

CHAPTER 7 : SOCIAL INFRASTRUCTURE

Economic, physical, and social infrastructures are inter-related components for a holistic and sustainable community development. Good and adequate social infrastructure is the key to achieve progressive communities. Social infrastructure can be defined as a system that creates a social safety net through the provision of health, education, public services and recreation.

The social infrastructure deals with the following aspects:

1. Health-care Facilities
2. Education Facilities
3. Socio-Cultural Facilities
4. Other Public-Semi-Public Facilities
 - i. Police
 - ii. Fire & Emergency Services
 - iii. Communication (Postal Facility)
5. Recreational Facilities & Open Spaces
6. Distributive Services
7. Miscellaneous Facilities.

For settlement-wise existing status of such facilities in detail, refer Annexure - XXI - XXXVI wherein the projected requirements of such facilities has been worked out as per the urban area norms prescribed by TCPO Ministry of Urban Development in the UDPFI Guidelines, 1996 and from other norms of various ministries pertaining to specific sectors have been adopted for Plain Areas as well as Hilly/Tribal/Difficult Access Areas, while integrating it with the existing provisions (Refer Annexure - XX on planning norms & standards).

7.1 Health-care

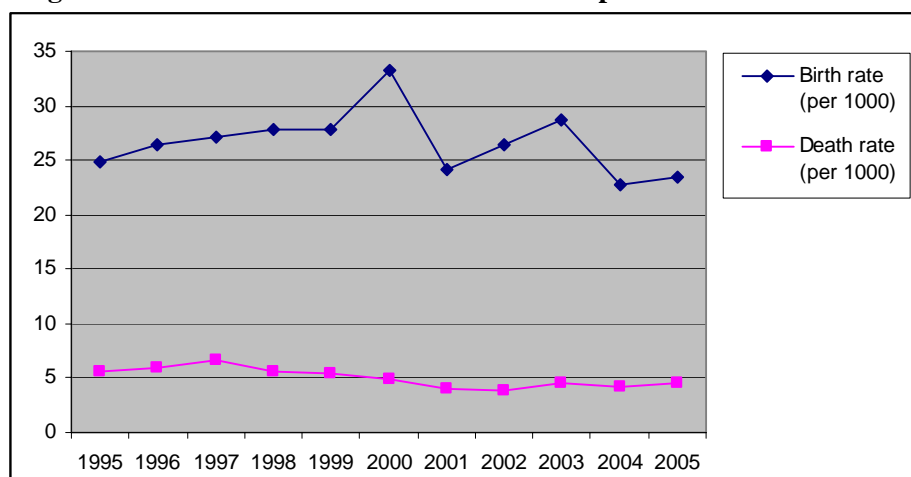
Better health is central to human happiness and well-being. It also makes an important contribution to economic progress, as healthy population live longer and are more productive.

The entitlements include a system of health-care and protection that is available, accessible, acceptable, and of good quality. Thus, the right to health implies that functioning public health and health care facilities, goods and services are available in sufficient quantity within a State/UT. It also means that they are accessible to everyone without discrimination.

7.1.1. Health Indicators in Dadra & Nagar Haveli

The crude birth rate (CBR) in DNH shows a significant variation from 1995 to 2005. The crude death rate (CDR) has decreased marginally from the year 1995 to 2005 from 5.48 to 4.50 respectively (refer figure 7-1).

Figure 7-1: Crude Birth Rate and Death Rate per 1000 Persons in DNH



Source: Department of Planning & Statistics, DNH

The CBR as well as CDR has increased in the year 2007 to 28.10 and 4.80 respectively (Refer Table 7-1).

The Fertility Rate¹ of the DNH UT is 3.5, which is fairly good as compared to the neighbouring States of Gujarat and Maharashtra. The Infant Mortality Rate for DNH is 35% as against 60% in India. The Sex Ratio in the DNH UT is 812 (as compared to 933 for the country). Comparative figures of major health and demographic indicators are given in Table 7-1 as follows:

Table 7-1: Comparative figures of major health and demographic indicators for DNH, Gujarat and Maharashtra

S. No.	Item	DNH	Gujarat	Maharashtra
1	Total Population (Census of India, 2001) in million	0.22	50.67	96.88

¹ Fertility Rate gives a figure for the average number of children that would be born per woman if all women lived to the end of their childbearing years and bore children according to a given fertility rate at each age. The total fertility rate is a more direct measure of the level of fertility than the crude birth rate, since it refers to births per woman. This indicator shows the potential for population growth in the country. High rates will also place some limits on the labour force participation rates for women. Large numbers of children born to women indicate large family sizes that might limit the ability of the families to feed and educate their children.

S. No.	Item	DNH	Gujarat	Maharashtra
2	Decadal Growth (Census of India, 2001) in %age	59.22	22.66	22.73
3	Crude Birth Rate (SRS 2007)	28.10	23.56	18.5
4	Crude Death Rate (SRS 2007)	4.80	7.3	6.7
5	Total Fertility Rate (SRS 2006)	3.50	2.8	2.2
6	Infant Mortality Rate (SRS 2007)	35.00	53	35
7	Maternal Mortality Ratio (SRS 2001 - 2003)	-	172	149

Source: RHS Bulletin, March 2007, MoHFW, GoI

It is evident that in terms of health indicators, DNH has been way ahead of progressive States like Maharashtra and Gujarat.

7.1.2. Existing Health Infrastructure in DNH

Review of Health-care Mechanism in Rural India

Health care delivery in India has been envisaged by the Ministry of Health & Family Welfare (MoHFW), GoI at three levels namely primary, secondary and tertiary.

A Health Sub-Centre (H-SC) is the most peripheral and first contact point between the primary health care system and the community. It is the lowest rung of a three-tier set up consisting of 1 Health Sub-Centre established for every 3,000 population in Hilly/Tribal/Difficult Access Areas and 1 for every 5,000 population in Plain Areas.

These H-Sc to have referral linkage to the next level of health-care facility of Primary Health Centre (PHC) at the rate of 1 PHC per 6 H-SC. In population norm terms, PHC to be provisioned as 1 for every 20,000 population in Hilly/Tribal/Difficult Access Areas and 1 for every 30,000 population in Plain Areas, while the bed norm is 4-6 beds in each PHC.

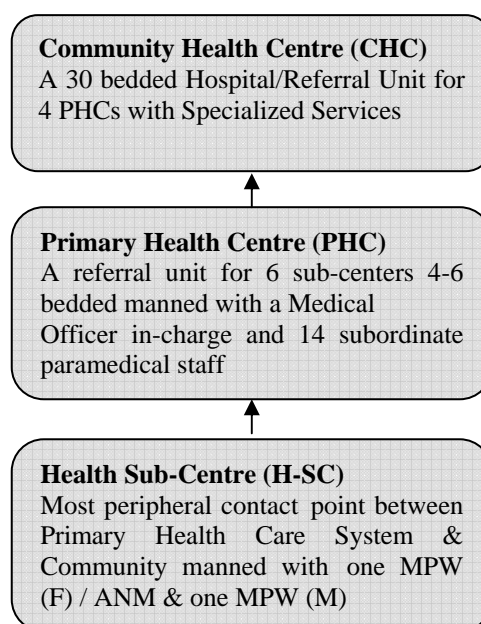


Figure 7-2: Hierarchy of Health-care delivery system in India prescribed by MoHFW, GoI

The basic level of health-care facility is further linked on referral and specialist health-care basis to a secondary level health-care facility of Community Health Centre (CHC) for rural population, provisioned as 1 for every 80,000 population in Hilly/Tribal/Difficult Access Areas and 1 for every 120,000 population in Plain Areas, while the bed norm is 30 beds in each CHC. It refers out further to higher order public hospitals located at sub-district and district level, which may fall predominantly fall in urban areas.

Review of Health-care Mechanism in Urban India

There has been little or no development of organized health care services for the vast urban areas in general. The health care mechanism in the urban areas is mostly through private clinics and hospitals. Table 7-2 below indicates the planning norms as stipulated by the UDPFI Guidelines, 1996.

Table 7-2: Health-care Facilities suggested by UDPFI Guidelines

S. No.	Facility	Support Population per Facility
1	General Hospital (500 beds capacity)	2.5 lakh
2	Intermediate Hospital Category-A (200 beds capacity)	1.0 lakh
3	Intermediate Hospital Category-B (80 beds capacity including 20 maternity beds)	1.0 lakh
4	Poly-clinic (with some observation beds)	1.0 lakh
5	Nursing home, child welfare and maternity centre (25 to 30 beds)	0.45 to 1.0 lakh
6	Dispensary	0.15 lakh

Table 7.3 below lists down the total number of health care facilities both urban and rural in DNH as in the year 2007, and the geographical distribution of the same is illustrated in Map 7-1. In addition to these facilities health camps are organized on a regular basis in primary schools at village level. Refer

Table 7-4 for another perspective from National Rural Health Mission, MoHFW, GoI.

Table 7-3: Health Infrastructure of Dadra & Nagar Haveli

District	Community Health Centre	Primary Health Centre	Sub-Centre
Silvassa	Khanvel	Khanvel	Khanvel, Rakholi, Masat, Khadoli, Kherdi, Parzai

District Hospital	Community Health Centre	Primary Health Centre	Sub-Centre
		Naroli	Naroli, Dhapsa, Kharadpada, Athal, Luhari, Silvassa, Saily, Dadra
		Kilavani	Randha, Bonta, Morkhal, Galonda, Sili, Umarkui, Athola, Aml
		Amboli	Amboli, Surangi, Chikhali, Velugam, Dapada, Vasona
		Dudhani	Shelti, Karchond, Gunsa, Dudhni, Kauncha, Vansda
		Mandoni	Mandoni, Rudana, Sindoni, Bedpa

Source: Medical and Public Health Department (Statistical Section), DNH

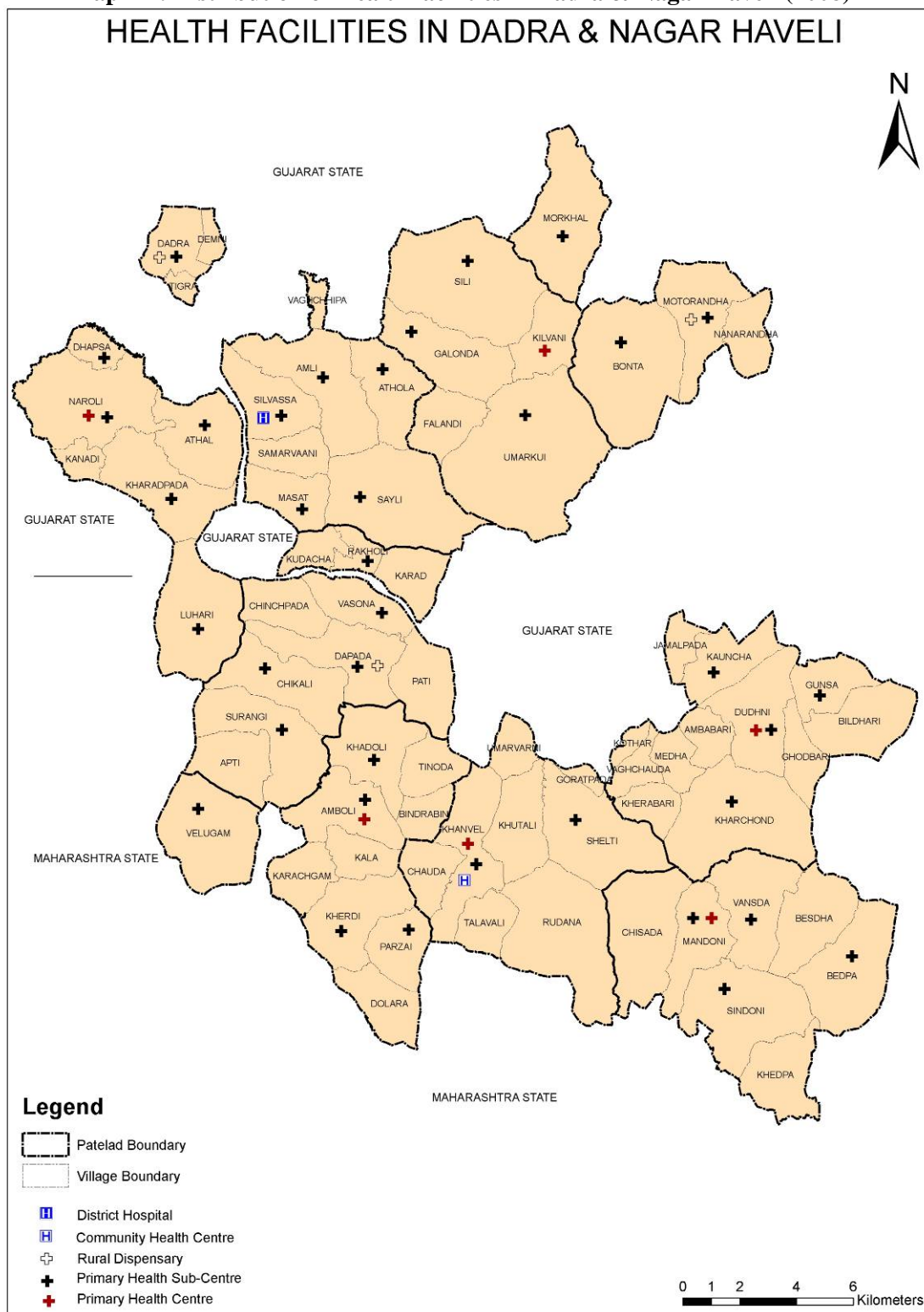
Table 7-4: Inventory of Health Institutions in DNH

Health Institution	Number
Medical College	Nil
District Hospitals	1
Referral Hospitals	1
City Family Welfare Centre	0
Rural Dispensaries	3
Ayurvedic Hospitals	-
Ayurvedic Dispensaries	1
Unani Hospitals	-
Unani Dispensaries	-
Homeopathic Hospitals	1
Homeopathic Dispensary	1

Source: National Rural Health Mission, MoHFW, GoI

While, the other lower level health-care facilities other than that provided by the government in DNH are predominantly available in urban areas through 8 Private Hospitals, 3 Nursing Homes, and 7 Private Clinics – all located in Silvassa, with other areas like, Dadra has 1 Nursing Home, Rakholi has 1 Nursing Home. All these are thus located in the northern half of the DNH only.

Map 7-1: Distribution of Health facilities in Dadra & Nagar Haveli (2008)

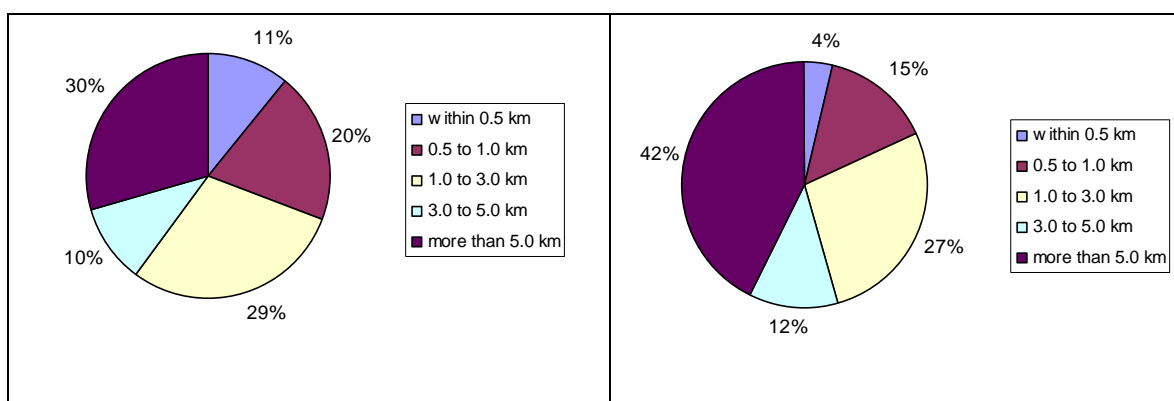


Source: Medical and Public Health Department, DNH and Consultant's Analysis, 2008

Analysing the health-care facility provision from the perspective of secondary data on number of beds available at present in 2008, the status is availability of about 1.18 beds per 1000 persons. As per a recent report presentation of FICCI/E&Y in August

2008, the current provision in DNH seems comparatively better than the national status of 0.86 beds per 1000 persons. The said report in general suggests a target of minimum 2 beds per 1000 persons by 2025 at the national level, however considering the best of the norms of UDPFI, Guidelines, 1996 & the MoHFW, GoI desirable target would be approaching about 4 beds per 1000 persons for DNH PA.

However, as per the socio-economic survey conducted in 2008 on sample households basis, the overall households' response on accessibility, refer Figure 7-3 for PHCs, Figure for Government Hospitals, Figure 7-5 for Private Clinics, and Figure 7-6 for Private Hospitals. For overall households' perception on improvements required on health-care facilities in DNH refer Figure 7-7.



Source

Figure 7-3: Access to PHC (Overall Households)

Figure 7-4: Accessibility to Government Hospitals (Overall Households)

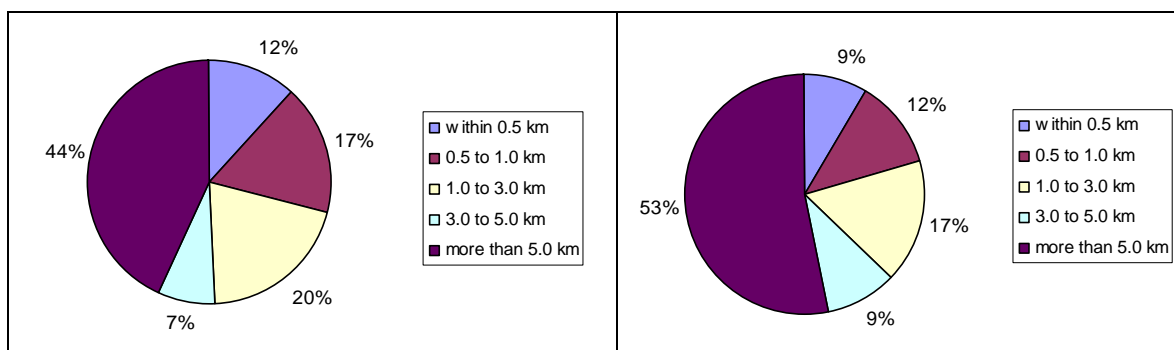


Figure 7-5: Accessibility to Private Clinics (Overall Households)

Source: Consultant's Socio-economic Survey, 2008

Figure 7-6: Accessibility to Private Hospitals (Overall Households)

14 out of 70 villages do not have a community health worker (hereafter referred to as CHW). Only 31% of the total population has a primary health centre within 1.0 km. from their place of residence. 39% if the population has to travel upto 5 km. to avail health facility and 30% has to travel more than 5 km.

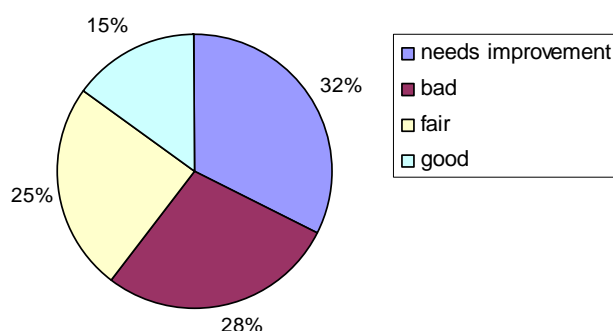


Figure 7-7: People's Perception of Health-care Facilities in DNH (Overall Households)

Source: Consultant's Socio-economic Survey, 2008

people rated the available health services to be good. 32% felt it needs to improve in terms of coverage as well as facilities.

54% of the population has to travel more than 3 km. to reach a Government Hospital. 29% of the respondents had to travel less than a kilometre, and 44% had to travel more than 5 km. to reach a private clinic. 23% of the respondents had to travel less than a kilometre, and 53% had to travel more than 5 km to reach a private clinic. Based on the survey results, 15% of the

In the context of veterinary facilities for animal health, sufficient facilities are available in DNH at present in 2008, which include 1 Veterinary Hospital in Amli, and 9 First Aid Veterinary Centres (F.A.V.C.) – 1 each located at Dadra, Naroli, Mota Randha, Kilavani, Dapada, Amboli, Khanvel, Mandoni and Dudhani. Moreover, in anticipation of the growing population in DNH, the Department of Animal Husbandry & Veterinary Sciences (DoAHVS) has already initiated the process of few proposals on creating additional F.A.V.C.'s, and the same is integrated.

7.2 Education

It is said that “Education is for life”. It is an investment that cannot be lost, spent or taken away. One of the Millennium Development Goals postulated by UN is to achieve ‘Universal Primary Education’, and so is the goal of Sarva Shiksha Abhiyan (SSA) programme of GoI.

7.2.1. Access to Education in DNH

Table 7-5 lists down the inventory of educational facilities in Dadra & Nagar Haveli. Each village in Dadra & Nagar Haveli has a primary school (refer Map 7-2 for

coverage of educational facilities). The current urban areas of DNH (Silvassa & Amlī CTs) have 15 primary schools and 7 secondary & higher secondary schools. 1 school for disabled students and 1 I.T.I. of the technical college category as per UDPFI Guidelines, 1996 also exist, located at Amlī.

Table 7-5: Number of Educational institutions in DNH by Hierarchy

S. No.	Institutes	Total No.s
1.	Schools	
	Primary School	267
	Secondary* & Higher Secondary School	26
	* 11 of these are extended upto Higher Secondary level	
2.	Social Welfare Hostels	15
3.	Libraries	11
4.	Industrial Training Institute (I.T.I.)	1
5.	Colleges	1

Source: Education Officer, District Panchayat, DNH (<http://www.dnheducation.net/Fact>)

9 out of 26 secondary schools and 4 out of 11 Higher Secondary schools are privately run institutions. Table 7-6 below enumerates the Patelad-wise list of Primary Schools in DNH.

Table 7-6: Number of Primary Schools in DNH (2007)

S. No.	Name of Patelad	CPS	Total No. of Primary Schools
1	Amboli	Amboli	35
2	Dadra	Dadra	05
3	Dapada	Vasona Dapada Surangi	29
4	Dudhani	Dudhani	26
5	Naroli	Naroli Kharadpada Navafalia	22
6	Khanvel	Khanvel	27
7	Kilavani	Galonda	30

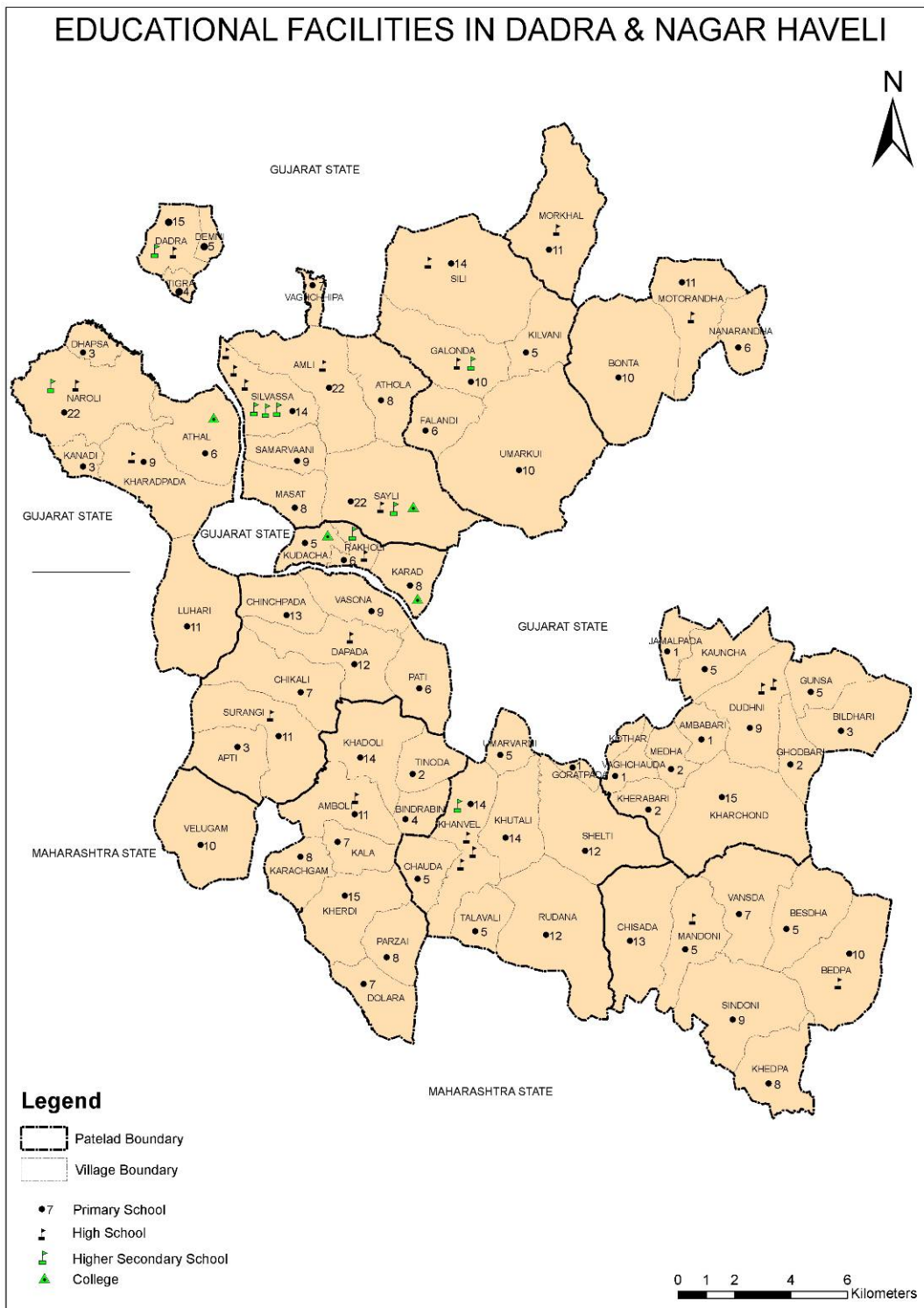
S. No.	Name of Patelad	CPS	Total No. of Primary Schools
8	Randha	Randha Morkhal	19
9	Rakholi	Masat Rakholi	15
10	Mandoni	Mandoni	32
11	Silvassa	Silvassa Baldevi Vaghchhipa Athola Samarvarni	27
Total			267

Source: Education Officer, District Panchayat, DNH

Refer Map 7-2 for geographical distribution of educational facilities in DNH.

Considering the secondary data analysis based on the urban norms of UDPFI Guidelines, 1996 and distance norm that a primary school shall be available within a radius of 1 km. (in DNH hilly terrain context based on road accessibility gradient the distance was further adopted upto an average of 0.85 km.) from the habitation, the current provision of primary schools by 2008 is found sufficient as overall in DNH, except being deficient in the urban area of Silvassa & Amla where population is estimated to be high. While, from primary survey, 2008 data analysis perspective, observations are that the government schools have a better reach as compared to the private schools (about 80% of the respondents have access to Anganwadi within 1 km. of travel, while about two-thirds of the household respondents travel within 1 km. for accessing primary school some of which are also clubbed together as upper primary/middle school).

Map 7-2: Distribution of Educational Facilities in DNH (2008)



Source: Consultant's Analysis on Socio-Economic Survey Data, 2008

However, the same is not true for the current provision of secondary / higher secondary schools by 2008, and the same is found to be less than half of the requirements generated using the above-mentioned urban norms, with significant deficiency in current urban areas. The deficient accessibility status is corroborated from the observations of the primary survey, 2008 data analysis. Similarly, the current provisions of needs of other education facilities seemed deficient in terms of higher percentage of households that have to travel longer distances. Refer Figure 7-8 and Figure 7-9 for the overall household's perception on the accessibility to educational facilities in DNH.

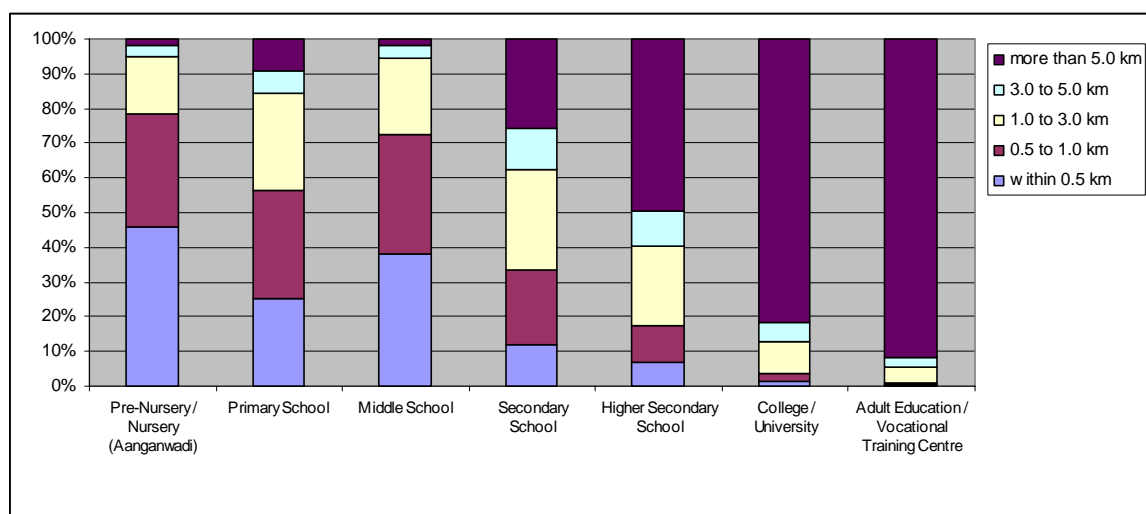


Figure 7-8: Distance to nearest Government Education Facility in DNH

Source: Consultant's Analysis on Socio-Economic Survey Data, 2008

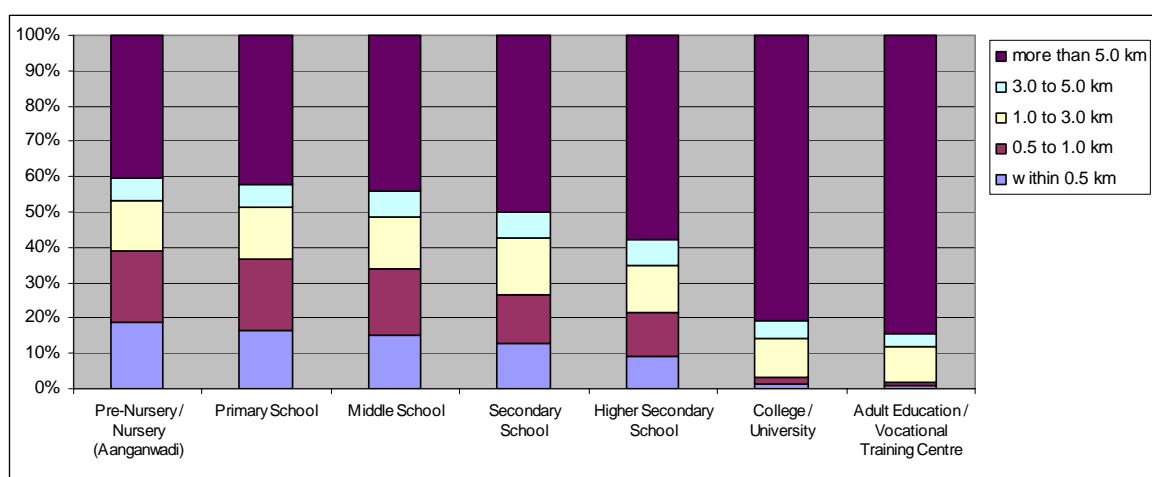


Figure 7-9: Distance to nearest Private Education Facility in DNH

Source: Consultant's Analysis on Socio-Economic Survey Data, 2008

7.2.2. Anganwadis (Integrated Child Development Services Scheme)

The Anganwadi, literally the courtyard play centre, is a childcare centre, located within the village itself. Anganwadi is the focal point for the delivery of services at the community level, to children below six years of age, pregnant and nursing mothers, and adolescent girls. Anganwadi centre also serves as the meeting place for women's groups, mothers' clubs and mahila mandals promoting awareness and joint action for child development and women's empowerment.

Dadra & Nagar Haveli has 219 Anganwadi centers and 34 mini Anganwadi centers as on September 30, 2007 (refer Table 7-7 and Map 7-3).

Table 7-7: Distribution of Anganwadis in DNH at Patelad level in the year 2007

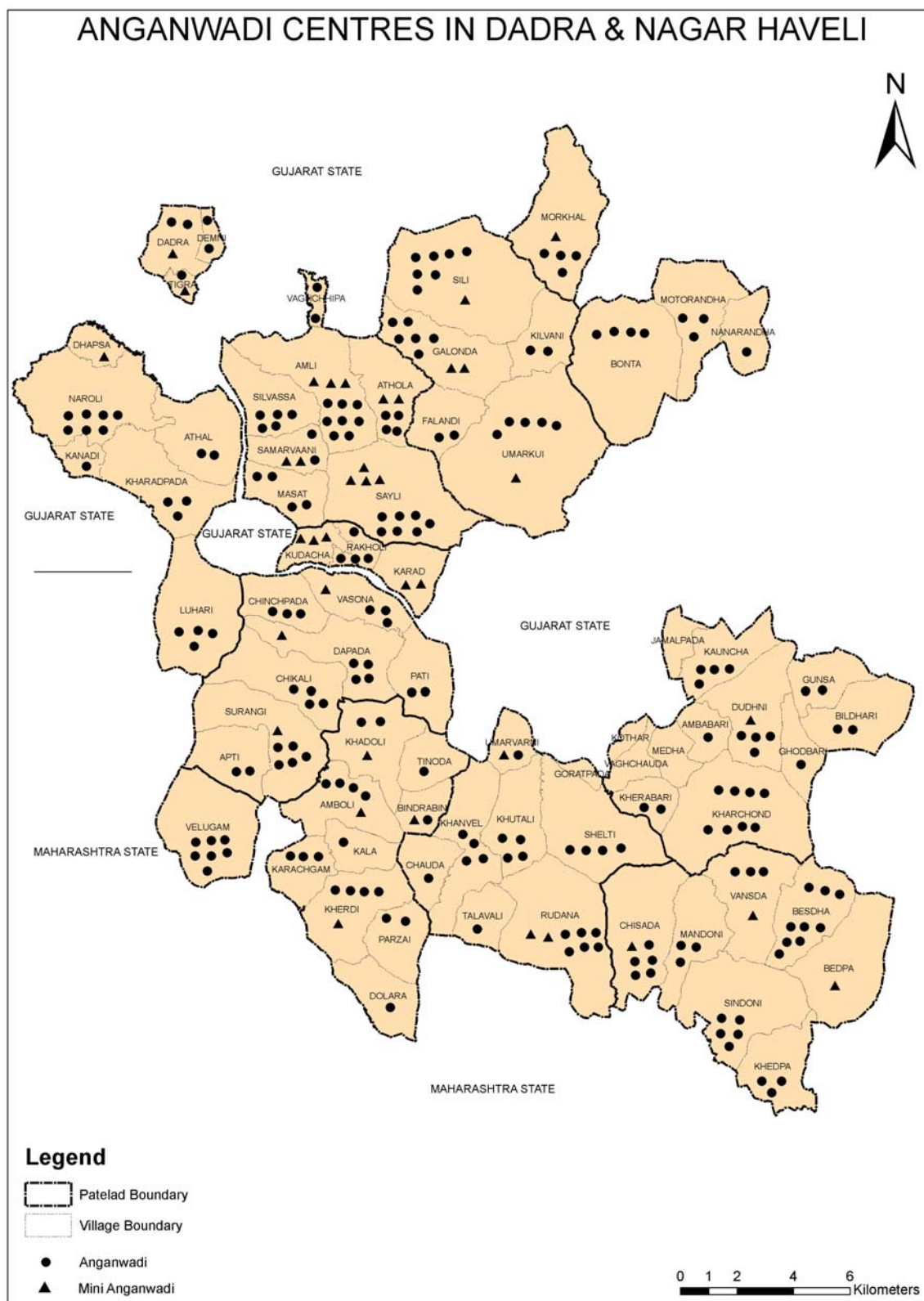
S. No.	Patelad	No. of Anganwadi Centres	No. of Mini-Anganwadi Centres
1	Amboli	26	04
2	Dadra	06	01
3	Dapada	23	03
4	Dudhani	25	01
5	Naroli	17	01
6	Khanvel	22	02
7	Kilavani	22	04
8	Randha	12	01
9	Rakholi	06	03
10	Mandoni	28	03
11	Silvassa	32	11
Total		219	34

Activities of the Anganwadi centres in DNH are as follows:

1. Supplementary nutrition to beneficiaries as per norms fixed by the Government of India per day
2. Immunization, health check up and referral services by medical department at Anganwadi centers
3. Pre-school education for children between 3 to 6 years

Considering the UDPFI Guidelines, 1996 norms for pre-primary education the above facility is sufficient in overall, except in current urban areas that are deficient.

Map 7-3: Distribution of Anganwadi Centres in DNH (2007)



Source: Secondary Data, DNH

Introduction to Sarva Shiksha Abhiyan

The *Sarva Shiksha Abhiyan* (SSA) aim is to provide useful and relevant elementary education for all children in the 6 to 14 age group by 2010. It is an effort at effectively involving the *Panchayati Raj Institutions, School Management Committees, Village and Urban Slum level Education Committees, Parents' Teachers' Associations, Mother Teacher Associations, Tribal Autonomous Councils* and other grass root level structures in the management of elementary schools.

7.2.3. Educational Norms prescribed under SSA

The norms under SSA predominantly for coverage of education and related interventions in rural areas are described in Table 7-8 below.

Table 7-8: Norms for Interventions under Sarva Shiksha Abhiyan (SSA)

S. No.	Intervention	Norm
1	Teacher	<ul style="list-style-type: none"> ▪ One teacher for every 40 children in primary and upper primary level schools – At least two teachers in a primary school – One teacher for every class in the upper primary school
2	School / Alternative Schooling Facility	<ul style="list-style-type: none"> ▪ Within 1 Kilometre of every habitation ▪ Provision for opening of new schools as per State/UT norms or for setting up EGS like schools in un-served habitations.
3	Upper Primary Schools/ Section	<ul style="list-style-type: none"> ▪ As per requirement based on the number of children completing primary education, up to a ceiling of one upper primary school/section for every two primary schools
4	Classrooms	<ul style="list-style-type: none"> ▪ A room for every teacher in Primary & Upper Primary Schools, with the provision that there would be 2 class rooms with verandah to every Primary School with at least 2 teachers ▪ A room for Head-Master in upper Primary School/Section

Source: SSA Framework for Implementation

Also, based on the above sections, the scenario of teacher-student ratio is observed to be as follows:

- Considering the current status of number of primary students enrolled and teachers available in the government primary schools in DNH, the teacher-pupil ratio is observed to be 1: 36 in 2007, i.e. already favourable situation that needs to be retained/leveraged on in future as desirable levels of 1:25 to 1:35 are suggested by Corporate Industry in a Planning Commission report.

- Similarly, the teacher-student ratio in the secondary education level in DNH is 1:24, a reasonably desirable status.

7.2.4. Vocational Training and Higher Education

In order to achieve an overall development, it is important to create employment opportunities in the rural area. It is essential to impart vocational training and employable skills to the rural youth for promotion of sustainable rural livelihood. DNH presently has 1 number of government run I.T.I., located at Amlī. At I.T.I. government schemes like Craftsmen Training Scheme and higher level Apprenticeship Training Scheme is implemented. The role of I.T.I. is to provide job-oriented technical training (i.e. industrial vocational training) to the youths of DNH in various trades; so that once they complete these courses they can explore suitable technical employment as per skill-level.

Though the I.T.I. institute began in 1976, currently from the 9 trades, 8 have been offered with an intake capacity of 120 trainee seats. Thus, improvements in the said set-up are possible to meet the growing employment needs of the population.

As far as higher education is concerned, some government and private initiatives have been taken-up in DNH. While a Government Polytechnic (Dr Bhimrao Babasaheb Ambedkar Government Polytechnic) is functional, private colleges have also come up as mentioned below in Table 7-9.

Table 7-9: Access to Higher Education in DNH

S. No.	Educational Facility	Village
1	Government Polytechnic	Karad
2	P S Institute of Information Technology	Athal
3	SSR College	Saily
4	Government College	Kudacha

OIDC has also taken up the process of construction of Institute of Hotel Management & Catering Technology at Karad for the Department of Tourism, and this facility would train people in necessary skills for the hospitality sector like employment for tourism services, hotels & restaurants.

Rural employment opportunities in farm and non-farm sectors can be explored in the following sectors:

1. Primary sub-sectors (including silviculture, horticulture, aquaculture, apiculture and sericulture)
2. Secondary sectors (including manufacturing, processing, construction), and
3. Tertiary sectors (including transport, trade, finance, rent services, tourism).

7.2.5. Hostel Facility

The DNH area being predominantly rural-cum-tribal in nature, it has been the endeavour of Department of Education to provide Social Welfare Hostels for the needy population. The list of such hostel facilities separate for boys and girls has been stated below (refer Table 7-10). The actual strength of hostels exceeds the approved strength. This indicates that the existing hostel facility is insufficient, and needs augmentation suitably. These could be integrated as well with schools to offer integrated school-cum-hostel facility, as far as feasible in the needy areas.

Table 7-10: Number of Social Welfare Hostels in DNH and their strength (2007-08)

S. No.	Name of Social Welfare Hostel	Approved Strength		Actual Strength	
		Girls	Boys	Girls	Boys
1	Khanvel	200	160	201	168
2	Dudhani	60	100	75	119
3	Mandoni	60	100	72	145
4	Randha	100	100	69	89
5	Silvassa	60	200	82	115
6	Rakholi		90		163
7	Galonda		60		69
8	Kharadpada		100		65
9	Surangi		60		72
10	Amboli		100		101
	Total	480	1,070	499	1,104

Source: Department of Education, DNH

7.3 Socio – Cultural Facilities

The history, the stories and music, the arts and crafts, and the traditions of tribal way of life - all create a cultural mosaic in DNH. However, no formal centres for such activity exist at present, except for Silvassa that has a tribal museum with exhibition

area for the display and sale of local paintings. More such initiatives to promote the local art and craft should be taken in the form of culture centers.

Socio-cultural centers located at the central village should be proposed in each planning unit – either as housing cluster level or sector level to preserve and popularize the culture and heritage. The cultural centre would comprise of the following:

1. Community Room / Lecture hall
2. Library
3. Recreation Club,
4. Music, Dance, & Drama Centre
5. Religious Sites
6. Vocational training center for handicrafts, etc.

Currently such facilities are limited in DNH, except the religious sites of various faiths that overall seem sufficient at present. Some of the facilities in future could be clubbed together as integrated facilities, as in DNH context, the availability of contiguous lands could be a constraint at several places, as the area is interspersed with forest areas, and zoning of RP-2021 is to be followed as available area for any ODP level zoning.

7.4 Other Public & Semi-Public Facilities

7.4.1. Police

A well distributed network of police stations and police out posts throughout a habitable region to provide security to the residents and create a peaceful and law abiding community is essential. The lower level police unit is a police outpost generally under command of a Head Constable, or Assistant Sub-Inspector. While, the next higher level police unit is a police station under command of a Sub-Inspector (assisted by Additional Sub-Inspectors if required). Two or more police stations forms a Police Circle, under an Inspector (generally called CI or Circle Inspector).

In DNH region, Khanvel and Silvassa both have a police station each, which is within the prescribed norms (see Table 7-11 for planning norms as per UDPFI Guidelines, 1996 for urban areas). The police station at Silvassa and Khanvel serve the northern and the southern Patelads respectively. In addition to these, each Patelad has at least one police outpost, and a total of 14 police out posts exist in DNH to ensure law and order (refer Map 7-4 later). The number of police outposts for the entire territory works out to 9, however since the territory is spread in a very vast area the existing provision of 14 police out posts seems reasonable to cover such large areas with

scattered habitations. Moreover, in anticipation of the growing population in DNH, the Department of Police has already initiated the process of proposals on creating an additional police station at Khanvel, a police line at Saily, and 7 police outposts (1 each at Dadra, Masat, Dhapsa, Khadoli, Velugam, Sindoni, and Dudhani), and one police beat post for Govt Hospital (V.B.C.H.) at Silvassa. However, as the population grows other higher level policing infrastructure that already exists in terms of district headquarter / battalion, police line, civil defence / home guards (currently IRBN exists), proper district jail would need to be augmented.

Table 7-11: Police Station Norms as per UDPFI Guidelines

S. No.	Facilities	Support Population per Facility
1	Police Station	1 for 90,000 population
2	Police Post	1 for 40,000 - 50,000 population

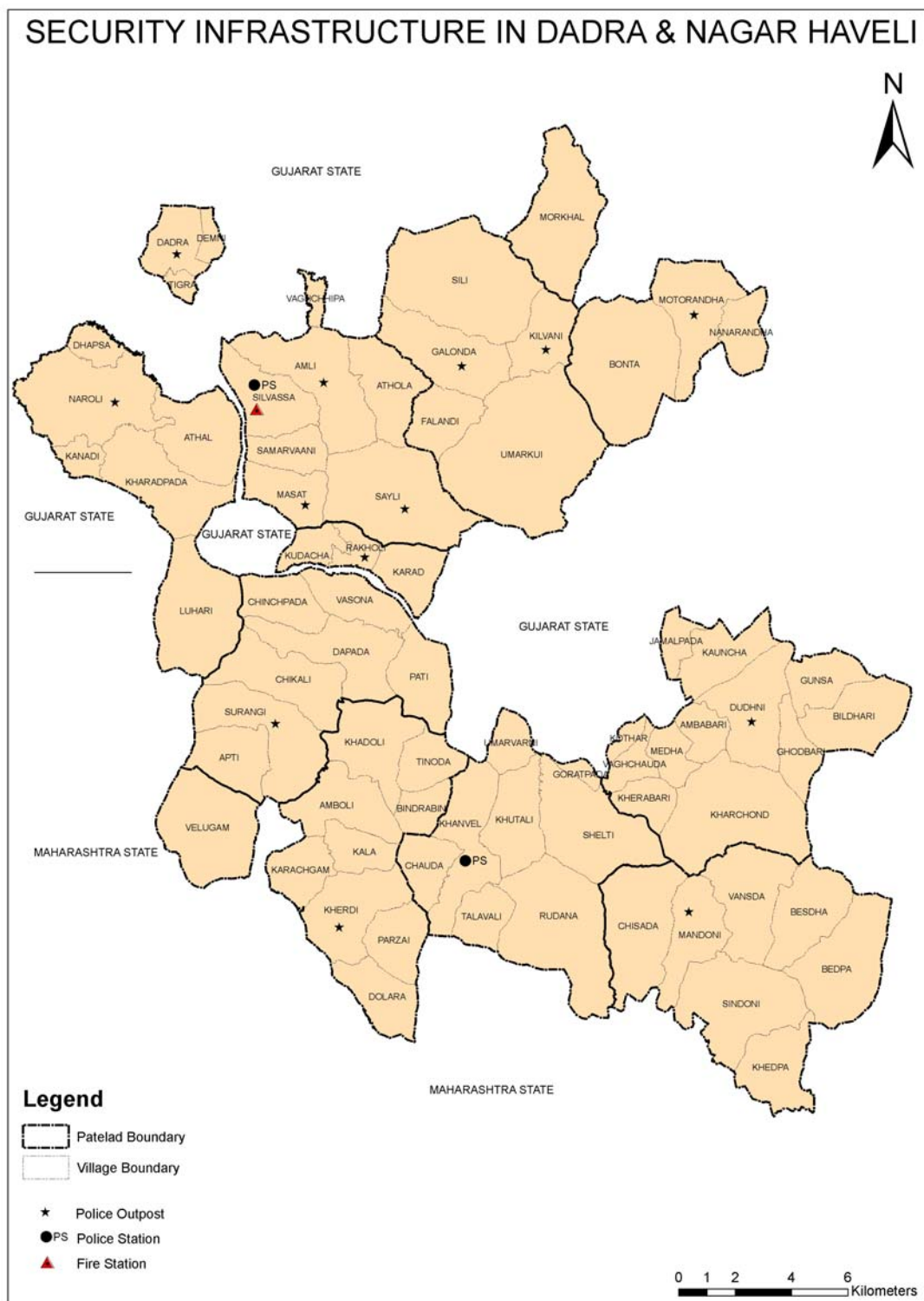
7.4.2. Fire & Emergency Services

Fire Services are needed for protecting people from fire hazards, building collapses, and other unforeseen emergencies / disasters. Fire is categorised as a disaster. It can spread over large area in no time and cause great damage to life and property. DNH presently has 1 fire station at Amlī, and area of the same is 2.02 Ha. Proposal for setting up for setting up new fire stations at Khanvel and Dadra and upgrading of equipment at Silvassa fire station is underway by the Department of Fire & Emergency Services. (refer Map 7-4). The existing facility of 1 fire station at Amlī is sufficient as per the UDPFI Guidelines, 1996 planning norms (as given below) for current urban area and could serve the urban area well till its population reaches 200,000. However, considering the terrain and connectivity of the union territory and its geographical spread in a vast area of DNH, the need for additional fire station to serve rural areas as mentioned above seems reasonable.

Table 7-12: Fire Station Norms as per UDPFI Guidelines

Facilities	Support Population per Facility & Area
Fire Station /	1 for 200,000 within 1-3 km.
Sub-Fire Station	Area: Fire station - 10,000 sq.m. & Sub-Fire Station - 6,000 sq.m.

Map 7-4: Distribution of Police Infrastructure & Fire Stations in DNH



Source: Secondary Data, DNH

7.4.3. Communication

The Postal Service, telephone and the internet form the communication network for any area. Out of the 72 settlements (including 2 census towns), 26 settlements do not have Post, Telegraph, & Telephone facilities.

Postal Facility

The Mukhya Dakghar (i.e. Main Post Office) is located at Silvassa. The main post office has 25 branch offices under its jurisdiction within DNH, though Village Directory – 2001 published by Census of India indicated 34 post offices.

People living in Medha, Vaghchauda, Bensda, Dolara and Luhari have to travel 5 to 10 km. for the nearest post office. Ghodbari is the only village with no postal facility within 10 km. radius.

Considering the planning norm of UDPFI Guidelines, 1996 for the urban area as 1 post office per 10,000 – 15,000 population, in DNH 2 postal facilities are available (1 each at Silvassa and Amla) and is short by average 5 postal facilities.

7.5 Recreational Facilities & Open Spaces

As far as recreational facilities are considered, it is observed that over 0.5 sq.km. or 50 Ha. of area is under recreational use both under the tourism / municipal jurisdictions together. At the urban area level for medium sized towns, UDPFI Guidelines, 1996 prescribe that the overall recreational areas could be worked out as 10 - 12 sq.m. per person. In DNH, recreational areas in the urban area amount to about 12 Ha., and this translates to about less than 1 sq.m. per person in urban area and thus seems very insufficient in terms of such planned green spaces. Overall in DNH at present based on the existing and already proposed recreational and tourism zone (RTZ) areas about 170 Ha. of such area seems allocated, and the per person norm status is about 4.3 sq.m. which seems better than the only urban norm achieved.

However, apart from the augmentation to be made to the formal RTZ areas within the possible land constraints as discussed earlier, the fact that the DNH territory has 41.4% area designated under forests including various wildlife park facilities, the said insufficiency in general could be considered addressed in terms overall open/green spaces available in the DNH UT.

7.6 Distributive Services

An efficient distribution system to fulfil the day-to-day needs of the citizens is necessary even at the smallest planning unit level of the city. The distributive services include milk, fruits & vegetables, LPG cooking gas, petrol / diesel, and banks.

Formal milk booth is only 1 located near the Govt Dairy Farm at Amla, and is an insufficient provision for DNH. The Union Territory has 14 fuel stations in all located at Naroli, Athal, Silvassa, Samarvarni, Vasona, Khanvel, Kherdi and Masat. Out of these, 3 are located in Silvassa C.T. serving the DNH urban area. With the norm of 1 fuel station per 150 Ha. of gross residential area & per 40 Ha. of gross residential area for urban areas (as given below), the number of petrol pumps required in DNH urban area is 6 at present in 2008, which is far less than the existing requirement. Only 1 LPG Godown exists at Silvassa that serves the DNH needs. Considering the DNH PA to be treated as urban and the population growth, necessary augmentation of such facility provisions shall be ascertained for reach of urban level benefits to all.

Table 7-13 : Planning Norms for Public Distribution System in Urban Areas

S. No.	Category	Planning Norms and Standards
1	Milk Booth / Milk and Fruit & Vegetable Booth	One per 5,000 population (in residential developments)
2	LPG Godown including Booking Office	3 LPG Godowns per 1 lakh population in Community Centres
3	Petrol Pumps	1 Petrol pump for 150 Ha. of gross residential use zone 1 Petrol pump for 40 Ha. of gross industrial area

Source: UDPMI Guidelines, 1996, Ministry of Urban Affairs & Employment, GoI

Since, there are no separate planning guidelines for distributive infrastructure in particular for rural areas, hence, Milk Booth/Milk and Fruit & Vegetable Booth could be located in every village as part of a formal / informal planned space.

Similarly, banks also play an important role in terms of distributive facility of regular use, and as per Reserve Bank of India (RBI) norms the same could be provided at a norm of 1 bank per 20,000 population. With this norm, the overall provision of banks in DNH seems sufficient, though more in the urban areas.

7.7 Miscellaneous Facilities

The following other facilities could be planned for accommodation in planning zones / included as permissible activities in development control regulations:

1. Cremation Sites / Burial Grounds
2. Dhobi Ghats
3. Bus Stops / Taxi & Rickshaw Stands
4. Other supportive facilities for senior persons / disabled persons / homeless persons that could be also considered, like: Old Age Home, Centre for Physically and Mentally Challenged, Working women / men hostel, Night Shelters, Adult Education Centres, Orphanage/ Children's centre etc.

Dadra & Nagar Haveli has 10 cremation sites at Silvassa, Sili, Bonta, Vasona, Luhari, Chikhali, Surangi, Khanvel and Amli, located on the banks of river / small streams. In future as the urban populations grows to a reasonably higher size, electric crematorium would be more relevant from environmental perspective. Also, since the share of population of Christian and Islamic faiths seem very low in number, as per their community requirements for a designated land for community cemetery/burial ground, appropriate size of land may be designated by DNH-PDA on case to case basis of such community cemetery/burial ground requests in the public & semi-public zones indicated in ODP's PLU map / green zones along the river/stream banks as suitable. In the current situation, 1 site of Church graveyard/cemetery exists at the junction of Silvassa-Amli-Saily roads to further east of District Civil Hospital (VBCH). While for burial grounds (managed by Wakf Board, DNH) for population of Islamic faith, government land has been provided for at Silvassa and Khanvel (Rajya Sabha Report, May 2002).

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