

crit collective research initiatives trust MUMBAI

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13 July 2004

To: Convenor Member, Committee for the Draft Development Plan, Vasai-Virar Sub-Region

Re: Observations and Suggestions regarding the Draft Development Plan for the Vasai – Virar Sub – Region (2001 – 2021)

Sir,

The Collective Research Initiatives Trust (CRIT) was invited to study the Draft Development Plan (DDP) for the Vasai - Virar Sub – Region (2001 – 2021) by the *Vasai Vikas Arakhada Nagari Kruti Samiti*. With the help of *Vasai Vikas Arakhada Nagari Kruti Samiti* and various other resident communities in the Vasai – Virar Sub – Region, the Study Group of CRIT undertook a preliminary field study of the Vasai – Virar Sub – Region during the month of September 2003 to identify the developmental issues that the VVSR is faced with. During the 'Objections and Suggestions Period' the Study Group of CRIT independently filed a request to the concerned authority to grant permission to present its study which examines the DDP for the Vasai – Virar Sub – Region.

METHODOLOGY ADOPTED FOR THE STUDY

This study has been conducted in three parts:

1. *Field Survey*

The first task of this study was to conduct a Field Survey of the Vasai – Virar Sub – Region. The Field Survey of the entire Vasai – Virar Sub – Region was conducted over a period of two weeks with the help of various resident communities. Two types of surveys were undertaken:

- The first survey that was conducted was to establish environmental threats through a preliminary visual diagnosis and photographic documentation of the Vasai – Virar Sub – Region.
- The second part of the survey was to establish the opinions of various resident communities through random sampling. The survey attempted to establish opinions and perceptions regarding the opportunities and threats that they perceived in their region and their knowledge of the DDP and its implications on their neighborhoods as well as the entire region. Due to the short period of the survey, the survey has not been able to prepare a detailed database on the communities. The survey, however, attempted to reach as many communities as was possible during the Field Survey to understand their basic opinions and perceptions.

The Field Survey helped us to identify the problem locations on the ground and the proposals in the DDP which affect these specific locations as well as the entire region. The exact nature of the problems observed on the ground was elaborated during the survey.

2. *Context Identification of the proposals in the DDP*

The second task of the study was to develop an understanding of the DDP in terms of the proposals that have been made and the context in which the proposals were made.

3. *Analysis and Recommendations*

The third part of the study involved conducting an analysis of the proposals in the DDP in terms of their strengths and weaknesses vis-à-vis the Context Identification and the problems identified during the Field Survey.

With reference to your letter no. S – 188, this study was presented to the Committee responsible for the DDP (2001 – 2021) at the CIDCO office in Vasai on June 01, 2004. On the basis of our discussions during the abovementioned meeting and as suggested to us by the Committee members, we have framed our recommendations to the general policies that need to be adopted for the VVSR.

Kindly find attached a copy of the same.

We are grateful and sincerely thank the Committee for giving us a patient hearing and freely discussing their viewpoints about the study as well as the DDP for the Vasai – Virar Sub – Region. The discussions with the Committee have led to further streamlining our study on the Vasai – Virar Sub – Region and have helped us in articulating concrete projects, which we would further pursue with both the Government as well as various local communities in the Vasai – Virar Sub – Region. The Study Group is delighted at fostering such a relationship with the hope that it could assist the Government and the local resident communities towards solving developmental issues in the Vasai – Virar Sub – Region.

Sincerely,

Rohit Mujumdar

Executive Member, CRIT (Collective Research Initiatives Trust), Mumbai

SUMMARY OF OBSERVATIONS AND RECOMMENDATIONS TO THE DRAFT DEVELOPMENT PLAN FOR THE VVSR (2001 – 2021)

GENERAL OBSERVATION REGARDING THE POLICIES ADOPTED FOR THE VVSR

The general policies adopted by the Committee and the modified DP could be categorized under the following heads:

NO.	POLICY	CATEGORY
1.	Plans of the Municipal Councils: works undertaken to provide amenities and facilities	PROVISION OF INFRASTRUCTURE
2.	Suggestions made by the village Panchayats	INSTITUTIONAL MECHANISMS ADOPTED
3.	Modification of DP to meet requirements of projected population	PROJECTIONS: DEMOGRAPHY AND PLANNING STANDARDS
4.	Revised Planning Standards for Providing minimal infrastructure	PROJECTIONS: DEMOGRAPHY AND PLANNING STANDARDS
5.	Proposal for differentiating 'Plantation Zone' from 'Green Zone'	ALLOCATION OF LANDUSE
6.	Shifting of APMC market yard	ALLOCATION OF LANDUSE
7.	Incorporating existing and proposed amenities in Plantation Zone	PROJECTIONS: DEMOGRAPHY AND PLANNING STANDARDS
8.	Designating historically important places	ALLOCATION OF LANDUSE
9.	Dropping of C. R. Z. limits	ALLOCATION OF LANDUSE
10.	Dropping the proposal for relocating Virar, Nalsopoara and Vasai stations Vasai Diva Link	PROVISION OF INFRASTRUCTURE
11.	Developing requisite facilities at Naigaon Station	PROVISION OF INFRASTRUCTURE
12.	Correcting the location of Juhechandra railway Station	RECTIFICATION/ADDITION TO EXISTING DATABASE
13.	Proposal for Mumbai – Ahmedabad Super - Expressway	PROVISION OF INFRASTRUCTURE
14.	Regulations in the Green Zone permitting tourist complexes	ALLOCATION OF LANDUSE
15.	Proposal for the Cattle Shed Zone (Kaman)	ALLOCATION OF LANDUSE
16.	Dropping of the Cattle Shed Zone (Pelhar)	ALLOCATION OF LANDUSE
17.	Modification of arterial road system	PROVISION OF INFRASTRUCTURE
18.	Reducing the width of nallas at the Waliv Gokhivare Industrial Complex	PROVISION OF INFRASTRUCTURE
19.	Proposal for Industrial Zones	ALLOCATION OF LANDUSE
20.	Reservations of Sites for Water Supply	PROVISION OF INFRASTRUCTURE
21.	Reservations of Sites for STP's and for Solid Waste Disposal	ALLOCATION OF LANDUSE
22.	Proposal for the natural storm water drainage system	PROVISION OF INFRASTRUCTURE
23.	Earmarking of major water bodies and reservoirs in D.P.	RECTIFICATION/ADDITION TO EXISTING DATABASE
24.	Proposal for fair grounds and parking facilities	ALLOCATION OF LANDUSE
25.	Honoring of previous N. A. permissions, Development Permissions made by Revenue Department, MMRDA	INSTITUTIONAL MECHANISMS ADOPTED
26.	Facilitation of commercial activities in already developed areas with less street widths	RECTIFICATION/ADDITION TO EXISTING DATABASE
27.	Proposal for the Low Density Zone and the Special Residential Zone	ALLOCATION OF LANDUSE
28.	Features, landmarks and amenity sites to be shown on drawings	RECTIFICATION/ADDITION TO EXISTING DATABASE
29.	Reservations on Government Lands to cut down the cost of acquisition	ALLOCATION OF LANDUSE
30.	Reservations for amenity sites	PROJECTIONS: DEMOGRAPHY AND PLANNING STANDARDS
31.	Proposals for amenities in Sector I & VI	PROJECTIONS: DEMOGRAPHY AND PLANNING STANDARDS

We observe five distinct categories emerging from the general policies that have been adopted for the VVSR, viz:

1. Allocation of Land Use
2. Provision of Infrastructure
3. Projections, Demography and Planning Standards adopted
4. Institutional Mechanisms adopted
5. Rectification, Modification, Addition to existing Database

We will elaborate our observations on the first three categories that have been identified above. Our observations and suggestions are based on the preliminary field studies that have been conducted and the problems that have been identified during the field study.

1. ALLOCATION OF LAND USE

The present development pattern in the VVSR has led to a severe contest for controlling resources that are present in the environment. Due to its uncontrolled nature it has also led to a severe damage of the natural environment. Through a careful reading of the DDP, we can conjecture that the allocation of certain land uses would lead to a further destruction of the natural environment. This destruction of the natural environment and allocation of certain land uses, in turn has, led to direct or indirect economic threats and has affected the living standards and conditions of the population of the VVSR. The threats that have arisen have been elaborated below.

1.1 *Economic Threats emerging arising out of damage to the natural environment*

A sizeable amount of the population in the VVSR is engaged in the agrarian sector. This sector relies which relies heavily on the natural environment for its production has been left at the mercy of the uncontrolled development that is presently taking place in the VVSR. The uncontrolled nature of the present development has led to a damage of the natural ecosystems, which in some cases are irretrievable. The destruction of the natural ecosystems, in turn has resulted into a severe economic threat for the agrarian sector. The Field Survey has presented two cases, where damage to the natural ecosystems has resulted in economic threats. The surveys point out that there is an inadequate understanding of the physical geography while allocating land uses.

1.1.1 CATTLE SHED ZONE (POLICY NO: 15 & 16)

Context: The context for the re-location of Cattle Sheds in the VVSR is due to their displacement from their present location in the city of Mumbai. Although an alternative site has been suggested for the relocation of Cattle Sheds at *Dabcheri*, the Cattle Shed owners have refused to move there due to the distance of the location from Mumbai.

Location: The Cattle Shed Zone is located at Kaman. Although the Cattle Shed Zone has been removed from Pelhar, there still exist numerous Cattle Sheds in the vicinity around Pelhar. Both these locations, Kaman and Pelhar, are topographically strategic because they form the bases of the surrounding hills and water catchment areas.

Problem Identification: The Cattle Shed Zone in Kaman and the still existing Cattle Sheds in Pelhar present the following problems:

1. The waste from the Cattle Sheds is dumped into the drains and the surrounding fields without treatment. The dumping of this waste has affected the condition of the cultivable land as well as the quality of water in the wells, rivers and the other underground sources. This effect on land and water is seen not only in the area in the immediate vicinity of the cattle sheds but has also started influencing the surrounding areas in the region.
2. The agricultural production has been destroyed due to damage to the cultivable land leading to huge economic losses and loss of jobs for the farmers as well as the adivasi labour that works in the agricultural fields. The farmers as well as the adivasi labour do not aspire to work in the Cattle Sheds. In the absence of any other form of economic activity nearby, provision of the Cattle Shed Zone looms as a severe economic threat.
3. There are instances of the adivasi population forcibly or indirectly displaced from their land and houses due to the newer migrants settling in the villages of the adivasi population. This population is increasingly getting displaced into the hills.
4. Due to their strategic topographical location, areas around Kaman and Pelhar present numerous opportunities as catchment areas and small sources of water supply. If they are tapped to their full potential they have the capacity of relieving the pressure on other sources and projects of water supply. The DDP instead of seeing these areas as opportunities for small water supply sources for the VVSR has seen these areas as locations for rehabilitating the displaced Cattle Sheds from Mumbai. The water supply project, however, has the capability of relieving the entire population of VVSR.

Recommendation: Since the Cattle Shed Zone has resulted in the loss of large amount of cultivable land, jobs and economic opportunities in the agrarian sector, displacement of local population and therefore in its present location becomes an incompatible activity with the rest of the agrarian activities, the Development Plan will adopt a twofold strategy (Short Term & Long Term) for the Cattle Shed Zone at Kaman and the existing Cattle Sheds at Pelhar.

As an immediate short term solution, stringent pollution control regulations will be formulated so that the damage of land and water resources that takes place presently is either brought to an end or minimized. Any Cattle Shed that does not follow the regulations would not be allowed to conduct its activities and penalized according to the procedures set by the Government.

In the long term, a definite period will be established to shift the Cattle Shed Zone to alternative locations where this activity can:

- provide jobs for an area where there is acute scarcity of jobs
- be compatible with the other activities
- be economical for this user.

It is strongly recommended that a study examining and measuring the environmental and social impact due to the provision of this land use as well as a study establishing the viability of other locations be initiated immediately.

The Plantation Zone was carved out of the Green Zone due to its particular topographical characteristics, peculiar occupational pattern and other attributes (popularized as the '*Konkan Style*' in the DDP). A similar attempt should be made to carve out a new '*Mountain Zone*' from the Green Zone, which would be the extreme east of the VVSR. The rationale for carving out such a Zone is that the mountainous area presents ample opportunities as catchment areas for tapping water, which haven't been exploited to their full potential. This area also lies in Seismic Zone 4 and is extremely sensitive. No activities like cattle sheds, holiday homes, entertainment parks, golf courses and quarrying should be permitted in this zone. In the case of there being no precedent for the creation of such a zone the MRTP should be modified accordingly.

1.1.2 DISPOSAL OF URBAN AND INDUSTRIAL WASTE INTO THE NATURAL ECOSYSTEMS, LOCATION OF GARBAGE DUMP SITES (POLICY NO: 19 & 21)

Context: In the background of the industrial transformations in the city of Mumbai, Industrial Zones have been proposed in the peripheries of Mumbai. The Industrial Zones within the Municipal limits of Virar, Vasai and Navghar-Manikpur have been facilitated during the last two decades due to their nearness to developed areas.

The rapid urbanization of the VVSR has led to the increased garbage production whose volume is increasing day-by-day. The earlier DDP prepared by CIDCO did not provide proposals for Solid Waste Disposal. The Collector has taken this issue on a priority basis and allotted a few Government Lands for compost depots. These sites which have been allocated for Compost Depots have been shown in the DDP.

Location: As mentioned earlier, the Industrial Zones for small scale industries have been proposed within the Municipal limits of Virar, Vasai and Navghar-Manikpur.

The garbage dumps have been located at several critical areas in the VVSR. For example,

- Along the edge of the Industrial Zone of Navghar Manikpur at Vasai East and the NDZ of Umelman. The salt production activity takes place within the NDZ and the creek separating the NDZ and the Garbage Dump was earlier used by fishermen for fishing activities.
- Towards the East of Malonde and Vasai Fishing Village. The natural slope of the Plantation is towards the North East and South East. The garbage dump has been located towards the extreme west.
- Along the edge of Juhechandra and the NDZ towards the south.

Problem Identification:

1. The industries have been responsible for dumping chemical and hazardous wastes into the nallahs. This waste reaches the creeks and finally the sea. While the industries have provided jobs to semi-skilled and skilled labour, a large quantum of fishing activity has been affected due to the callous dumping of industrial waste into the natural ecosystems. Historically, agrarian activities like fishing have been one of the chief activities in the VVSR and the population involved in these activities has been amongst the earliest settlers on this land. The fishing communities have been involved in fishing both in the sea and in the creeks of the VVSR. Due to the callous dumping of industrial waste some of the small creeks in the VVSR which were earlier used by the fishermen for fishing activities have altogether disappeared as grounds for fishing. In other words, while the deep-sea fishing is a territory controlled by large organizations having sophisticated

- capacities, fishing activities by indigenous fishermen having weak organizational capacities have been at the mercy of the pressures of urbanization.
2. The compost depots where the garbage is dumped have been located at critical junctions where agrarian activities like fishing, salt production and agriculture have been functioning for several centuries. While the compost depots will surely solve the problem of dumping the urban waste, the same compost depots are presently responsible for degrading the condition of the soil and the underground water. The manner in which the compost depots have presently been located has definitely affected the natural ecosystems and indirectly is causing severe recurring economic losses to the fishing, agricultural and salt production activities.

Recommendation: A detailed study of the environmental and social impact of garbage treatment sites, the dumping of industrial and urban waste on the fragile ecosystems necessary for the agrarian sector should be undertaken to formulate a management plan for controlling pollution and degradation of ecosystems on which the agrarian sector is based. The garbage dump and treatment sites should be carefully located only after such a study has been conducted. This study should be undertaken on a priority basis.

1.2 Direct Economic Threats due to transformed land uses

The manufacturing and tourism economy in the VVSR has developed over the agrarian economy. This transformation of the economy has threatened the agrarian production in ways that have been unforeseen in the DDP. While the DDP has recognized the importance of the agrarian economy by forming the Plantation Zone, there have been no corresponding social or economic policies that have been formulated to nurture the agrarian economy. The Field Surveys point out that it is due to an inadequate understanding of the social and economic geography no relevant social or economic policies have been formulated in the DDP, particularly for the agrarian economy. In the following example we will identify the problems arising out of the new programmes that have emerged due to the allocation of land use. Our deduction is that these changes have resulted in direct economic threats for certain sections of the population.

1.2.1 ALLOWING TOURISM IN THE GREEN ZONE AND THE PLANTATION ZONE (POLICY NO: 5 & 14)

Context: In the earlier DP prepared by CIDCO a separate Tourism Zone had been proposed at the Coastal Belt between Arnala to Kalamb, at Vajreshwari Junction along NH-8 and on Vasai Creek along the Super Expressway where no connection is possible. Due to strong opposition from the local population the Tourism Zone has been cancelled in the present DDP. However, DC regulations provide for the grant of permissions to tourist complexes anywhere in the Green Zone and the Plantation Zone.

Location: Entire Green Zone and Plantation Zone.

Problem Identification: The shift from agrarian economy to an economy based on tourism in the VVSR is a recent shift. In fact, a number of peri-urban areas like the VVSR have been conceptualized partly as areas for Tourism and Recreation in the last few decades. Such a conceptualization has led to the emergence of new programmes like Weekend Holiday Housing, Holiday Homes and Resorts, Spiritual Tourism, Amusement Parks, Golf Courses and their associated programmes. These new programmes have developed not on Green-Field Sites but over the agrarian housing (including the fishing villages) and the agricultural fields.

The market for the agrarian economy as well as the tourism economy has essentially been Mumbai. However, the agrarian economy is organized around resident farmers and fishermen and resident as well as some amount of migrant labour. On the other hand, the tourism economy is however based on a miniscule amount of participation of local residents. These transformations have led to the following conflicts:

1. The shift from the agrarian economy to a tourism based economy has resulted into loss of jobs and the mode of sustenance for some sections of the population. The sections of the population who have lost their mode of sustenance have been forced to take up jobs in the transport and related sectors which are being stimulated by the tourism economy. However, due to their skills being based on primarily on agrarian production, this transformation has led to an abject degradation of their living condition by snatching their mode of sustenance from them.

2. The recent transformation of the economy into a tourism based economy has created a pressure on the farmers to sell of their land. This pressure has also been created in the case of owners who do not want to sell their land.
3. The tourism economy is resource intensive in the sense that it requires a large amount of basic resources like water supply. These resources, especially water, are being unfairly siphoned into the tourism economy by the creation of a new tanker lobby. Excessive siphoning of this resource led to the lowering of the water table in the Green Zone and the Plantation Zone.
4. While the peri-urban areas like VVSR have been conceptualized partly as areas for recreation and Tourism by the DDP, this conceptualization has failed to take into account the local aspirations. It has also failed to take into account the aspirations of the newer generations.
5. The Coastal Zone Management Plan, which hasn't been sanctioned and is yet pending has allowed incompatible activities to emerge in coastal zones.

Recommendation: In the case of transformation from agrarian to a tourism based economy in the Plantation Zone and the Green Zone, the regulations must restrict the new activities of tourism / entertainment/ leisure to operate with equal participation of local communities.

The DP in the present format is extremely flexible due to which the more powerful economic groups use it to their advantage. In such a context should suggest ways of protecting the interest of local communities based on the agrarian activities (like the fishing / agriculture / adivasi communities in the VVSR) by formulating relevant social and economic policies and providing them with adequate infrastructure and social amenities to strengthen their present economic activities. A detailed study to achieve this should be undertaken immediately to inform the DP.

In the existing Plantation Zone the Coastal Zone Regulations should be clearly recognized and maintained.

1.3 Environmental Threats affecting living conditions

In the earlier section we have elaborated the case of the location of garbage dumps which pose as a serious environmental threat. However, environmental threats have developed due to other reasons too – like the insufficiency of water supply and drainage infrastructure, the destruction of existing built fabrics etc. The DDP has in no way come close towards articulating a good living standard for the entire population of the VVSR and the scant nature of environmental resources has always affected the living conditions. We have elaborated two cases wherein either meager resources or destruction of existing fabrics have affected the living conditions. In such a context, the aim should be towards conserving the already existing resources by framing them as heritage assets.

1.3.1 FORMATION OF A SPECIAL RESIDENTIAL ZONE

Context: The State Government has issued instructions to make suitable reservations for rehabilitation of slum dwellers. This instruction has been issued due to a argument being made about the inadequacy of land for re-housing the slum dwellers within Mumbai.

Location: The Special Residential Zone has been located at –

1. Shirgaon – Chandansar Industrial Complex.
2. Between Virar and Nallasopara railway stations near the proposed car-shed.
3. In Rajvali – Juhechandra area on both sides of the Vasai – Diva railway link where the Low Density Residential Zone has been converted into a Special Residential Zone.

Problem Identification:

1. Local residents from the three areas where the Special Residential Zone has been located point out instances of land already being brought by the builders and therefore there is pressure created on the Government for the creation of such a zone, which would only profit the builder/developer lobby.
2. In the context of acute shortage of basic amenities and infrastructure like water supply, sewerage system and the already overburdened transport infrastructure the creation of such a zone would worsen the living condition of the already existing population of the VVSR and the population that will shift here.

3. Such developments without appropriate provision of amenities and infrastructure have led to the creation of another set of middle men like the tanker lobby, which thrives on such situations by siphoning resources that are meant for other areas. It is often either the State Government or the residents of the Plantation and Green Zone who have to bear the burden of the siphoning of resources. Instances of siphoning water from the dams and wells by the builder lobby is a common and prevalent practice due to which the Government or the local communities have to bear tremendous economic losses. Due to the excessive siphoning of water from the Green Zone and the Plantation Zone to the U – Zone, the level of the underground water table has gone down tremendously and has severely affected the Green Zone and the Plantation Zone.
4. The informal housing – slum - has always presented conditions of both living and working. In other cases slums primarily service the MIG and the HIG housing. Cases of rehabilitated slum dwellers selling houses and going back to stay in the slums, especially when the rehabilitation has been done in far-off areas, are well documented by now. While such a model has proved to be an economic benefit for the slum dweller, in many a case the rehabilitated dweller has returned back to the slum because the location for rehabilitation did not provide livelihood opportunities.

Recommendation: The Special Residential Zone demarcated in the plan should include only for:

- Encroachments / informal settlements in the VVSR.
- In the case of shifting slum dwellers from Mumbai, it should only include inhabitants who have to be rehabilitated due to safeguarding macro level environmentally sensitive zones like the lakes or building of large public infrastructure projects like railways. This zone, apart from rehabilitation, should provide for economical housing for migrants settling in the city of Mumbai.

The development in the special Residential Zone should at no point compromise with the level of infrastructure or should allow any relaxation in the DC rules. Development permissions should not be granted in the case of adequate infrastructure not being provided in the Special Residential Zone.

The DC rules should clearly mention that the development in the Special Residential Zone would not be permitted in the case of there being no appropriate infrastructure and amenities in the Special Residential Zone. The DC rules should provide for small-scale economic activities along with housing in the Special Residential Zone.

1.3.2 IDENTIFICATION OF HERITAGE SITES (POLICY NO: 8)

Context: The DDP has identified only two assets of heritage importance – the Vasai Fort and Ashoka Shilalekh. It is evident that these two places, without doubt, are amongst the important assets of heritage value. However, within the fabric of the VVSR, there are numerous other buildings and precincts of heritage value, which haven't as yet been designated by the modified DDP (2001 – 2021) or any other authorized document or by any independent study for the purposes of conservation. The predatory nature of the present pattern of urbanization (the examples stated in the earlier paragraphs present the problems of the present pattern of urbanization) has tended to eat into the built fabrics and resources of the already existing communities in the VVSR. In the context of the predatory nature of urbanization the tool of Heritage Conservation could be effectively used to safeguard the built fabrics and resources of the local communities in the VVSR.

Location: --- --- ---

Problem Identification:

1. Many examples of the destruction of existing built fabrics in the VVSR could be cited. For example, the pressures of gentrification in the older towns of Sopara and Vasai, the fishing villages as well as in the Plantation Zone which are rapidly transforming the fabrics of these places. Whether the infrastructure of these places has the capability of taking these transformations, whether the social contexts would allow for a smooth transition during such a transformation are questions that are still unanswered. In Mumbai, it is in the context of such transformations that the Conservation Policy was formulated.
2. If we compare the case of Mumbai and VVSR, which are almost of the same area (Mumbai admeasures approximately 465 sq. km. while VVSR admeasures approximately around 380 sq. km.), then we observe that a fairly well developed Conservation Policy

and Legislation has been developed for Mumbai. In the case of the VVSR, on the other hand, there is only a mention to two structures that have been identified for heritage conservation.

3. From our preliminary surveys of the VVSR, we find that there are several other built structures that merit heritage importance. Some of these structures precede even some of the most important heritage structures in Mumbai. These buildings include religious (churches and temples) and domestic (wadās and other house types) structures. Along with built structures, several precincts that still exhibit an agrarian economy and thus show a distinct built fabric (popularized in the DDP, 2001-21 as the *Konkan Style*) exist in the region. Moreover, several environmentally sensitive zones like the mudflats, creeks, lakes, the plantation zone, the green zone, the forest zones and the coastal zones that have significantly contributed to the culture and heritage of the region. VVSR also have traditionally recognized public spaces like the tanks, wells, squares, nodes and streets that add to the heritage aspect of the region. These assets need to be recognized as heritage conservation assets.

Recommendation: There is a need to identify, grade heritage buildings and precincts other than the ones mentioned above and formulate development control regulations should include more than the existing two monuments as mentioned. A detailed study to enlarge the scope of this aspect of the VVSR should be undertaken immediately. The study should have as its scope:

- The listing and grading of heritage buildings and precincts.
- Formulating a relevant Conservation Policy and appropriate Development Control Regulations.

2. PROVISION OF INFRASTRUCTURE

The pace of development of the VVSR is increasing rapidly day-by-day. The DDP too, facilitates newer developments in the VVSR. However, while facilitating the newer development the DDP has failed to take cognizance of the ground conditions in the VVSR, which confirm that physical infrastructure is not only inadequate and meager but in some cases is also non-existent. In areas where the DDP has made proposals for providing physical infrastructure we find that there are either lop-sided investments being made or the investments into physical infrastructure have a weak rationale. We will elaborate specific cases of proposals for Public Transport, Water Supply, Storm Water Drainage and Garbage Disposal wherein we have identified problems during the Field Survey.

2.1 *Proposals for Public Transport*

VVSR presents an excellent case of dormitory town that has developed with public transport infrastructure being almost non-existent. It is only recently that the quadrupling of railway tracks is taking place but there are no improvement schemes suggested for station areas. Bus transport is almost non-existent. There are no concrete policies in the DDP to remedy this situation, instead it has cancelled the projects which need to be taken on a priority basis and has made proposals in areas where no immediate planning or investment is required. The project that needs to be taken on a priority basis is the reinforcing of and integration of the rail and road system for public transport.

2.1.1 DROPPING OF NEW RAILWAY STATIONS AND RELOCATION OF EXISTING STATIONS (POLICY NO: 10)

Context: The DDP has dropped the following proposals –

1. To make a new railway station between Nala Sopara and Virar, and
2. To relocate the existing Virar, Nala Sopara and Vasai Stations.

The DDP, on the one hand, acknowledges that these proposals would have offered better facilities to the public, but on the other, these proposals have been dropped because either the railways are not in favour or on financial grounds.

Location: --- --- ---

Problem Identification: This adoption of this policy in conjunction with policies that have been formulated for providing new roads (like the Super Expressway) provides an outstanding example of lop-sided investments that are being made in transport infrastructure. We can identify the following problems:

1. The DDP does not state why the Railways do not favour the new railway station between Nala Sopara and Virar. Development of this railway station would definitely help residents in the surrounding considering the fact that the distances between any two stations are large as compared to distances between stations in Mumbai. Moreover, the VVSR does not have an efficient public transport system like the BEST in Mumbai, which facilitates movement of large masses from housing, commercial or business areas up to the railway stations.
2. The VVSR is one of the most rapidly developing peripheries of Mumbai. The DDP recognizes that “during the two decades between 1971 to 1991, the growth of this area was much faster than it was anticipated in the Development Plan. New Mumbai, however, did not achieve much development”. It further goes on to add that “VVSR has developed as a dormitory town for Mumbai” and “the commuters have nightmarish experiences while traveling at peak hours. Adequate facilities for parking near the stations are lacking. Moreover, the haphazard development of commercial activity which has taken place in and around the stations has also made movement of the pedestrians and vehicles extremely difficult”. When such drastic conditions of public transport are recognized, the proposals for bettering facilities cannot be dropped on financial or even technical grounds. The DP should formulate innovative methods of providing the basic public facilities.

Recommendation: The station area, which is an important part of the rail network, should be redeveloped to provide for better infrastructure for vehicular traffic movement, pedestrian movement and other commercial, cultural activities. An urban design plan should be drawn for this area which should seek participation from government agencies, private organizations as well as local communities residing there.

2.1.2 PROPOSAL FOR THE SUPER EXPRESSWAY AND MODIFICATION OF THE ARTERIAL ROAD SYSTEM (POLICY NO: 13 & 17)

Context: We would speak about the following proposals made in the DDP–

1. Incorporation of the Mumbai – Ahmedabad Super Expressway proposed by the Maharashtra State Road Development Corporation.
2. Modification of coastal road from Girij to Aghasi – Arnala.

Location: --- --- ---

Problem Identification: The proposals mentioned above have been made at a time when there is no real need for these roads. The Mumbai – Ahmedabad Expressway is not required because the NH-8 is efficient to serve the present traffic load. If the traffic load is estimated to increase this road could be widened as it provides ample opportunities for road widening. The proposal for the new coastal road between Girij to Aghasi – Arnala should only be taken up if no opportunities for widening of the existing road are available. It is interesting to note that while making these proposals the DDP has thought about a long term vision but the DDP has made no reservation or proposal for improving station areas or providing a service road along both sides of the railway line or even providing a north south connection towards the west of the railway line from Bhayander to Vasai, which are the priorities for relieving the population of the VVSR from the presently cumbersome movement network.

Recommendation: The suggestions to reinforce the arterial road system in this region should be rethought. Instead of increasing the number of north-south arterial roads in the Plantation Zone from one to two the DP should as far as possible strengthen the existing connection by widening it. The houses which loose area due to this should be re-compensated by providing more space towards the back of their plots. If this is not possible then the DP should propose added incentives for owners of the plots where the new road alignment is going to cut through.

The DDP should propose newer north - south links adjoining the railway line between all the stations as such connections do not exist presently. This north – south link would act as the service road.

Such a road system should strengthen the bridge link between the Bhyandar region as planned in development plan.

The proposal Mumbai - Ahmedabad expressway should be dropped. Instead, the existing NH-8 should be reinforced and if necessary could be widened.

2.2 Water Supply Proposals

The DDP has identified newer sources of water supply that could be tapped. However, the Surya Scheme, which is the first scheme under implementation, has stopped due to the shortage of funds. The shortage of water supply from Municipal sources, the proliferation of tanker lobbies that rely on well water is well known. We can discern that newer developments in the VVSR are being facilitated with the assumption that a basic minimum amount of water supply necessary to sustain the estimated population would be made available. However, the ground realities point out that there are presently no newer warder supply schemes that are implemented and that there is a paucity of funds to implement the schemes. In such a condition the DDP has been making assurances in thin air.

2.2.1 NEWER PROPOSALS FOR WATER SUPPLY (DDP, CHAPTER VIII)

Context: In the context of the estimated population (13 Lakh by 2011) of the VVSR, the DDP estimates that the population of VVSR would be sustained comfortably by 2011 on the water supply proposals (assured water supply 155 mld sustaining 15.5 Lakh) have been made. In this scheme the first project under implementation is the Surya Scheme (200mld). The other sources that have been identified are Wandri Scheme (96.00 mld), Ghatghar (8.00 mld), Kaman (52 mld), Kholsapada Scheme (34.55 mld), Varna Nalla Project (55.00 mld), Rajivali – Sativali Scheme (10.00 mld).

Location: --- --- ---

Problem Identification: We can identify the following problems:

1. If we look at the amount of water supplied to the VVSR from existing sources then we find that the well water supply is the single largest source of water supply. Of the total 30.00

mld of well water supply, 15.00 mld is used by the urban areas and the remaining 15.00 mld is used by the Green Zone and Plantation Zone. This means that half of the well water supply is distributed to the urban areas. The DDP also states that 15.00 mld of water is supplied to the urban areas through tankers. This water is also made available from the underground water table in the Green Zone and the Plantation Zone. The depth of the water table in the Green Zone and the Plantation Zone has been rapidly declining due to this and a sustained effort of withdrawing water from these areas would affect not only the agricultural production but also the sustenance of the population of the Plantation and the Green Zone. It is therefore wrong of the DDP to assume that the population from the Green Zone and Plantation zone would sustain on the well water supply already available in these zones.

No	Area	Usgaon Scheme	Pelhar Dam	Papadkhind Dam	Well Supply	Water
1.	Vasai Town	2.50mld	---	---	---	---
2.	Navghar Manikpur Municipal Area	4.00mld	3.50mld	---	---	6.00mld
3.	Nala Sopara Municipal Area	4.00mld	3.50mld	---	---	9.00mld
4.	Virar Municipal Area	14.00mld	---	1.50mld	---	---
5.	Green Zone	---	7.00mld	---	---	2.00mld
6.	Plantation Zone	---	---	---	---	13.00mld
Total Water Supply		24.50mld	14.00mld	1.50mld	---	30.00mld

2. It has been observed that the tanker water supply is tapped through unfair means, for example from plots adjoining the bases of various dams. This means not only huge losses of revenue to the State but also that an essential amenity has to be purchased in the market at a higher cost. The tanker lobby has been proliferating due to such repeated ignorance of this situation from the concerned authorities.
3. Before facilitating newer developments in the VVSR, the water supply infrastructure to tap water from the sources that have been identified should be put into place and the newer schemes that have been identified should be implemented. This is the first priority project that should be undertaken in the VVSR.
4. A number of sources that have been identified for water supply to the VVSR lie outside the sub – region and have been identified to supply water to those regions. Due to this there is already a conflict that has emerged in which the clarity of water supply sources catering to the VVSR is unclear.
5. There exist ample number of smaller catchment areas in the Green Zone, which have not been tapped for water supply. Instead of relying on large projects like the Surya Project, which requires large investments smaller sources could be identified in the VVSR that could provide water with minimal investments.

Recommendation: The existing natural water system comprising of catchment areas and ponds, along with the existing topography should be mapped and protected immediately. Smaller catchment areas, which require minimal investment to tap water, should be identified immediately. This system should be recognized as an alternative source of water for this region. As a policy a DCR should be passed that all new housing projects should undertake water-harvesting schemes.

2.3 Storm Water Drainage Proposals

It has been observed that the flawed tampering of the topography of the VVSR in several places has led to a severe damage of the existing natural surface slopes. Due to this a large amount of water logging and flooding occurs in various places. Large tracts of fields in the Plantation Zone have been left uncultivable for the last 15-20 years due to large amounts of land filling done in the adjacent U – Zone causing heavy economic damages. It should be realized that not only proposals for reservations of natural water detention areas, deepening of nalas and creeks need to be made but also that new developments should not be allowed to tamper with the existing topography. In case the modifications to the natural topography are inevitable they must be carefully engineered.

2.4 Solid Waste Disposal

The problems with the present system of Solid Waste Disposal have been discussed in 'Section 1.1.2'. The Municipal Councils in the VVSR needs to adopt the newer programmes that have been formulated by the MCGM to solve the problems of solid waste disposal.

3. PROJECTIONS, DEMOGRAPHY AND PLANNING STANDARDS ADOPTED

3.1 PLANNING STANDARDS ADOPTED TO PROVIDE AMENITIES AND INFRASTRUCTURE (POLICY NO: 4 & 30)

Context: In the DDP, the planning standards for amenities have been revised for providing minimal infrastructure. The DDP further states that “the Town Planning and Valuation Department has submitted to the Government a proposal to revise these standards mainly because of the fact that the financial liabilities in the implementation of any Development Plan always remain out of reach of the planning authorities”.

Problem Identification:

1. The table below provides a comparison of the State Planning Standards and the Planning Standards adopted for the VVSR in the case of three essential amenities:

NO.	AMENITY	STATE PLANNING STANDARDS	VVSR PLANNING STANDARDS	REMARKS
1.	Recreational Open Spaces			
	Gardens / Parks	0.2 ha per 1000 population	0.1 ha per 1000 population	Recreational Open Spaces as reserved amenities reserved in the VVSR amount to half of those employed by the State Planning Standards.
	Play Grounds	0.4 ha per 1000 population	0.2 ha per 1000 population	
Educational Facilities				
2.	Primary Schools (33% expected through the Private Sector in VVSR)	15% of the population One site for every 400 to 500 pupils	15% of the population One school for 500 to 1000 students Minimum area of site is 0.6 ha to 0.8 ha The site is inclusive of playground	Educational facilities as amenities reserved in the VVSR amount to half of those employed by the State Planning Standards.
	High School + Jr. College (50% expected through the Private Sector in VVSR)	7.5% of the total population One site per 750 to 1000 students	9% of the total population One site for 1000 to 1500 students Minimum area of site is 1.0 ha to 1.2 ha The site is inclusive of playground	
	College (2/3 rd expected through the Private Sector in VVSR)		3% of the population One site for 1500 to 2000 students Minimum area of site is 1.5 ha to 2.0 ha The site is inclusive of playground	
3.	Medical Facilities			
	Dispensaries	0.25 ha per 10,000 population	No separate site is required and O. P. D. section is suggested in every medical center.	Medical facilities as amenities reserved in the VVSR amount to half of those employed by the State Planning Standards.
	Health Center and Maternity Home (50% expected through the Private Sector in VVSR)	0.25 ha per 10,000 population	One site for every 25,000 persons Minimum area of site is 0.2 ha to 0.3 ha	
	General Hospital	One site for 30,000 population Minimum area of site is 4 ha to 6 ha	One site for every 1,00,000 persons Minimum area of site is 1.5 ha to 2.0 ha	
Central Hospital		One site for total sub-region population Minimum area of site is 5 ha		

We can observe that in the case of provision of Recreational Open Spaces, Educational Facilities and Medical Facilities the Planning Standards adopted for the VVSR amount to half of those employed by the Planning Standards of the Maharashtra State. The DDP instead of addressing

the formulation of viable financial models in order to provide amenities and infrastructure has reduced their number and quantity by lowering the Planning Standards. The following question emerges, which needs to be addressed immediately: Can the planning process blatantly state “financial liability” as an excuse for lowering the Planning Standards or should the planning process aim towards developing viable financial models to provide the necessary amenities and infrastructure?

- The table provides a sector-wise comparison of Recreational Open Spaces, Educational Facilities and Medical Facilities, which have been provided according to the lately adopted standards:

Recreational Open Spaces Gardens & Playgrounds)

SECTOR	PROJECTED POPULATION	NO. OF SITES	AREA (HA) DESIRABLE	AREA (HA) PROVIDED	REMARKS
I	(2011) 55,000 (2021) 85,000	10 -12	8.5 -17.00	27.3789 on 24 sites	---
II	(2011) 2,95,000 (2021) 4, 65,000	25 - 30	29.50-59.50	77.2939 on 57 sites	Area reserved is less considering large parks are proposed in site nos. 83 and 91.
III	(2011) 3,15,000 (2021) 4,30,000	25 - 30	31.50-63.00	69.2429 on 46 sites	The area mainly to the east of Railway line in villages Tuling and Achole is thickly populated and no open lands are available for proposing required sites.
IV	(2011) 1,85,000 (2021) 2,75,000	18 - 20	18.50-37.00	43.2532 on 36 sites	The area is already developed and hence small size sites are proposed as no vacant lands are available
V	(2011) 65,000 (2021) 95,000	10 for R 10 -15 for I zone	9.50 -19.00	29.7178 on 36 sites	The open spaces proposed in the industrial zones will act as air lungs.
VI	(2011) 1,45,000 (2021) 1,85,000	22-25	18.50-37.50	54.8742on 36 sites	---
VII	(2011) 30,000 (2021) 40,000	3	3.00	2.245 on 3 sites	---
VIII	(2011) 65,000 (2021) 75,000	22	15.00	27.777 on 22 sites	This is the oldest urban area in the sub region and provisions are made considering the 2021 population.
IX	(2011) 95,000 (2021) 1,15,000	15	---	17.3976 on 15 sites	Area mainly includes population living in plantation zone. Hence amenities are not provided according to standards. Some locations are provided for important amenities
X	(2011) 50,000 (2021) 60,000	The area under this sector is mainly of scattered villages and also includes major forestlands as well as small or large hills on both sides of the national highway no 8. The area is purely of rural nature and no urban amenities are required. Hence no reservations are made in this sector no. 10 However sites required for amenities like Tungareshwar Temple Fair, Dam side picnic spot are only provided.			

Educational Facilities – Pr.Schools (33% expected through private sector)

SECTOR	PROJECTED POPULATION	NO. OF SITES	AREA (HA) DESIRABLE	AREA (HA) PROVIDED	REMARKS
I	(2011) 55,000 (2021) 85,000	11	6.00	6.3009 on 11 sites	---
II	(2011) 2,95,000 (2021) 4, 65,000	30	18.00	13.3924 on 23 sites	Z.P.school are already running to cater the need and hence less sites are provided.
III	(2011) 3,15,000 (2021) 4,30,000	31	18.60	7.4081 on 15 sites	Primary schools of Z.P and of private trusts are already available and hence sites are reduced accordingly.
IV	(2011) 1,85,000 (2021) 2,75,000	19	111.40	6.888 on 12 sites	The Z.P and public trusts have already provided schools which cater the need.
V	(2011) 65,000 (2021) 95,000	9	5.40	5.3666 on 8 sites	Z.P has already provided sufficient schools in this area.
VI	(2011) 1,45,000 (2021) 1,85,000	18 - 20	16.00	16.0993 on 18 sites	---
VII	(2011) 30,000 (2021) 40,000	5	4.00	0.6209 on 1 sites	Sufficient Pr.Schools are already existing of Z.P/Trusts
VIII	(2011) 65,000 (2021) 75,000	15	9.00	nil	Requisite Pr.Schools are already existing.
IX	(2011) 95,000 (2021) 1,15,000	---	---	---	---
X	(2011) 50,000 (2021) 60,000	The area under this sector is mainly of scattered villages and also includes major forestlands as well as small or large hills on both sides of the national highway no 8. The area is purely of rural nature and no urban amenities are required. Hence no reservations are made in this sector no. 10 However sites required for amenities like Tungareshwar Temple Fair, Dam side picnic spot are only provided.			

Educational Facilities – Secondary Schools and Jr.College (50% expected from private sector)

SECTOR	PROJECTED POPULATION	NO. OF SITES	AREA (HA) DESIRABLE	AREA (HA) PROVIDED	REMARKS
I	(2011) 55,000 (2021) 85,000	8	8.00	7.2717 on 8 sites	Area provided is slightly less.
II	(2011) 2,95,000 (2021) 4, 65,000	22	26.40	25.7507 on 25 sites	Some existing private High Schools are sub-standard in the area without having play-ground or in rented premises and hence more sites are proposed.
III	(2011) 3,15,000 (2021) 4,30,000	15	15.00	11.8345 On 15 sites	Area provided is slightly less for want of vacant lands.
IV	(2011) 1,85,000 (2021) 2,75,000	8	8.00	7.6114 on 8 sites	---
V	(2011) 65,000 (2021) 95,000	4	4.80	5.7401 on 5 sites	---
VI	(2011) 1,45,000 (2021) 1,85,000	14	16.80	21.1284 on 14 sites	Site nos.571,577,609,842 are markets with shopping centres, hence more area is proposed
VII	(2011) 30,000 (2021) 40,000	2	2.40	2.0556 on 2 sites	---
VIII	(2011) 65,000 (2021) 75,000	3	3.68	0.2904 on 1 sites	Requisite High schools are already existing.
IX	(2011) 95,000 (2021) 1,15,000	---	---	2.9803 on 1 site	---
X	(2011) 50,000 (2021) 60,000	The area under this sector is mainly of scattered villages and also includes major forestlands as well as small or large hills on both sides of the national highway no 8. The area is purely of rural nature and no urban amenities are required. Hence no reservations are made in this sector no. 10 However sites required for amenities like Tungareshwar Temple Fair, Dam side picnic spot are only provided.			

Educational Facilities – College (2\3 rd expected from private sector)

SECTOR	PROJECTED POPULATION	NO. OF SITES	AREA (HA) DESIRABLE	AREA (HA) PROVIDED	REMARKS
I	(2011) 55,000 (2021) 85,000	1	1.5	---	College is not proposed and it is presumed that college at Virar would cater the need.
II	(2011) 2,95,000 (2021) 4, 65,000	2	4.00	3.3455 on 1 sites	One college is already existing ans site no.184 is proposed for its extension.
III	(2011) 3,15,000 (2021) 4,30,000	2	4.00	4.6744 On 2 sites	Sites no.371 is being developed by a trust, hence third site is appearing.
IV	(2011) 1,85,000 (2021) 2,75,000	1	2.00	2.2559 on 1 sites	---
V	(2011) 65,000 (2021) 95,000	--	---	---	College is being provided by the Vidyavikasini
VI	(2011) 1,45,000 (2021) 1,85,000	3	6.00	4.0202 on 3 sites	---
VII	(2011) 30,000 (2021) 40,000	---	---	---	---
VIII	(2011) 65,000 (2021) 75,000	---	---	---	College is already existing
IX	(2011) 95,000 (2021) 1,15,000	---	---	2.9803 on 1 site	---
X	(2011) 50,000 (2021) 60,000	The area under this sector is mainly of scattered villages and also includes major forestlands as well as small or large hills on both sides of the national highway no 8. The area is purely of rural nature and no urban amenities are required. Hence no reservations are made in this sector no. 10 However sites required for amenities like Tungareshwar Temple Fair, Dam side picnic spot are only provided.			

Medical Facilities – Health Centres (50% expected from private sector)

SECTOR	PROJECTED POPULATION	NO. OF SITES	AREA (HA) DESIRABLE	AREA (HA) PROVIDED	REMARKS
I	(2011) 55,000 (2021) 85,000	4	1.20	1.8602 on 5 sites	One site is proposed in excess considering industrial complex.
II	(2011) 2,95,000 (2021) 4, 65,000	6	1.80	2.7762 on 8 sites	2sites are provided more considering extent of sector.
III	(2011) 3,15,000 (2021) 4,30,000	7	2.10	3.3426 on 8 sites	---
IV	(2011) 1,85,000 (2021) 2,75,000	4	1.20	2.1413 on 5 sites	More health centres are proposed in view of industrial area.
V	(2011) 65,000 (2021) 95,000	4	1.20	1.6035 on 4 sites	---
VI	(2011) 1,45,000	7	2.10	3.6415 on 7 sites	---

	(2021) 1,85,000				
VII	(2011) 30,000 (2021) 40,000	---	---	---	---
VIII	(2011) 65,000 (2021) 75,000	1	0.03	0.5025 on 1 sites	---
IX	(2011) 95,000 (2021) 1,15,000	---	---	---	---
X	(2011) 50,000 (2021) 60,000	The area under this sector is mainly of scattered villages and also includes major forestlands as well as small or large hills on both sides of the national highway no 8. The area is purely of rural nature and no urban amenities are required. Hence no reservations are made in this sector no. 10 However sites required for amenities like Tungareashwar Temple Fair, Dam side picnic spot are only provided.			

Medical Facilities – General hospitals

SECTOR	PROJECTED POPULATION	NO. OF SITES	AREA (HA) DESIRABLE	AREA (HA) PROVIDED	REMARKS
I	(2011) 55,000 (2021) 85,000	---	---	---	---
II	(2011) 2,95,000 (2021) 4, 65,000	3	6.00	6.9591 on 3 sites	---
III	(2011) 3,15,000 (2021) 4,30,000	3	6.00	4.9921 on 3 sites	---
IV	(2011) 1,85,000 (2021) 2,75,000	2	4.00	3.2482 on 2 sites	More health centres are proposed in view of industrial area.
V	(2011) 65,000 (2021) 95,000	1	2.00	0.7622 on 1 sites	---
VI	(2011) 1,45,000 (2021) 1,85,000	2	4.00	4.2695 on 2 sites	---
VII	(2011) 30,000 (2021) 40,000	---	---	---	---
VIII	(2011) 65,000 (2021) 75,000	1	---	---	Municipal hospital is existing.
IX	(2011) 95,000 (2021) 1,15,000	---	---	---	---
X	(2011) 50,000 (2021) 60,000	The area under this sector is mainly of scattered villages and also includes major forestlands as well as small or large hills on both sides of the national highway no 8. The area is purely of rural nature and no urban amenities are required. Hence no reservations are made in this sector no. 10 However sites required for amenities like Tungareashwar Temple Fair, Dam side picnic spot are only provided.			

We can observe that in the case of providing Recreational, Educational and Health Facilities in Sector X, no amenities and infrastructure has been reserved. Although this sector is rural in nature and its densities cannot be compared to urban areas there is a dire need to provide and improve basic Recreational, Educational and Health amenities and infrastructure in this sector. Access to Recreational, Educational and Health infrastructure is not solely the need or right of residents living in urban areas; and instead of articulating strategies to provide amenities in peri-urban areas, the present DDP has indulged in lowering the Planning Standards. In this sector, which is rural in nature and does not have densities like the urban areas, the DP may need to formulate an altogether different strategy to provide essential amenities and infrastructure that are severely lacking in these areas.

Recommendation: The Planning Standards for the VVSR should not be lowered under any circumstances. Considering the fact that the VVSR is a peri-urban development of Mumbai, the DP should aim towards upgrading the Planning Standards in order to improve living standards in peri-urban areas like the VVSR. The Planning Authorities should formulate innovative financial models for providing amenities and infrastructure. These models could be in the form of seeking private initiative or through providing additional development rights etc. Such models can only be established after a viability study is conducted for such models. Such a study should be initiated immediately.

GENERAL RECOMMENDATION

Within the five categories of policies that have been made in the DDP several policies make repeated references to one another. For the convenience of the lay reader we suggest that the policies adopted should be categorized and presented under distinct heads like allocation of land use, provision of infrastructure, institutional mechanisms adopted, demography / projections and planning standards, addition / modification / rectification to existing drawings.