing and repair of boats;
- g) Petrol Pumps, Service stations and Weigh bridges;
- h) Educational, recreational, research institutions and specialised medical facilities including those for senior citizens.

### **Section 32.4.1 shall be modified as follows.**

The maximum permissible FAR in G1 and G2 Zone shall be 50%. The FAR shall be calculated on the gross area of the plot. The coverage area shall be 25% of the gross area of the plot. No building in these zones shall be more than ground plus one structure.

### **Section 38.2 shall be modified as follows.**

The balconies not in excess of 1.2 meter width with maximum length of 1/3<sup>rd</sup> of the perimeter of the building at that floor and provided further that area of the projected balcony does not exceed 10% of the floor from which the balcony projects, only such balcony shall be eligible for exemption from the FSI calculation. This facility will also be extended to the residential hotels in addition to the residential buildings. Excess additional area of balcony over that as prescribed above shall be calculated as part

of FSI. However the balcony of a maximum width up to 1.5 mtrs. can be allowed in the marginal open space and no open space should be reduced 1/3<sup>rd</sup> of prescribed margin/open space etc., but would be calculated as part of FSI.

**Section 39.0(i) shall be modified as follows**

i Areas covered by service duct, pump rooms, electric substations, niches up to 1m depth below window sill and staircase.

**After the Section 39.0 (I) the following to be added.**

m. Area of Electric Meter Room up to 6.00 Sq.mtrs of Built up area constructed at stilt area.

n. Basement area specifically to be used for parking purpose in Residential / Commercial and Institutional Buildings.

**Annexure 17 of the DC Rules shall be substituted as follows**

**Annexure 17**

**Annexure 17**

**After Annexure-20 of the DC Rules 2001, the following Annexures 21, 22 and 23 shall be inserted.**

**Annexure 21**

**Application for Registering Issue of Deemed Building Permit**

To  
**The Collector,**  
Dadra & Nagar Haveli, U.T.  
Silvassa.

Proposed building: (Title of the work)  
Plot No.:  
Area of the Plot:  
Address and location of proposed building:

Sir,

I am currently listed as Architect on Record with the Town & Country Planning Department and I am fully conversant with the Building Byelaws of Dadra & Nagar Haveli U.T. I have been appointed as the Architect on Record of the proposed building. I hereby certify that I have verified the design and specifications of the proposed building and certify that they comply with the Building Byelaws of Dadra & Nagar Haveli U.T.

I have issued a Deemed Building Permit for construction of the proposed building and hereby apply for registration of the same on the records of the Town & Country Planning Department. I fully understand that in case my certificate is found to be false, or if it is found that the Deemed Building Permit issued by me is inconsistent with the Building Byelaws of Dadra & Nagar Haveli UT, the Town & Country Planning Department shall be at liberty to penalize me as deemed fit.

Name of the AOR: \_\_\_\_\_  
TCPD Listing No.: \_\_\_\_\_  
Address: \_\_\_\_\_  
Tel. No.: \_\_\_\_\_

Signature:

Date:

## Application for Listing as Person on Record

To  
**The Collector**  
Dadra & Nagar Haveli, U.T.  
Silvassa.

1. Name:
2. Local Address:
3. Permanent Address:
4. Telephone / Fax No:
5. Membership of Professional: Associations \_\_\_\_\_  
(indicate appropriate professional affiliations)
6. Experience (No. of years):
7. Previous year's Listing No.:

Sir,

Kindly list me as \_\_\_\_\_ (Architect/Civil Engineer on Record of the Town Planning Department. I meet with the minimum qualifications and competence requirements and the relevant documents as attested by a Gazetted officer are attached herewith.

I hereby undertake to abide by all rules, regulations, standing orders, requisitions and instructions given by the Town & Country Planning Department and shall carry out my responsibilities as prescribed in the Building Byelaws of Dadra & Nagar Haveli. I also understand that if I fail to perform my responsibilities as above, the Town & Country Planning Department reserves the right to de-list me, and take other appropriate action as deemed fit.

Name of the Applicant:

Signature:

Date:

## **Minimum Qualification and Experience Requirements for Being Considered for Listing with the Town & Country Planning Department as Persons on Record**

The procedure for listing persons with Town & Country Planning Department has to be followed. The listing shall be valid for one calendar year after which it shall be renewed annually. The following are the minimum qualifications and experience requirements for all persons to be considered for listing with Town & Country Planning Department as Persons on Record, in order to determine their competence to fulfill their responsibilities.

### **1. Architect on Record (AOR)**

Minimum qualifications and experience requirements for architects, for being considered for listing with the Town & Country Planning Department, as Architects on Record shall be as follows:

1. The Architect must hold a valid registration with the Council of Architecture, India, issued as per the provisions of the Architects Act, 1972, and
2. The Architect must have a minimum of two years of experience in a practice of architecture, after having held a valid registration with the Council of Architecture, India.

### **2. Civil Engineer on Record (CEOR)**

Minimum qualifications and experience requirements for civil engineers, for being considered for listing with the Town & Country Planning Department as Civil Engineer on Record shall be as follows:

1. A Bachelors Degree in Civil Engineering or a Masters Degree in Civil Engineering or a qualification recognized to be their equivalent by the All India Council for Technical Education, and
2. 2 years of experience of preparing building designs and detailed drawings and also having a valid registration with the Institute of Engineers

# **AMMENDED LANDUSE REGISTER 2007**