

Report
on
Rationalization of Precincts
for
Paro Valley Development Plan

DEPARTMENT OF HUMAN SETTLEMENT,
MINISTRY OF WORKS & HUMAN SETTLEMENT

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ରୂପାଲ୍ମୁଖପ୍ରସାଦକ୍ଷମି । କର୍ମଚାରୀଙ୍କମନ୍ଦିର ।
ROYAL GOVERNMENT OF BHUTAN
MINISTRY OF WORKS & HUMAN SETTLEMENT
THIMPHU: BHUTAN



MINISTER

FOREWORD

Paro Valley, located in the western part of the country is one of the most picturesque and historic places of Bhutan. The lush paddy fields alongside elegant traditional buildings and the religious & cultural sites portray Paro as the quintessential image of Bhutan as a unique Cultural Landscape. Due to its favourable terrain, proximity to the nation's capital and the international accessibility, there is tremendous potential and at the same time pressure for developmental activities and growth. Therefore, the Paro Valley Development Plan (PVDP) was initiated in 2015 to temper the haphazard sprawl of human settlement and promote integrated and sustainable development through provision of general growth direction. The PVDP planning area constitutes 37sq.km of planned area and 10 sq.km of extended area covering 8 Gewogs and 45 chiwogs. The Plan was approved during the 16th National Consultative Committee for Human Settlement (NCCHS) held on 29th December 2016 and was released for implementation in 2017. But due to implementation issues, namely: increasing development proposals and appeals for land conversion; difficulty in processing proposals falling under multiple precincts and overlays such as river and stream buffers, flight paths, environment and agriculture precincts, the PVDP precinct rationalization exercise was initiated by MoWHS in June 2020 with the following objectives:

- provide holistic solutions to issues and avoid isolated & fragmented resolution of individual problems,
- establish strategies to resolve future development proposals and appeals.

After several rounds of consultation with the relevant stakeholders, the Ministry finalized the revised precinct plan in June 2021. The Plan was approved during the 37th Policy and Planning Coordination Meeting (PPCM) held on 3rd August 2021. The precinct rationalization exercise adopted 11 strategies to rationalize the precincts under the PVDP. As such the long-term sustainability of Paro Valley would depend on how development activities respect the provisions of the approved Valley Development Plan. I would therefore like to urge the Local Government (Dzongkhag and Gewog administrations) to take full ownership of the Plan and ensure that development takes place as per the provisions of the approved plan.

Further, I request all stakeholders to interpret and implement the plan in its true spirit and intention to realize the goals and objectives of the plan.

Tashi Delek

Dorji Tshering
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1. Introduction

A. Background of PVDP

The Paro Valley Development Plan (PVDP) was prepared to provide general direction for development in the valley. It was approved on 29th December, 2016 during the 16th National Consultative Committee for Human Settlement (NCCHS) and subsequently released to the Paro Dzongkhag Administration for implementation in 2017. The Plan covers an area of 37 sq.km, which includes 8 Gewogs and 45 Chiwogs. The extended area beyond the project boundary encompasses Drugyel, Isuna, Dotey and Logokha villages and has an area of 10 sq.km.

Paro Valley Development Plan was prepared following the due planning process as highlighted in Figure 1.1. The main aim of the plan was to promote integrated and sustainable development through provision of general growth direction due to increasing development pressure, fragmentation and conversion of land. Through PVDP, Paro was envisioned to be preserved as ‘an image of Bhutan’s Cultural Landscape’. To realize this vision, following objective and strategies were formulated:

- a. Conserve significant Cultural Landscape of the Valley.
- b. Protect and enhance the sanctity of religious sites and the cultural heritage.
- c. Conserve and enhance the traditional villages and settlements in order to maintain the unique identity of Paro valley.
- d. Keep agricultural areas for local food supply and for the specific landscape scenery.
- e. Enhance accessibility by promoting walking, cycling and public transportation.
- f. Promote sustainable tourism development benefiting the local population.
- g. Provide infrastructure for solid waste management, water supply and sewage for the development of the focus areas.
- h. Promote Paro Valley by adopting principles of smart growth.



Figure 1.1 PVDP Planning Procedure

The Plan highlights the importance of fulfilling these objectives due to Paro being the gateway to Bhutan giving outsiders the first and last impression of the country. Hence, Figure 1.2 summarizes the strategies for PVDP.

The major consideration while developing the concept plan for Paro Valley has been establishing the urban spine that links the valley from Isuna in the south to Drugyel in the north (Figure 1.3). This will serve as the economic corridor that will facilitate future development while connecting and opening pockets of medium to high density development hubs or neighborhood nodes along its way.

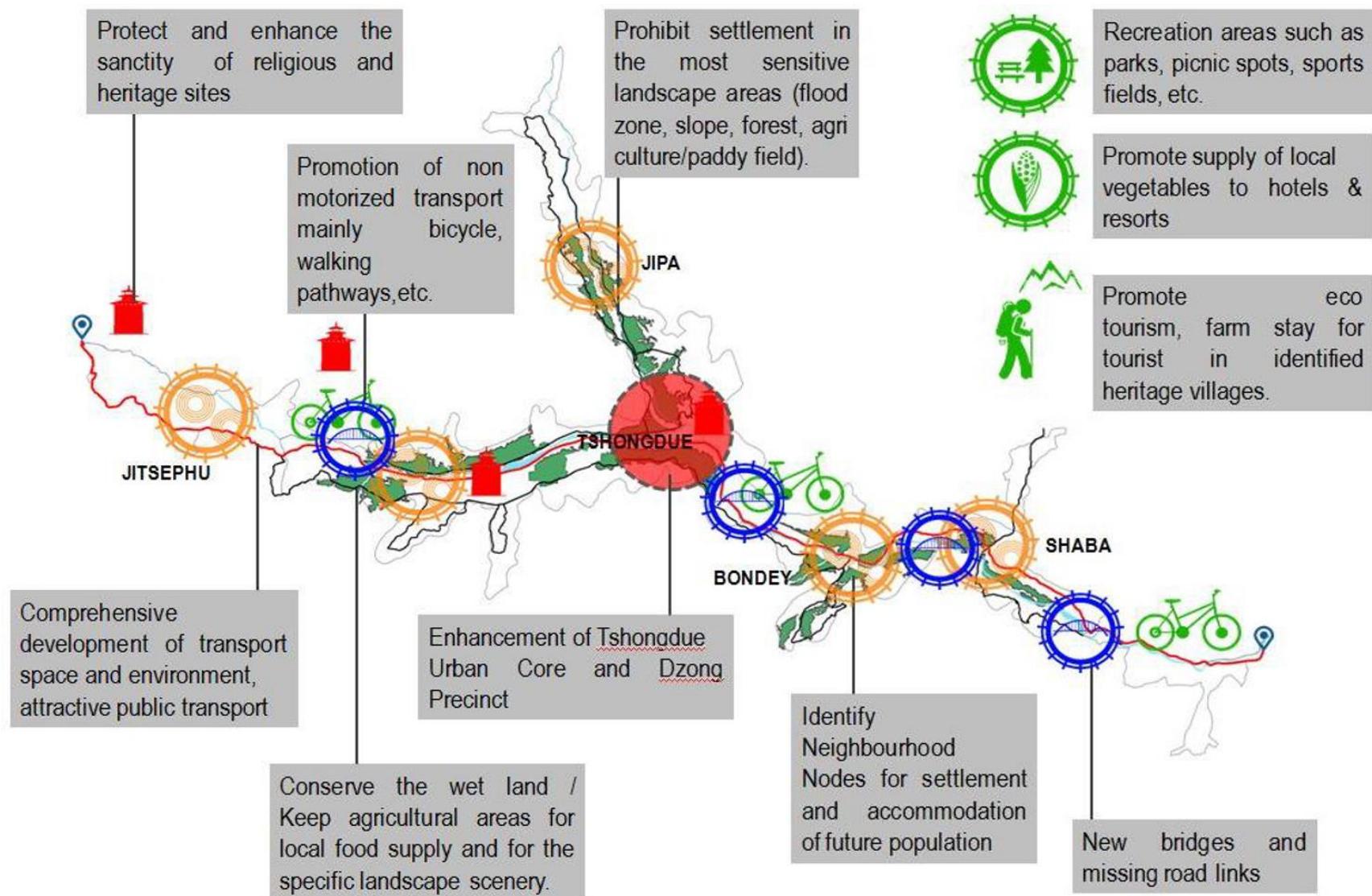


Figure 1.2 Proposed Strategies in PVDP

Urban Spine

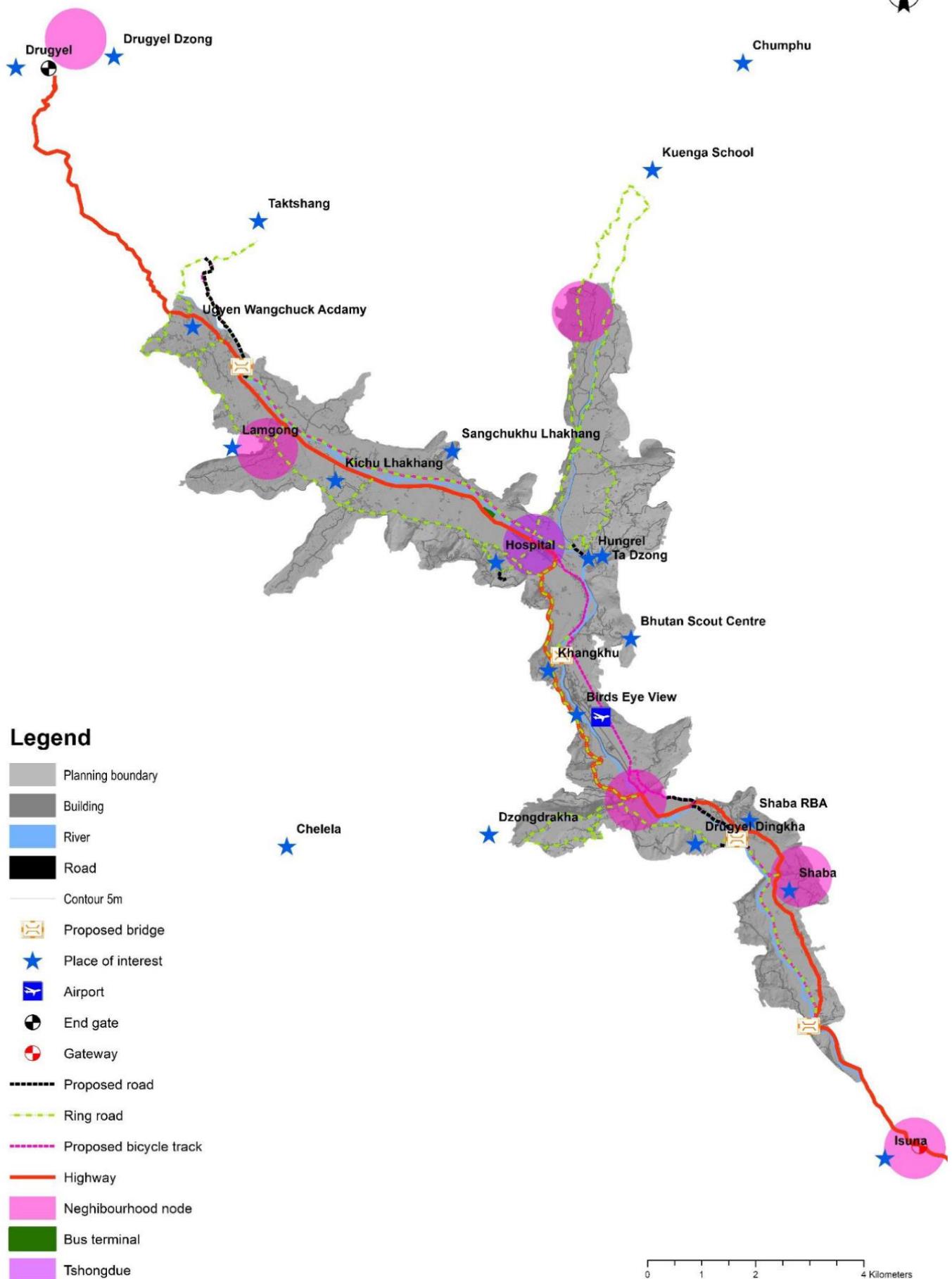


Figure 1.3 Proposed Urban Spine in PVDP 2016

B. Land Use Zones and Precincts

The entire planning area is divided into two broad land use zones (cultural Landscape Zone and Built Environment Zone as per the Paro Valley Development Plan 2016. The Cultural landscape zone comprises the chhuzhings, Places of religious importance and environmentally sensitive areas where developments are restricted, whereas the Built Environment Zones comprises kamzhings, residential, commercial, institutional and industrial land that are suitable for development. The Cultural Landscape Zone covers around 60% of the total planning area and the rest are under Built Environment Zones.

Cultural landscape zone is proposed to serve as legacy for all as it reveals the aspects of country's origins and development through its forms, features and the way they are used. It provides scenic, economic, ecological, social, recreational and educational opportunities to individuals, communities and nations to understand themselves. The Built Environment Zone within the cultural landscape is planned to blend and contribute to the visual and contextual character of the place through appropriate design, scale and its location.

The following table shows the list of precincts under the two broad land use zones. There are a total of 13 precincts under Built-Environment Zone and 8 precincts under Cultural Landscape Zone.

Table 1 List of precincts under the two broad land use zones

Sl.No.	Precincts under Cultural Landscape Zone	Characteristics
1	Water front	Buffer of 30 m for Pachhu and Dochhu. 15 m for major streams
2	Agriculture	Predominantly Chhuzhing located along the low lying plains of the valley
3	Dzong	Rinpung Dzong and its immediate surrounding areas
4	Forest	Existing Government reserved forest and community forest
5	Heritage/Religious	Places of religious, cultural and historical significance along with the immediate surroundings in order to
6	Open space	Recreation, playgrounds and parks
7	Royal Precinct	
8	Environment Sensitive	Slope more than 50% and high hazard areas
Sl.No.	Precincts under Built Environment Zone	Characteristics
1	Industrial	Land earmarked for industrial and manufacturing unit
2	Institution	Land earmarked for Schools, offices and other institutions
3	Military	Land earmarked for Military use

4	Neighbourhood Node	Provisioning of amenities and facilities accessible within comfortable distance
5	Airport	Existing Airport Area
6	Rural Residential	Kamzhing, Khimsa and Orchards within 0 to 30 degree slope
7	Rural Residential (LD)	Kamzhing, Khimsa and Orchards within 31 to 50 degree slope
8	Scattered Settlement	Traditional independent settlements
9	Services	Bus terminal, Taxi stand, Truck parking, workshops, stores and warehouse
10	Tourism Intensive	Land earmarked for tourism related products and services
11	Town Center	Tshongdue area
12	Traditional village	Traditional mixed use settlements
13	Heritage Village	Historic or traditional mixed use settlements earmarked for conservation

C. Reviews and Amendments

After the approval of the plan in 2016, few reviews and amendments were carried out for the plan. The plan had provision of maximum allowable building height of two floors and one floor in rural residential and rural residential low density precincts respectively. Subsequent to the revision of maximum allowable height in BBR-2018, the Development Control Regulations for PVDP was revised and approved during the 20th NCCHS held on October 9, 2018. The amendment also had provisions to allow construction in the Heritage Village precinct with special approval from MoWHS.

However, conversion of Chhuzhing to other uses, appeals for construction in culture landscape zones where development is prohibited, i.e., agriculture and waterfront precinct and existence of multiple precincts in a single plot were some of the issues which could not be resolved. Case by case reviews for applications with such issues were conducted jointly by the Department and the Dzongkhag Administration.

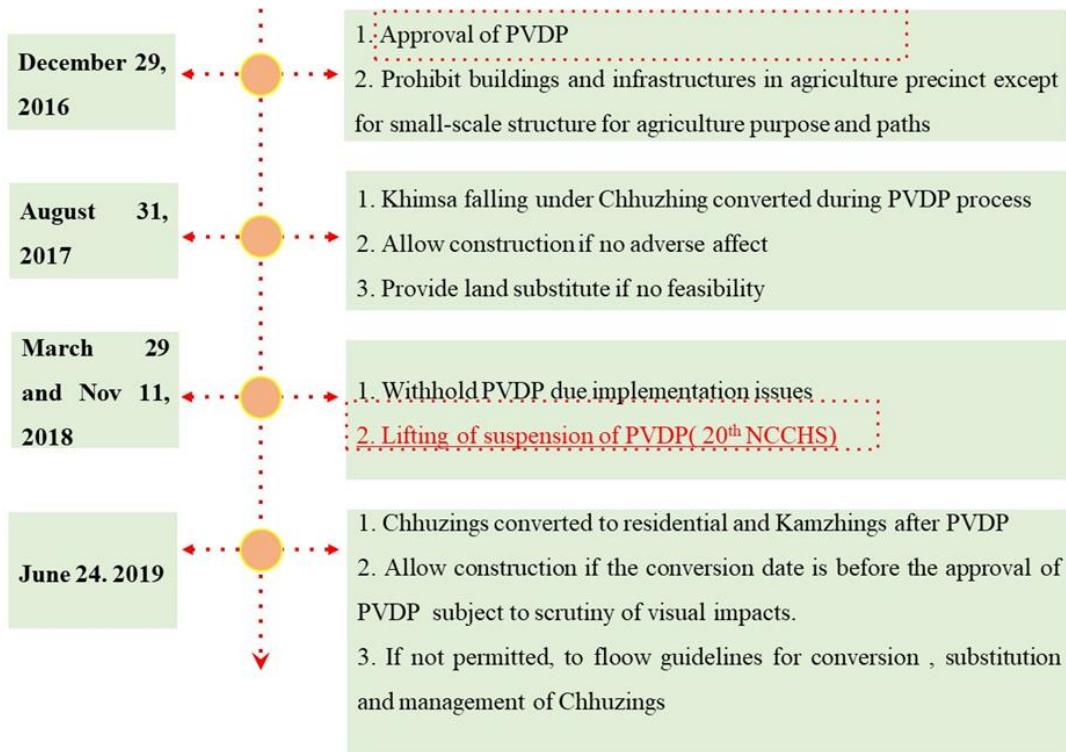


Figure 1.4 Chronology of Activities undertaken for PVDP 2016

2. Need for Precinct Rationalization

During implementation of PVDP, the Dzongkhag Administration faced many challenges which were often forwarded to the Department for review and further directives. Rather than taking up individual cases on adhoc basis, the rationalization exercise was carried out to provide a holistic approach to resolving the issues and to avoid isolated and fragmented resolution of individual problems. The major challenges faced by the local government with regard to the implementation of PVDP are:

1) Difficulty in implementation of the PVDP on site.

Implementation of PVDP directly on ground in the absence of Local Area Plan has posed many issues such as irrational precinct boundary designation, multiple patches of precincts in single plots; and mismatch of plan and the site conditions. Additionally, the change in policies and regulations especially pertaining to the review of Bhutan Building Regulations in 2014 has led to the amendment of the building heights, which was approved by the 20th NCCHS in 2018. There was also a lack of clear directions and strategies for the properties affected by the Plan.

2) Development pressure.

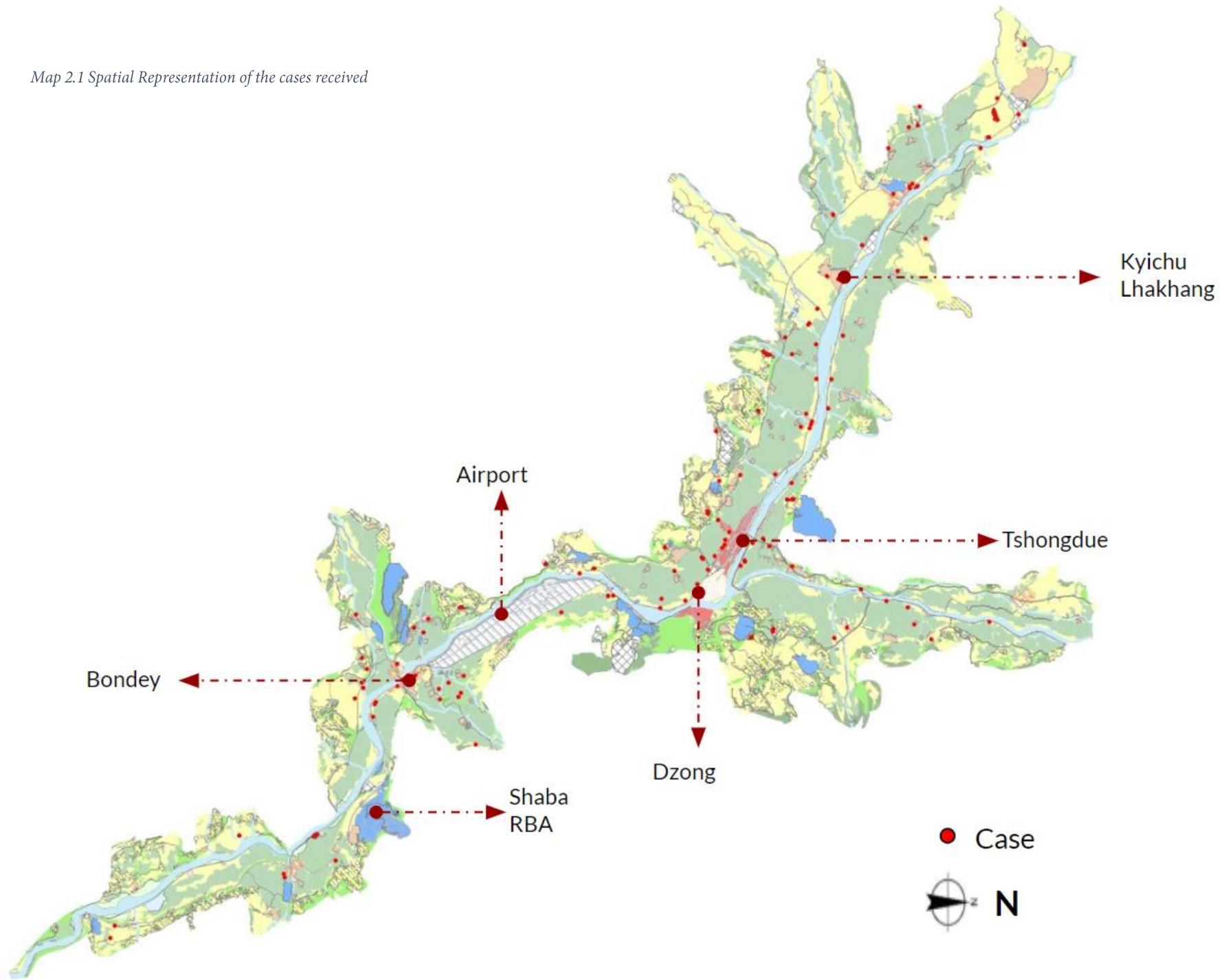
A lot of development applications for plots falling under the Cultural Landscape zone and land conversion cases from Chhuzhing to other land types were received by the Dzongkhag Administration, which were then forwarded to the department. The following table shows the summary of the cases received and reviewed by the Ministry in collaboration with the Dzongkhag Administration. The spatial distribution of the cases is also as shown in **Error! Reference source not found..**

Dealing these issues on a case-by-case basis were time consuming and strenuous resulting in difficulty in keeping track of the effect it will have on the overall plan. The rationalization exercise is necessary and timely to carry out a holistic review of various cases received so far and to provide a one-time strategy to future issues so that any development undertaken contributes to the achievement of the overall vision of the Paro Valley Development Plan.

Table 2 Summary of the cases received

Sl#		TYPE OF CASE	RESOLUTIONS
1.	Plots falling partly/fully under Waterfront Precinct. <i>No. of cases received : 22</i>	-Where there is no river.	-To be allowed as per the nearest precinct.
		-Where there is a river/stream with precedent developments.	-Based on review of the visual impact in the context. Accordingly, it was converted to the nearest precinct.
		-Where there is a natural/man made boundary between the river and plots.	
2.	Plots falling under multiple precincts in irrational patches. <i>No. of cases received : 16</i>	-Between Cultural Landscape and Built Environment Precincts.	-To follow the provisions of PVDP.
		-Between precincts with different DCR provisions. (Rural Residential and Rural Residential LD).	-To follow the provisions of the dominant precinct.
3.	Plots falling under agriculture precinct but converted to kamzhing/khimsa. <i>No. of cases received : 54</i>	-Converted before/during the preparation of PVDP. -Converted after the approval of the PVDP. -Has been Kamzhing/Khimsa but falls under Agriculture Precinct as per PVDP.	-Based on review of the visual impact on the context and accessibility. Accordingly, it was converted to the nearest precinct. -Based on Ministry's instruction vide letter No. MoWHS/DHS/CDRD/Paro/2018-2019/2315 dated June 24, 2019 to cross check visual impact as well as date of conversion.
4.	Other cases. <i>No. of cases received : 34</i>	-Plots falling partly under Road Right of Way .	-To follow the provisions of PVDP for roads under the project area.
		-Plots falling beyond Project Area.	-Follow the provisions of the PVDP for areas beyond the project area but within the Paro valley.
		-Plots falling under Flight Funnel.	-To seek clearance from the Department of Civil Aviation.

Map 2.1 Spatial Representation of the cases received



3. Scope of Work

In line with the Principles, Objectives, Strategies and Proposals of the PVDP, the Precinct Rationalization exercise will specifically cover the following areas:

- a. Rationalization of precincts for all land types falling under agriculture precinct.
- b. Revisit precinct designations and boundary (boundary, use, contiguity).
- c. Validate buffers for water bodies and religious sites and structures.
- d. Provide strategies for development of plots affected by road right of way.
- e. Review and Update the DCR.

NOTE:

The technical analysis of planning aspects, plot reconfiguration and relocation are not within the scope of this exercise.

4. Methodology

For the purpose of this exercise, the study area zones identified during the preparation of PVDP in 2015-2016 were used. There are a total of 36 study area zones within the planning boundary.

The methodology for undertaking this exercise is as shown in the figure below. Starting with a desk review of the existing PVDP-2016, strategies were developed corresponding to the issues identified. The strategies were first tested on one of the zones and then refined and finally adopted for all other zones. The strategies have been thoroughly discussed and deliberated through numerous stakeholder consultation meetings.

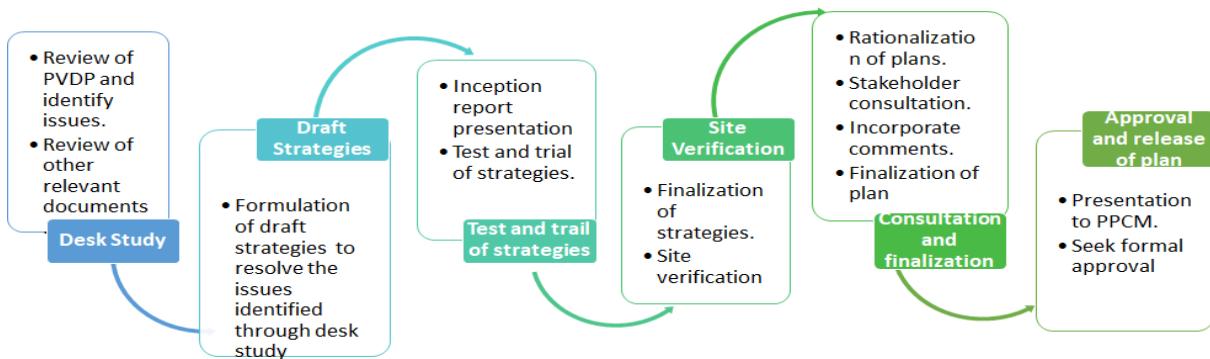


Figure 4.1 Methodology for Precinct Rationalization Exercise

The following figure shows the chronology of activities undertaken for this precinct rationalization exercise throughout the time span of one fiscal year (July, 2020 to June, 2021).

Chronology of Activities Undertaken

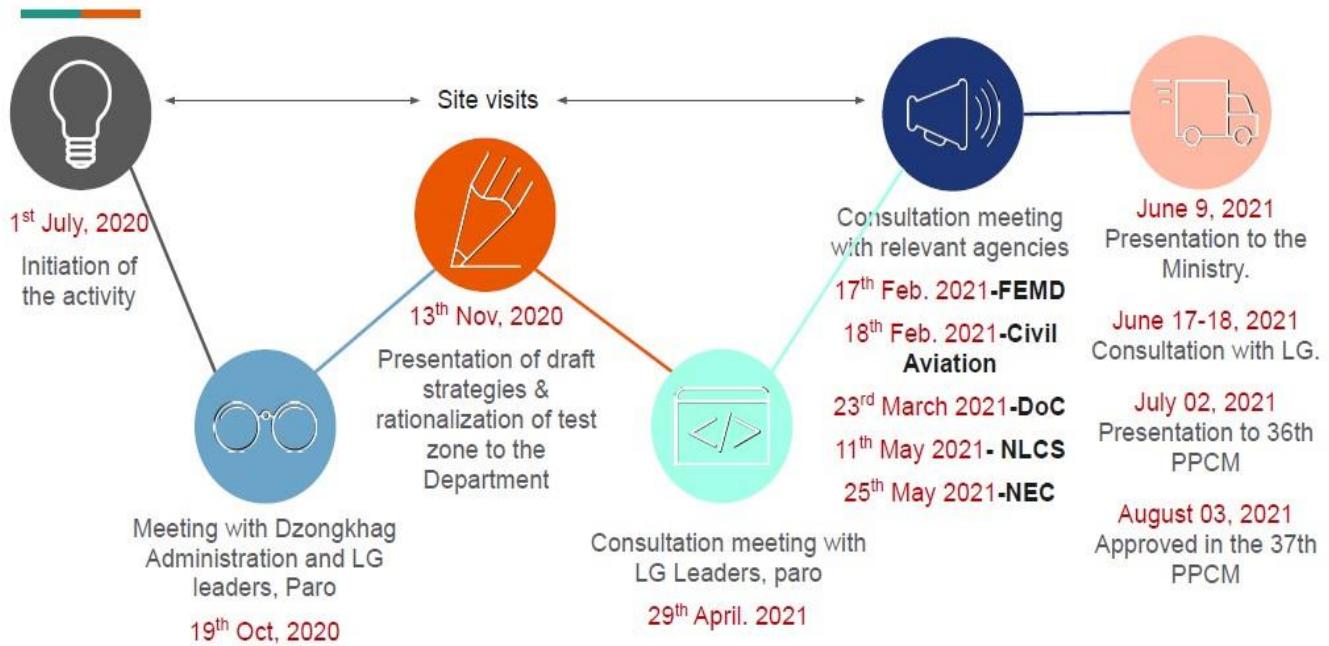


Figure 4.2 Chronology of activities undertaken for precinct rationalization

5. Specific Issues and Strategies for Resolution

Through the analysis of the issues and need for precinct rationalization, strategies were formulated to be applied for rationalization of the precincts. Consultations were also held with the Flood Engineering and Management Division of MoWHS, Department of Civil Aviation, Department of Culture, NLCS, NEC and the local government to seek guidance on the related precincts and to validate the precincts.

During the initial phase of the Project, the *draft* principles for precinct rationalization were formulated and applied to a pilot zone i.e., Rinpung Zone through site verification to test its applicability. Subsequently, a revised precinct plan was prepared for the zone. Gaps and issues were also identified and accordingly, strategies were finalized, which were then used for precinct rationalization of the rest of the zones. The strategies are as follows:

1) Plots falling under River/Stream Buffer

Observation: PVDP has a buffer provision of 30m on both sides of the rivers (Pa Chhu & Do Chhu) and 15m on both sides for all streams. Upon physical verification, it was found that some of the stream has been tapped for irrigation purposes leaving very little flow towards the end of the stream or some are man-made irrigation canals or drains. But the buffer requirement irrespective of the size of the stream has caused huge inconvenience to the land owners as these streams mainly run through the existing settlements affecting numerous plots by the buffer provision.

As per NECS, except for man-made features like irrigation canals and open channel drains, all other natural waterways are considered as water bodies. Hence, no developmental activities shall be allowed within a buffer zone of one hundred feet, measured from the determinable highest flood level of either side of any water body without an Environmental Clearance.

The main recommendation is for preparation of LAPs and conduct of corresponding EIAs for the LAPs. However, since the preparation of LAPs for all the areas in the PVDP at the same time is not feasible, and in principle the provisions of the PVDP will be applied on the ground, the buffer needs to be maintained as proposed in the plan. The EIA based on updated topographic details of the river and streams may be initiated by the implementing authority for the affected areas with development pressure and potential for growth in the near future.

The stream and its buffers in Geptey and Jargathang-Lamgong areas have been realigned and updated based on the topographical survey carried out in 2019. However, other water bodies are based on the Digital Elevation Model for Paro valley.

Strategy:

- 1.1 Verify and validate the existence of riversstreams.
- 1.2 Maintain buffers for existing perennial rivers and streams and remove buffer provision for irrigation canals and man-made drains.
- 1.3 Assign nearest/appropriate precincts for small/isolated waterfront precincts. There are cases of waterfront precincts assigned beyond the road edges in a fragmented manner even though the area is mostly developed. These small and isolated areas will be assigned with nearest appropriate precincts.
- 1.4 Recommend for initiation of EIA by the implementing authority for the affected areas with development pressure and growth potential in the near future.

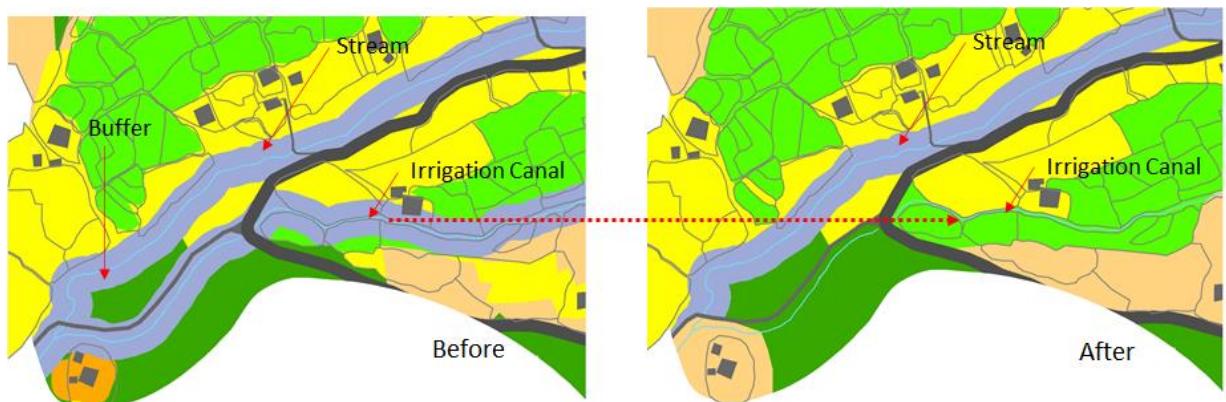


Figure 5.1 Before and After image on applying strategy 1

2) Plots falling under Heritage Precinct

Observation: As per PVDP 2016, buffers were designated for dzong, lhakhangs, chortens, monasteries and heritage villages; and are maintained as heritage precinct, whereby the development on these precincts would require clearance from the Department of Culture (DoC), MoHCA.

Strategy:

- 2.1 Retain heritage precinct for major heritage structures.
- 2.2 Designate nearest/appropriate precinct for individual structures such as chorten and small community lhakhangs. While general permissible uses will be as per the designated precinct, the development within such plots would be subject to clearance from DoC.

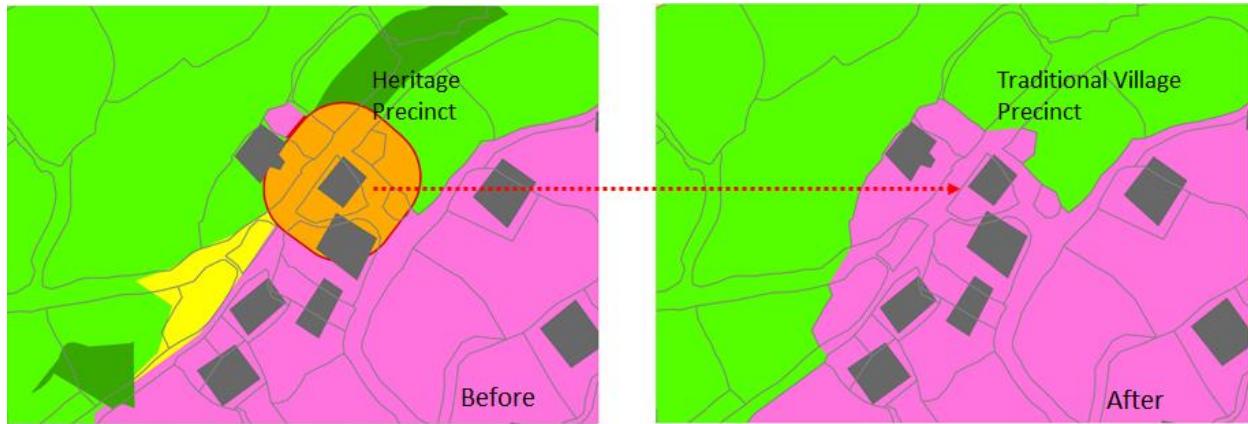


Figure 5.2 Before and After image on applying strategy 2

3) Fragmented/Mix of Precincts (Rural Residential, Rural Residential LD and Environment Sensitive) in a small area.

Observation: The precinct boundaries lack contiguity with presence of patches of different precincts within a small area resulting in different permissible heights and coverages for plots with fairly same site conditions.

Strategy:

- 3.1. Subsume small/fragmented precincts in the dominant precinct based on topography.
- 3.2. Define precinct boundaries by prominent natural features like gorge and mound or manmade features like roads, etc.

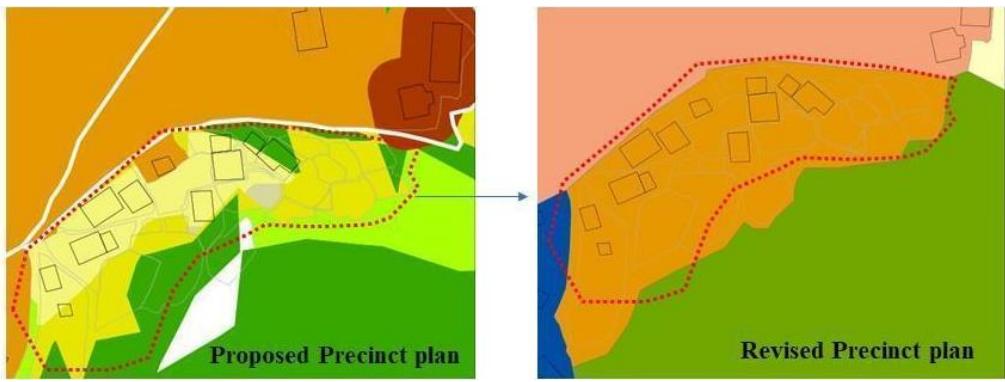


Figure 5.3 Before and After image on applying strategy 3

4) Environment Sensitive precinct

Observation: There are patches of Environment Sensitive precinct designated mainly as a result of slope analysis. As per the verification, these areas are either a patch of steep slope area along the parcel boundary or patch of vegetated area in the middle of a plot. Upon site verification, some of the patches of area (especially the smaller patches) are found to be feasible for development.

Strategy:

- 4.1 Include small/fragmented EV precinct in the nearest predominant precinct.
- 4.2 Verify and assign EV precinct for sites not feasible for development based on site verification and slope map.
- 4.3 Assign EV precinct for sites with slope more than 50%.

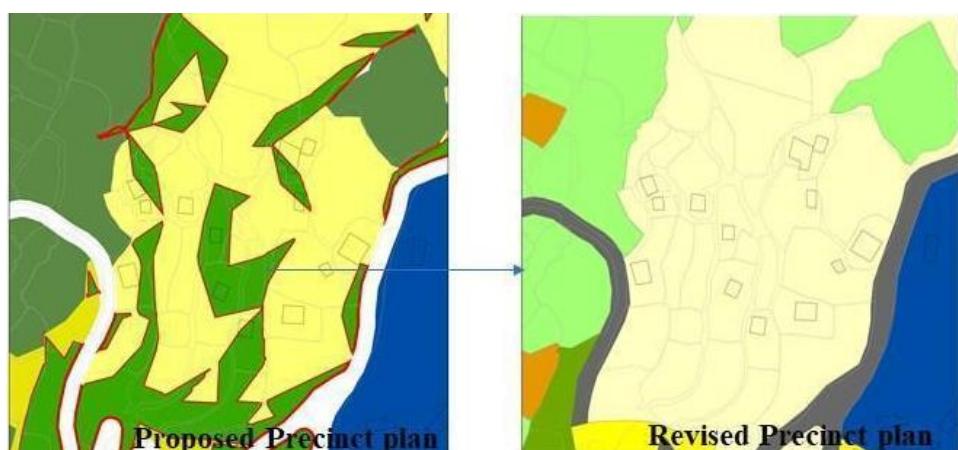


Figure 5.4 Before and After image on applying strategy 4

5) Institutional and Religious Plots

Observation: In PVDP, all the land with land type as institutions and religious institutions are assigned institutional and religious precinct respectively. For example, a small plot under institutional ownership and land type are assigned as institutional precincts while this is just a part of activity permissible in the major precinct and does not form a major district.

Strategy:

- 5.1 Assign nearest appropriate precinct for smaller plots.
- 5.2 Assign Institution/religious precinct for larger Institutional/religious plots.

6) Scattered Settlement Precinct

Observation: Scattered settlement precincts are independent traditional settlements with very low density residential development. In some cases, the scattered settlements have been designated based on the building footprints of the existing structure which would result in varying permissible limits if the part of the plot is assigned with another precinct.

Strategy:

- 6.1 Rationalize the precinct boundary based on plot boundary if feasible to avoid multiple precincts in a single plot.
- 6.2 Change the Scattered Settlement Precinct to Traditional Village Precinct if trapped by Chhuzhings.
- 6.3 Nearest appropriate precinct to un-trapped Scattered Settlement Precinct.

7) Traditional Village (TV)

Observation: Traditional village precincts are traditional mixed use settlements with low density residential development. The existing settlement clusters with strong traditional character are

maintained as TV and are generally trapped khimsas/kamzhings in agriculture as shown in the figure.

The designation of Traditional Village precinct is based on the strategies below.

Strategy:

The Traditional Village precinct will be assigned to the following;

- 7.1 Existing settlement clusters with strong traditional character.
- 7.2 Existing trapped scattered settlement.
- 7.3 Built-up plots (single or cluster of land types other than chhuzhing) trapped by chhuzhing on all sides.
- 7.4 Vacant plots adjacent to existing/proposed TV precinct.
- 7.5 Settlement with limited opportunities for provision of services/ with less scope for land readjustment.



Figure 5.5 Example of Traditional Village Precinct

8) Plots falling under Agriculture Precinct

Observation: There are cases where some chhuzhing plots are assigned with various precincts of built-environment zones. With the vision of PVDP to maintain the cultural landscape through preservation of chhuzhing and the definition of Agriculture precinct as predominantly chhuzhings there is a need to rationalize the precincts assigned to chhuzhing land types.

On the other hand, there are kamzhings, khimsas and other land types assigned as Agriculture Precinct in the PVDP in order to maintain the continuity of the chhuzhings and to maintain the cultural landscape of Paro. Some of these plots are already built on site and are contiguous to existing settlements.

Strategy:

- 8.1 All Chhuzhings as Agriculture Precinct except for Chhuzhings already assigned as service plots and trapped by land type other than chhuzhing.
- 8.2 Chhuzhings trapped by precincts of built environment zones on all sides and areas less than 50 decimal are assigned to the nearest appropriate precinct. Since such pockets are neither feasible for paddy cultivation nor add much value to the cultural landscape, these were recommended to be converted to a built environment zone. The area criterion of 50 decimals is based on earlier consultation meetings carried out with MoAF.
- 8.3 For the vacant plots (single or cluster) of other land types surrounded by chhuzhing on all sides are maintained as agriculture precincts. However, strategies of relocation and readjustments for these affected plots shall be explored during the preparation of the Local Area Plan.
- 8.4 For Built-up plots (single or cluster) of other land types surrounded by Chhuzhing on all sides are assigned Traditional Village precincts to complement the cultural landscape formed by agricultural precincts.
- 8.5 Vacant plots of other land types adjacent to the trapped built-up plots identified in strategy 8.4 are also assigned as Traditional Village precincts.

8.6 The plots of other land types along the periphery (i.e.,not surrounded by chhuzhing on all sides) are assigned the nearest appropriate precinct of the built environment zone.

8.7 The plots abutting primary, secondary and tertiary roads are assigned the nearest appropriate precincts of the built environment zone.

The number and area of trapped chhuzhing and plots of land types other than chhuzhing falling in agriculture precincts and their location are indicated zone wise in the next section.

An example of application of above stated strategies is shown in the figure below.

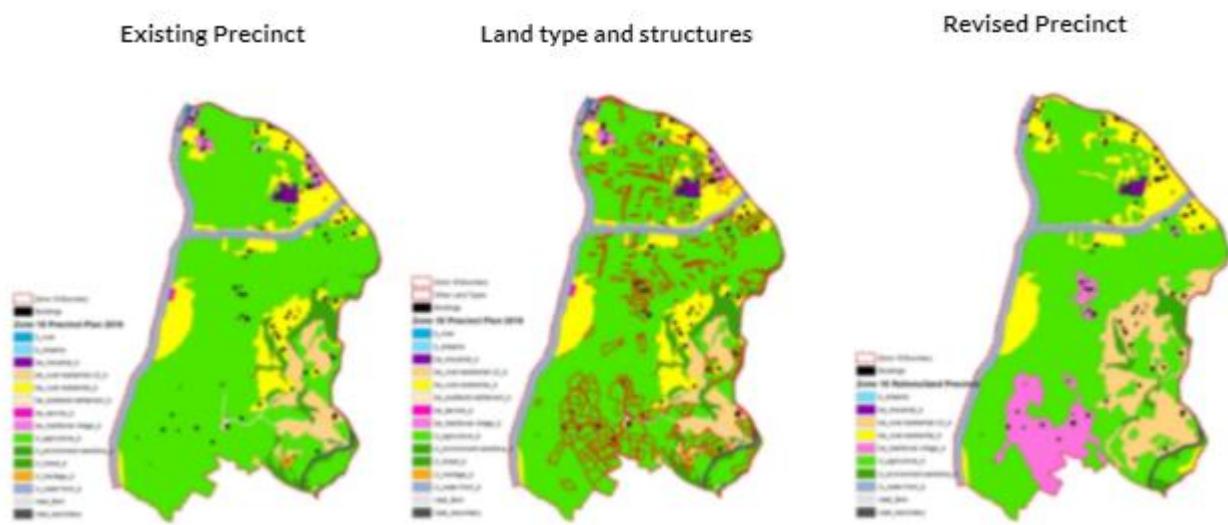


Figure 5.6 Before and After image upon application of strategies

9) Plots falling under Road ROW

Observation: Some plots fall under road ROW. If subsequent and immediate LAPs were prepared, then the issue of plots falling under road ROW would have been resolved.

Strategy:

9.1 For developable plots (minimum plot size might have to be worked out) development could be allowed based on the following:

Setback: minimum required setback as per the DCR measured from the edge of ROW.

Coverage: Maximum coverage calculated based on the registered plot area but within the setback limits.

9.2 For undevelopable plots: Restrict development and re-adjust during LAP preparation.

10) Plots falling under Flight Funnel

Observation: Some plots fall under the flight funnel of the Paro International Airport. Based on discussion with the Department of Civil Aviation, the flight funnel map prepared in 2008 requires an update to incorporate the latest flight path as well as to revisit the previous buffer provision and its restrictions. It was found that a certain buffer/shaded area beyond the flight funnel/path does not pose any hindrance as per the technical requirements and hence no restriction on building construction.

While the current system of seeking technical clearance from the Civil Aviation Department will continue to be in place for any developmental activities within the existing flight path boundary, the revised and updated flight path will be forwarded as an overlay layer for implementation as and when it is updated.

Strategy:

10.1 Assign underlying precinct but subject the development to clearance from Department of Civil Aviation (overlay concept).

11) Tourism Intensive Precinct

Observation: As per the existing PVDP, the plots under the existing tourism infrastructures such as hotels and resorts are designated as tourism Intensive Precinct. As per the verification, these land uses are fragmented and isolated in nature and scattered across the planning boundary. Further, the development control regulation and restrictions imposed on these uses shows less scope for development of such infrastructures in the future considering the dynamic nature of the industry. The

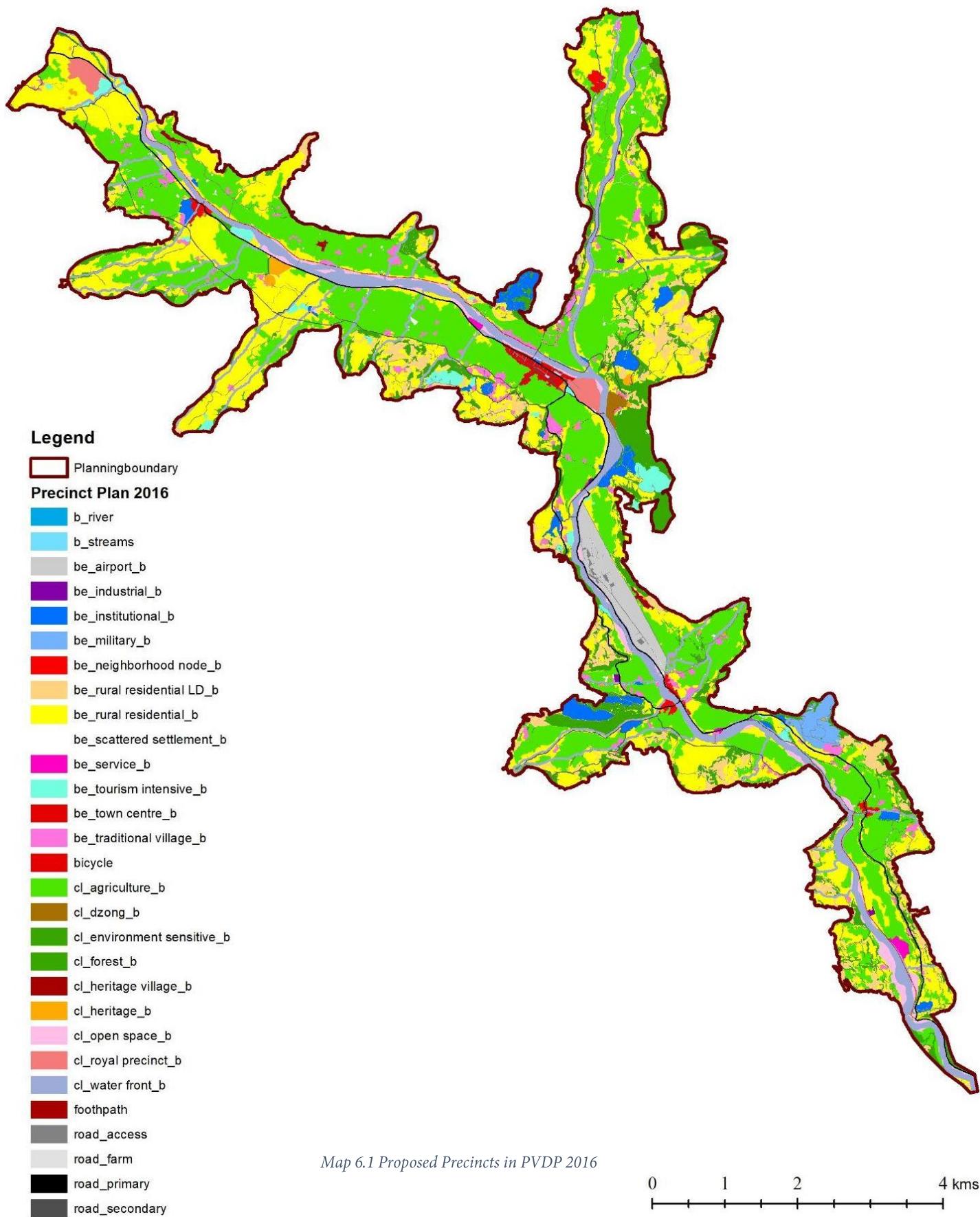
hotels and resorts are part of the activities that can be permitted with special conditions under the broad precincts.

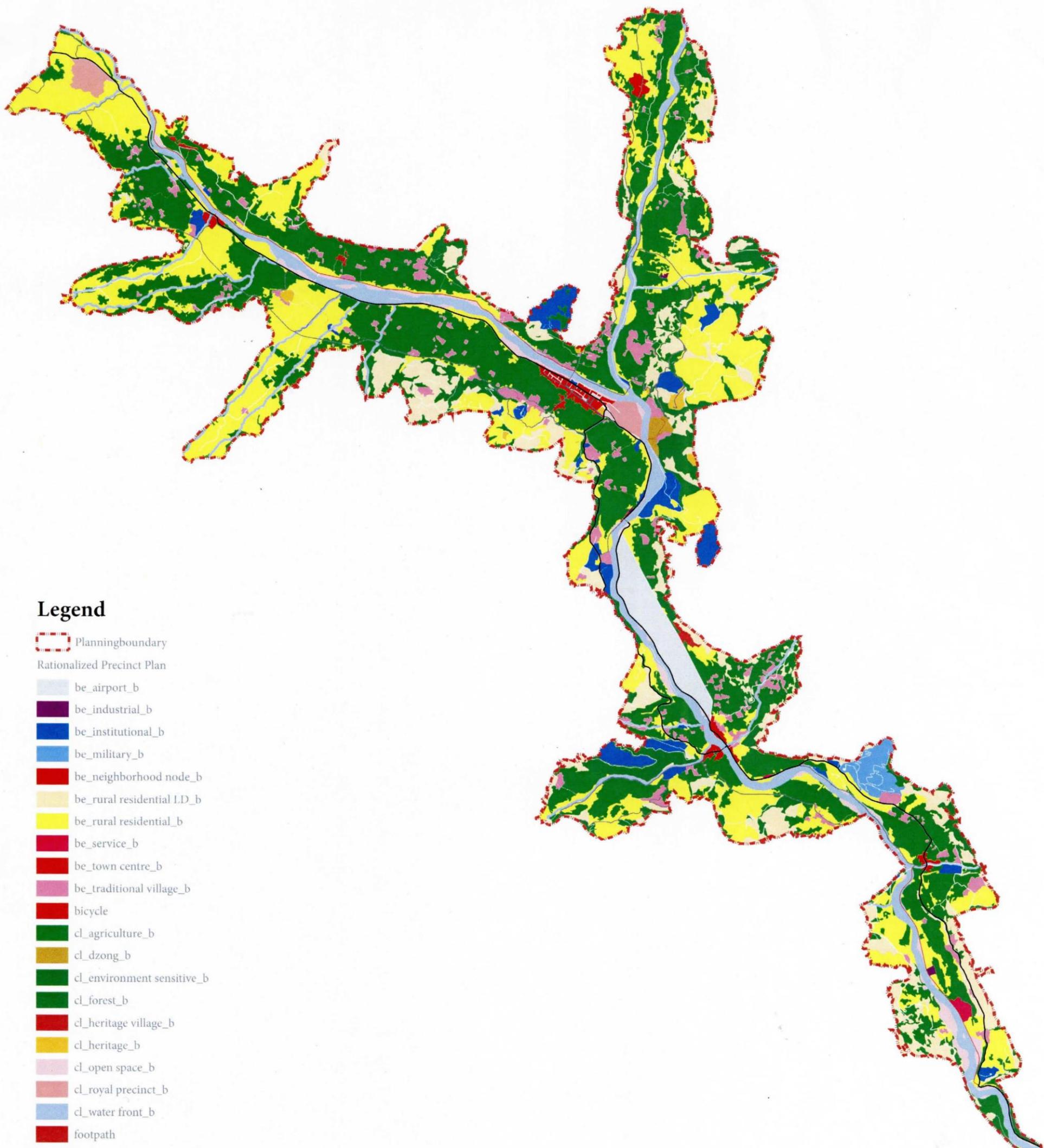
Strategy:

- 11.1 Change the existing tourism Intensive Precinct to the nearest appropriate precinct.
- 11.2 Allow development of tourism infrastructures with special conditions under the broad precinct designation for the development control regulations.

6. Revised Precinct Map for PVDP

With the rectifications made on the proposed precinct based on the strategies, a revised precinct map for Paro and its respective 36 zones has been prepared. After the rationalization, the area of the Environment Sensitive Precinct has decreased by 2.05% from 7.76% in the initial PVDP. Other major changes are seen in Rural Residential LD and Traditional Village Precinct which have increased by 3.57% and 1.68% respectively.





Map 6.2 Rationalized Precinct Map



PARO VALLEY DEVELOPMENT PLAN

PRECINCT PLAN

Regional and Rural Planning Division
Department of Human Settlement
Ministry of Works and Human Settlement

SCALE: NTS



Director,
DHS, MoWHS

Hon'ble Secretary,
MoWHS

Hon'ble Lyonpo,
MoWHS

Table 3 The Area Change of Precincts After Rationalization

Sl#	Precincts	BEFORE		AFTER		Net Area Change (acres)
		Area (acre)	%	Area (acre)	%	
1	Airport	161.225	1.76	178.508	1.95	17.283
2	Agriculture	2874.248	31.40	2898.016	31.66	23.768
2	Dzong	17.879	0.20	19.951	0.22	2.071
	Environment sensitive					
3		710.299	7.76	528.610	5.77	-181.689
4	Forest	294.516	3.22	226.738	2.48	-67.779
5	Heritage	41.053	0.45	24.230	0.26	-16.822
6	Open space	121.236	1.32	113.722	1.24	-7.514
7	Royal precinct	66.184	0.72	72.058	0.79	5.874
8	Water front	910.079	9.94	748.548	8.18	-161.530
9	Heritage village	12.106	0.13	15.069	0.16	2.963
10	Industrial	5.762	0.06	4.228	0.05	-1.534
11	Institutional	195.655	2.14	252.980	2.76	57.325
12	Military	68.095	0.74	73.085	0.80	4.990
13	Neighborhood node	38.522	0.42	39.933	0.44	1.410
14	Rural residential	2342.978	25.59	2316.603	25.31	-26.374
15	Rural residential LD	516.961	5.65	868.343	9.49	351.382
16	Scattered settlement	14.625	0.16	0.000	0.00	-14.625
17	Service	16.553	0.18	13.131	0.14	-3.423
18	Tourism intensive	118.160	1.29	0.000	0.00	-118.160
19	Town centre	33.586	0.37	34.474	0.38	0.888
20	Traditional village	195.408	2.13	332.567	3.63	137.159
21	Road_access	106.282	1.16	113.749	1.24	7.466
22	Footpath	3.231	0.04	3.104	0.03	-0.127
23	Road_farm	48.640	0.53	35.417	0.39	-13.222
24	Road_primary	117.175	1.28	117.176	1.28	0.000
25	Road_secondary	104.907	1.15	104.893	1.15	-0.014
26	Bicycle	19.007	0.21	19.007	0.21	0.000

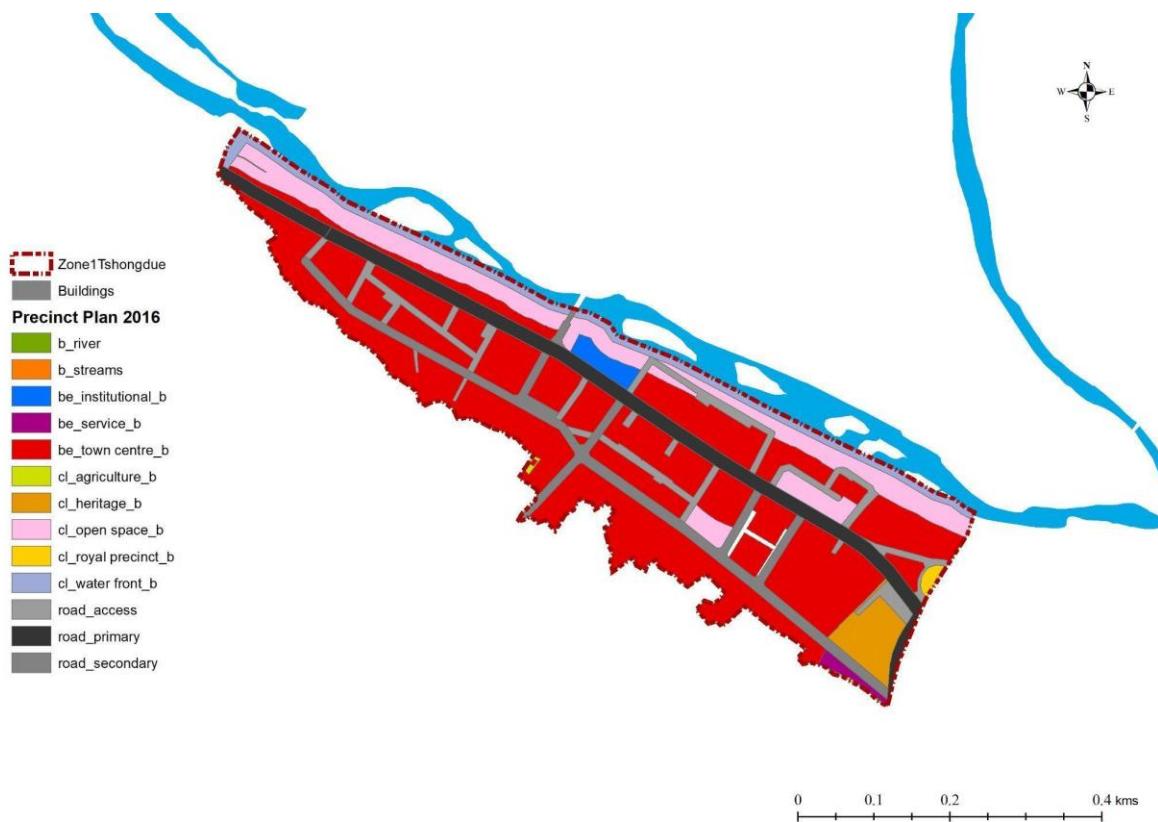
7. Zone Wise Precinct Rationalization

The study area zones identified during the preparation of PVDP in 2015-2016 were used and divided among 3 groups to take up the site assessment and verification. The strategies for rationalization were applied wherever appropriate to rationalize the precincts. The zone wise verification contains the statistics on zone area, total plots, comparison on previous and revised precinct maps along with precinct areas. Further, the boundaries of trapped chhuzhings and plots other than chhuzhing falling under the agriculture precinct based on the PVDP 2016 are overlaid on the previous precinct map to see the magnitude of the issues.

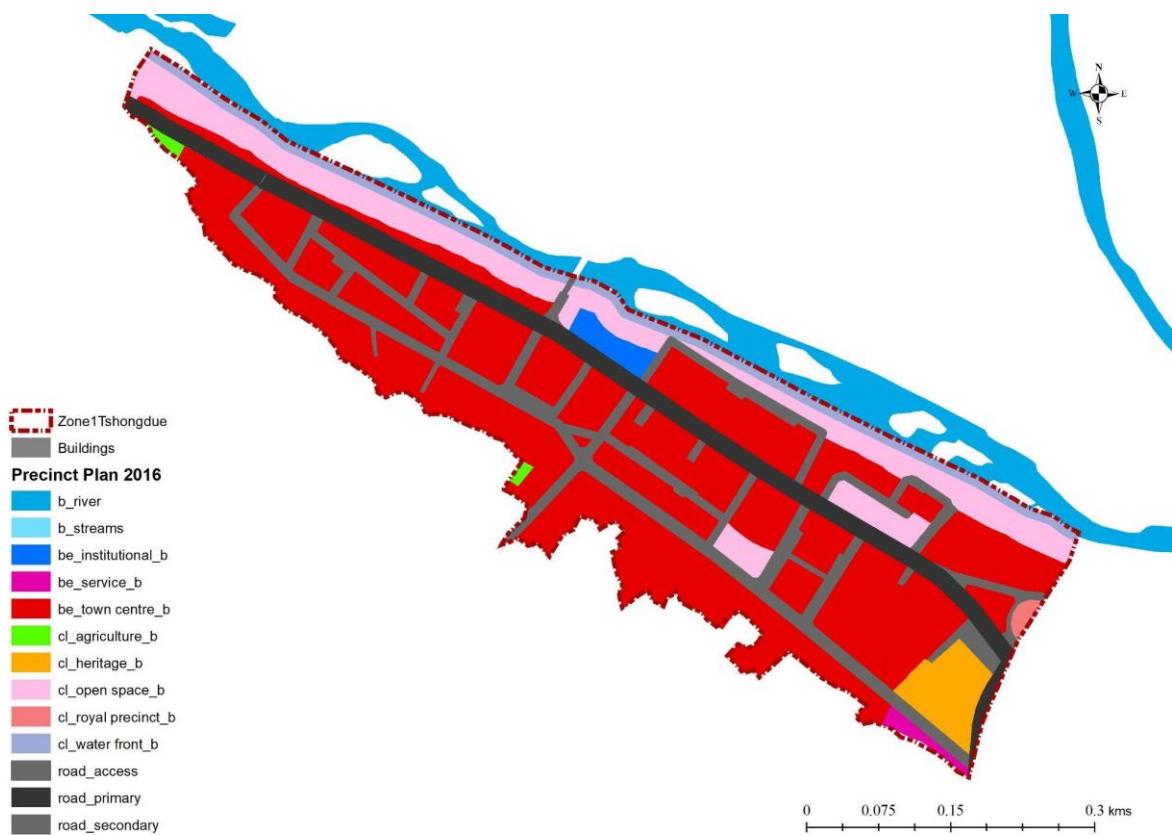
This is then followed by statistics on plots affected by various precincts of the Cultural Landscape Zone which could not be resolved with the strategies mentioned in the previous sections. The figures for plots affected by precincts of Environment, waterfront, open space and road right of way include plots which are partly or wholly affected by these precincts (Plots whose affected area is less than 1 decimal have been excluded from the total).

7.1 Zone 1 Tshongdue

Zone 1 has an area of 54.978 acres (0.223 sq.km) and comprises Tshongdue town area. Of the total area, 31.03 acres are registered land as per the cadastral data. Zone 1 vicinity includes Geptay and Ringpung Dzong.



Map 7.1 Precinct Map of Zone 1_PVDP 2016



Map 7.2 Rationalized Precinct Map of Zone 1

The change in the precinct area is as tabulated below.

Table 4 Precinct area breakup for Zone 1

Sl.#	Proposed Precinct	Before		After		Net Area Change (acres)
		Area (Acre)	%	Area (Acre)	%	
1	Agriculture	0.101	0.18	0.192	0.35	0.091
2	Religious/Heritage	1.549	2.82	1.511	2.75	-0.039
3	Town Centre	29.136	52.98	29.224	53.15	0.088
8	Institutional	0.595	1.08	0.595	1.08	0
4	Royal precinct	0.184	0.33	0.184	0.33	0
5	Service	0.295	0.54	0.295	0.54	0
6	Open Space	7.084	12.88	7.096	12.91	0.012
7	Water Front	2.856	5.19	2.694	4.90	-0.162
8	Access/Tertiary Road	3.639	6.62	3.639	6.62	0
9	Primary Road	5.079	9.24	5.079	9.24	0
10	Secondary Road	4.473	8.14	4.473	8.14	0
	Total	54.99	100	54.982	100	

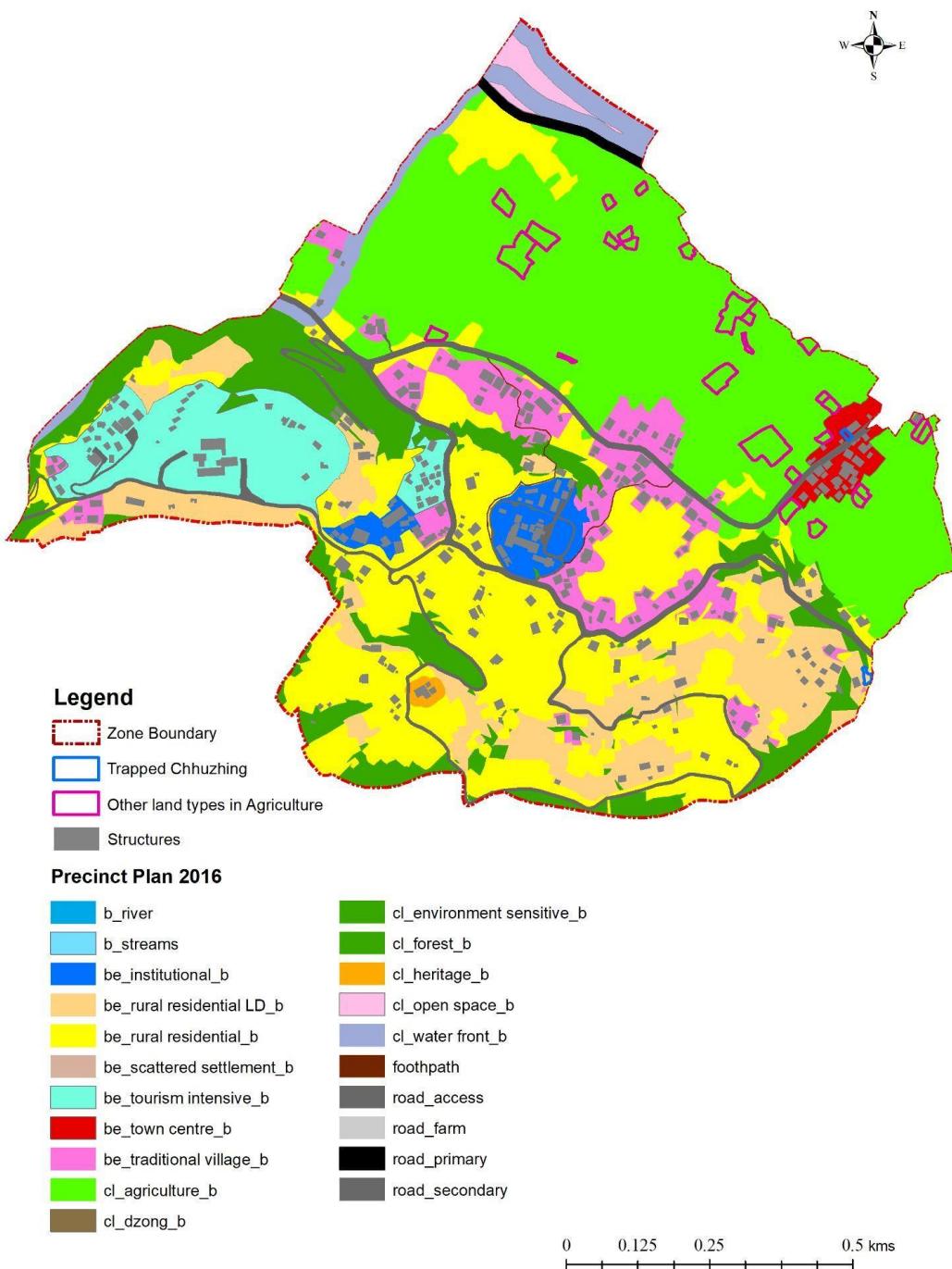
The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 5 Affected Plots in CL zone

Sl.No	Precinct	No. of Plots	Area (Acres)
1	Open Space	18	2.807
2	Road ROW	21	0.598
	Total	39	3.405

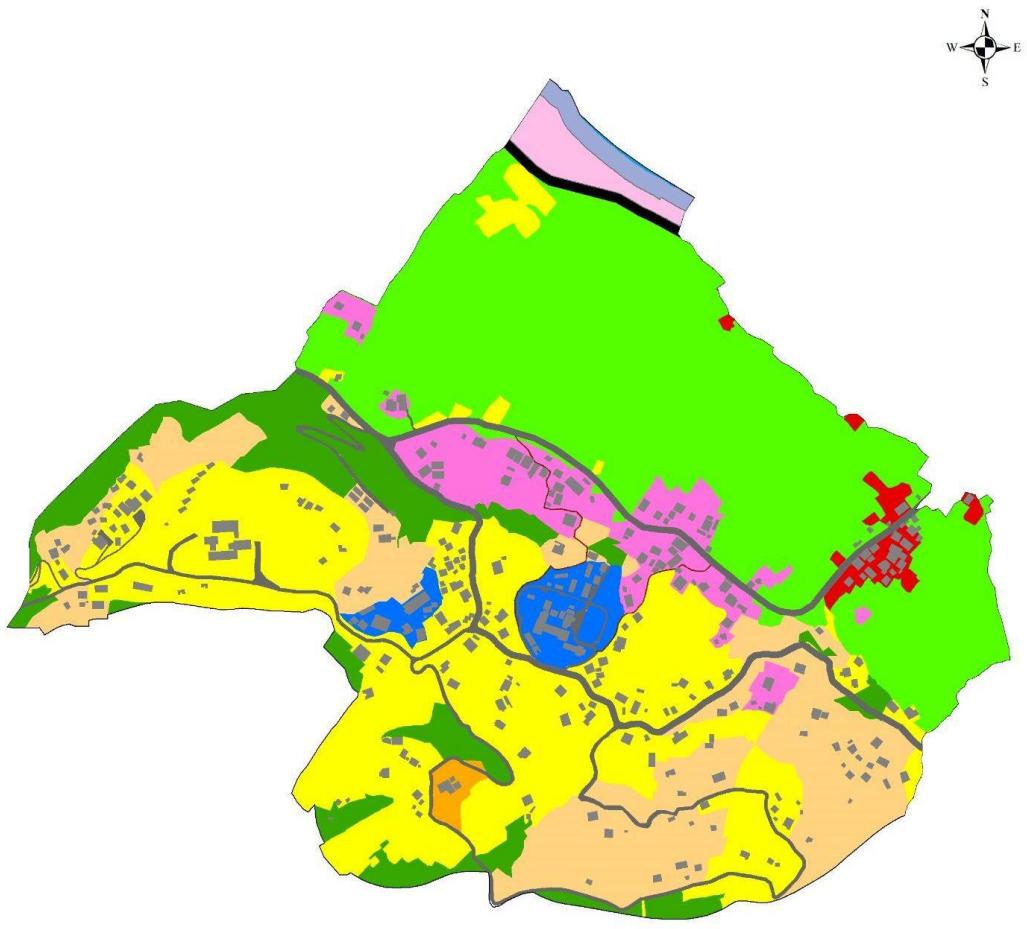
7.2 Zone 2 Geptey

Zone 2 has an area of 301.78 acres (1.22 sq.km) and comprises predominantly of Geptey village which falls partly under Lungnyi Gewog and partly under Wangchang Gewog. Of the total area, 259.159 acres are registered land as per the cadastral data. Zone 2 is located immediately behind the town core (Tsongdu) and includes the Hospital area and a number of resorts.



Map 7.3 Precinct Map of Zone 2_PVDP 2016

There are a total of 28 plots of land type other than chhuzhing in the Agriculture precinct out of which 14 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the 2 trapped chhuzhing have also been assigned the nearest appropriate precinct.



Legend

Zone Boundary

Structures

Rationalized Precinct Plan

b_river	cl_forest_b
be_institutional_b	cl_heritage_b
be_rural residential LD_b	cl_open space_b
be_rural residential_b	cl_water front_b
be_town centre_b	footpath
be_traditional village_b	road_access
cl_agriculture_b	road_primary
cl_environment sensitive_b	road_secondary

0 0.15 0.3 0.6 kms

Map 7.4 Rationalized Precinct Map of Zone 2

The change in the precinct area is as tabulated below.

Table 6 Precinct area breakup for Zone 2

Sl.#	Proposed Precinct	Before		After		Net area change (Acres)
		Area (Acre)	%	Area (Acre)	%	
1	Rivers	0.16	0.05	0.16	0.05	0
2	Institutional	6.98	2.31	7.5	2.48	0.17
3	Rural residential LD	31.85	10.56	44.1	14.61	4.06
4	Rural residential	71.52	23.7	84.83	28.11	4.41
5	Tourism intensive	20.78	6.88	0	0	-6.88
6	Town centre	3.76	1.24	4	1.32	0.08
7	Traditional village	21.53	7.14	22.05	7.31	0.17
8	Agriculture	90.97	30.14	92.71	30.72	0.58
9	Environment sensitive	13.37	4.43	8.5	2.82	-1.61
10	Forest	17.38	5.76	17.31	5.74	-0.02
11	Heritage	0.69	0.23	1.53	0.51	0.28
12	Open Space	1.82	0.6	3.95	1.31	0.7
13	Water front	8.15	2.7	2.31	0.76	-1.94
14	Footpath	0.4	0.13	0.4	0.13	0
15	Road_ternary	4.17	1.38	4.17	1.38	0
16	Road_primary	1.35	0.45	1.35	0.45	0
17	Road_secondary	6.9	2.29	6.9	2.29	0
	Total	301.78	100	301.78	100	

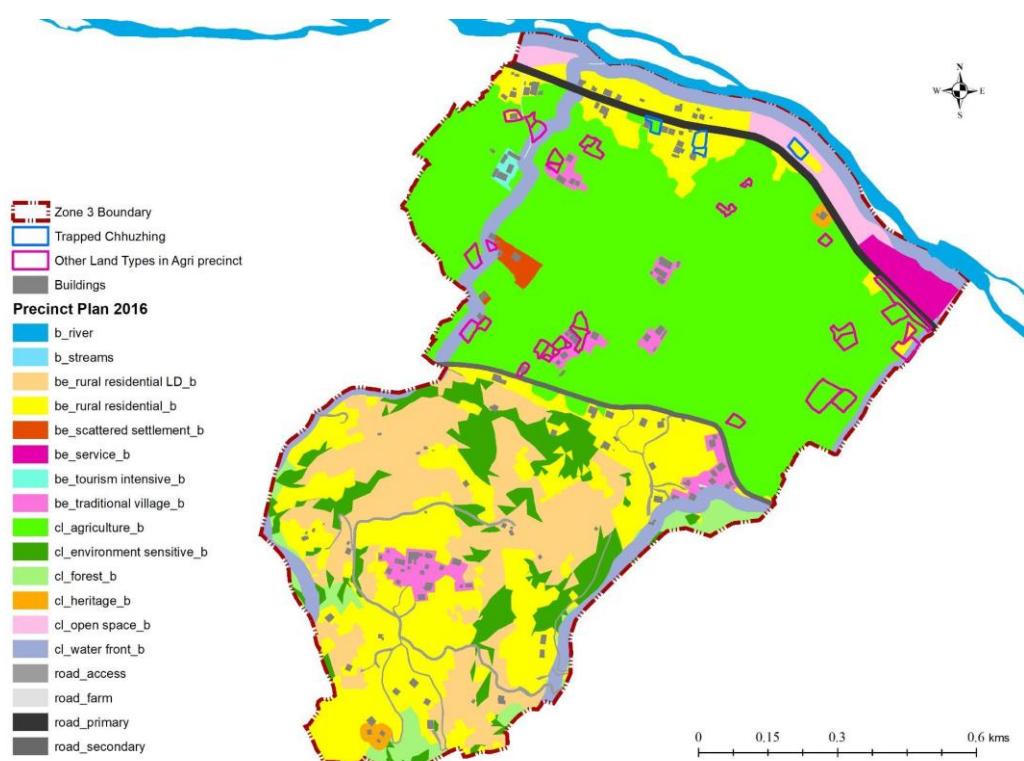
The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 7 Affected Plots in CL zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	2	0.102
		Religious	14	4.233
		No data	0	0
		Total	16	4.335
2	Environment Sensitive	Khimsa	0	0
		Kamzhing	6	1.569
		Orchard	0	0
		Total	6	1.569
3	Waterfront	Chhuzhing	0	0
		Other Land Types	0	0
		Total	0	0
4	Open Space		18	3.318
5	Road ROW		21	3.27
	Total		61	12.492

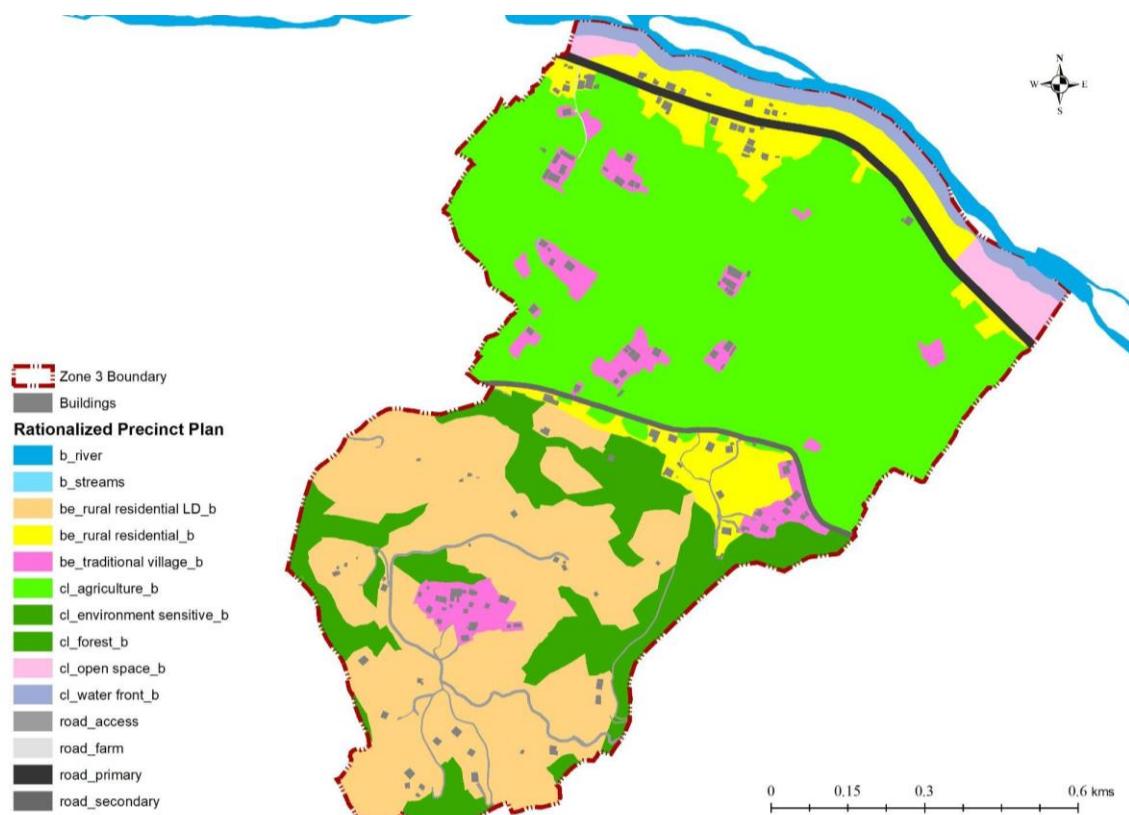
7.3 Zone 3 Nemjo

Zone 3 has an area of 315.617 acres (1.277 sq.km) and comprises predominantly of Nemjo village under Lungnyi Gewog, parts of Wangchang, Lamgong and Dop Shari gewogs. Of the total area, 259.159 acres are registered land as per the cadastral data. Zone 3 vicinity includes Geptay and is located in close proximity to Tshongdu Town. The settlements are surrounded by vast agricultural land.



Map 7.5 Precinct Map of Zone 3_PVDP 2016

There are a total of 32 plots of land type other than chhuzhing in the Agriculture precinct out of which 24 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the 4 trapped chhuzhing have also been assigned the nearest appropriate precinct.



Map 7.6 Rationalized Precinct Map of Zone 3

The change in the precinct area is as tabulated below.

Table 8 Precinct area breakup for Zone 3

Sl.#	Proposed Precinct	Before		After		Net Area Change (acres)
		Area (Acre)	%	Area (Acre)	%	
1	Agriculture	126.634	40.12	131.663	41.71	1.59
2	Forest	6.27	1.99	6.365	2.02	0.03
3	Environment Sensitive	19.276	6.11	32.096	10.17	4.06
4	Religious/Heritage	1.138	0.36	0	0	-0.36
5	Rural Residential	67.043	21.24	25.145	7.97	-13.27
6	RR (LD)	42.15	13.35	81.316	25.76	12.41
7	Scattered Settlement	1.506	0.48	0	0	-0.48
8	Traditional Village	7.796	2.47	14.966	4.74	2.27
9	Tourism Intensive	0.755	0.24	0	0	-0.24
10	Service	3.563	1.13	0	0	-1.13
11	Open Space	5.333	1.69	4.869	1.54	-0.15
12	Water Front	23.459	7.43	8.141	2.58	-4.85
13	Access/Tertiary Road	3.676	1.16	3.645	1.15	-0.1
14	Farm Road	0.113	0.04	0.113	0.04	0
15	Primary Road	4.682	1.48	4.682	1.48	0
16	Secondary Road	2.254	0.71	2.254	0.71	0
	Total	315.648	100	315.649	100	

The figure and the area of plots falling under Cultural Landscape zone in the precincts of Agriculture, Environment sensitive, waterfront, open space and under road right of way are as tabulated below.

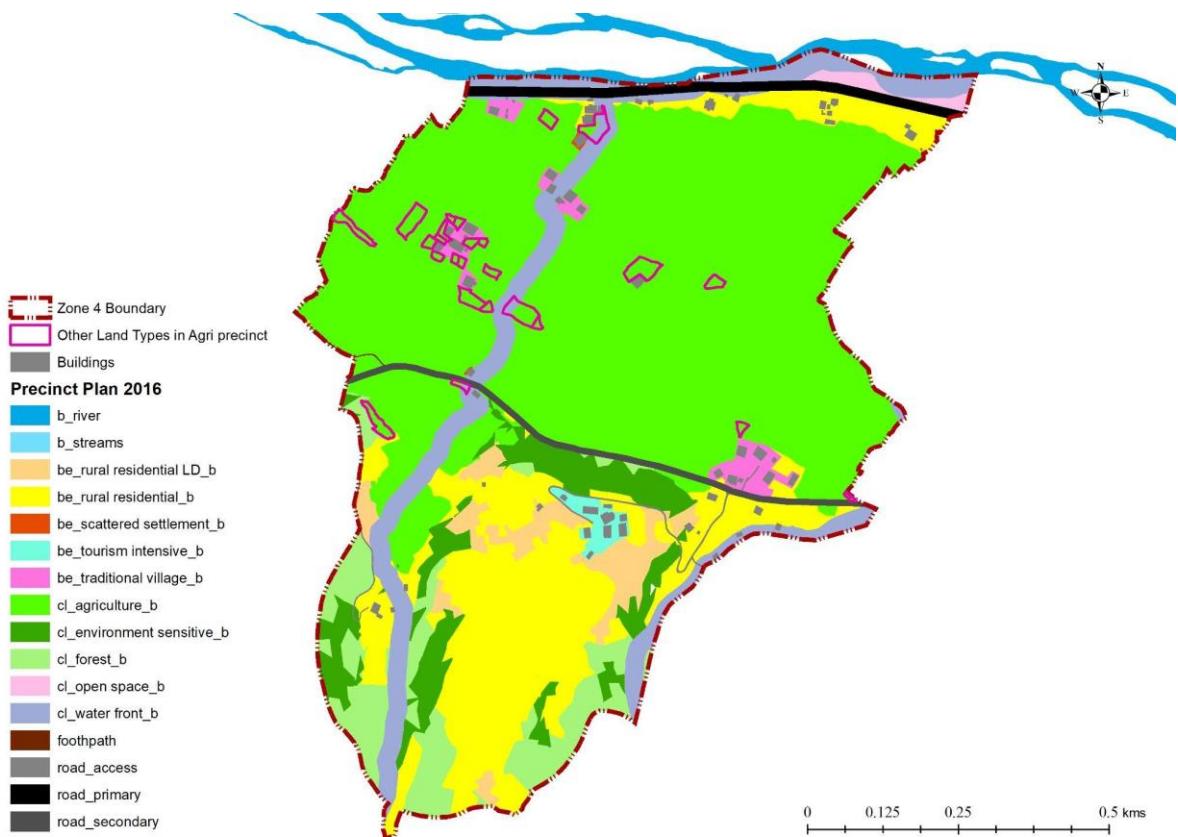
Table 9 Affected Plots in CL zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	3	0.37
		Religious	4	1.548
		No data	1	0.099
		Total	8	2.018
2	Environment Sensitive	Khimsa	6	2.698
		Kamzhing	17	7.081
		Orchard	6	5.907
		Total	29	15.686
3	Waterfront	Other Land Types	9	2.072
		Total	9	2.072
4	Open Space		0	0
5	Road ROW		71	2.26
	Total		117	22.036

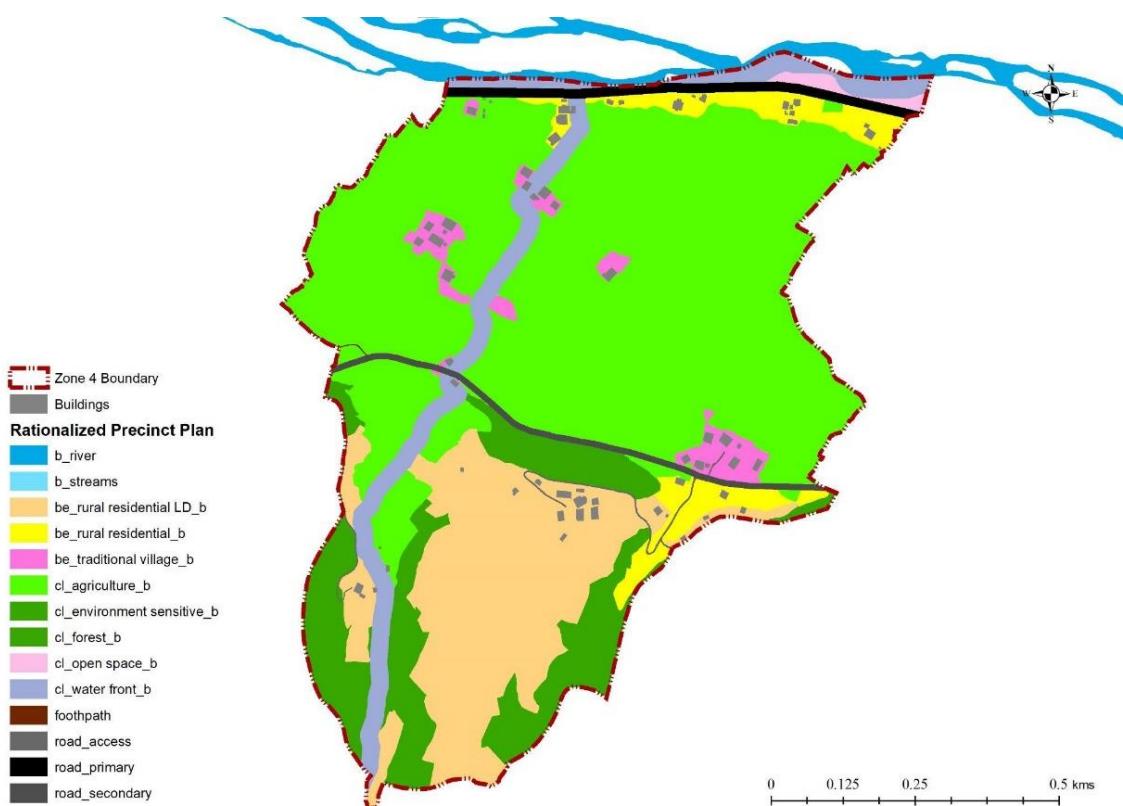
7.4 Zone 4 Nemjo_Ngoba

Zone 4 has an area of 217.496 acres (0.880 sq.km) and comprises predominantly of Nemjo village under Lungnyi Gewog, and parts of Lamgong gewog. Of the total area, 168.111 acres are registered land as per the cadastral data. Zone 4 vicinity includes Geptay towards south and Kichu towards north. The settlements are surrounded by vast agricultural land.

There are a total of 24 plots of land type other than chhuzhing in the Agriculture precinct out of which 17 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section.



Map 7.7 Precinct Map of Zone 4_PVDP 2016



Map 7.8 Rationalized Precinct Map of Zone 4

The change in the precinct area is as tabulated below.

Table 10 Precinct area breakup for Zone 4

Sl.#	Proposed Precinct	Before		After		Net Area Change (acres)
		Area (Acre)	%	Area (Acre)	%	
1	Agriculture	115.177	52.95	115.093	52.92	-0.08
2	Forest	13.434	6.18	13.385	6.15	-0.05
3	Environment Sensitive	11.540	5.31	12.674	5.83	1.13
4	Rural Residential	38.893	17.88	9.699	4.46	-29.19
5	RR (LD)	7.063	3.25	38.989	17.93	31.93
6	Scattered Settlement	0.231	0.11	0	0	-0.11
7	Traditional Village	3.763	1.73	5.816	2.67	2.05
8	Tourism Intensive	1.593	0.73	0	0	-0.73
9	Open Space	0.98	0.45	0.98	0.45	0
10	Water Front	18.208	8.37	14.247	6.55	-3.96
11	Access/Tertiary Road	0.742	0.34	0.742	0.34	0
12	Primary Road	3.38	1.55	3.38	1.55	0
13	Secondary Road	2.423	1.11	2.423	1.11	0
14	Footpath	0.069	0.03	0.069	0.03	0
	Total	217.496	100%	217.496	100	

The figure and the area of plots falling under Cultural Landscape zone in the precincts of Agriculture, Environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 11 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Khimsa	3	0.560
		Kamzhing	4	0.578
		Total	7	1.138
2	Environment Sensitive	Kamzhing	4	1.373
		Orchard	2	0.349
		Total	6	1.722
3	Waterfront	Chhuzhing	43	3.627
		Other Land Types	27	2.748
4	Open Space		6	0.924
5	Road RoW		39	1.45
	Total		128	11.617

7.5 Zone 5: Kichu_Shomo

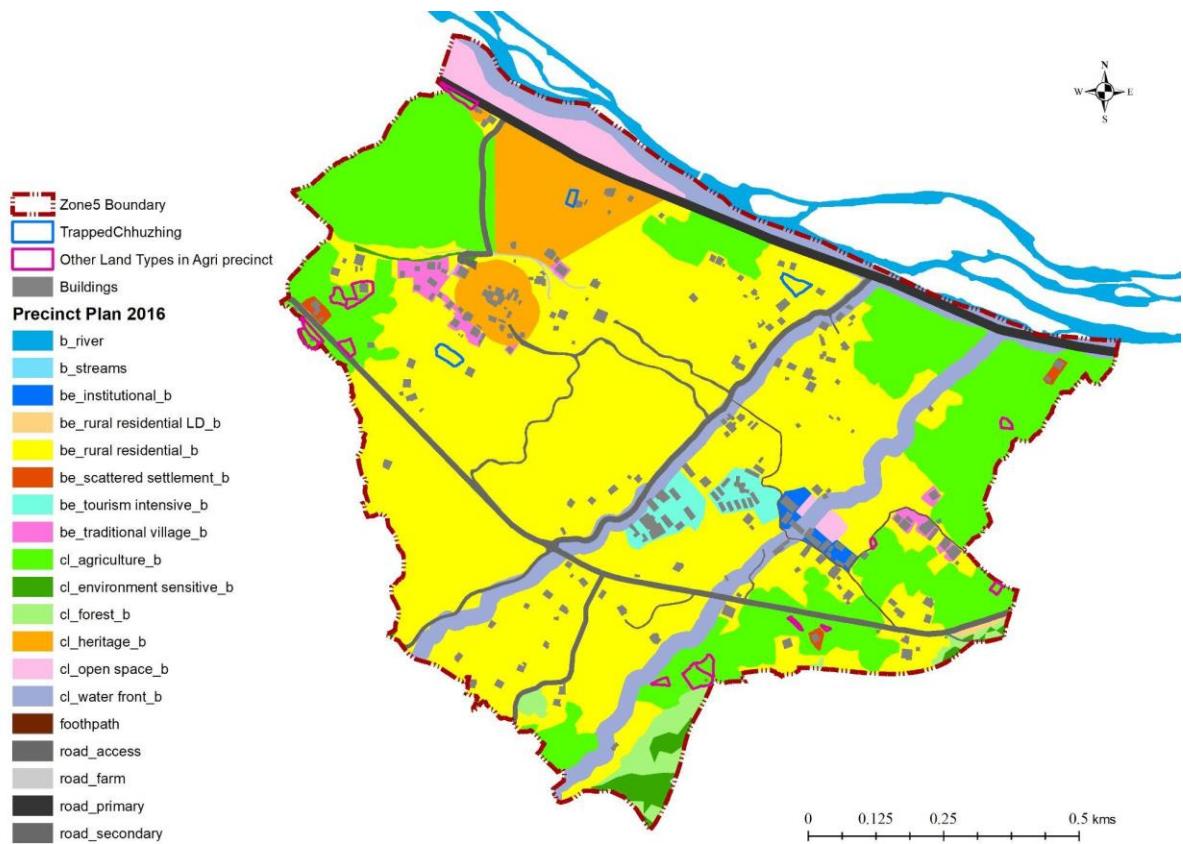
Zone 5 has an area of 294.759 acres (1.193 sq.km) and comprises predominantly of Kichu and Shomo area under Lamgong Gewog. Of the total area, 242.782 acres are registered land as per the cadastral data. Zone 6 vicinity includes Kichu Lhakhang. The settlement is predominantly a residential area.

There are a total of 14 plots of land type other than chhuzhing in the Agriculture precinct out of which 9 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the 3 trapped chhuzhing have also been assigned the nearest appropriate precinct.

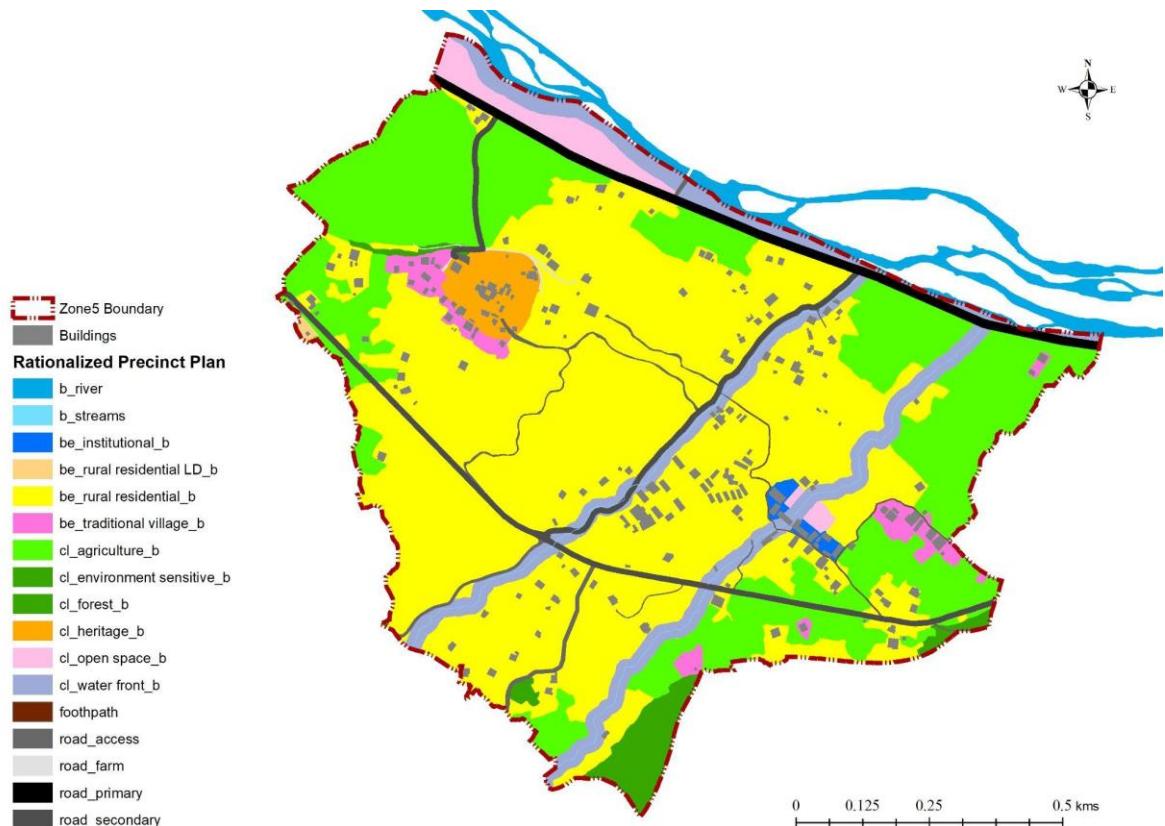
The change in the precinct area is as tabulated below.

Table 12 Precinct area breakup for Zone 5

Sl.#	Proposed Precinct	Before		After		Net Area Change (acres)
		Area (Acre)	%	Area (Acre)	%	
1	Agriculture	66.87	22.68	74.927	25.42	2.73
2	Forest	4.116	1.4	3.966	1.35	-0.05
3	Environment Sensitive	2.752	0.93	3.028	1.03	0.09
4	Rural Residential	148.957	50.53	153.976	52.24	1.71
5	RR (LD)	0.231	0.08	0.292	0.1	0.02
6	Institutional	1.445	0.49	1.444	0.49	0
7	Scattered Settlement	0.977	0.33	0	0	-0.33
8	Traditional Village	3.358	1.14	6.526	2.21	1.07
9	Tourism Intensive	4.815	1.63	0	0	-1.63
10	Heritage	16.318	5.54	5.521	1.87	-3.66
11	Water Front	23.102	7.84	23.234	7.88	0.05
12	Open space	5.477	1.86	5.478	1.86	0
13	Primary Road	5.606	1.9	5.606	1.9	0
14	Secondary road	7.166	2.43	7.166	2.43	0
15	Footpath	0.505	0.17	0.505	0.17	0
16	Access/Tertiary Road	2.784	0.94	2.784	0.94	0
17	Farm Road	0.311	0.11	0.311	0.11	0
	Total	294.785	100%	294.764	100	



Map 7.9 Precinct Map of Zone 5_PVDP 2016



Map 7.10 Rationalized Precinct Map of Zone 5

The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 13 Affected Plots in CL Zone

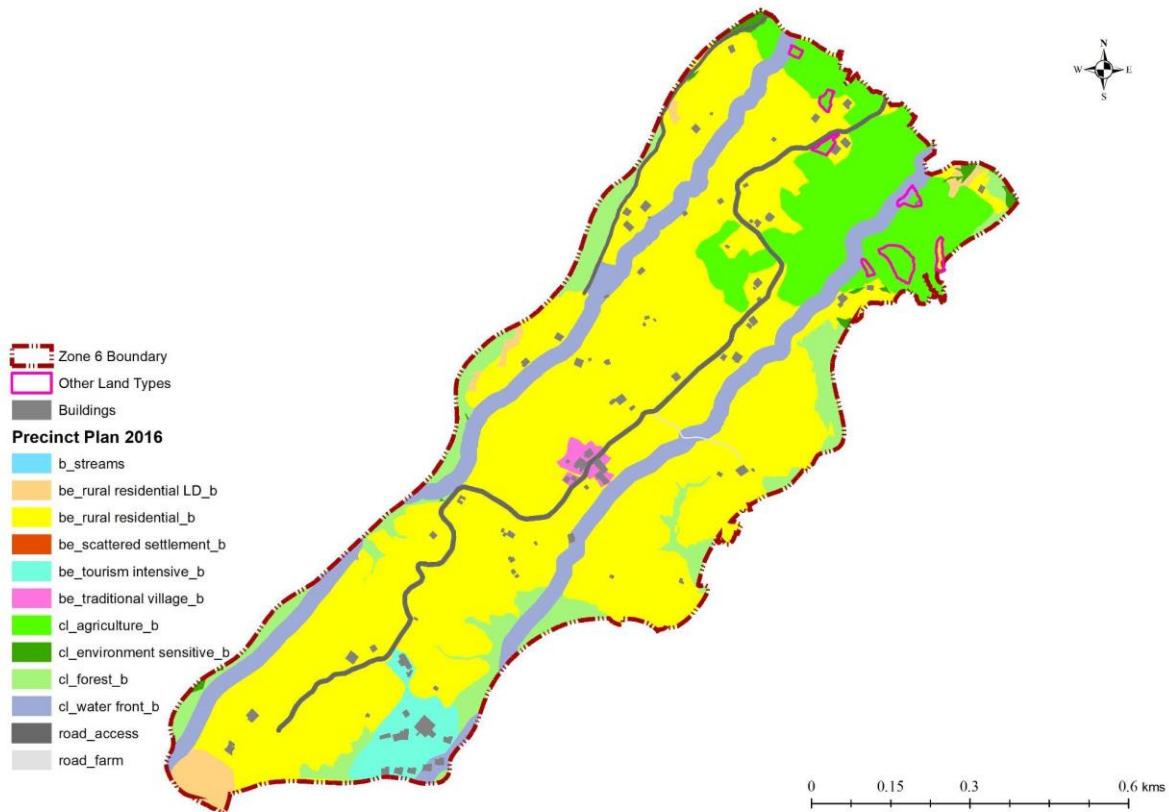
Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	5	0.24
		Total	5	0.24
2	Environment Sensitive	Kamzhing	4	0.321
		Total	4	0.321
3	Waterfront	Chhuzhing	24	2.098
		Other Land Types	71	8.485
		Total	95	10.583
4	Open Space		6	0.677
5	Road RoW		58	2.906
	Total		168	14.727

7.6 Zone 6 Tshenthangang

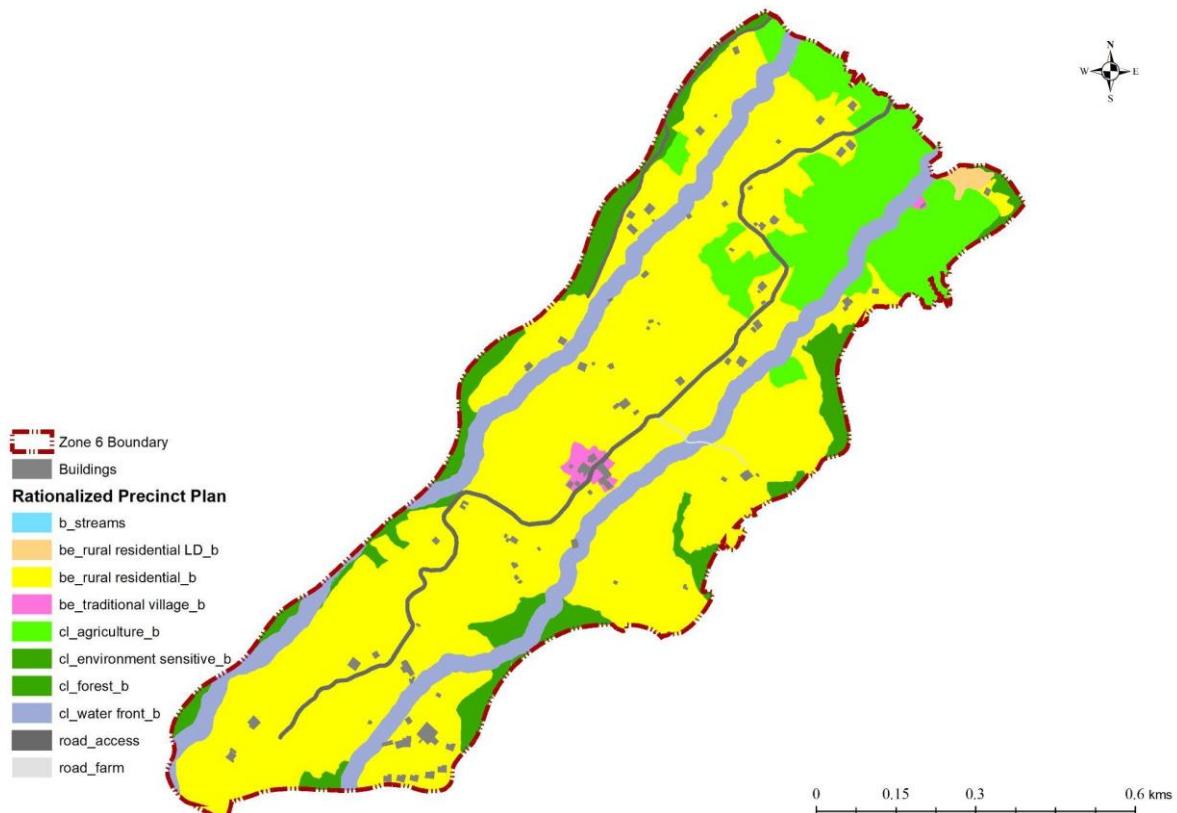
Zone 6 has an area of 219.496 acres (0.888 sq.km) and comprises predominantly of Ngoba village under Lamgong Gewog, and parts of Lungnyi gewog. Of the total area, 158.998 acres are registered land as per the cadastral data. Zone 6 vicinity includes Kichu lhakhang. The settlement is predominantly a residential area. The change in the precinct area is as tabulated below.

Table 14 Precinct area breakup for Zone 6

Sl.#	Proposed Precinct	Before		After		Net Area Change (acres)
		Area (Acre)	%	Area (Acre)	%	
1	Agriculture	27.266	12.42	28.566	13.01	1.30
2	Forest	17.634	8.03	16.791	7.65	-0.84
3	Environment Sensitive	1.079	0.49	1.569	0.71	0.49
4	Rural Residential	132.942	60.57	137.996	62.86	5.05
5	RR (LD)	3.325	1.51	0.821	0.37	-2.50
6	Scattered Settlement	0.016	0.01	0	0	-0.2
7	Traditional Village	1.378	0.63	1.500	0.68	0.12
8	Tourism Intensive	5.824	2.65	0	0	-5.82
9	Water Front	24.743	11.27	26.99	12.29	2.25
10	Access/Tertiary Road	5.139	2.34	5.139	2.34	0
11	Farm Road	0.15	0.07	0.15	0.07	0
	Total	219.496	100	219.521	100	



Map 7.11 Precinct Map of Zone 6_PVDP 2016



Map 7.12 Rationalized Precinct Map of Zone 6

There are a total of 7 plots of land type other than chhuzhing in the Agriculture precinct out of which 4 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section.

The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

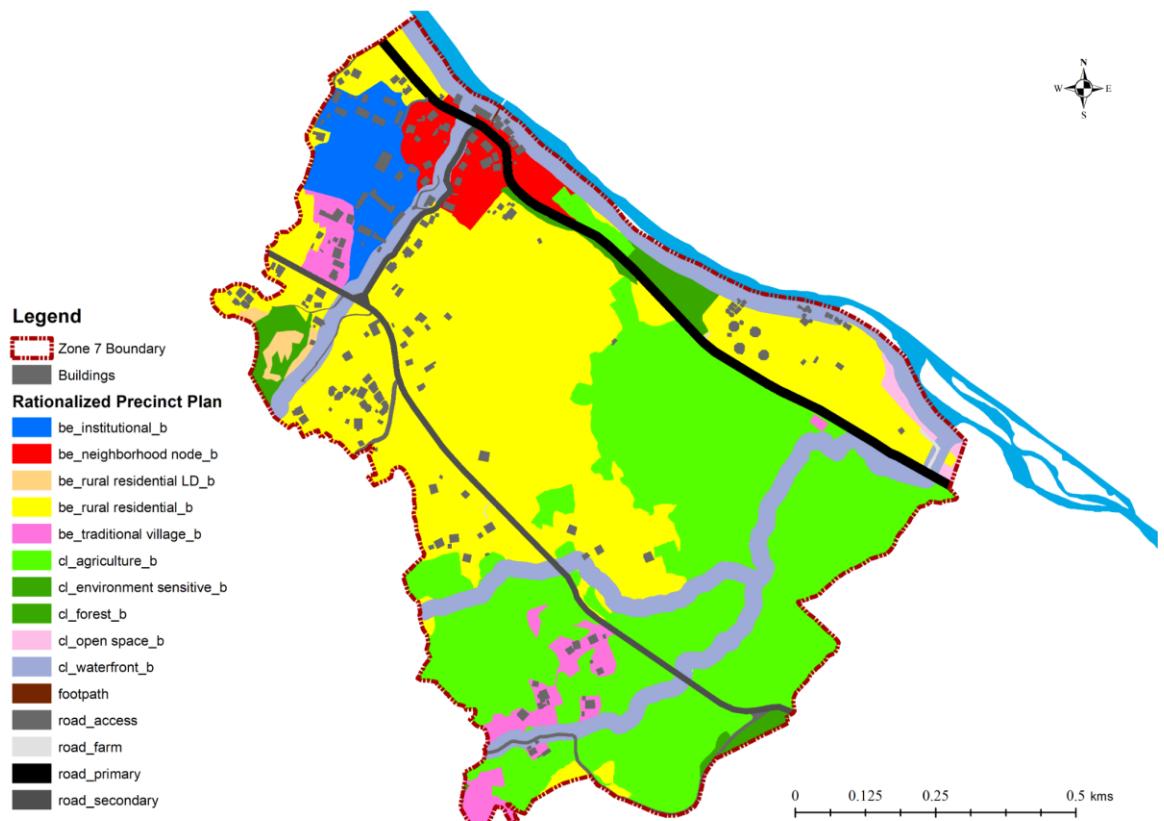
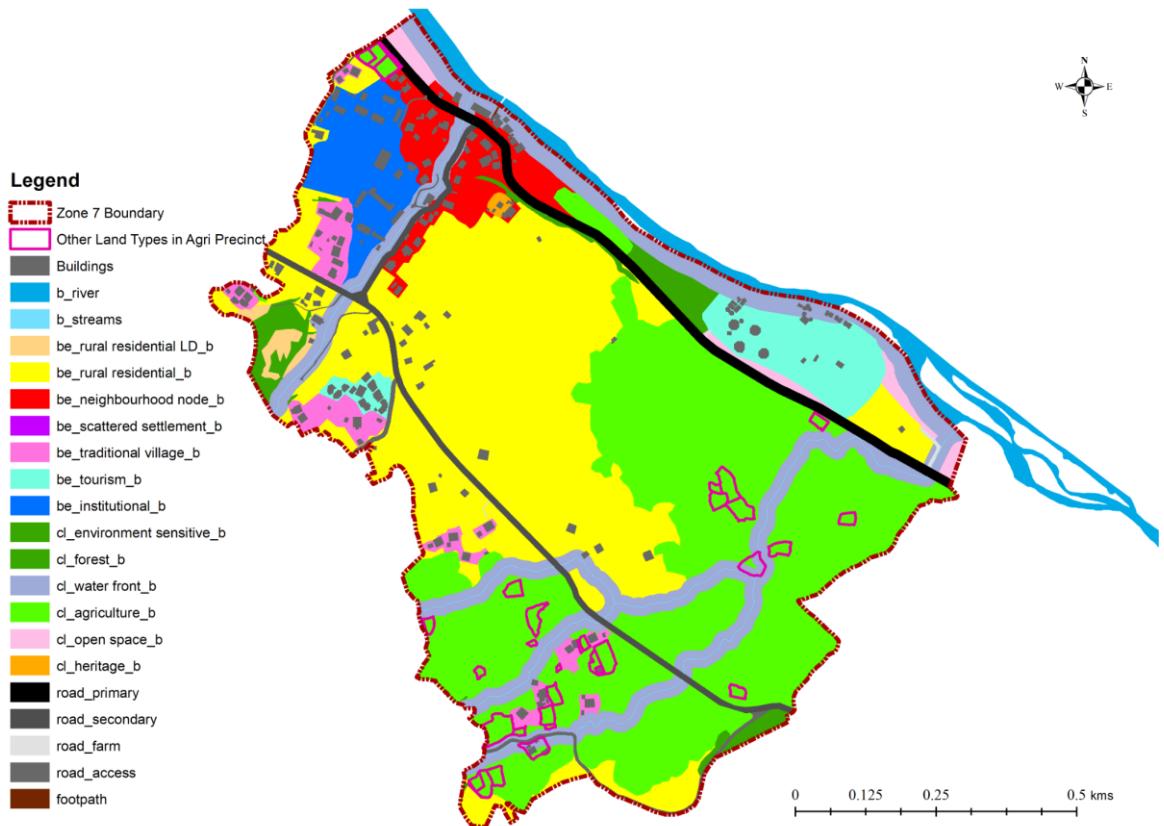
Table 15 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Khimsa	1	0.089
		Kamzhing	2	0.842
		Total	3	0.931
2	Environment Sensitive	Total	0	0
3	Waterfront	Chhuzhing	16	1.667
		Other Land Types	68	7.98
		Total	84	9.647
4	Open Space		0	0
5	Road RoW		23	0.499
	Total		110	11.064

7.7 Zone 7 Lamgong

Zone 7 has an area of 241.816 acres (0.979 sq.km) and falls under Lamgong Gewog. Of the total area, 198.355 acres are registered land as per the cadastral data. Zone 7 vicinity includes Lamgong Middle Secondary School and Lamgong commercial centre. The settlement has a mixture of both agricultural and residential uses.

There are a total of 31 plots of land type other than chhuzhing in the Agriculture precinct out of which 20 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section.



The change in the precinct area is as tabulated below.

Table 16 Precinct area breakup for Zone 7

Sl.#	Proposed Precinct	BEFORE		AFTER		Change in Area (In Acres)
		Area (Acre)	%	Area (Acre)	%	
1	Forest	3.428	1.42	3.417	1.41	0.011
2	Environment Sensitive	2.459	1.02	2.301	0.95	0.158
3	Waterfront	29.092	12.03	27.004	11.17	2.088
4	Open Space	2.457	1.02	0.944	0.39	1.513
5	Agriculture	80.781	33.4	82.856	34.26	-2.075
6	Institutional	9.666	4	9.66	3.99	0.006
7	Heritage	0.352	0.15	0	0.00	0.352
8	Tourism	10.395	4.3	0	0.00	10.395
9	Neighbourhood Node	8.841	3.65	6.95	2.87	1.891
10	Rural Residential	72.465	29.96	87.35	36.12	-14.885
11	RR (LD)	1.233	0.51	1.238	0.51	-0.005
12	Traditional Village	7.789	3.22	8.142	3.37	-0.353
13	Scattered Settlement	0.059	0.02	0	0.00	0.059
14	Primary Road	5.461	2.26	5.46	2.26	0.001
15	Secondary Road	4.536	1.88	4.535	1.88	0.001
16	Farm Road	0.17	0.07	0.17	0.07	0
17	Access/Tertiary Road	1.776	0.73	1.776	0.73	0
18	Footpath	0.028	0.01	0.028	0.01	0
19	River	0.159	0.07	0	0.00	0.159
20	Stream	0.745	0.31	0	0.00	0.745
	Total	241.892	100	241.831	100	

The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

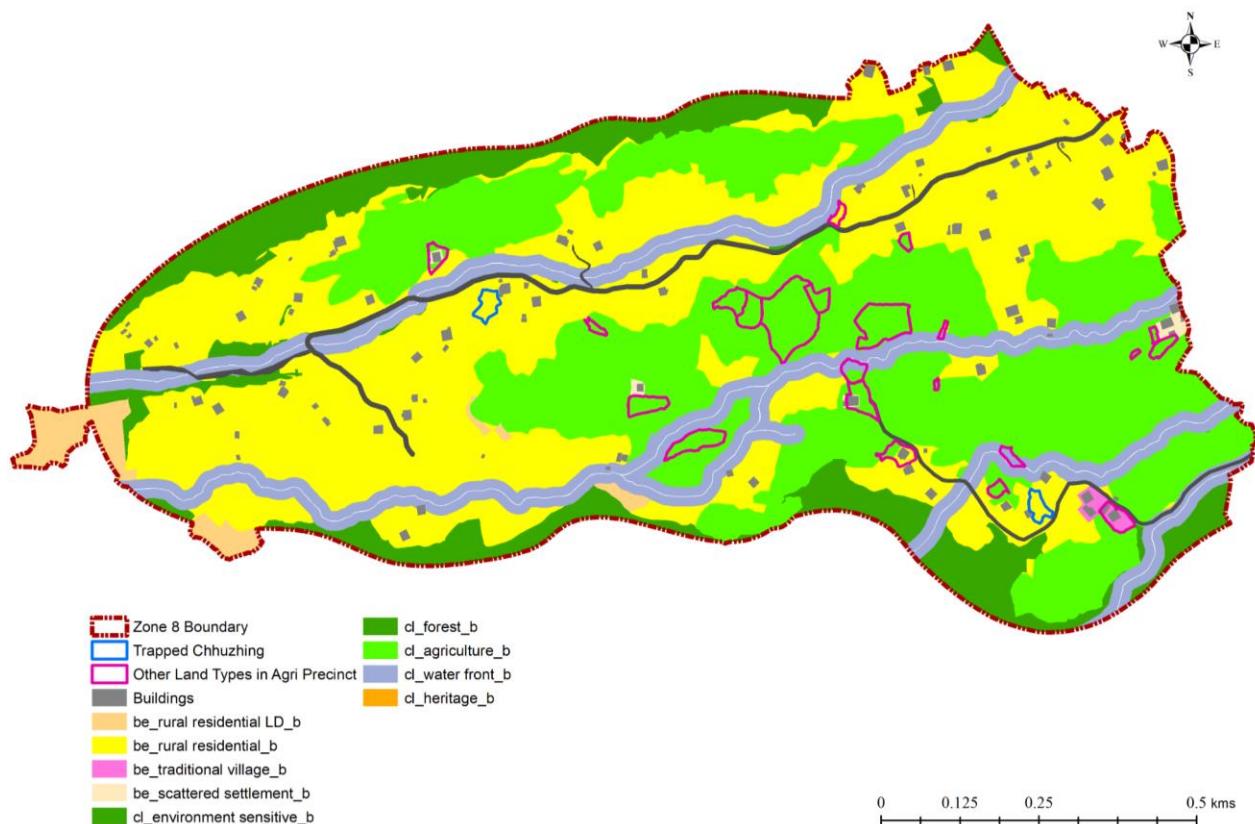
Table 17 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Khimsa	1	0.129
		Kamzhing	10	1.831
		Total	11	1.96
2	Environment Sensitive	Kamzhing	2	0.1138
		Total	2	0.1138
		Chhuzhing	87	9.112

3	Waterfront	Other Land Types	45	6.512
		Total	132	15.624
4	Road ROW		111	2.044
	Total		256	19.742

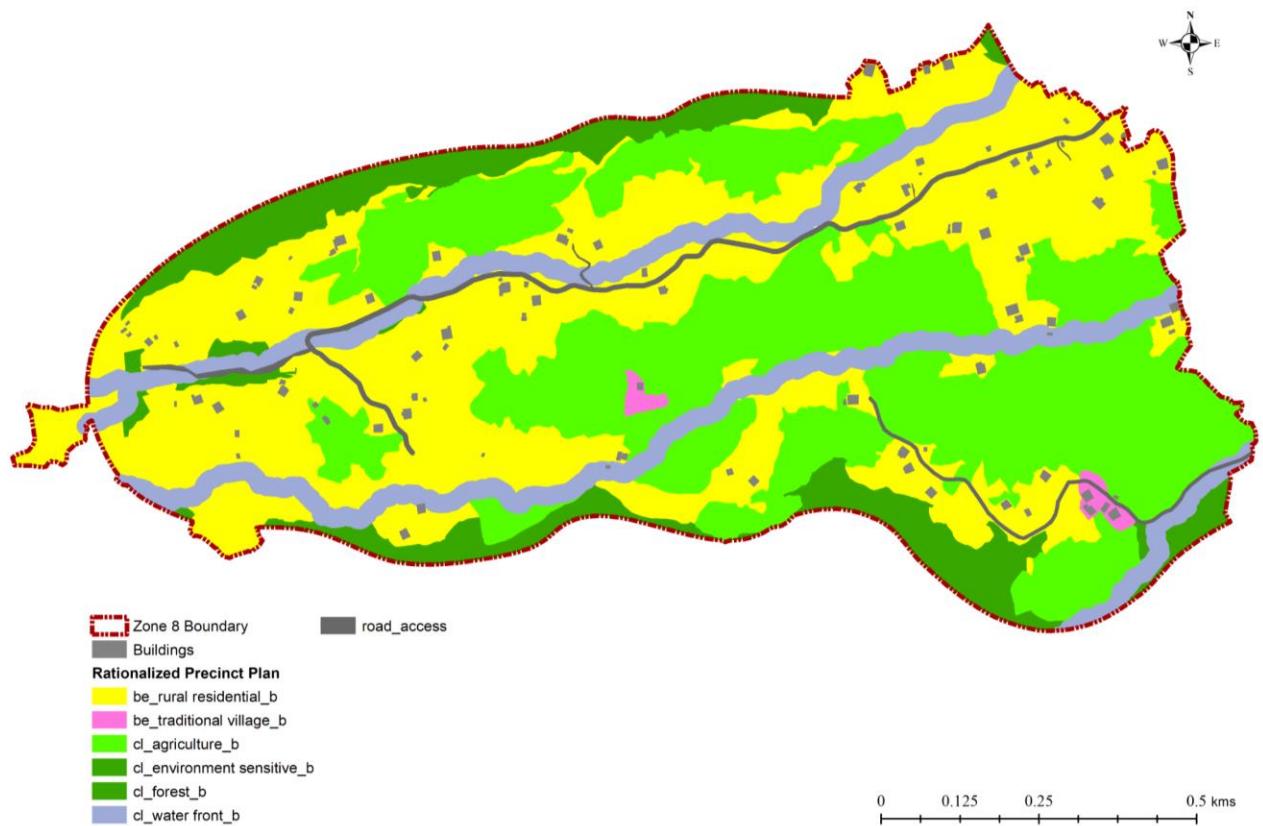
7.8 Zone 8 Jagarthang

Zone 8 consists mostly of Jargathang Toe and Gungang Toe villages under Lamgong gewog and has a planning area of 282.687 acres (1.14 sq.km). There are 544 registered plots with an area of 201.22 acres.



Map 7.15 Precinct Map of Zone 8_PVDP 2016

There are a total of 21 plots of land type other than chhuzhing in the Agriculture precinct out of which 10 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition the 2 trapped chhuzhing have also been assigned the nearest appropriate precinct.



Map 7.16 Rationalized Precinct Map of Zone 8

The change in the precinct area is as tabulated below.

Table 18 Precinct area breakup for Zone 8

Sl.#	Proposed Precinct	BEFORE		AFTER		Change in Area (In Acres)
		Area (Acre)	%	Area (Acre)	%	
1	Forest	29.322	10.36	29.036	10.27	0.09
2	Environment Sensitive	2.052	0.73	0.527	0.19	0.54
3	Waterfront	35.587	12.58	29.594	10.47	2.11
4	Heritage	0.301	0.11	0	0.00	0.11
5	Agriculture	91.602	32.37	100.789	35.66	-3.29
6	Rural Residential	111.252	39.31	115.919	41.01	-1.70
7	RR (LD)	4.873	1.72	0	0.00	1.72
8	Traditional Village	0.782	0.28	1.611	0.57	-0.29
9	Scattered Settlement	0.799	0.28	0	0.00	0.28
10	Access/Tertiary Road	5.177	1.83	5.177	1.83	0.00
11	Stream	1.239	0.44	0	0.00	0.44
	Total	282.986	100	282.653	100	

The figure and the area of plots falling under Cultural Landscape zone in the precincts of Agriculture,

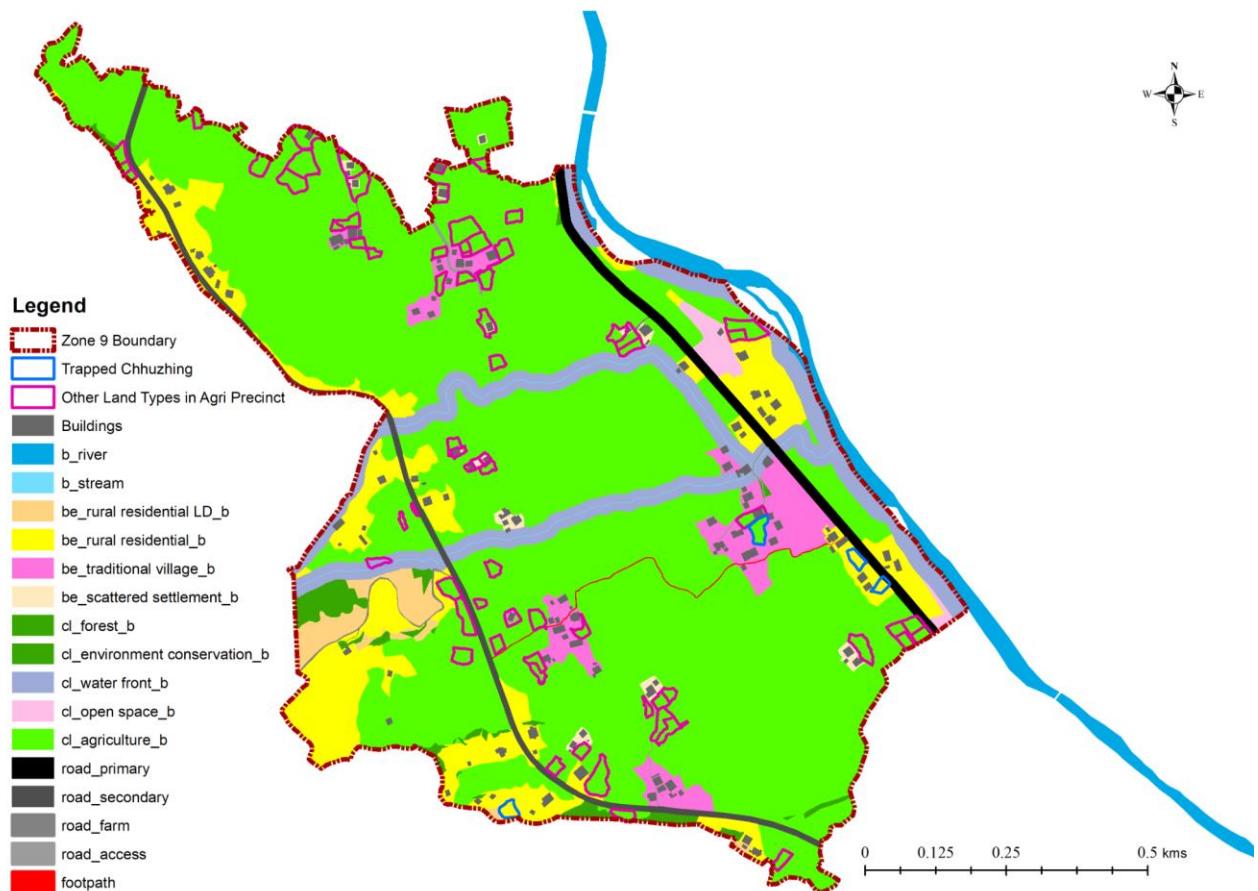
Environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 19 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	11	5.261
		Total	11	5.261
2	Environment Sensitive	Kamzhing	2	0.18
		Total	2	0.18
3	Waterfront	Chhuzhing	30	4.839
		Other Land Types	55	5.904
		Total	85	10.743
4	Road RoW		79	0.681
	Total		177	16.865

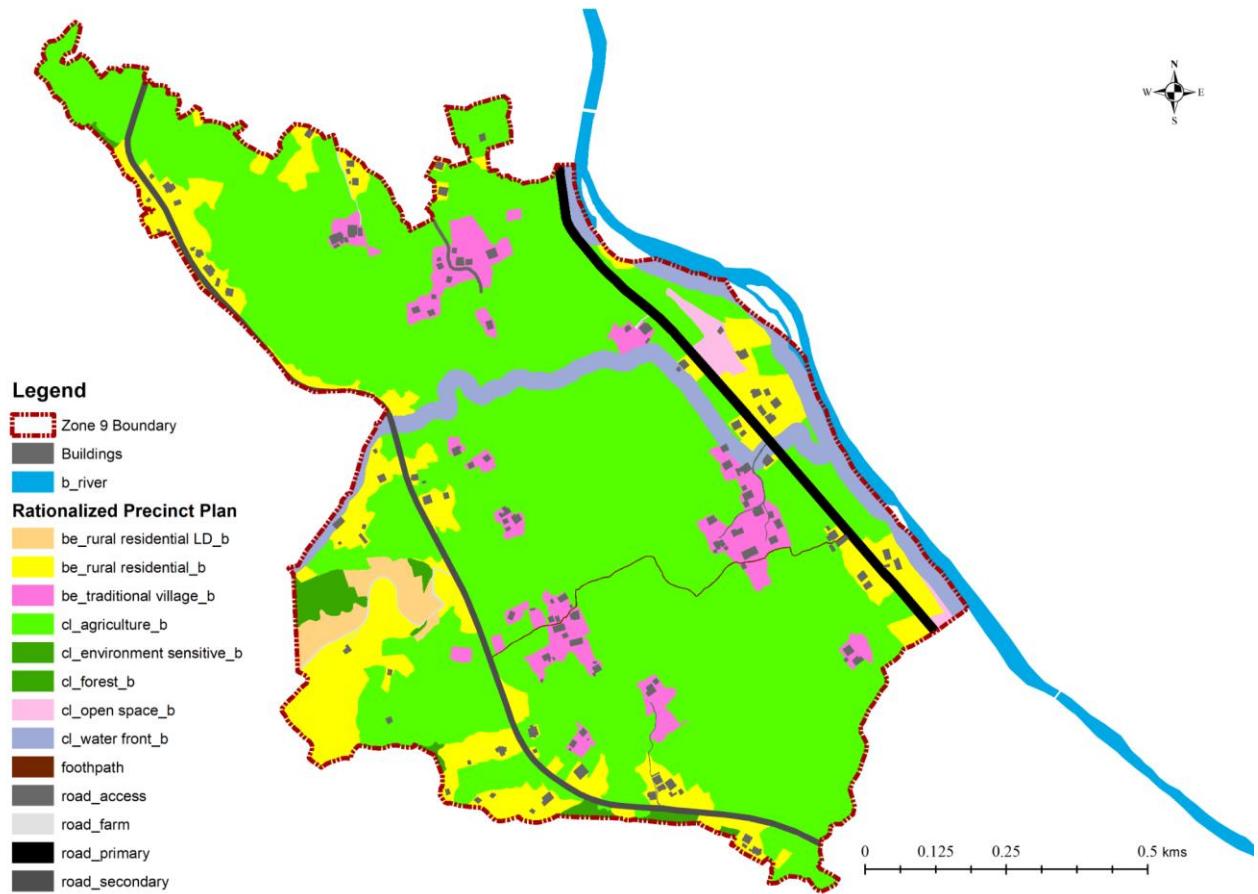
7.9 Zone 9 Jagarthang and Lamgong

Jagarthang Moe and part of Lamgong village of Lamgong gewog fall under this zone. The zone has a total area of 281.969 acres (1.14 sq.km), of which 247.559 acres are registered land (917 plots).



Map 7.17 Precinct Map of Zone 9_PVDP 2016

There are a total of 69 plots of land type other than chhuzhing in the Agriculture precinct out of which 64 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the 4 trapped chhuzhing have also been assigned the nearest appropriate precinct.



Map 7.18 Rationalized Precinct Map of Zone 9

The change in the precinct area is as tabulated below.

Table 20 Precinct area breakup for Zone 9

Sl.#	Proposed Precinct	BEFORE		AFTER		Change in Area (In Acres)
		Area (Acre)	%	Area (Acre)	%	
1	Forest	2.898	1.03	3.346	1.19	-0.448
2	Environment Sensitive	1.256	0.45	0.358	0.13	0.898
3	Waterfront	21.424	7.6	15.539	5.51	5.885
4	Open Space	1.889	0.67	1.99	0.71	-0.101
5	Agriculture	194.029	68.79	192.609	68.32	1.42
6	Rural Residential	30.695	10.88	37.452	13.28	-6.757

7	RR (LD)	3.823	1.36	3.964	1.41	-0.141
8	Traditional Village	12.059	4.28	15.854	5.62	-3.795
9	Scattered Settlement	2.416	0.86	0	0.00	2.416
10	Primary Road	4.469	1.58	4.468	1.58	0.001
11	Secondary Road	4.915	1.74	4.915	1.74	0
12	Farm Road	0.527	0.19	0.527	0.19	0
13	Access/Tertiary Road	0.505	0.18	0.505	0.18	0
14	Footpath	0.409	0.15	0.409	0.15	0
15	River	0.245	0.09	0	0.00	0.245
16	Stream	0.503	0.18	0	0.00	0.503
	Total	282.062	100	281.936	100	0.126

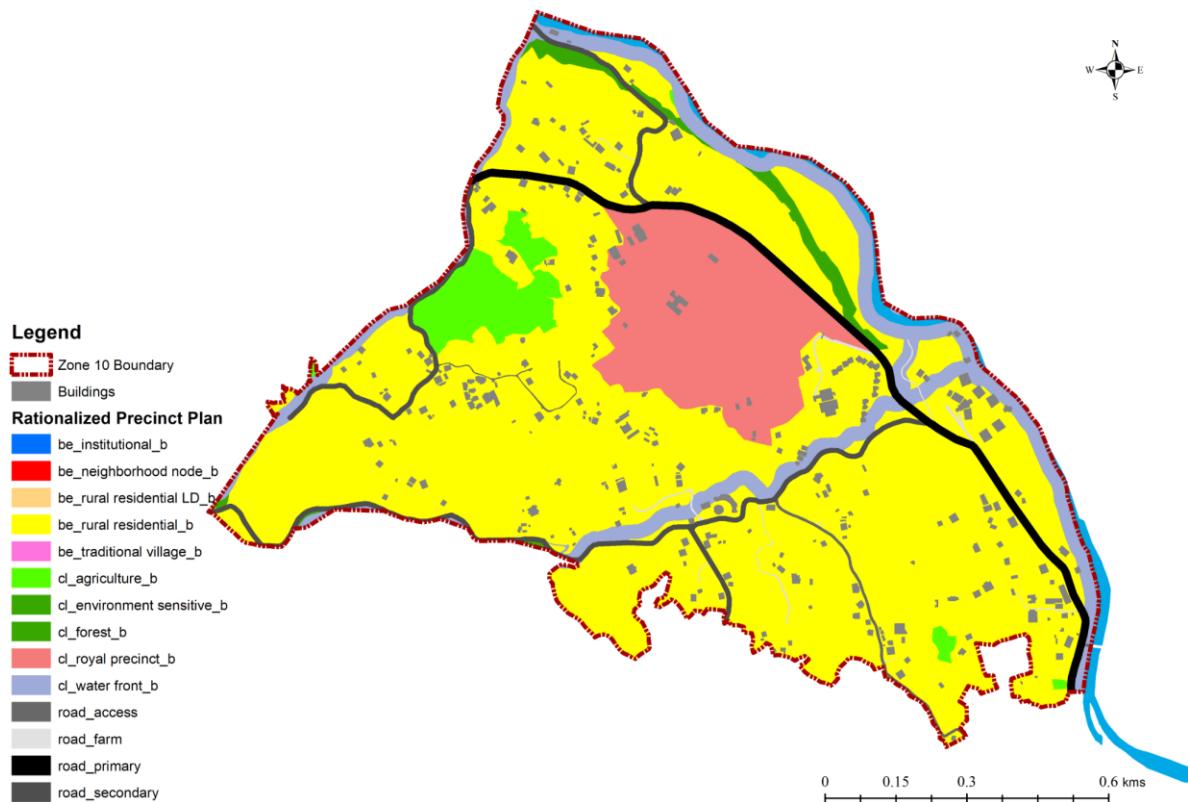
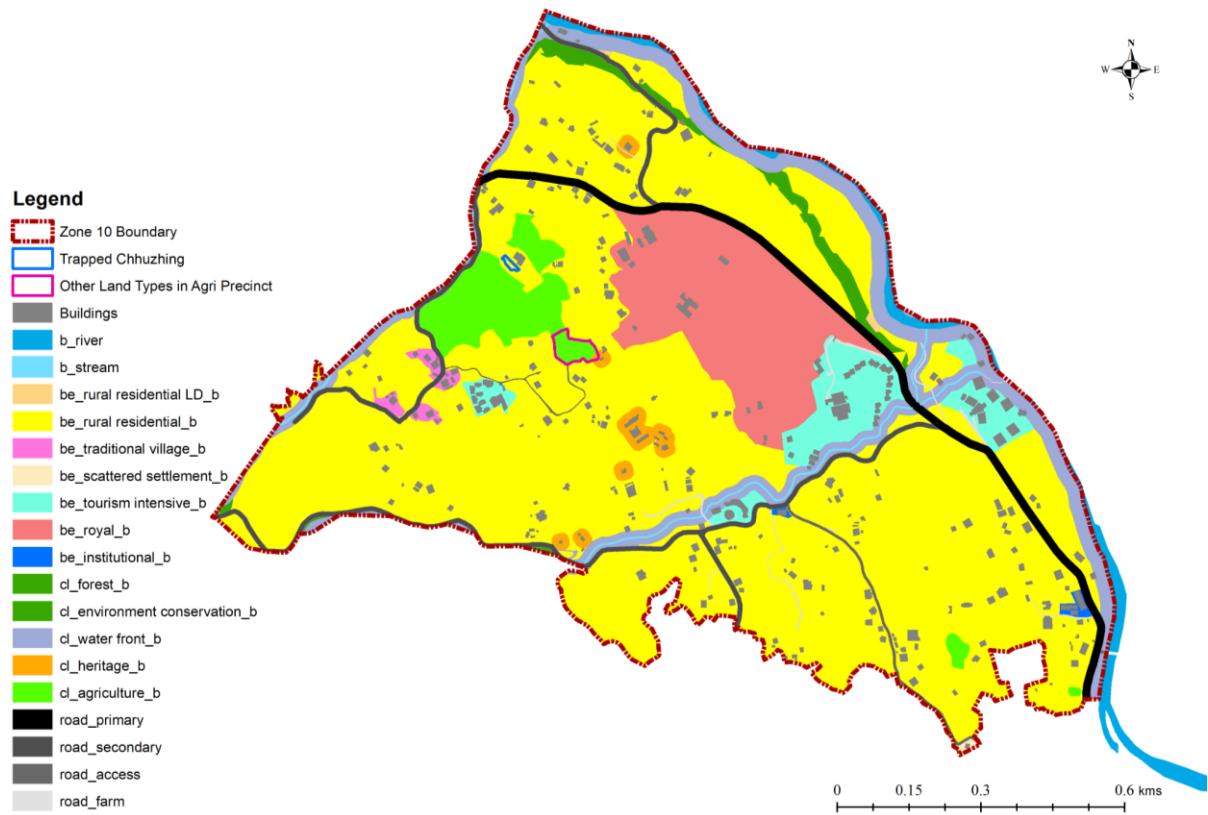
The figure and the area of plots falling under Cultural Landscape zone in the precincts of Agriculture, Environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 21 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Khimsa	2	0.26
		Kamzhing	3	0.139
		Total	5	0.399
2	Waterfront	Chhuzhing	50	7.998
		Other Land Types	23	2.978
		Total	73	10.976
3	Open Space		4	1.685
4	Road RoW		119	2.689
	Total		201	15.749

7.10 Zone 10 Sasam

Zone 10 consists predominantly of Sasam, Namey and Shari villages under Lamgong and Tsento gewogs. The planning zone has an area of 353.395 acres (1.14 sq.km). The zone has a total registered land of 306.424 acres (465 plots). There is only 1 plot of land type other than chhuzhing in the Agriculture precinct and has been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the only trapped chhuzhing has also been assigned the nearest appropriate precinct.



The change in the precinct area is as tabulated below.

Table 22 Precinct area breakup for Zone 10

Sl.#	Proposed Precinct	BEFORE		AFTER		Change in Area (In Acres)
		Area (Acre)	%	Area (Acre)	%	
1	Forest	0.409	0.12	0.262	0.07	0.147
2	Environment Sensitive	4.644	1.31	4.369	1.24	0.275
3	Waterfront	26.671	7.55	30.339	8.58	-3.668
4	Heritage	3.434	0.97	0	0.00	3.434
5	Institutional	0.685	0.19	0	0.00	0.685
6	Royal	34.436	9.74	40.306	11.41	-5.87
7	Tourism	14.867	4.21	0	0.00	14.867
8	Agriculture	13.114	3.71	12.266	3.47	0.848
9	Rural Residential	229.916	65.06	246.494	69.75	-16.578
10	RR (LD)	0.194	0.05	0	0.00	0.194
11	Traditional Village	1.772	0.5	0	0.00	1.772
12	Scattered Settlement	0.192	0.05	0	0.00	0.192
13	Primary Road	7.823	2.21	7.822	2.21	0.001
14	Secondary Road	8.835	2.5	8.834	2.50	0.001
15	Farm Road	1.289	0.36	1.287	0.36	0.002
16	Access/Tertiary Road	1.377	0.39	1.377	0.39	0
17	River	3.209	0.91	0	0.00	3.209
18	Stream	0.528	0.15	0	0.00	0.528
Total		353.395	100	353.356	100	

The figure and the area of plots falling under Cultural Landscape zone in the precincts of Agriculture, Environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 23 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
2	Environment Sensitive	Kamzhing	2	1.551
		Total	2	1.551
3	Waterfront	Chhuzhing	4	0.389
		Other Land Types	56	12.3
		Total	60	12.689
5	Road RoW		144	5.068
	Total		206	19.308

7.11 Zone 11 Jangsa

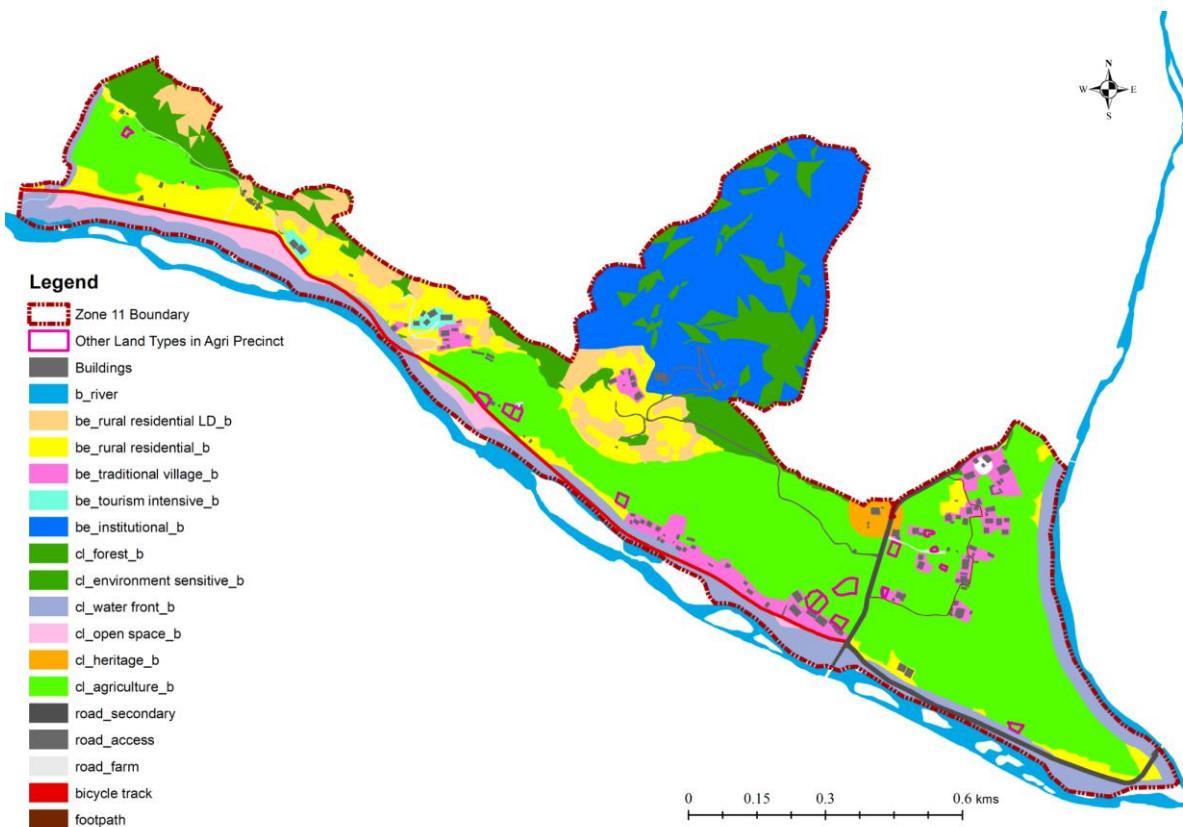
Zone 11 has an area of 260.523 acres (1.054 sq.km) and comprises parts of Dop Shari, Hungrel, Lamgong and Lungyi Gewogs. Of the total area, 202.797 acres are registered land as per the cadastral data. Zone 11 vicinity includes the very sacred Jangtsa Dumtseg Lhakhang and is located in close proximity to Tshongdue Town just across Paro Chhu. The settlements are surrounded by vast agricultural land.

The change in the precinct area is as tabulated below.

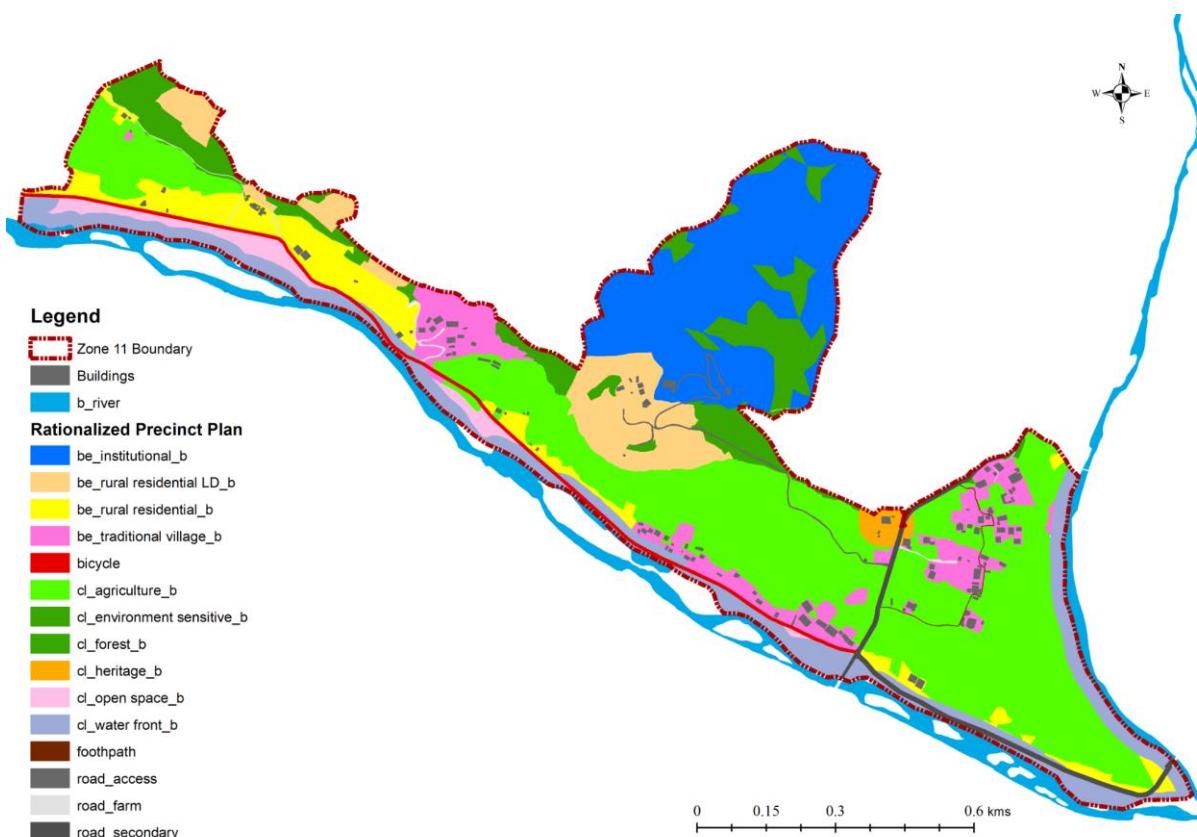
Table 24 Precinct Map of Zone 11_PVDP 2016

Sl.#	Proposed Precinct	BEFORE		AFTER		Change in Area (In Acres)
		Area (Acre)	%	Area (Acre)	%	
1	Forest	2.88	1.11	2.851	1.1	0.029
2	Environment Sensitive	24.75	9.5	21.775	8.39	2.975
3	Water Front	26.54	10.19	26.28	9.79	0.26
4	Open Space	4.79	1.84	4.786	1.84	0.004
5	Institution	41.95	16.1	44.139	16.95	-2.189
6	Religious/Heritage	2.154	0.83	1.865	0.72	0.289
7	Tourism	1.27	0.49	0	0	1.27
8	Agriculture	94.83	36.4	92.341	35.32	2.489
9	Rural Residential	25.646	9.84	18.292	7.02	7.354
10	RR (LD)	12.68	4.87	18.029	6.92	-5.349
11	Traditional Village	11.96	4.59	19.874	7.74	-7.914
12	Scattered Settlement	0.124	0.05	0	0	0.124
13	Secondary Road	3.79	1.45	3.792	1.46	-0.002
14	Farm Road	0.84	0.32	0.843	0.32	-0.003
15	Access/Tertiary Road	1.19	0.46	1.19	0.46	0
16	Footpath	0.31	0.12	0.306	0.12	0.004
17	Bicycle Track	4.03	1.55	4.03	1.55	0
18	River	0.773	0.3	0	0.3	0.773

There are a total of 15 plots of land type other than chhuzhing in the Agriculture precinct out of which 13 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section.



Map 7.21 Precinct Map of Zone 11_PVDP 2016



Map 7.22 Rationalized Precinct Map of Zone 11

The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

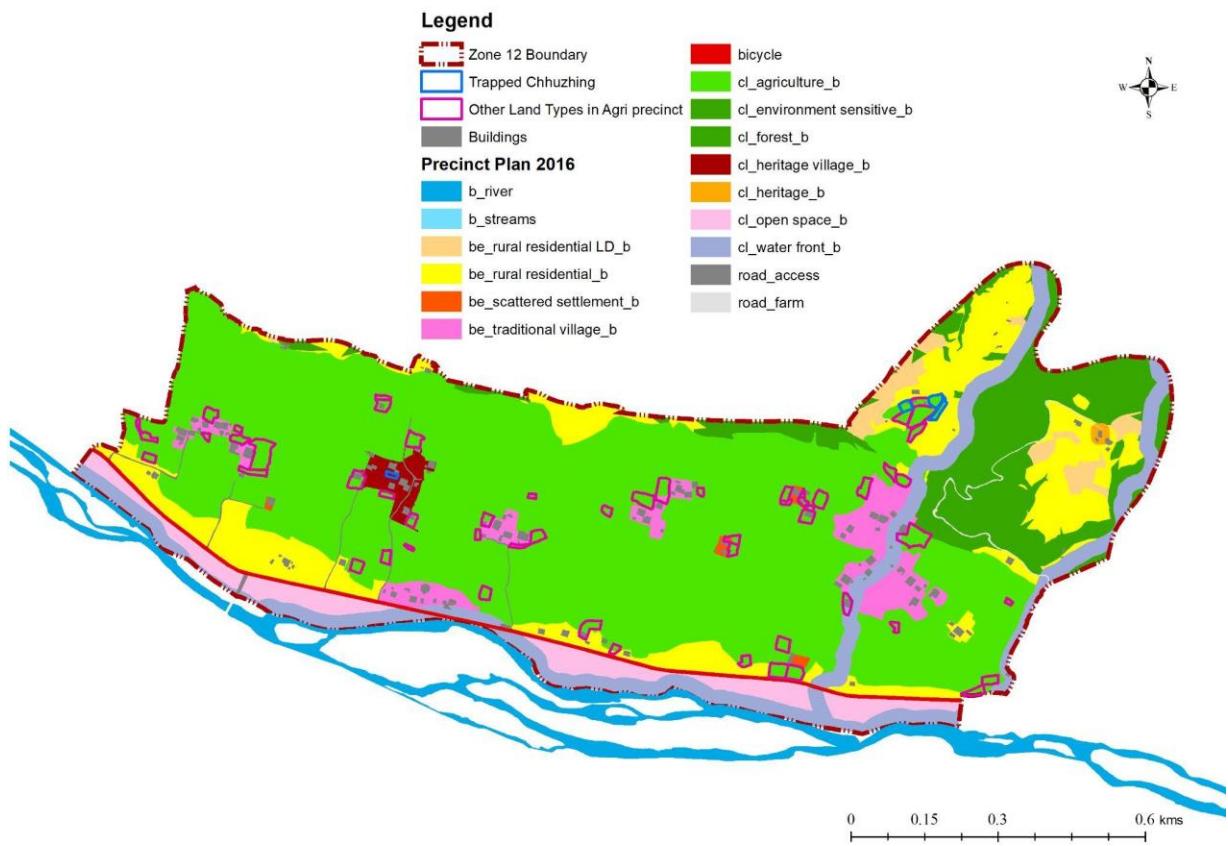
Table 25 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Khimsa	1	0.13
		Kamzhing	1	0.05
		Total	2	0.18
2	Environment Sensitive	Chhuzhings	3	0.095
		Khimsa	1	0.064
		Kamzhing	8	2.194
		Institution	1	10.408
		Orchard	1	0.052
		Total	14	12.813
		Chhuzhing	24	2.593
3	Waterfront	Other Land Types	22	3.693
		Total	46	6.286
4	Open Space		3	1.815
5	Road RoW		50	1.143
	Total		115	22.237

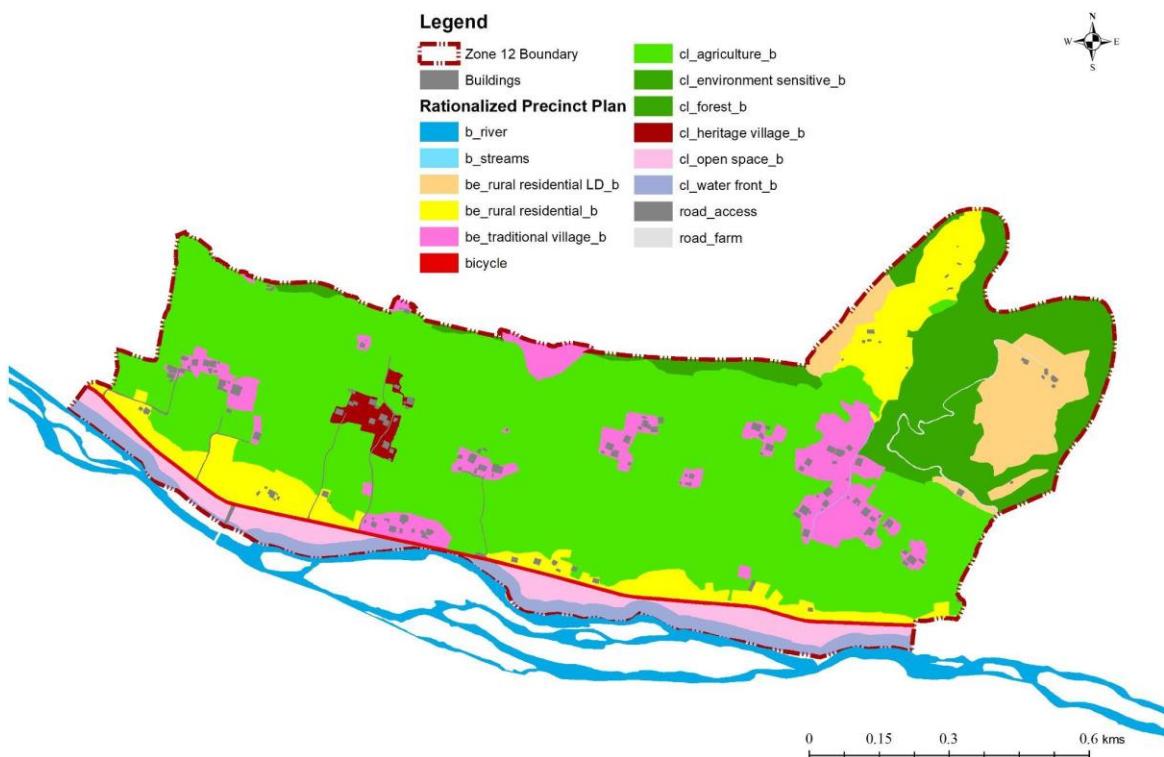
7.12 Zone 12 Tsendona

Zone 12 has an area of 297.635 acres (1.20 sq.km) and comprises Tsendona under Lamgong Gewog. Of the total area, 220.189 acres are registered land as per the cadastral data. Zone 12 vicinity includes the Chhukha heritage village and is located in close proximity to Lamgong Town just across Paro Chhu. The settlements are surrounded by vast agricultural land.

There are a total of 56 plots of land type other than chhuzhing in the Agriculture precinct out of which 48 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the 4 trapped chhuzhing have also been assigned the nearest appropriate precinct.



Map 7.23 Precinct area breakup for Zone 12_PVDP 2016



Map 7.24 Rationalized Precinct Map of Zone 12

The change in the precinct area is as tabulated below.

Table 26 Precinct area breakup for Zone 12

Sl.#	Proposed Precinct	Before		After		Net Area Change (acres)
		Area (Acre)	%	Area (Acre)	%	
1	Agriculture	163.5707	54.967	161.674	54.32	-1.897
2	Forest	15.429	5.18	14.703	4.94	-0.726
3	Environment Sensitive	15.126	5.08	22.342	7.51	7.216
4	Religious/Heritage	0.362	0.12	0	0	-0.362
5	Rural Residential	37.743	12.68	27.605	9.27	-10.138
6	RR (LD)	5.137	1.73	15.938	5.35	10.801
7	Scattered Settlement	1.074	0.36	0	0	-1.074
8	Heritage Village	2.851	0.96	2.963	1	0.112
9	Bicycle Track	3.582	1.2	3.582	1.2	0
10	Traditional Village	12.922	4.34	23.185	7.79	10.263
11	Open Space	11.3	3.8	11.701	3.93	0.400
12	Water Front	26.982	9.07	12.406	4.17	-14.576
13	Access/Tertiary Road	0.971	0.33	0.971	0.33	0
14	Farm Road	0.588	0.2	0.588	0.2	0
	Total	297.638	100	297.657	100	

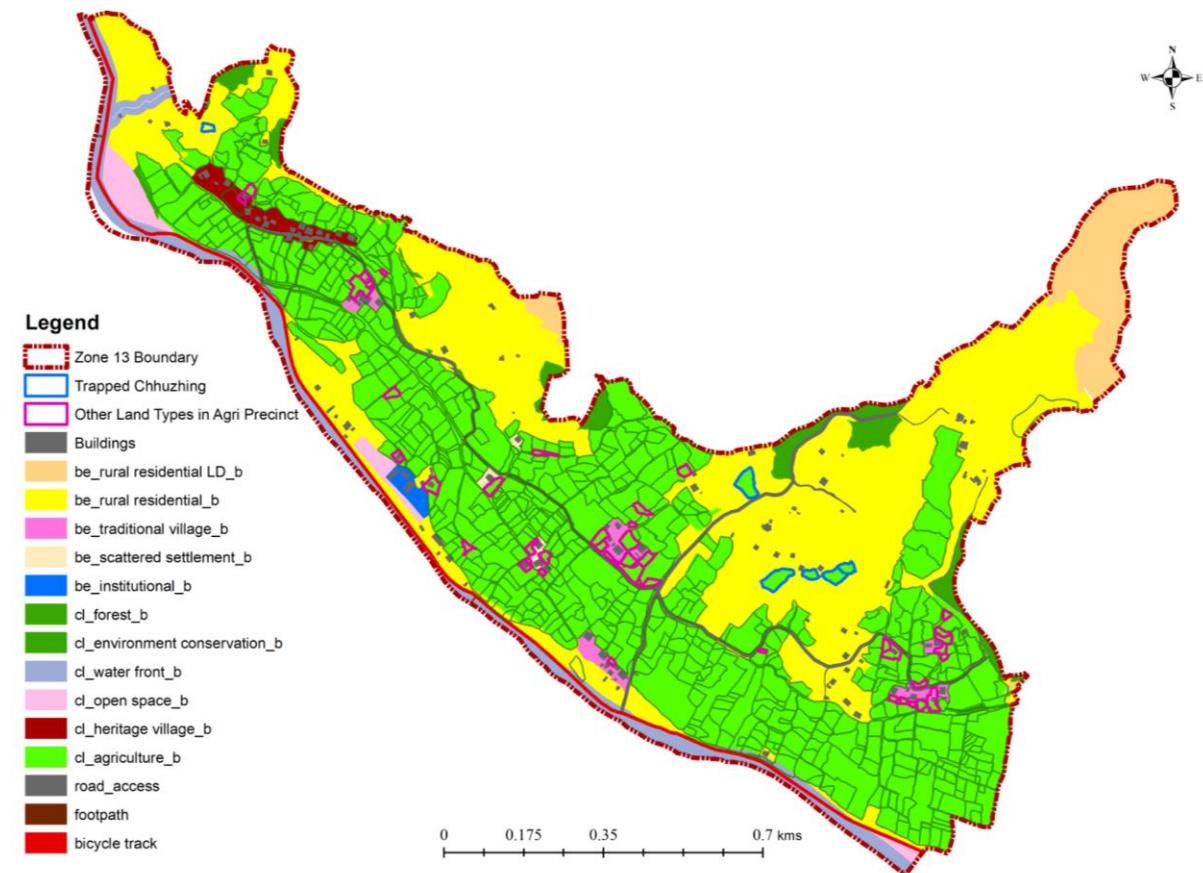
The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 27 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Khimsa	2	0.269
		Kamzhing	6	0.374
		Total	8	0.643
2	Environment Sensitive	Kamzhing	1	0.245
		Total	1	0.245
3	Waterfront	Chhuzhing	1	0.084
		Other Land Types	6	2.599
		Total	7	2.683
4	Open Space		5	2.874
5	Road RoW		4	0.122
	Total		25	6.567

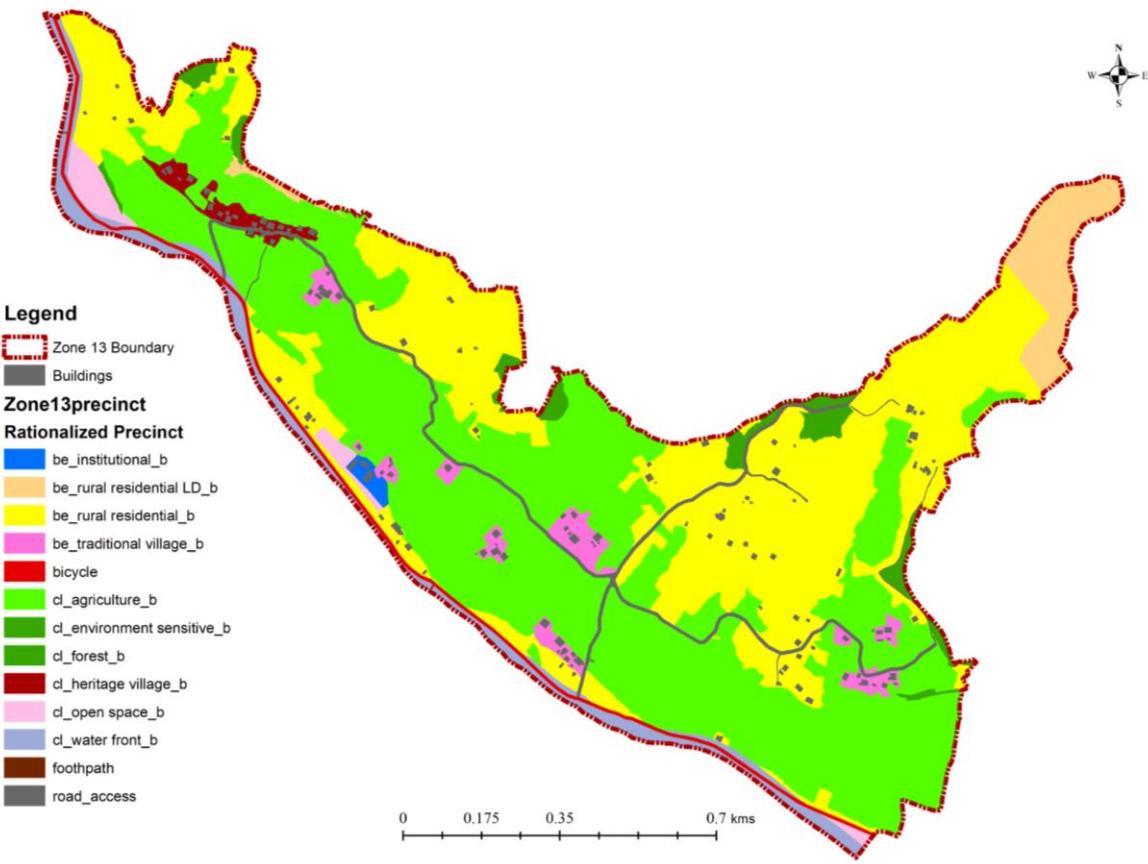
7.13 Zone 13 Chhukha

Zone 13 includes Chhukha village under Lamgong Gewog and has an area of 366.703 acres. 976 plots are registered land with an area of 306.119 acres in the zone.



Map 7.25 Precinct Map of Zone 13_PVDP 2016

There are a total of 45 plots of land type other than chhuzhing in the Agriculture precinct out of which 40 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the 6 trapped chhuzhing have also been assigned the nearest appropriate precinct.



Map 7.26 Rationalized Precinct Map of Zone 13

The change in the precinct area is as tabulated below.

Table 28 Precinct area breakup for Zone 13

Sl. #	Proposed Precinct	BEFORE		AFTER		Change In Area (In Acres)
		Area (Acre)	%	Area (Acre)	%	
1	Forest	7.513	2.05	7.319	2.00	0.194
2	Environment Sensitive	1.85	0.51	1.494	0.41	0.356
3	Waterfront	14.992	4.09	14.503	3.95	0.489
4	Open Space	4.478	1.22	4.478	1.22	0
5	Institution	1.233	0.34	1.233	0.34	0
6	Agriculture	171.982	46.95	169.021	46.08	2.961
7	Heritage Village	3.948	1.08	3.712	1.01	0.236
8	Rural Residential	126.088	34.42	128.969	35.16	-2.881
9	RR (LD)	15.216	4.15	13.801	3.76	1.415
10	Scattered Settlement	1.012	0.28	0	0.00	1.012
11	Traditional Village	4.176	1.14	9.215	2.51	-5.039
12	Access/Tertiary Road	7.757	2.12	7.757	2.11	0

13	Footpath	0.013	0.00	0.013	0.00	0
14	Bicycle Track	5.315	1.45	5.315	1.45	0
15	River	0.664	0.18	0	0.00	0.664
16	Stream	0.039	0.01	0	0.00	0.039

The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

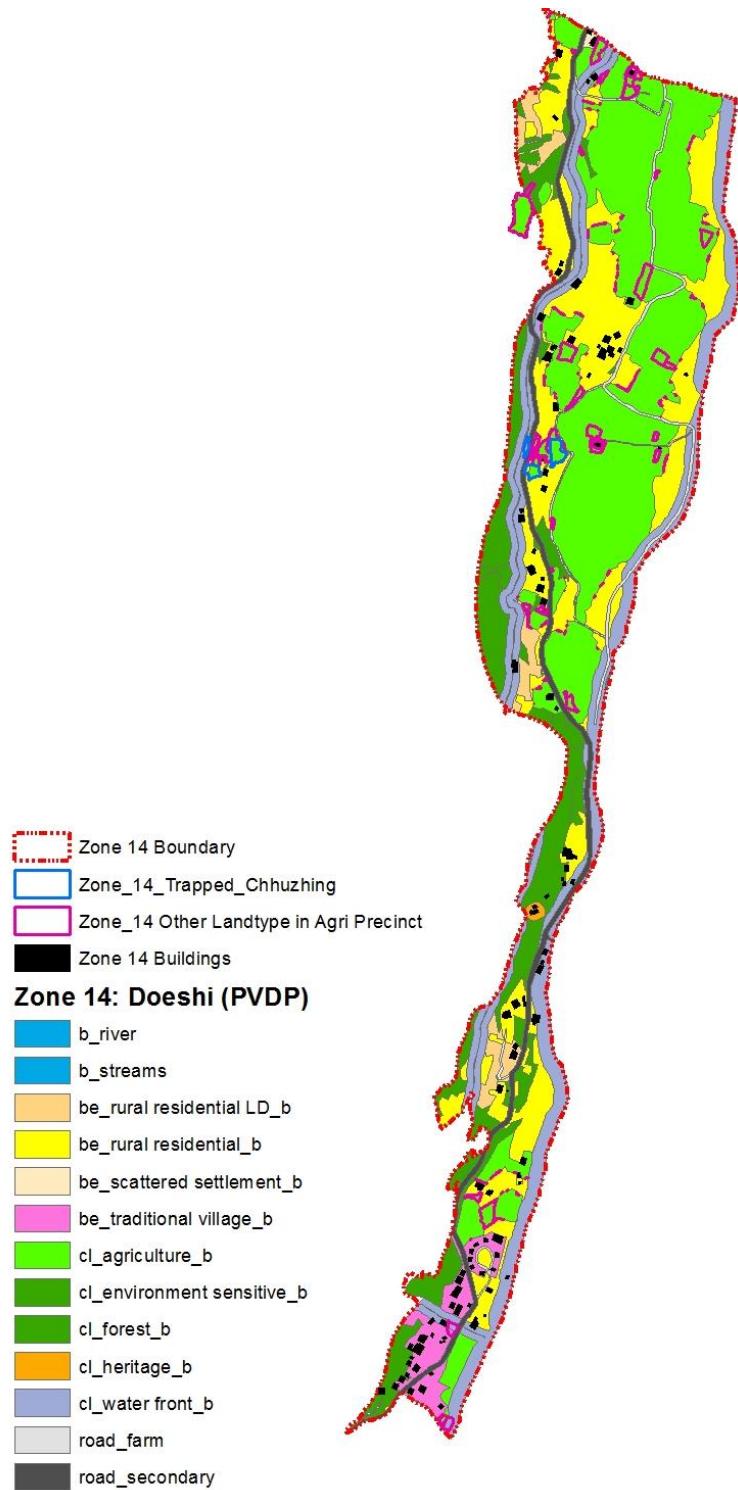
Table 29 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	5	0.442
		Total	5	0.442
2	Environment Sensitive	Chhuzhing	2	0.059
		Kamzhing	1	0.086
		Total	3	0.145
3	Waterfront	Chhuzhing	16	0.754
		Other Land Types	10	0.793
		Total	26	1.547
4	Open Space		1	1.07
5	Road RoW		157	2.917
	Total		192	6.121

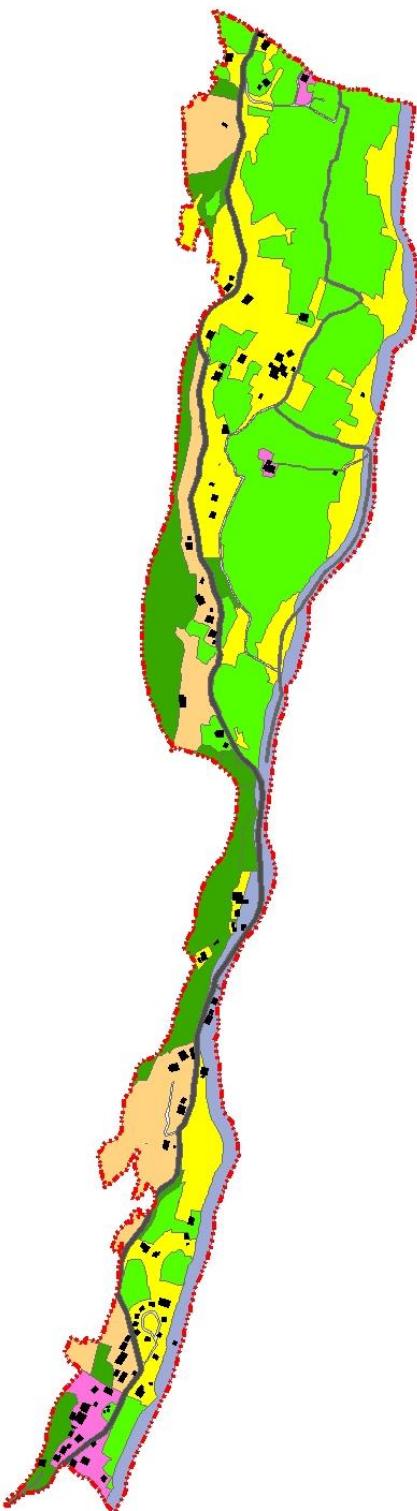
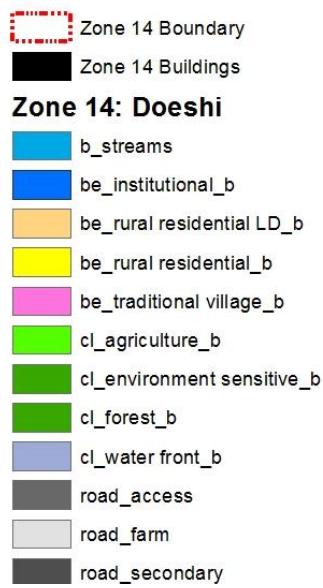
7.14 Zone 14 Doeshi

Zone 14 covers the area of Doeshi with an area of 205.01 acres (0.82 sq.km) of which 142.56 acres are registered land as per the cadastral data.

As per the approved PVDP, there are a total of 31 plots of land type other than chhuzhing in the Agriculture precinct out of which 27 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the 3 trapped chhuzhing have also been assigned the nearest appropriate precinct. A Waterfront Precinct was designated along a manmade irrigation channel which has been removed as per the strategy and appropriate precincts were assigned to the affected area.



Map 7.27 Precinct Map of Zone 14_PVDP 2016



Map 7.28 Rationalized Precinct Map of Zone 14

The change in the precinct area is as tabulated below.

Table 30 Precinct area breakup for Zone 14

Sl.#	Proposed Precinct	Before		After		% Change
		Area (Acre)	%	Area (Acre)	%	
1	Rural Residential	44.50	21.71	45.97	22.42	0.72
2	Rural Residential(LD)	5.02	2.45	23.30	11.37	8.92
3	Traditional Village	6.54	3.19	5.13	2.50	-0.69
4	Scattered Settlement	0.38	0.19	0	0.00	-0.19
5	Heritage	0.35	0.17	0	0.00	-0.17
6	Agriculture	73.21	35.71	72.34	35.29	-0.43
7	Environment Sensitive	25.35	12.37	23.47	11.45	-0.92
8	Waterfront	33.90	16.54	19.55	9.54	-7.00
9	farm Road	1.36	0.66	1.36	0.66	0.00
10	Access/Tertiary Road	2.68	1.31	2.68	1.31	0.00
11	Secondary Road	8.73	4.26	8.73	4.26	0.00
12	River/Stream	0.70	0.34	0.70	0.34	0.00
13	Forest	2.29	1.12	1.78	0.87	-0.25
		205.01	100.00	205.01	100.00	0.00

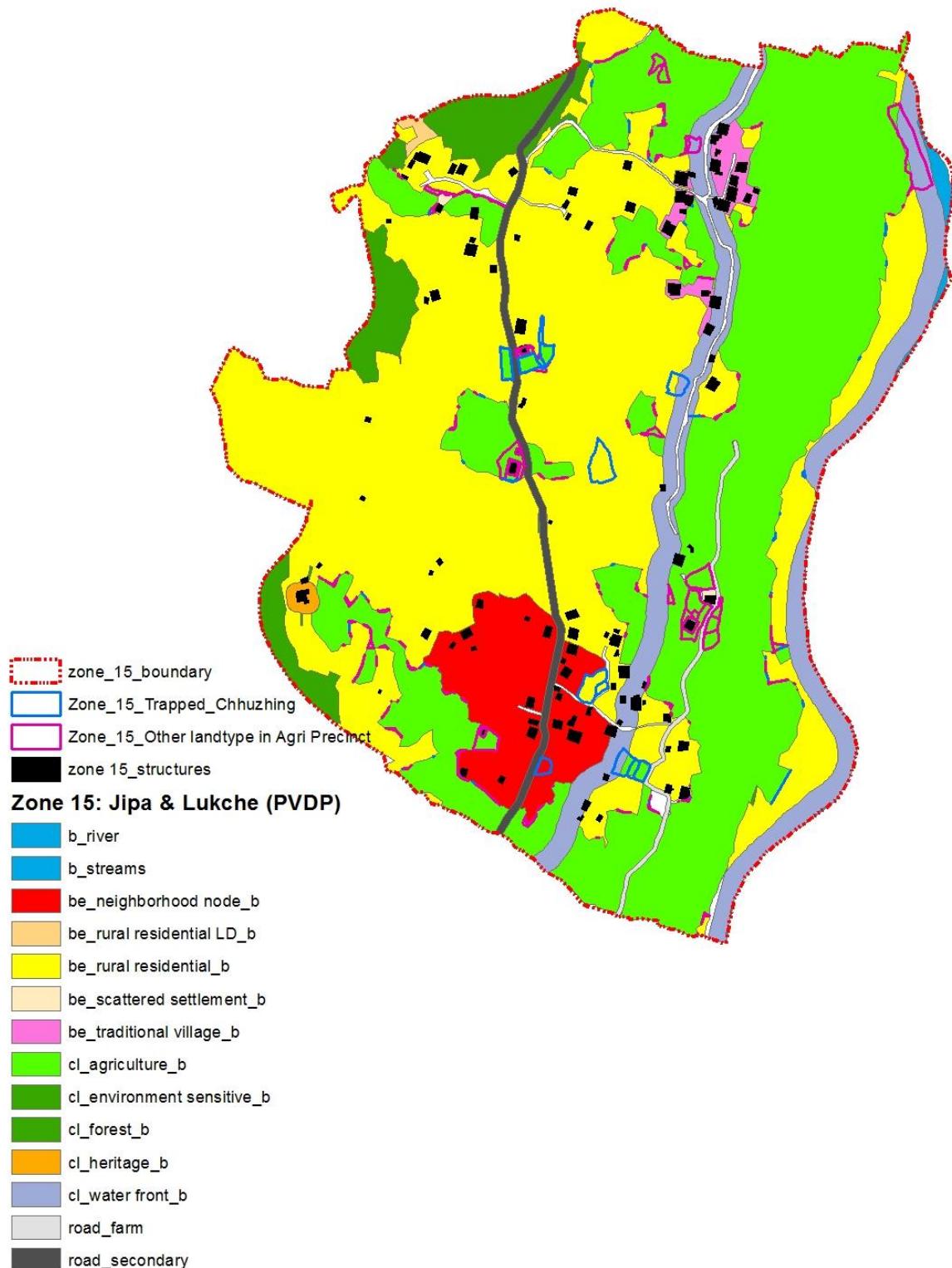
The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 31 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Khimsa	1	0.15
		Kamzhing	3	0.12
		Total	4	0.27
2	Environment Sensitive	Khimsa	1	0.11
		Kamzhing	12	2.72
		Chhuzhing	1	0.07
		Orchard	2	0.24
		Total	16	3.15
3	Waterfront	Chhuzhing	13	1.49
		Other Land Types	29	4.7
		Total	42	6.19
4	Road ROW		51	1.58
	Total		113	11.19

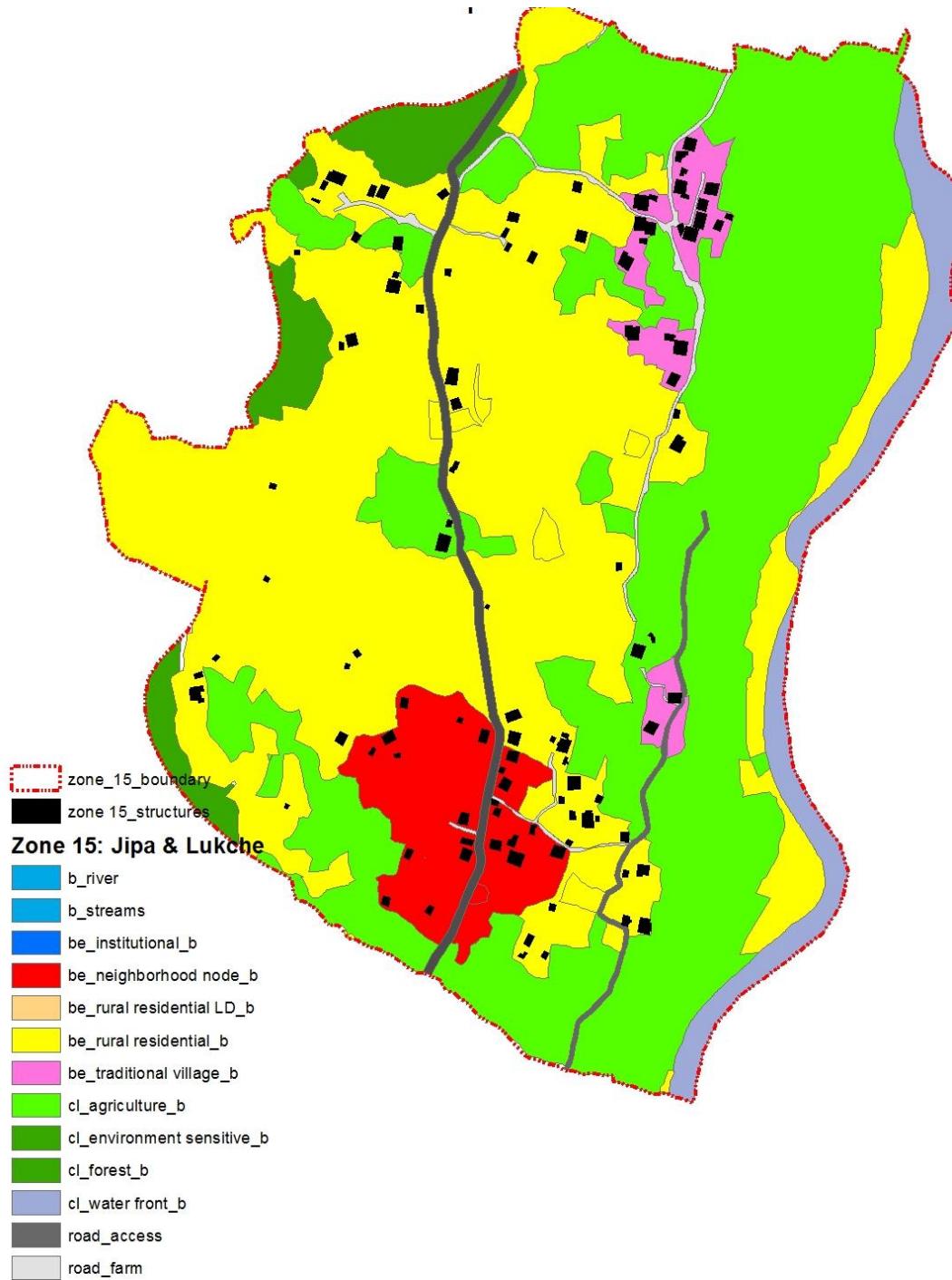
7.15 Zone 15 Jipa and Lukche

Zone 15 covers the area of Jipa and Lukche with an area of 224.72 acres (0.9 sq.km) of which 185.52 acres are registered land as per the cadastral data.



Map 7.29 Precinct Map of Zone 15_PVDP 2016

As per the approved PVDP, there are a total of 18 plots of land type other than chhuzhing in the Agriculture precinct out of which 16 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the 11 trapped chhuzhing have also been assigned the nearest appropriate precinct. A Waterfront Precinct was designated along a man-made irrigation channel which has been removed as per the strategy and appropriate precincts were assigned to the affected area.



Map 7.30 Rationalized Precinct Map of Zone 15

The change in the precinct area is as tabulated below.

Table 32 Precinct area breakup for Zone 15

Sl.#	Proposed Precinct	Before		After		% Change
		Area (Acre)	%	Area (Acre)	%	
1	Rural Residential	93.54	41.63	96.24	42.82	1.20
2	Rural Residential(LD)	0.33	0.15		0.00	-0.15
3	Neighborhood Node	11.95	5.32	12.54	5.58	0.26
4	Traditional Village	2.53	1.13	5.72	2.55	1.42
5	Scattered Settlement	0.39	0.17		0.00	-0.17
6	Heritage	0.45	0.20		0.00	-0.20
7	Agriculture	80.92	36.01	84.67	37.68	1.67
8	Environment Sensitive	4.41	1.96	3.91	1.74	-0.22
9	Waterfront	17.99	8.01	10.00	4.45	-3.56
10	farm Road	2.00	0.89	2.00	0.89	0.00
11	Access/Tertiary Road	1.15	0.51	1.15	0.51	
12	Secondary Road	3.11	1.38	3.11	1.39	0.00
13	River/Stream	1.05	0.47	0.74	0.33	-0.14
14	Forest	4.90	2.18	4.64	2.06	-0.12
		224.72	100.00	224.72	100.00	0.00

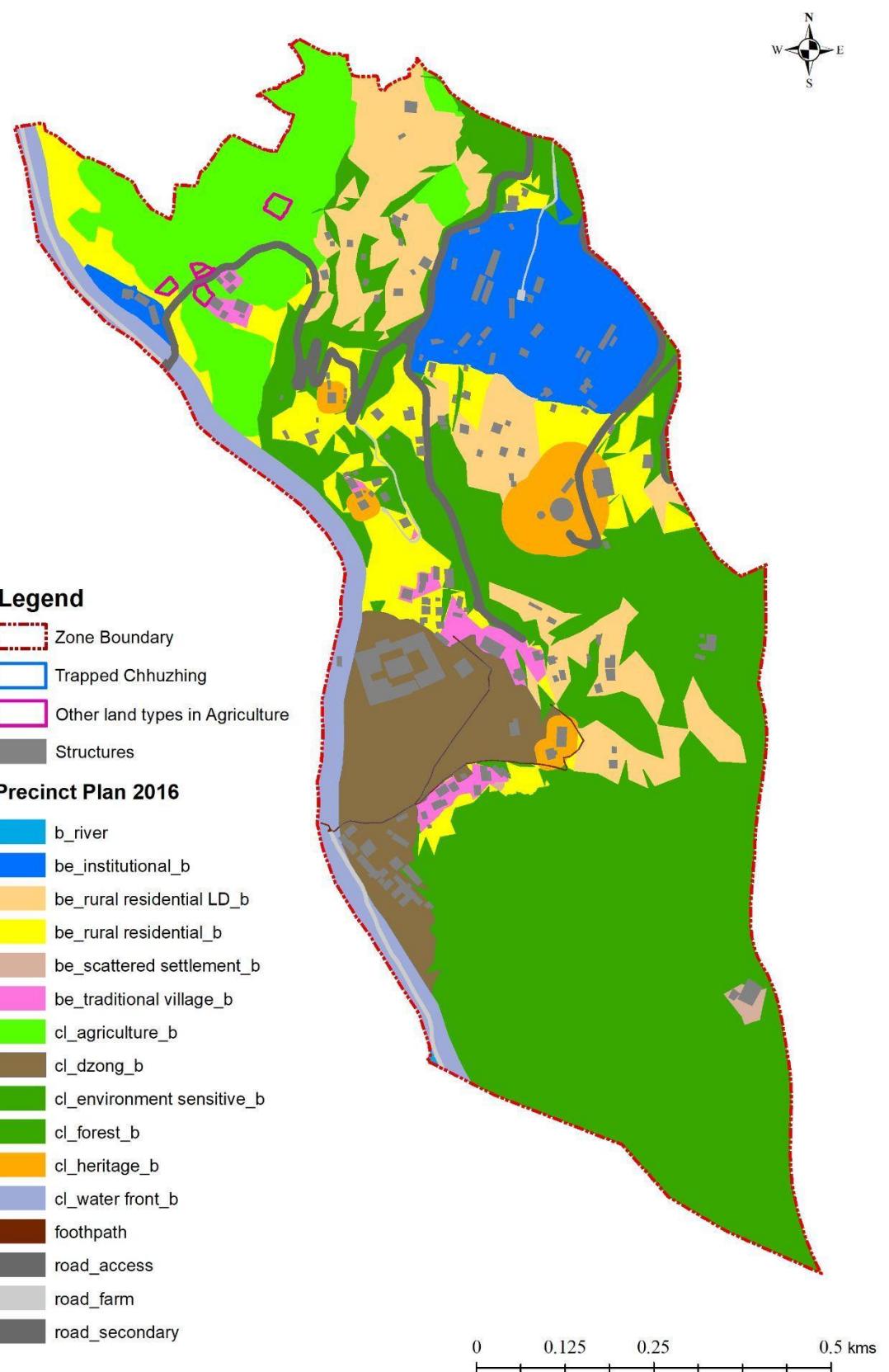
The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 33 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	2	0.14
		Total	2	0.14
2	Waterfront	Chhuzhing	7	0.6
		Other Landtypes	14	1.77
		Total	21	2.37
3	Road ROW		25	0.52
	Total		48	3.03

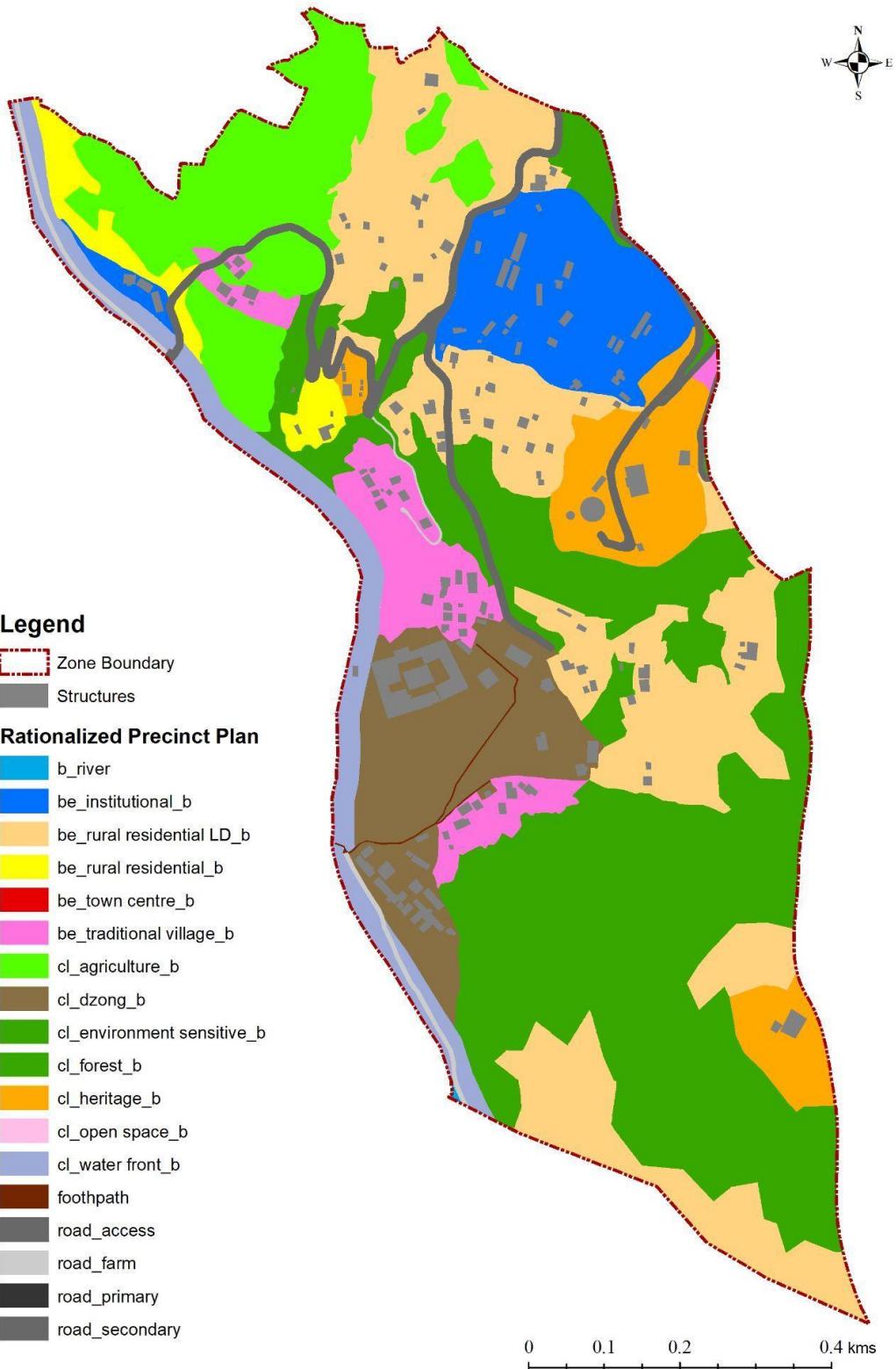
7.16 Zone 16 Rinpung

Zone 16 has an area of 225.1 acres (0.91 sq.km) of which 125.33 acres are registered land as per the cadastral data. This zone covers the areas of Rinpung Dzong and its vicinity which includes prominent landmarks such as Ta Dzong, Crematorium, Gewog office and settlements surrounded by vast agricultural land.



Map 7.31 Precinct Map of Zone 16_PVDP 2016

There are a total of 6 plots of land type other than chhuzhing in the Agriculture precinct out of which 4 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section.



Map 7.32 Rationalized Precinct Map of Zone 16

The change in the precinct area is as tabulated below.

Table 34 Precinct area breakup for Zone 16

Sl.#	Proposed Precinct	Before		After		Net area change(acre)
		Area (Acre)	%	Area (Acre)	%	
1	River	0.09	0.04	0.07	0.03	-0.02
2	Institution	17.14	7.62	16.16	7.18	-0.98
3	Rural Residential (LD)	22.52	10.01	50.03	22.23	27.51
4	Rural Residential	17.60	7.82	4.542307	2.02	-13.06
5	Scattered Settlement	0.56	0.25		0.00	-0.56
6	Traditional Village	3.58	1.59	11.60	5.15	8.01
7	Agriculture	21.45	9.53	22.21	9.87	0.77
8	Dzong	17.88	7.94	19.95	8.86	2.07
9	Environment Sensitive	92.01	40.87	68.34	30.36	-23.67
10	Forest	7.39	3.28		0.00	-7.39
11	Heritage	5.79	2.57	13.56	6.02	7.77
12	Waterfront	10.30	4.57	10.24	4.55	-0.05
13	Footpath	0.42	0.19	0.28	0.12	-0.15
14	Road_ternary	0.47	0.21	0.47	0.21	0.00
15	Road_farm	1.60	0.71	1.36	0.60	-0.24
16	Road_Secondary	6.29	2.80	6.281272	2.79	-0.01
Total		225.1	100	225.1	100	0.00

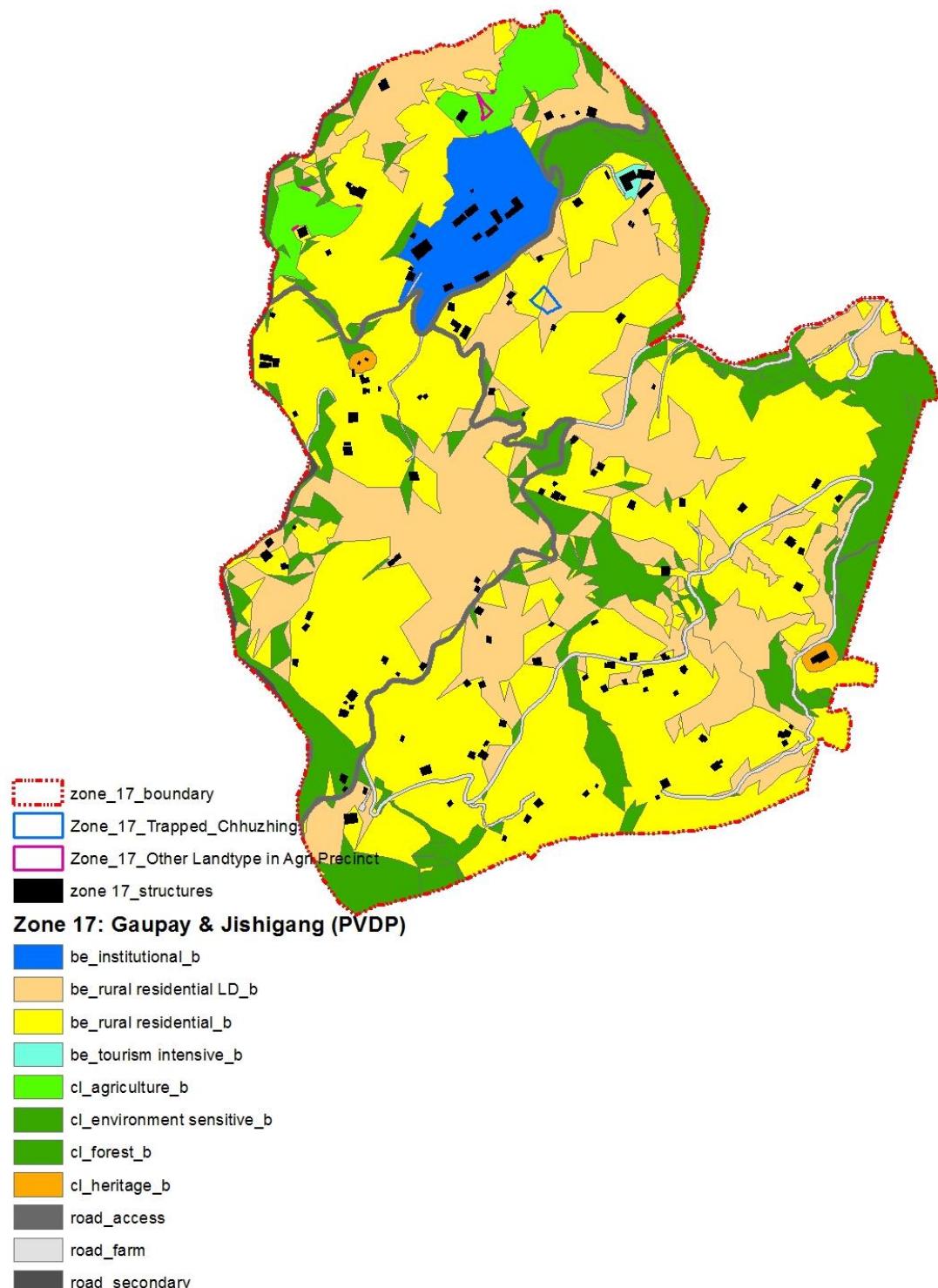
The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 35 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	2	0.278
		Religious	0	0
		No data	0	0
		Total	2	0.278
2	Environment Sensitive	Khimsa	1	0.225
		Kamzhing	12	2.724
		Orchard	1	0.173
		Institutional	1	4.455
		Total	15	7.577
3	Waterfront	Chhuzhing	1	0.138
		Other Land Types	8	3.035
		Total	9	3.173
4	Open Space		0	0
5	Road ROW		24	1.769
	Total		50	12.797

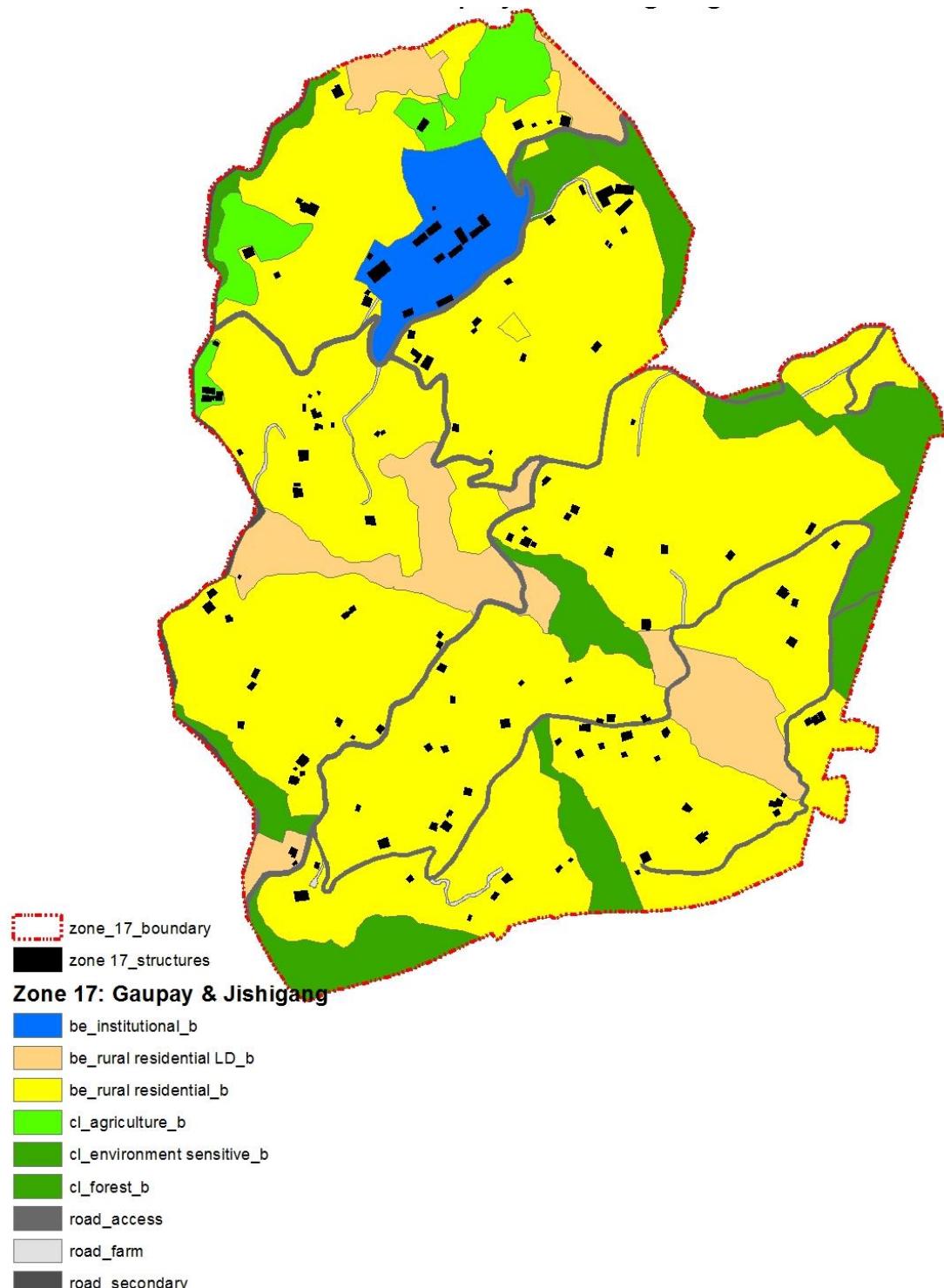
7.17 Zone 17 Gaupay and Jishigang

Zone 17 covers the area of Gaupay and Jishigang with an area of 326.25 acres (1.32 sq.km) of which 218.47 acres are registered land as per the cadastral data.



Map 7.33 Precinct Map of Zone 17_PVDP 2016

As per the approved PVDP, there is 1 plot of land type other than chhuzhing in the Agriculture precinct which has been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the 1 trapped chhuzhing have also been assigned the nearest appropriate precinct.



Map 7.34 Rationalized Precinct Map of Zone 17

The change in the precinct area is as tabulated below.

Table 36 Precinct area breakup for Zone 17

Sl.#	Proposed Precinct	Before		After		% Change
		Area (Acre)	%	Area (Acre)	%	
1	Rural Residential	156.34	47.92	226.48	69.42	21.50
2	Rural Residential(LD)	81.72	25.05	26.67	8.17	-16.88
3	Institutional	12.77	3.91	12.28	3.76	-0.15
4	Heritage	0.97	0.30		0.00	-0.30
5	Tourism Intensive	0.53	0.16		0.00	-0.16
6	Agriculture	9.02	2.76	10.49	3.22	0.45
7	Environment Sensitive	33.40	10.24	22.67	6.95	-3.29
8	farm Road	5.98	1.83	1.19	0.36	-1.47
9	Access/Tertiary Road	6.03	1.85	10.82	3.32	1.47
10	Secondary Road	1.90	0.58	1.90	0.58	0.00
11	Forest	17.59	5.39	13.75	4.22	-1.18
		326.25	100.00	326.25	100.00	0.00

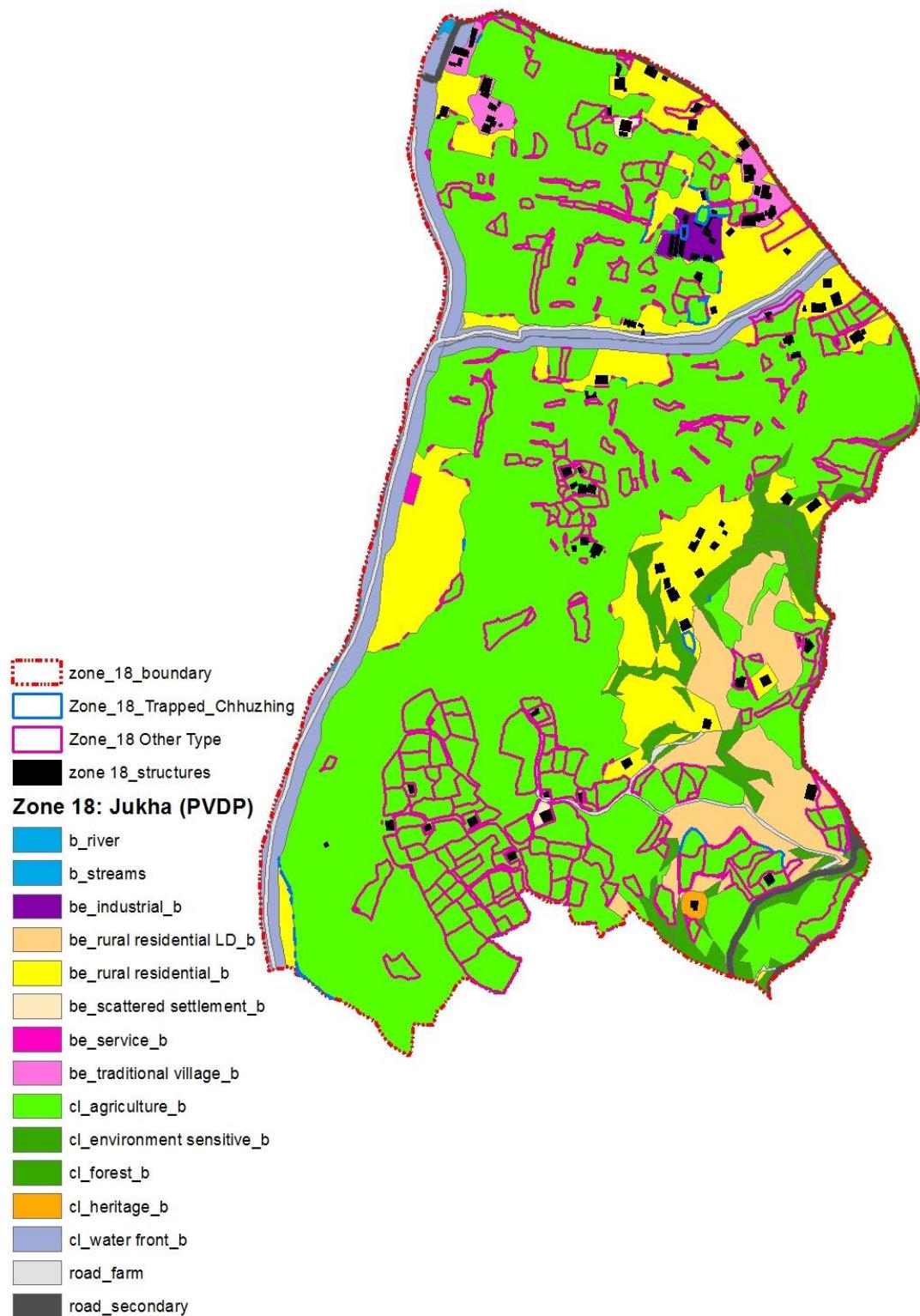
The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 37 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Environment Sensitive	Kamzhing	7	2.9
		Total	7	2.9
2	Road ROW		27	1.28
	Total		34	4.18

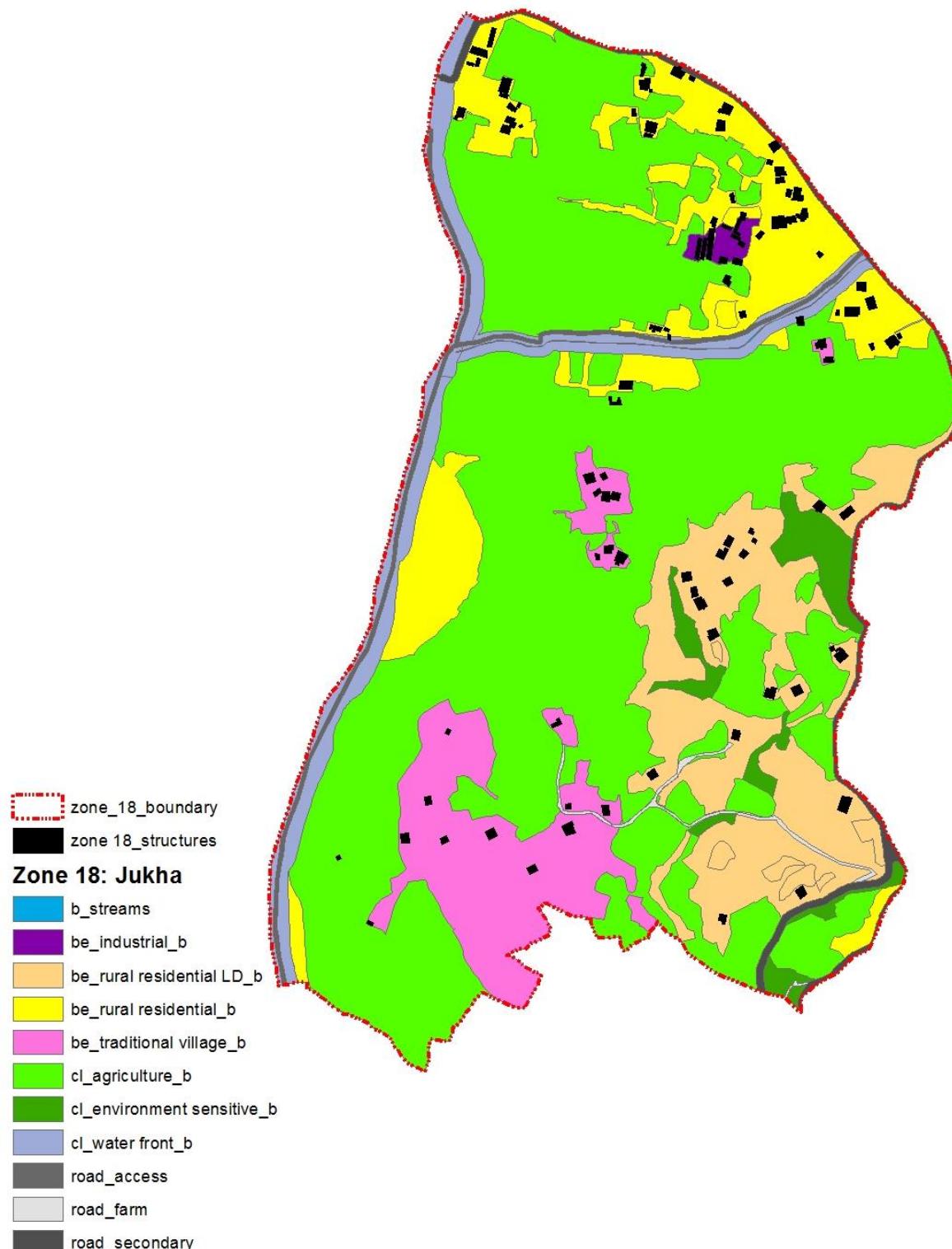
7.18 Zone 18 Jukha

Zone 18 covers the area of Jukha with an area of 254.81 acres (1.03 sq.km) of which 211.37 acres are registered land as per the cadastral data.



Map 7.35 Precinct Map of Zone 18_PVDP 2016

As per the approved PVDP, there are more than 200 plots of land type other than chhuzhing in the Agriculture precinct out of which most of them have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the 11 trapped chhuzhing have also been assigned the nearest appropriate precinct.



Map 7.36 Rationalized Precinct Map of Zone 18

The change in the precinct area is as tabulated below.

Table 38 Precinct area breakup for Zone 17

Sl.#	Proposed Precinct	Before		After		% Change
		Area (Acre)	%	Area (Acre)	%	
1	Rural Residential	34.92	13.70	31.06	12.19	-1.52
2	Rural Residential(LD)	13.30	5.22	32.45	12.73	7.51
3	Traditional Village	2.77	1.09	22.80	8.95	7.86
4	Scattered Settlement	0.60	0.24	0.00	0.00	-0.24
5	Heritage	0.38	0.15	0.00	0.00	-0.15
6	Industrial	1.43	0.56	1.16	0.46	-0.10
7	Service	0.21	0.08	0.00	0.00	-0.08
8	Agriculture	168.65	66.19	139.85	54.89	-11.30
9	Environment Sensitive	9.62	3.78	6.27	2.46	-1.31
10	WaterFront	13.03	5.11	12.99	5.10	-0.01
11	farm Road	0.97	0.38	0.97	0.38	0.00
12	Access/Tertiary Road	2.98	1.17	2.98	1.17	
13	Secondary Road	4.11	1.61	4.11	1.61	0.00
14	River/Stream	0.70	0.27	0.17	0.06	-0.21
15	Forest	1.14	0.45	0.00	0.00	-0.45
		254.81	100.00	254.81	100.00	0.00

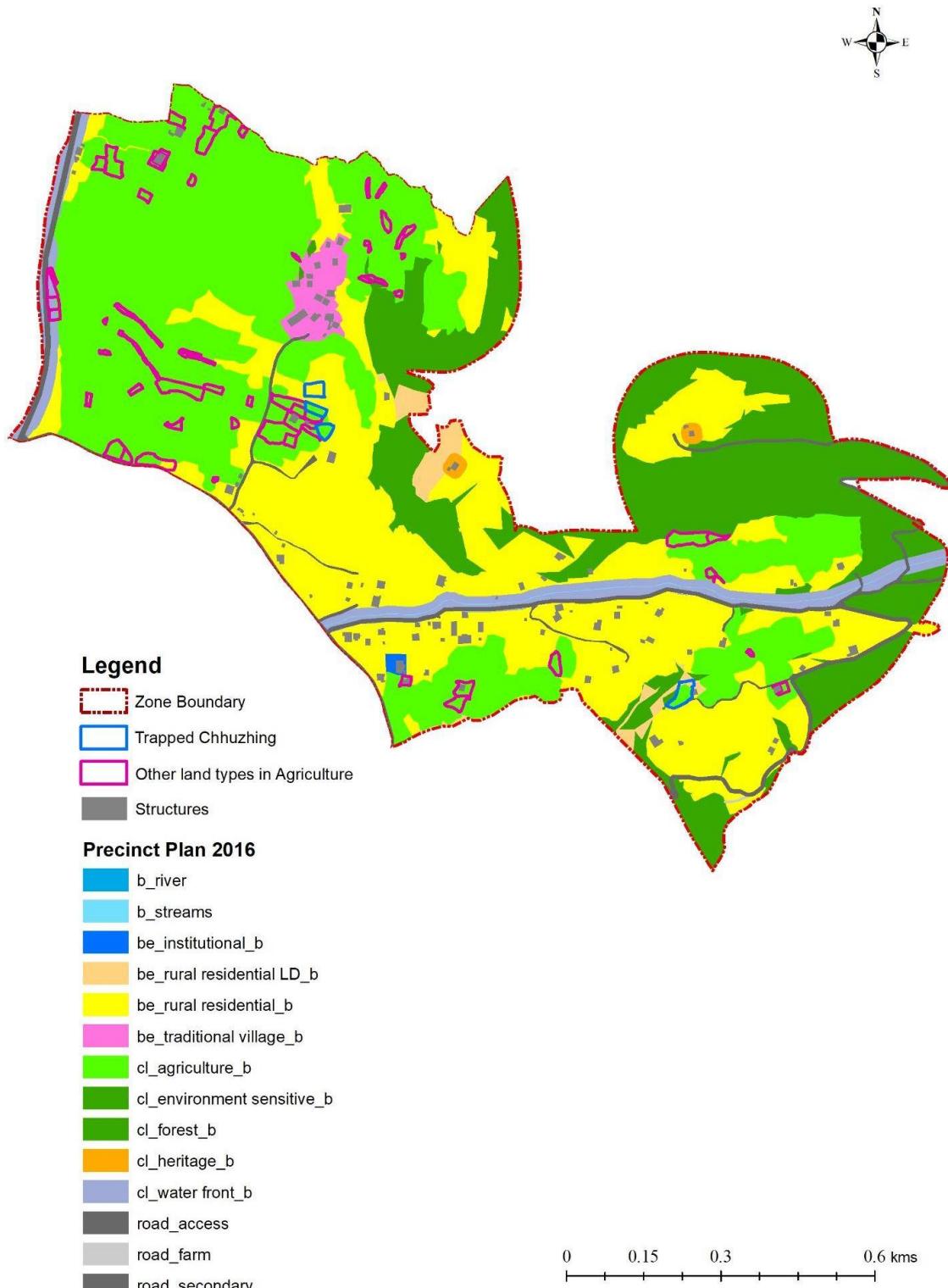
The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 39 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	74	4.02
		Religious	4	0.71
		No data	1	0.13
		Total	79	4.8
3	Waterfront	Chhuzhing	26	2.82
		Other Lantypes	29	2.22
		Total	55	5.04
5	Road ROW		9	0.23
	Total		143	10.07

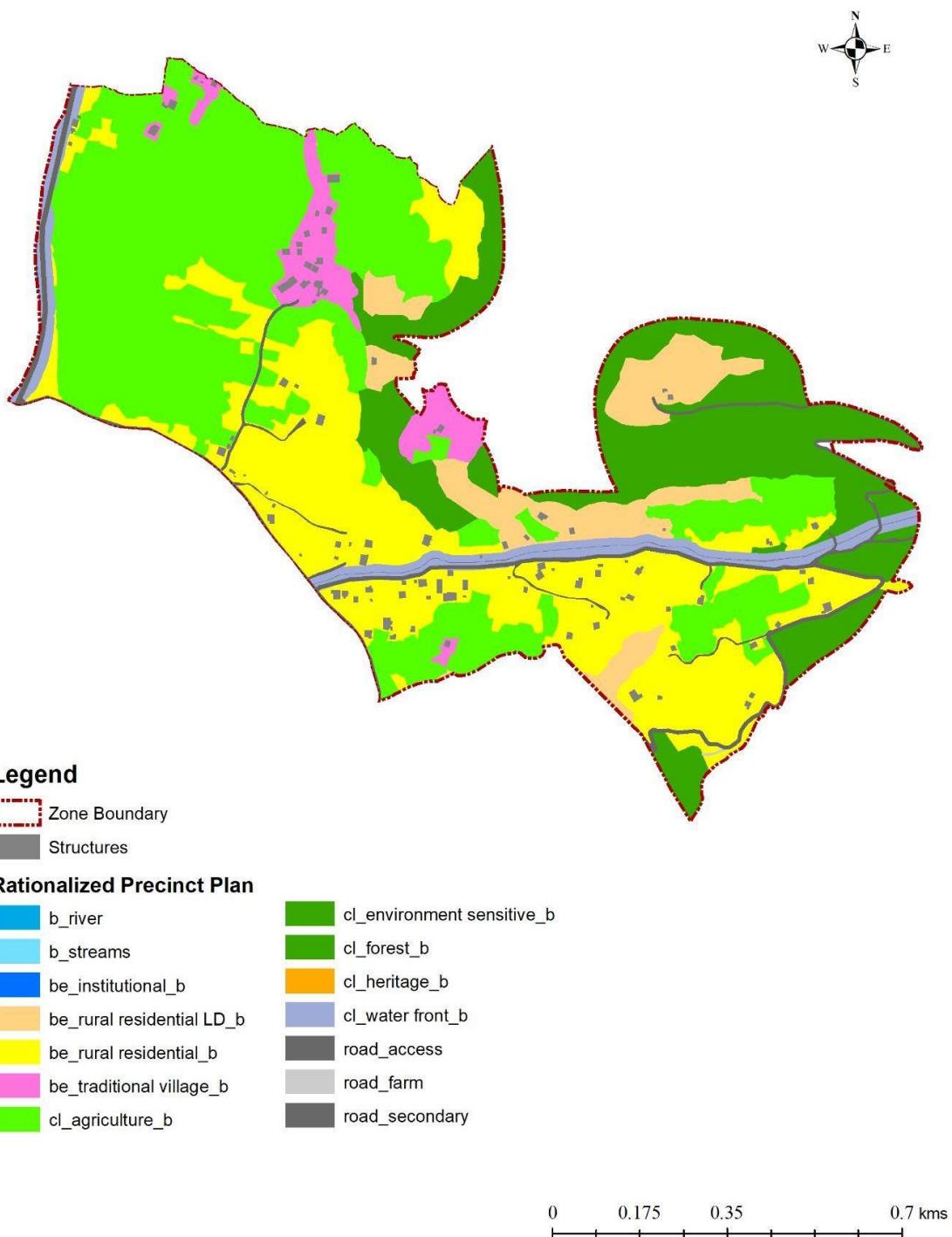
7.19 Zone 19 Shari

Zone 19 covers the area of Shari with an area of 304.96 acres (1.23 sq.km) of which 213.53 acres are registered land as per the cadastral data. The zone predominantly comprises an agricultural precinct which constitutes more than 35% of the total zone area. Shari Gewog office also falls within this zone.



Map 7.37 Precinct Map of Zone 19_PVDP 2016

There are a total of 72 plots of land type other than chhuzhing in the Agriculture precinct out of which 37 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the 4 trapped chhuzhing have also been assigned the nearest appropriate precinct.



Map 7.38 Rationalized Precinct Map of Zone 19

The change in the precinct area is as tabulated below.

Table 40 Precinct area breakup for Zone 17

Sl.#	Proposed Precinct	Before		After		Net area Change (Acre)
		Area (Acre)	%	Area (Acre)	%	
1	River	0.14	0.04	0.14	0.04	0.00
2	Stream	0.31	0.10	0.31	0.10	0.00
3	Institutional	0.39	0.13		0.00	-0.39
4	Rural Residential (LD)	3.95	1.30	23.10	7.58	19.15
5	Rural Residential	99.41	32.60	83.62	27.42	-15.80
6	Traditional Village	4.21	1.38	12.30	4.03	8.09
7	Agriculture	109.56	35.93	110.07	36.10	0.52
8	Environment Sensitive	25.61	8.40	20.78	6.82	-4.83
9	Forest	39.23	12.86	35.35	11.59	-3.88
10	Heritage	0.77	0.25		0.00	-0.77
11	Waterfront	10.75	3.53	8.66	2.84	-2.09
12	Road_ternary	7.49	2.46	7.49	2.45	0.00
13	Road_farm	0.06	0.02	0.06	0.02	0.00
14	Road_Secondary	3.08	1.01	3.08	1.01	0.00
	Total	304.96	100.0	304.96	100.0	0.00

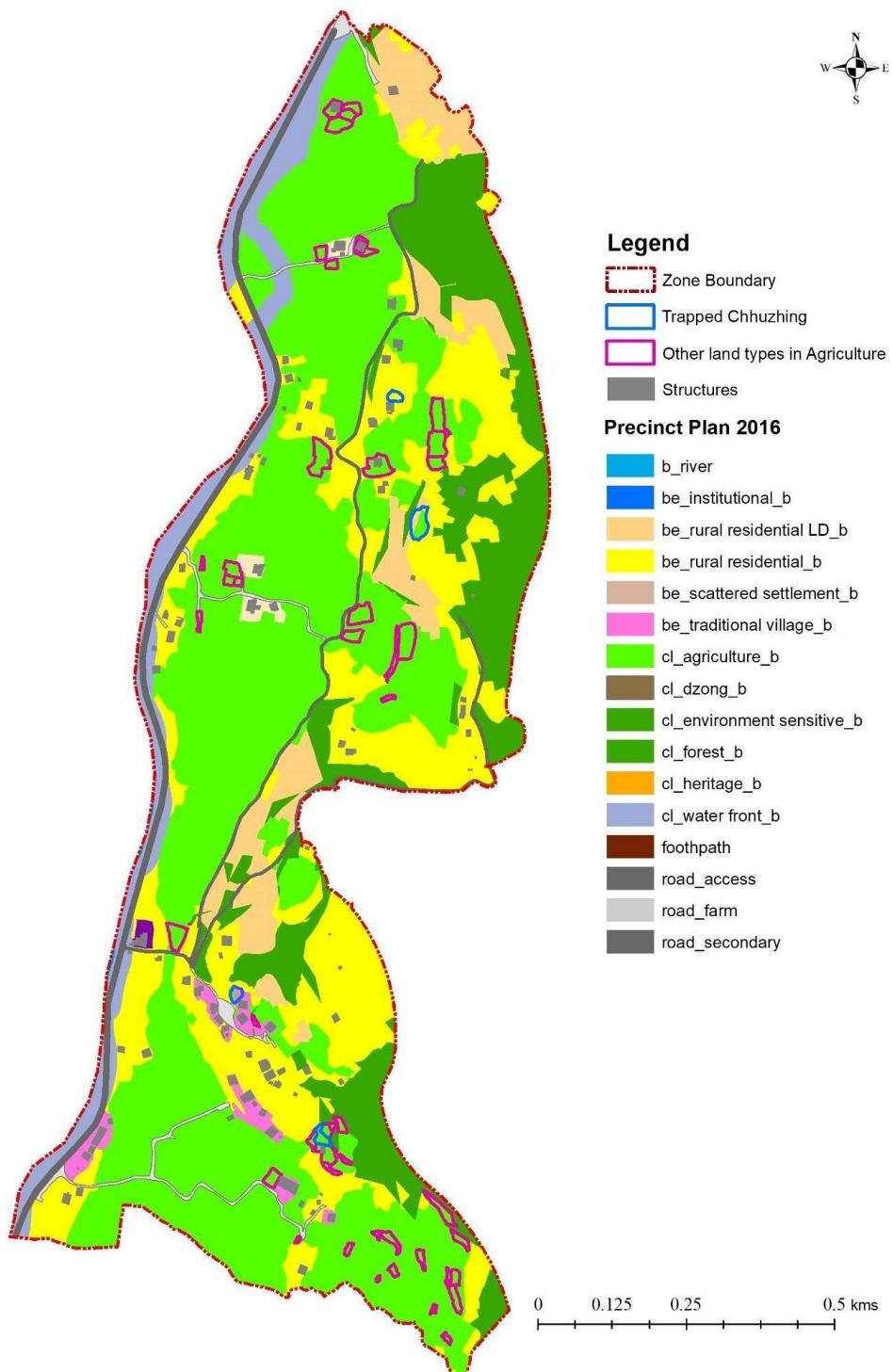
The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 41 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	35	1.838
		Religious	0	0
		No data	0	0
		Total	35	1.838
2	Environment Sensitive	Khimsa	0	0
		Kamzhing	2	0.922
		Orchard	1	0.163
		Institutional	0	0
		Total	3	1.085
3	Waterfront	Chhuzhing	7	0.440
		Other Land Types	21	1.801
		Total	28	2.241
4	Open Space		0	0
5	Road ROW		29	1.037
	Total		95	6.201

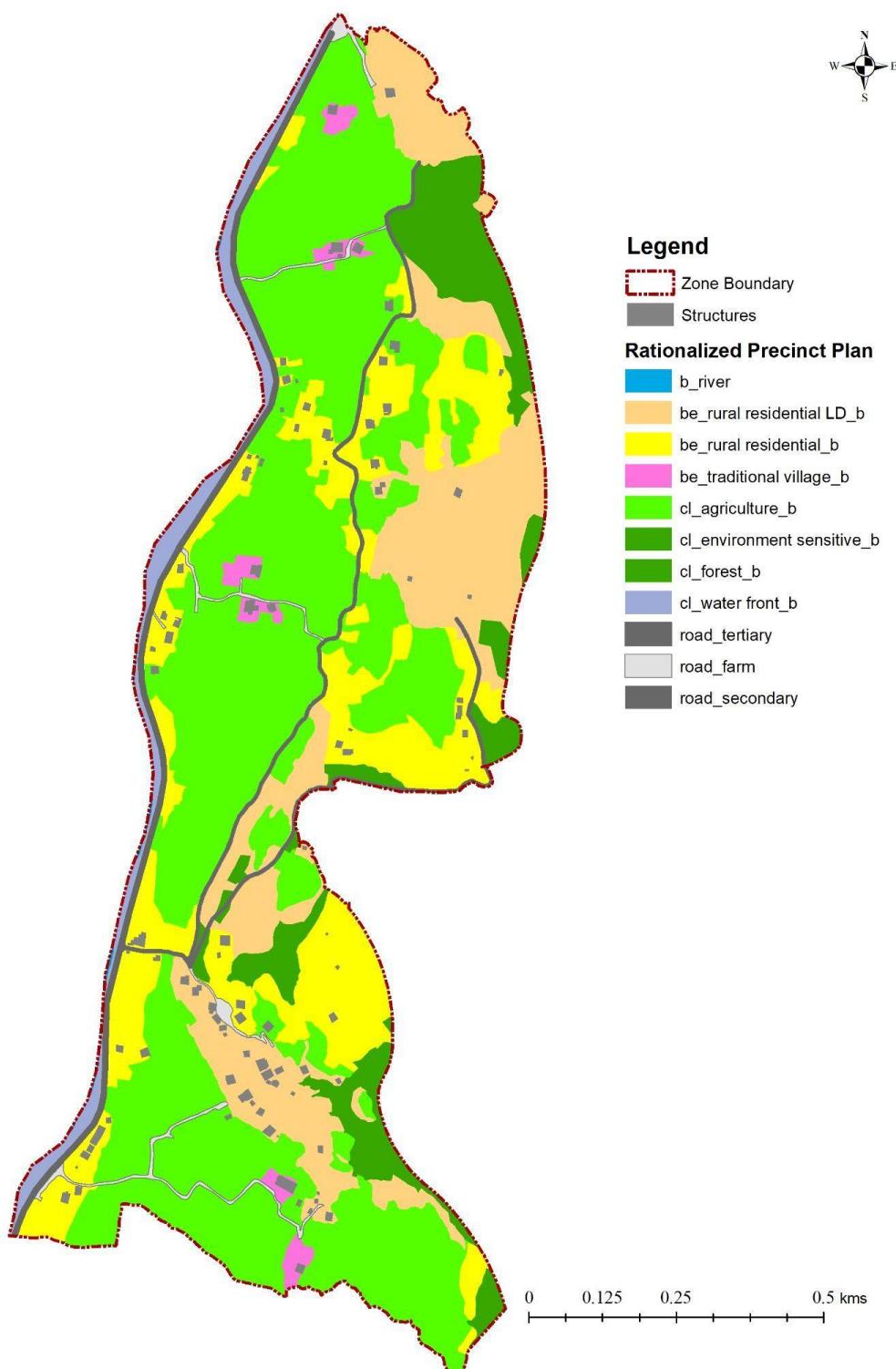
7.20 Zone 20 Khempa and Khudophu

Zone 20 covers the area of Khempa and Khudophu with an area of **261.29** acres (1.057 sq.km) of which 187.719 acres are registered land as per the cadastral data. The zone predominantly comprises an agricultural precinct which constitutes more than 47% of the total zone area.



Map 7.39 Precinct Map of Zone 20_PVDP 2016

There are a total of 49 plots of land type other than chhuzhing in the Agriculture precinct out of which 31 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the 4 trapped chhuzhing have also been assigned the nearest appropriate precinct.



Map 7.40 Rationalized Precinct Map of Zone 20

The change in the precinct area is as tabulated below.

Table 42 Precinct area breakup for Zone 20

Sl.#	Proposed Precinct	Before		After		Net Area Change (Acre)
		Area (Acre)	%	Area (Acre)	%	
1	b_river	0.34	0.13	0.34	0.13	0.00
2	be_industrial_b	0.37	0.14		0.00	-0.37
3	be_rural residential LD_b	16.07	6.15	46.35	17.74	30.28
4	be_rural residential_b	58.78	22.49	46.81	17.91	-11.97
5	be_scattered settlement_b	1.35	0.51		0.00	-1.35
6	be_traditional village_b	3.45	1.32	3.69	1.41	0.24
7	cl_agriculture_b	118.84	45.48	122.86	47.02	4.02
8	cl_environment sensitive_b	21.01	8.04	7.40	2.83	-13.61
9	cl_forest_b	15.27	5.84	14.33	5.48	-0.94
10	cl_heritage_b	0.04	0.01		0.00	-0.04
11	cl_water front_b	13.33	5.10	7.07	2.71	-6.26
12	road_tertiary	3.97	1.52	3.97	1.52	0.00
13	road_farm	2.58	0.99	2.58	0.99	0.00
14	road_secondary	5.90	2.26	5.90	2.26	0.00
		261.29	100.0	261.29	100.0	0.00

The figure and the area of plots falling under Cultural Landscape zone in the precincts of Agriculture, Environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 43 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	18	0.926
		Total	20	0.926
2	Road ROW		10	0.22
	Total		30	1.146

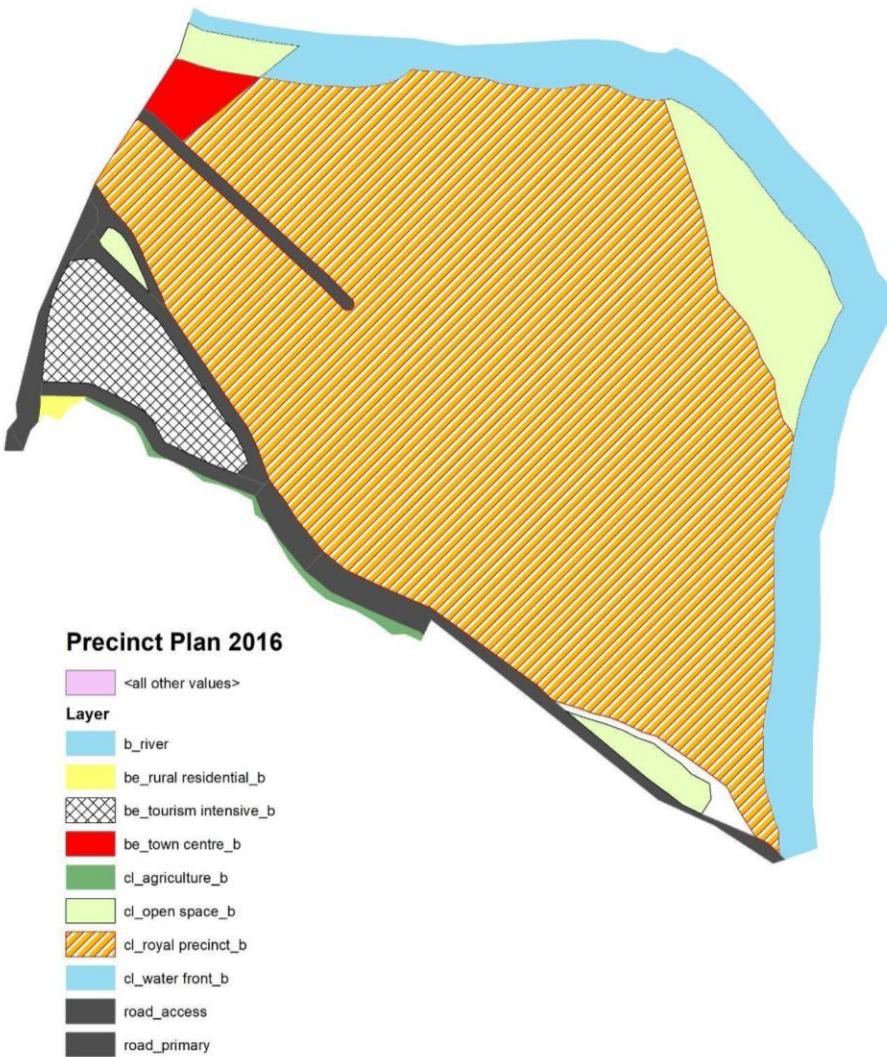
7.21 Zone 21 Ugyen Pelri Palace

Zone 21 covers the Ugyen Pelri palace with an area of **46.64** acres (0.188 sq.km) of which 213.4 acres are registered land as per the cadastral data. There is no change in the precinct area in this zone and the precinct detail area is as tabulated below.

Table 44 Precinct area breakup for Zone 21

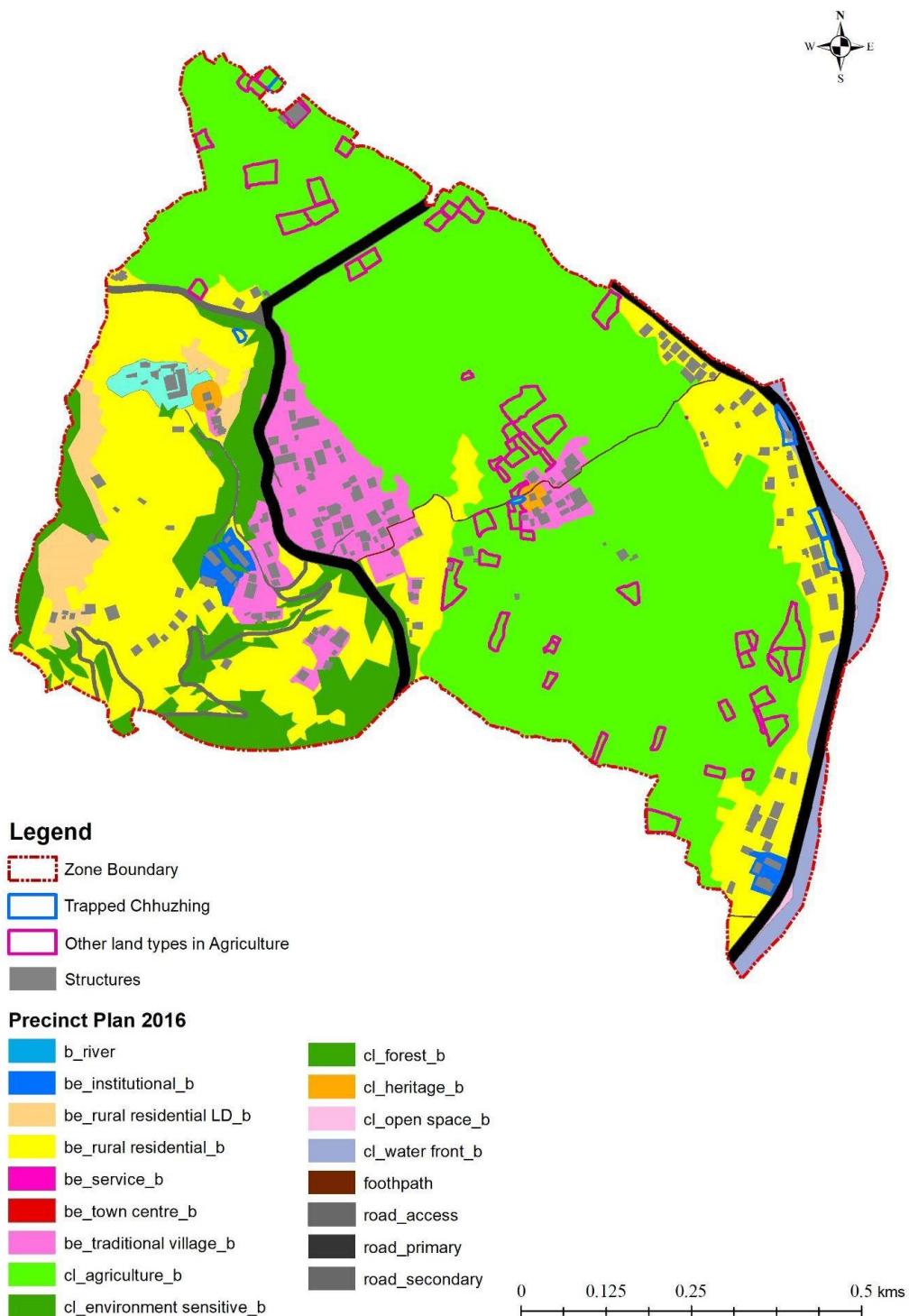
Sl.	Proposed Precinct	Area (Acre)	%
1	b_river	0.18	0.386847
2	be_rural residential_b	0.07	0.150441
3	be_tourism intensive_b	1.94	4.169353
4	be_town centre_b	0.49	1.053084
5	cl_agriculture_b	0.22	0.472813
6	cl_royal precinct_b	31.56	67.82721
7	cl_open space_b	3.16	6.791317
8	cl_water front_b	6.11	13.13131
9	road_access/tertiary	0.53	1.13905
10	road_primary	2.27	4.878573
		46.53	100

Map 7.41 Precinct Map of Zone 21_PVDP 2016



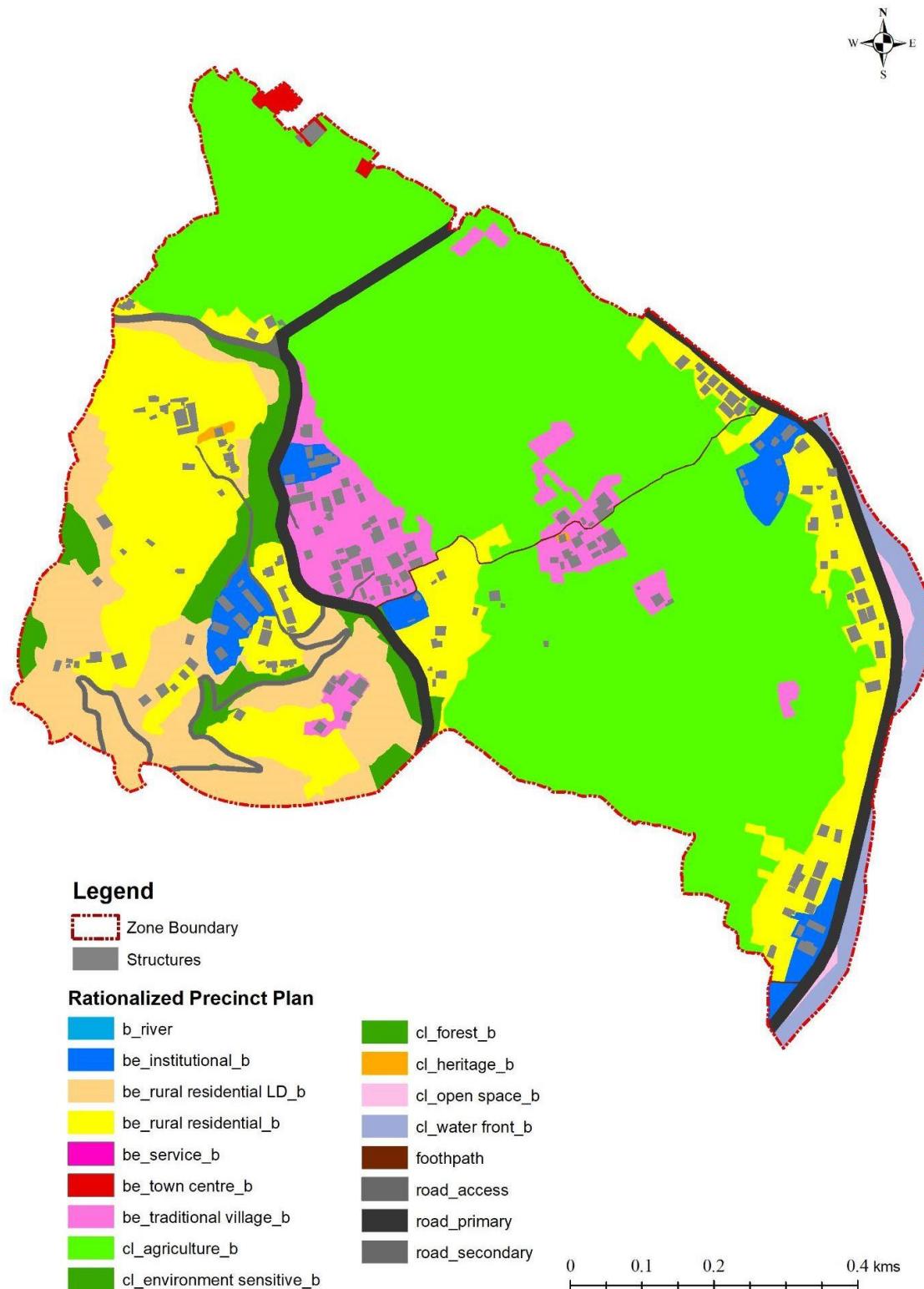
7.22 Zone 22 Taju

Zone 22 covers the area of Taju with an area of **223.99** acres (0.91 sq.km) of which 181.59 acres are registered land as per the cadastral data. The zone predominantly comprises an agricultural precinct which constitutes more than 51% of the total zone area.



Map 7.42 Precinct Map of Zone 22_PVDP 2016

There are a total of 54 plots of land type other than chhuzhing in the Agriculture precinct out of which 23 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the 6 trapped chhuzhing have also been assigned the nearest appropriate precinct.



Map 7.43 Rationalized Precinct Map of Zone 22

Table 45 Precinct area breakup for Zone 22

Sl.#	Proposed Precinct	Before		After		Net area change (Acre)
		Area (Acre)	%	Area (Acre)	%	
1	b_river	0.06	0.03	0.06	0.03	0.00
2	be_institutional_b	1.77	0.79	6.62	2.96	4.85
3	be_rural residential LD_b	4.91	2.19	21.52	9.61	16.61
4	be_rural residential_b	49.81	22.24	43.14	19.26	-6.66
5	be_service_b	0.00	0.00	0.00	0.00	0.00
6	be_tourism intensive_b	1.72	0.77	0.00	0.00	-1.72
7	be_town centre_b	0.20	0.09	0.77	0.34	0.56
8	be_traditional village_b	14.28	6.38	12.90	5.76	-1.39
9	cl_agriculture_b	117.34	52.39	115.38	51.51	-1.97
10	cl_environment sensitive_b	16.38	7.31	7.38	3.30	-9.00
11	cl_forest_b	0.19	0.08	0.01	0.00	-0.18
12	cl_heritage_b	0.73	0.33	0.24	0.11	-0.49
13	cl_open space_b	0.61	0.27	0.61	0.27	0.00
14	cl_water front_b	4.52	2.02	3.89	1.74	-0.63
15	footpath	0.42	0.19	0.42	0.19	0.00
16	road_tertiary	1.89	0.84	1.89	0.84	0.00
17	road_primary	8.48	3.78	8.48	3.78	0.00
18	road_secondary	0.69	0.31	0.69	0.31	0.00
	Total	223.99	100	223.99	100	0

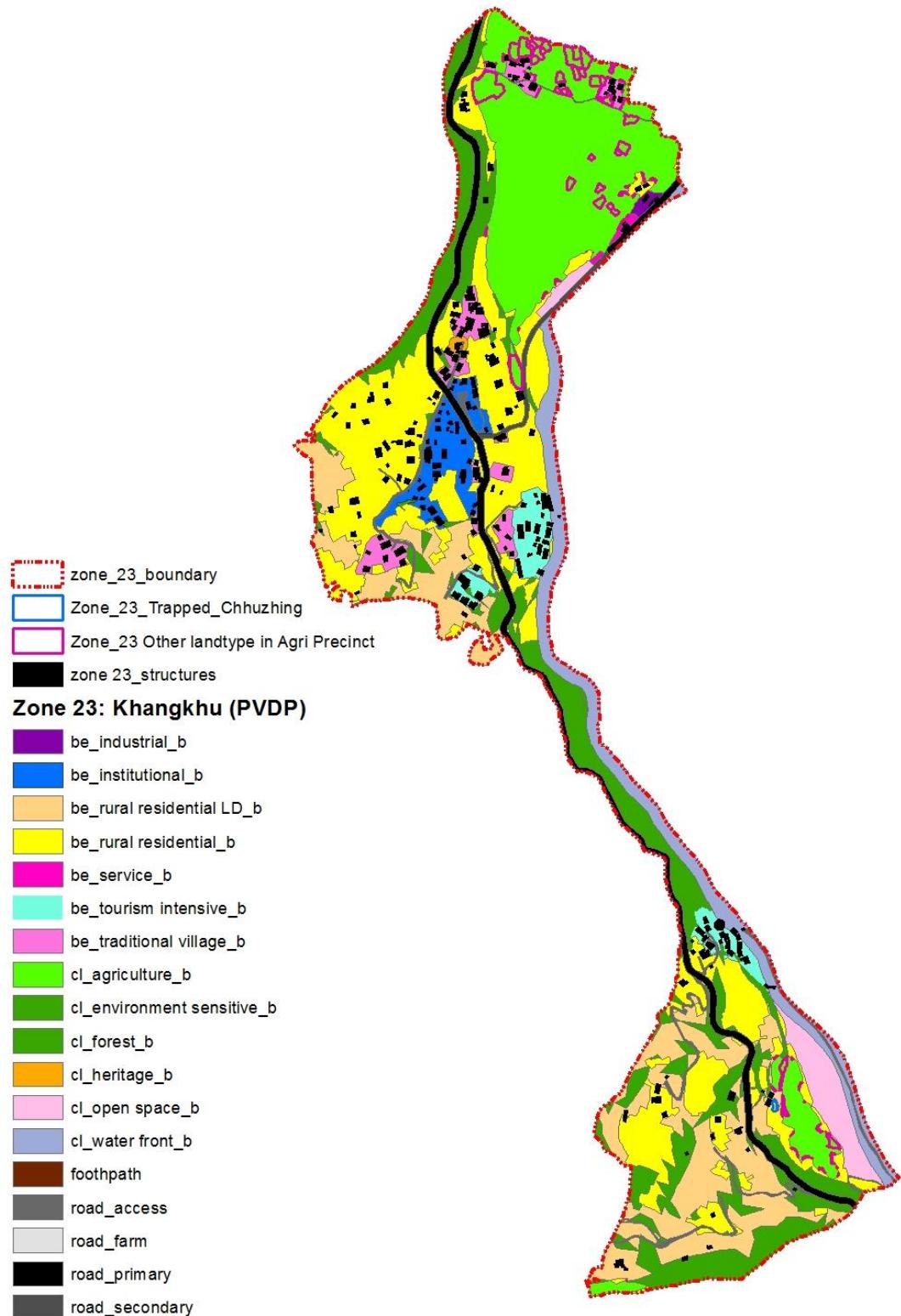
The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 46 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Khimsa	3	0.441
		Kamzhing	10	1.197
		Religious	18	2.752
		Total	31	4.39
2	Environment Sensitive	Kamzhing	1	0.703
		Orchard	1	0.128
		Institutional	1	0.244
		Total	3	1.075
5	Road ROW		35	1.244
	Total		69	6.709

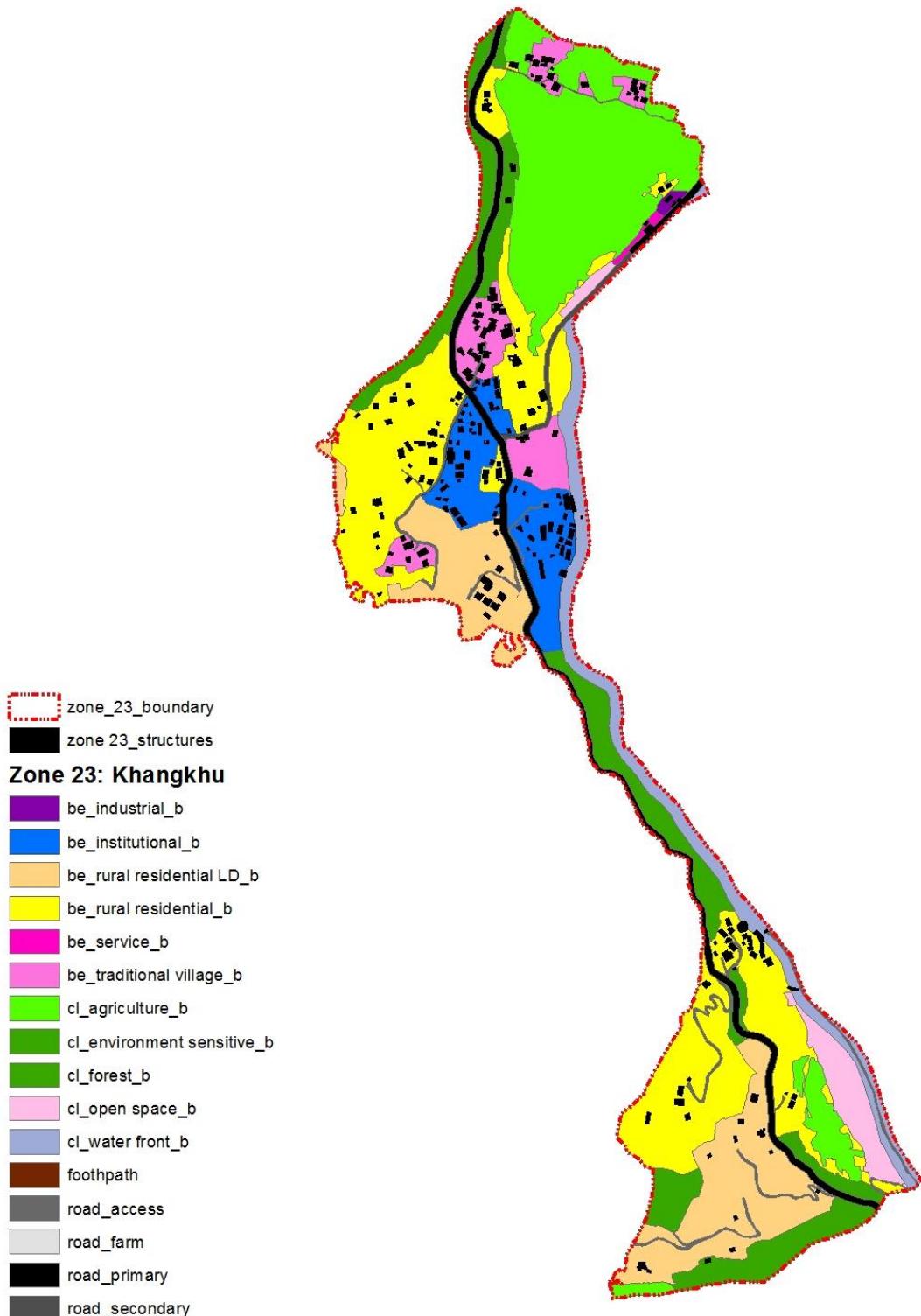
7.23 Zone 23 Khangkhu

Zone 23 covers the area of Khangkhu with an area of 292.24 acres (1.18 sq.km) of which 201.74 acres are registered land as per the cadastral data.



Map 7.44 Precinct Map of Zone 23_PVDP 2016

As per the approved PVDP, there are a total of 37 plots of land type other than chhuzhing in the Agriculture precinct out of which 24 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section. In addition, the 1 trapped chhuzhing have also been assigned the nearest appropriate precinct.



Map 7.45 Rationalized Precinct Map of Zone 23

The change in the precinct area is as tabulated below.

Table 47 Precinct area breakup for Zone 23

Sl.#	Proposed Precinct	Before		After		% Change
		Area (Acre)	%	Area (Acre)	%	
1	Rural Residential	73.66	25.21	74.99	25.66	0.46
2	Rural Residential(LD)	39.72	13.59	41.83	14.31	0.72
3	Traditional Village	8.65	2.96	15.59	5.33	2.37
4	Heritage	0.47	0.16	0.00		-0.16
5	Institutional	8.45	2.89	19.98	6.84	3.95
6	Industrial	0.57	0.20	0.57	0.19	0.00
7	Tourism Intensive	8.27	2.83	0.00		-2.83
8	Service	0.50	0.17	0.62	0.21	0.04
9	Agriculture	57.45	19.66	55.82	19.10	-0.56
10	Environment Sensitive	46.03	15.75	31.53	10.79	-4.96
11	WaterFront	18.20	6.23	18.20	6.23	0.00
12	Footpath	0.28	0.10	0.28	0.09	0.00
13	Access/Tertiary Road	4.75	1.63	4.75	1.63	0.00
15	Secondary Road	1.62	0.55	1.62	0.55	0.00
16	Primary Road	13.65	4.67	13.65	4.67	0.00
17	River/Stream	0.90	0.31	0.90	0.31	0.00
18	Open Space	7.69	2.63	8.30	2.84	0.21
19	Forest	1.38	0.47	3.61	1.24	0.76
Total		292.24	100.00	292.24	100.00	0.00

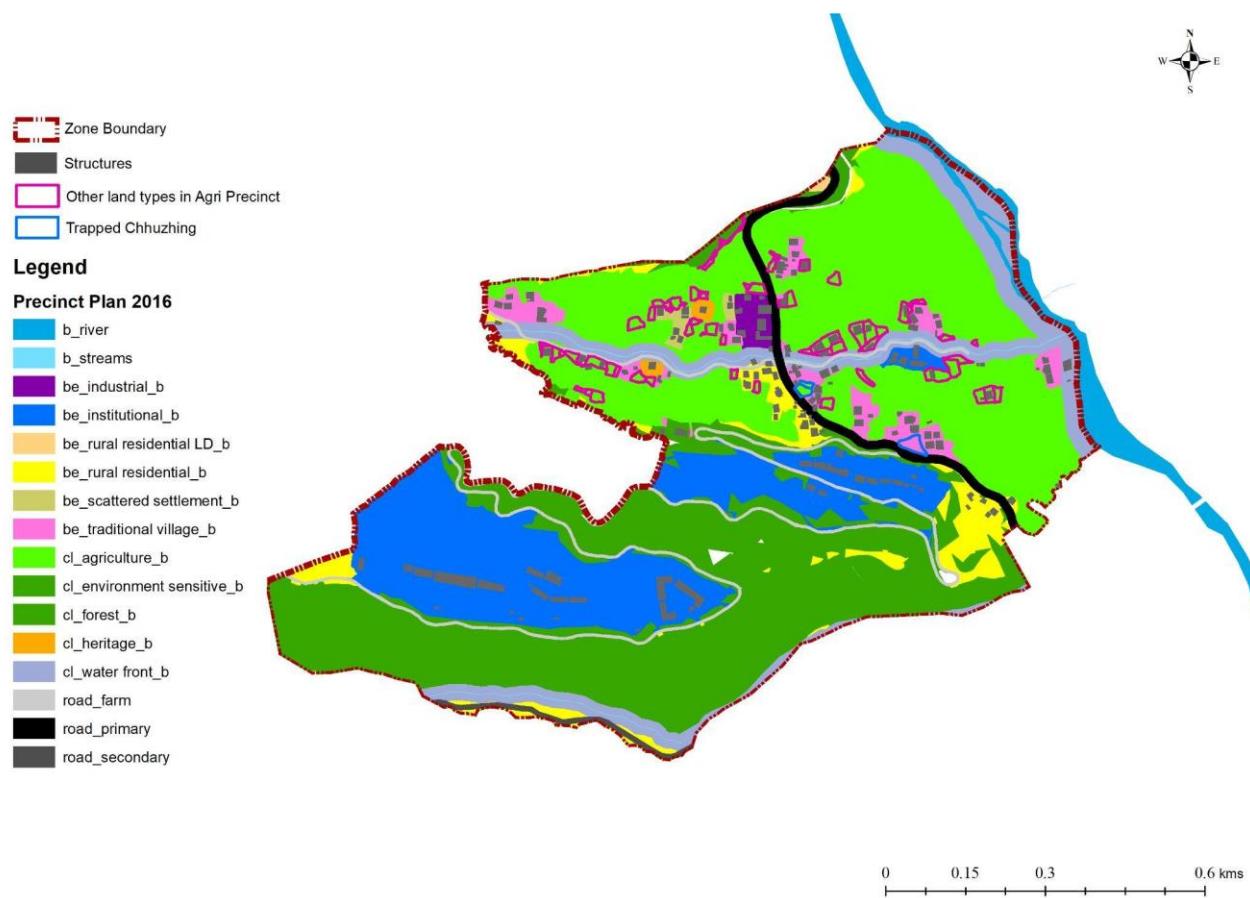
The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 48 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	2	0.17
		Religious	11	1.23
		Total	13	1.4
2	Environment Sensitive	Khimsa	5	0.88
		Kamzhing	10	2.64
		Total	15	3.52
3	Open Space	Institution	1	6.08
		Other Land Types	1	1.03
		Total	2	7.11
4	Waterfront	Other Land Types	8	6.34
		Total	8	6.34
5	Road ROW		31	3.61
	Total		69	21.98

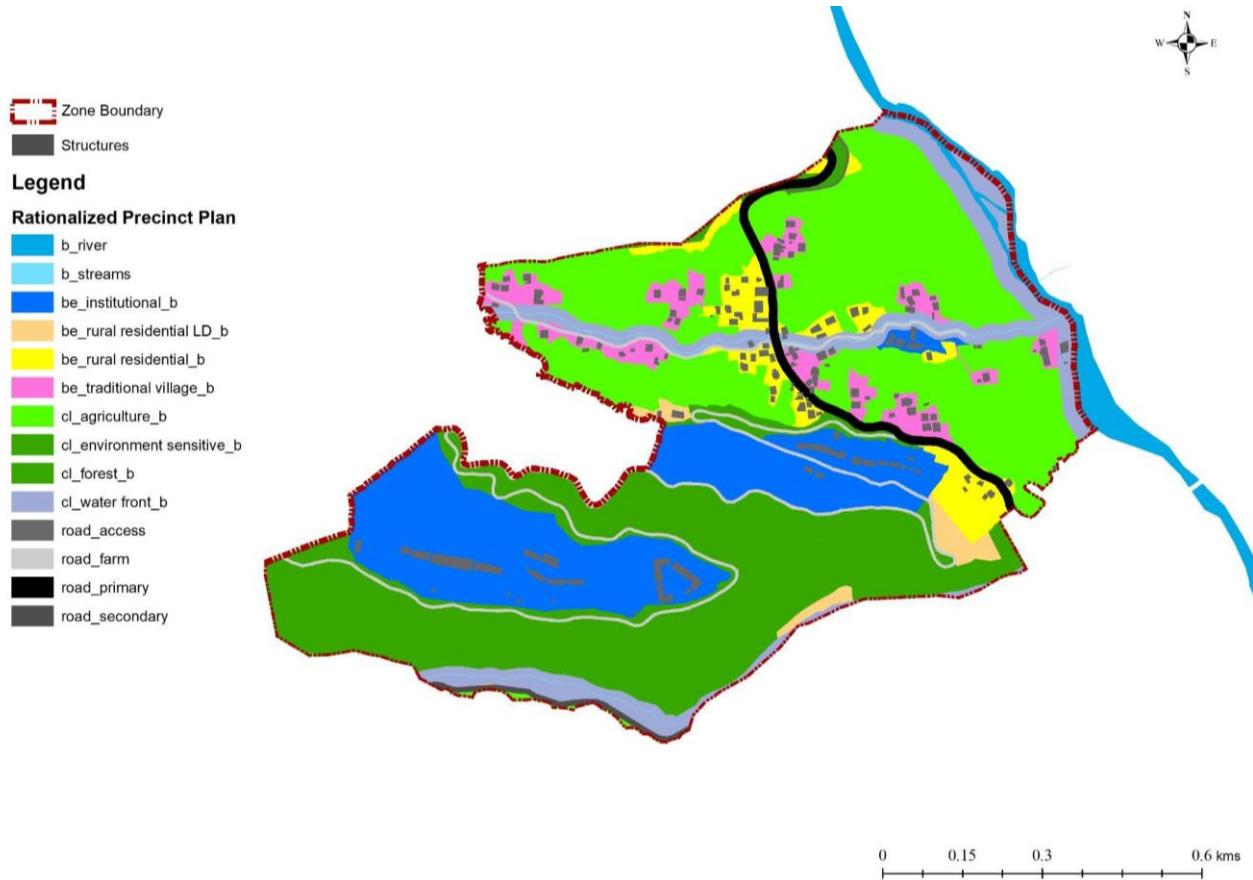
7.24 Zone 24 Woochu

Covering an area of 243.18 acres, the Zone-24 has clusters of settlements surrounded by chhuzhings on low-lying plains and institutional areas on the slopes along the Paro-Haa highway. The Lungyi Gewog center is also located in this zone along the perennial stream. Of the total zone area, 142.697 acres are registered land categorized under various land types as per the cadastral data. Of the total registered land area, 70.574 acres are chhuzhings



Map 7.46 Precinct Map of Zone 24_PVDP 2016

As per the precinct map of 2016 PVDP, 67 plots of land type other than chhuzhings have been designated as agriculture precinct where no development is permitted. However, after the rationalization, most of the issues have been resolved except for 7 plots with total areas of 0.484 acres where no rationalization is possible. These plots are vacant and trapped by chhuzhings on all sides and therefore designated as agriculture precincts. In addition, 3 trapped chhuzhing plots have been rationalized based on the approved strategy and assigned with the nearest appropriate precinct.



Map 7.47 Rationalized Precinct Map of Zone 24

The share of areas of each precinct and change in the precinct area is as tabulated below:

Table 49 Precinct area breakup for Zone 24

Sl.No.	Precincts	Before		After		Net Area Change (acres)
		Area(Acres)	%	Area(Acres)	%	
1	Rural Residential(LD)	0.192	0.08	3.160	1.30	2.968
2	Rural Residential	10.657	4.38	11.051	4.54	0.394
3	Traditional Village	7.891	3.24	11.637	4.79	3.746
4	Scattered Settlement	1.225	0.50	0.000	0.00	-1.225
5	Industrial	1.587	0.65	0.000	0.00	-1.587
6	Institution	43.021	17.69	45.922	18.88	2.901
7	Heritage	1.078	0.44	0.000	0.00	-1.078
8	Agriculture	70.694	29.07	68.310	28.09	-2.384
9	Environment Sensitive	58.940	24.24	53.672	22.07	-5.268
10	Waterfront	18.855	7.75	18.642	7.67	-0.213
11	Forest	12.484	5.13	14.442	5.94	1.958
12	farm Road	7.156	2.94	7.156	2.94	0.000
13	Secondary Road	1.381	0.57	1.381	0.57	0.000
14	Primary Road	4.463	1.84	4.463	1.84	0.000
15	River/streams	3.345	1.38	3.345	1.38	0.000
16	Access/Tertiary Road	0.212	0.09	0.212	0.09	0.000
Total		243.180	100.00	243.180	100.00	0.000

There are also plots of various land types affected by the various other precincts of the cultural landscape zone apart from the agriculture precinct. The number and areas of plots falling under the precinct of cultural landscape zone is as tabulated below:

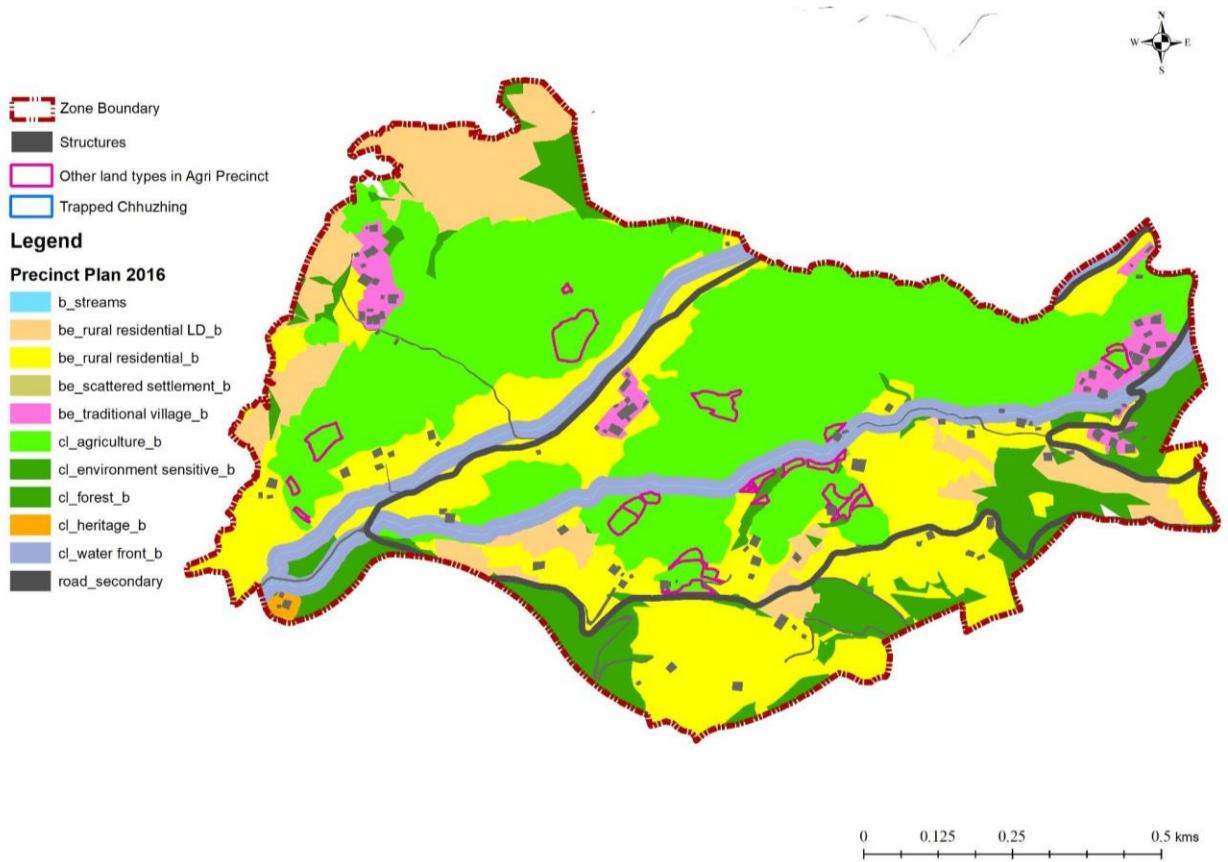
Table 50 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	7	0.484
2	Environment Sensitive	Institution	1	0.113
3	Road ROW		38	1.23
Total			46	1.827

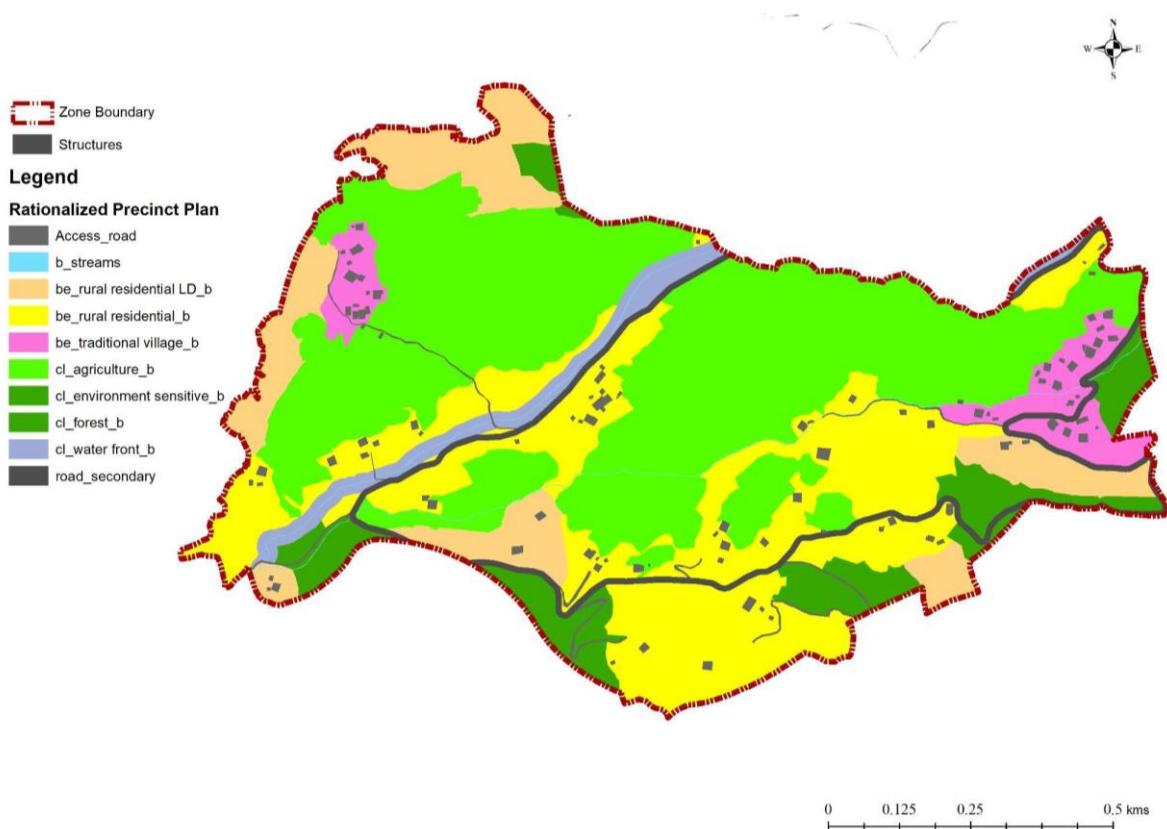
7.25 Zone 25 Gepjana

This zone has a total area of 260.825 acres of which 200.556 acres are registered plots as per the cadastral data. With chhuzhings on the lower plains and clusters of settlements on the higher slopes, the land types are predominantly chhuzhings constituting more than 50% of the total registered plot areas.

The precinct rationalization exercise in this zone mainly focused on the validation of presence of perennial streams and found that one stream with designated buffers in the previous plan is an irrigation canal and accordingly the buffer has been removed. Further, the change in precinct area is attributed to rationalization of precinct boundaries based on prominent natural and man-made features and also due to subsuming scattered village precinct and heritage precinct in nearest prominent precinct.



Map 7.48 Precinct Map of Zone 25_PVDP 2016



Map 7.49 Rationalized Precinct Map of Zone 25

The precinct area share and net area change of each precinct is as tabulated below:

Table 51 Precinct area breakup for Zone 25

Sl.No.	Precincts	Before		After		Net Area Change(acres)
		Area(Acres)	%	Area(Acres)	%	
1	Rural Residential(LD)	26.354	10.13	29.614	11.38	3.260
2	Rural Residential	65.897	25.32	66.724	25.63	0.827
3	Traditional Village	6.950	2.67	11.950	4.59	5.000
4	Scattered Settlement	0.350	0.13	0.000	0.00	-0.350
5	Heritage	0.471	0.18	0.000	0.00	-0.471
6	Agriculture	102.330	39.31	113.055	43.44	10.725
7	Environment Sensitive	13.100	5.03	8.302	3.19	-4.798
8	Waterfront	20.205	7.76	7.778	2.99	-12.427
9	Forest	13.260	5.09	11.928	4.58	-1.332
10	Access/Tertiary Road	1.660	0.64	1.660	0.64	0.000
11	Secondary Road	8.983	3.45	8.983	3.45	0.000
12	River/streams	0.725	0.28	0.291	0.11	-0.434
	Total	260.285	100.00	260.285	100.00	0.000

As per the 2016 PVDP, around 27 plots of land type other than chhuzhings are designated as agriculture precincts. After the rationalization, only 8 plots of land types other than chhuzhing fall under agriculture precinct as these plots are trapped by chhuzhings on all sides. Further, there are also some plots falling under various precincts of the cultural landscape zone where no rationalization was possible. The details of the affected number and area areas of plots are as tabulated below:

Table 52 Affected Plots in CL Zone

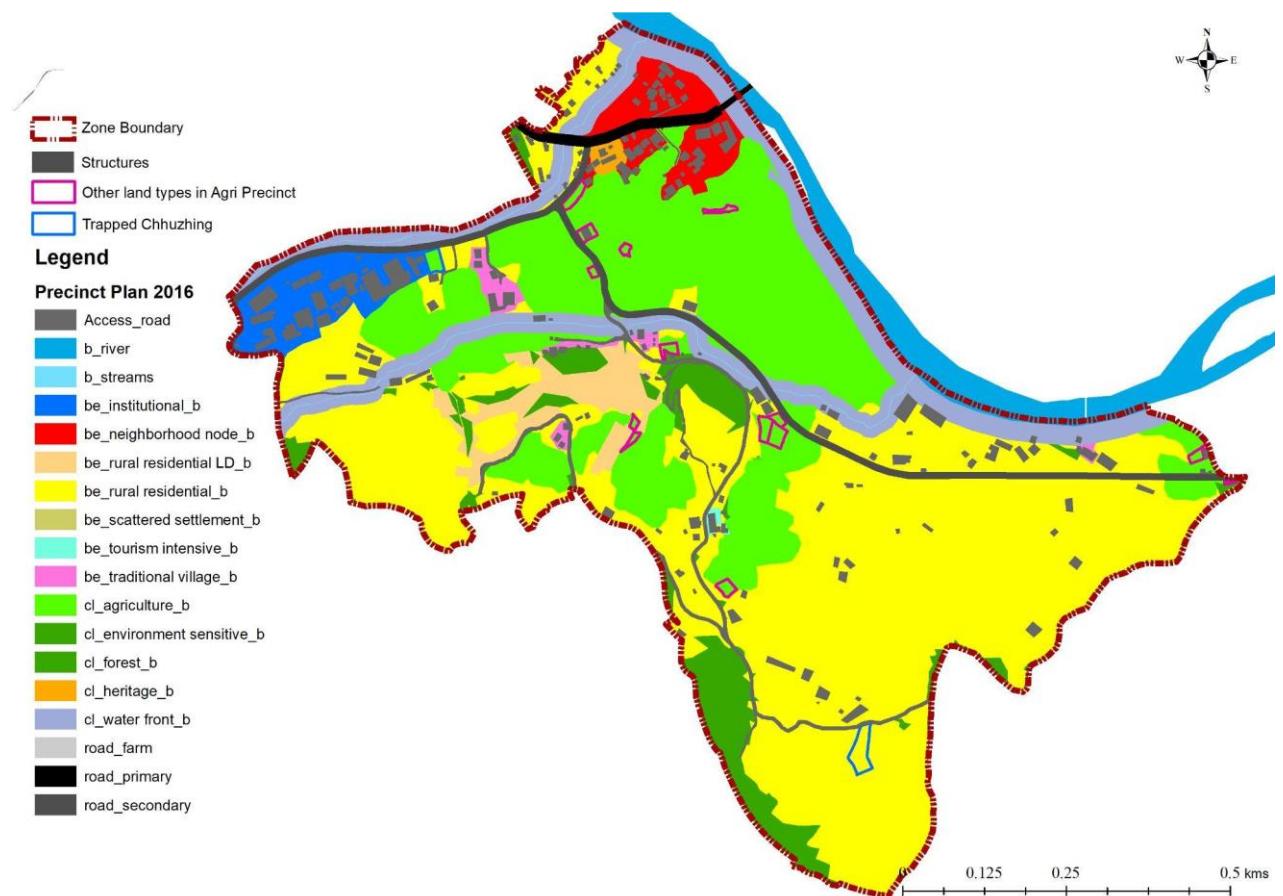
Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	7	2.426
		Orchard	1	0.487
2	Waterfront	Chhuzhing	2	0.13
		Other Land Types	9	0.49
3	Road RoW		30	1.13
	Total		49	4.663

7.26 Zone 26 Bondey

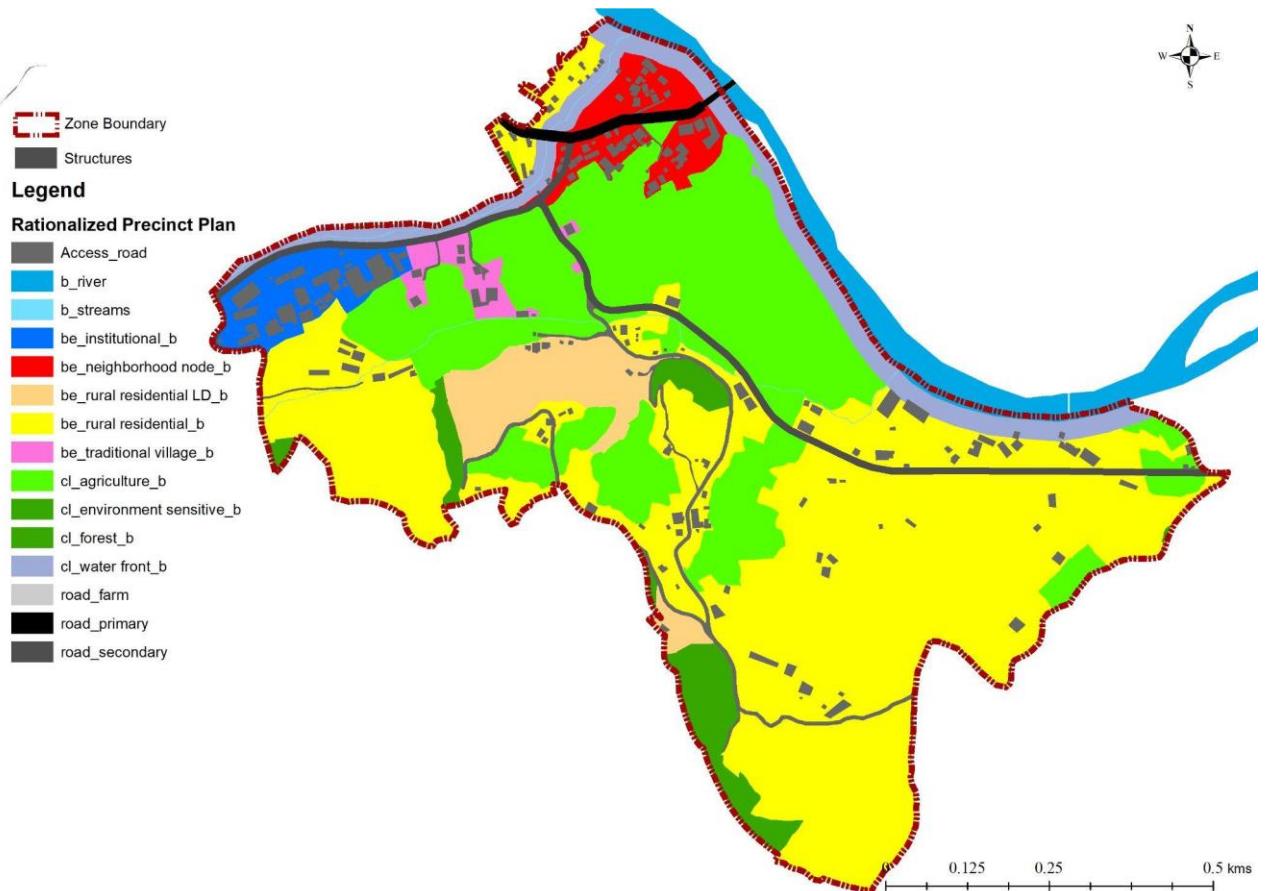
This zone has an area of 2016.018 acres covering the Bondey town, AMC and clusters of settlements surrounded by the chhuzhings. Of the total area, 173.207 acres are registered plots with 52. 93 acres of chhuzhings, and remaining areas falling under kamzhing, khimsa, orchards etc.

With 14 plots of land type other than chhuzhings falling under agriculture precinct initially, only 2 kamzhings plots measuring 0.123 acres of areas remain in the agriculture precinct after the rationalization as these plots are currently vacant and trapped by chhuzhings on all sides. Meanwhile, 2 trapped chhuzhing plots measuring 0.199 acres and 0.40 acres respectively are rationalized and designated with the nearest appropriate precinct.

Apart from rationalizing the precinct boundaries based on prominent natural and man-made features, the buffer for one irrigation canal has been removed and the affected plots are designated with nearest appropriate precincts.



Map 7.50 Precinct Map of Zone 26_PVDP 2016



Map 7.51 Rationalized Precinct Map of Zone 26

The following table shows the change in the precinct area after rationalization. The scattered settlement precinct, tourism intensive precinct and heritage precinct have been removed and plots are designated under nearest appropriate precincts.

Table 53 Precinct area breakup for Zone 26

Sl.No.	Precincts	Before		After		Net area change (acres)
		Area(Ares)	%	Area(Ares)	%	
1	Neighbourhood Node	5.937	2.88	6.828	3.31	0.891
2	Rural Residential(LD)	5.721	2.78	9.579	4.65	3.858
3	Rural Residential	95.041	46.13	96.462	46.82	1.421
4	Traditional Village	1.764	0.86	2.799	1.36	1.035
5	Scattered Settlement	0.046	0.02	0.000	0.00	-0.046
6	Institution	6.619	3.21	6.616	3.21	-0.003
7	Tourism Intensive	0.103	0.05	0.000	0.00	-0.103
8	Heritage	0.510	0.25	0.000	0.00	-0.510
9	Agriculture	48.099	23.35	52.527	25.50	4.428
10	Environment Sensitive	9.020	4.38	7.304	3.55	-1.716

11	Waterfront	19.710	9.57	12.049	5.85	-7.661
12	Forest	1.630	0.79	0.526	0.26	-1.104
13	Access/Tertiary Road	0.936	0.45	0.936	0.45	0.000
14	farm Road	2.778	1.35	2.778	1.35	0.000
15	Secondary Road	5.238	2.54	5.238	2.54	0.000
16	Primary Road	1.406	0.68	1.406	0.68	0.000
17	River/streams	1.459	0.71	0.969	0.47	-0.489
	Total	206.018	100.00	206.018	100.00	0.000

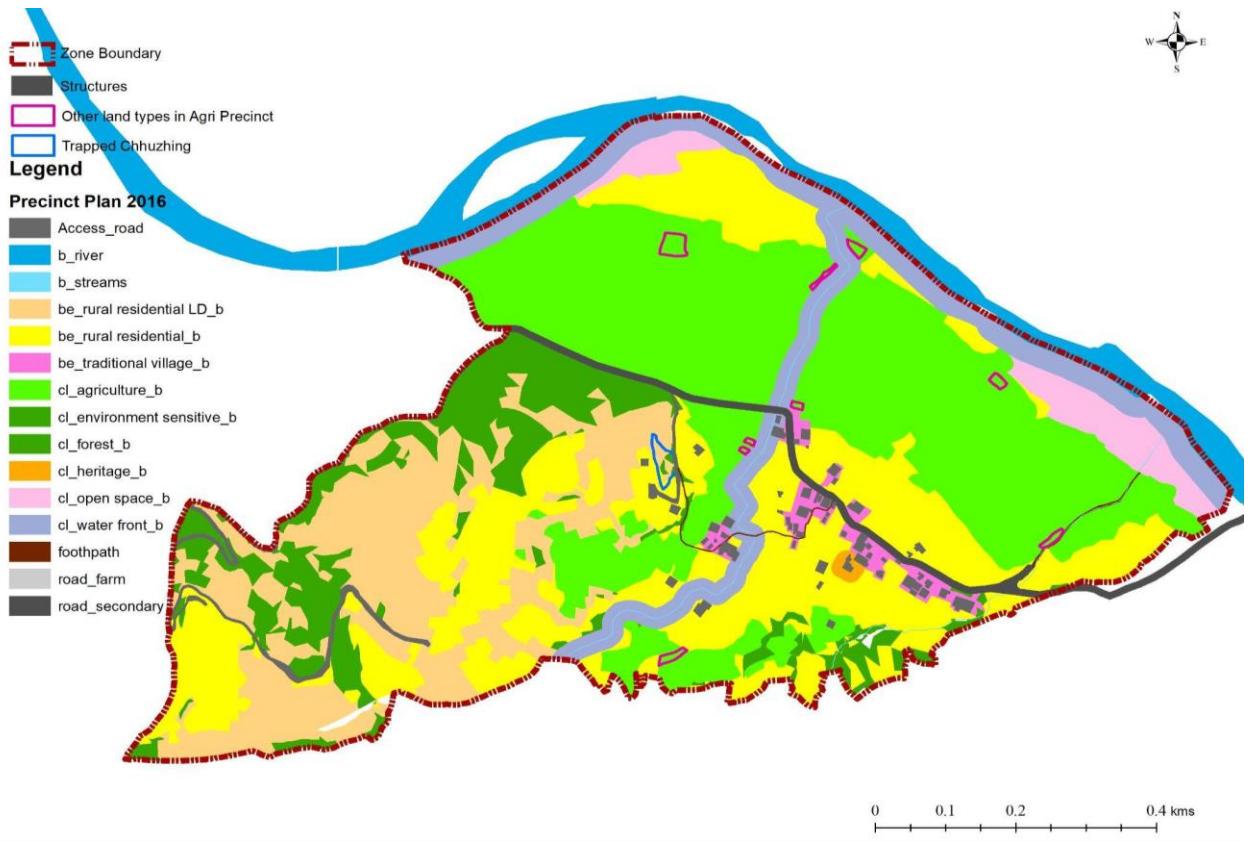
There are also some plots falling partially or fully under environment sensitive precincts, waterfront precincts and Road ROW. The details are as tabulated below:

Table 54 Affected Plots under CL Zone

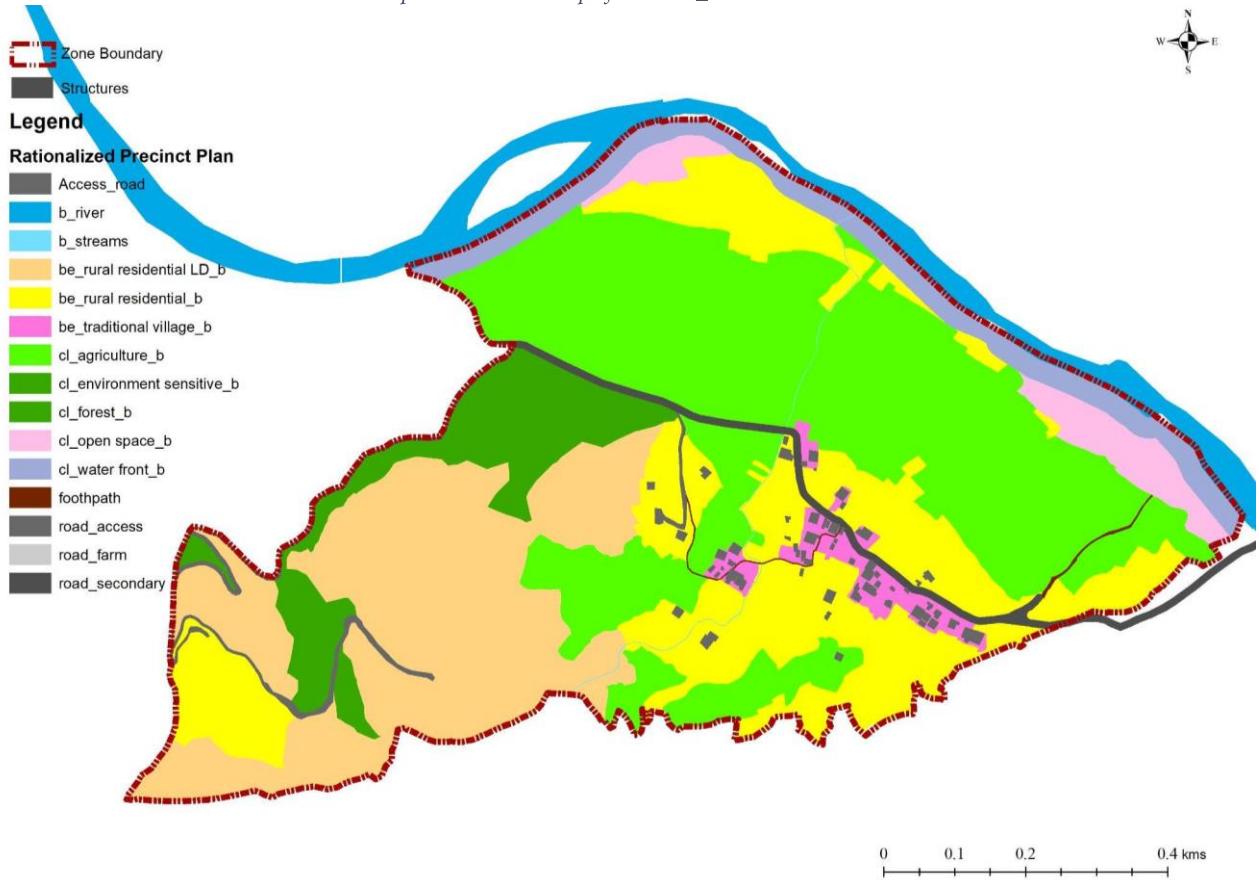
Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	2	0.123
2	Environment Sensitive	Kamzhing	2	1.045
3	Waterfront	Chhuzhing	12	0.91
		Other Land Types	30	3.12
4	Road RoW		45	1.02
	Total		91	6.218

7.27 Zone 27 Drugyel Dingkha

This zone encompasses the Sha Drugyel Dhingkha village cluster surrounded by the chhuzhings on the northern part and other land types on the southern side. The zone has an area of 199.345 acres of which 149.796 acres are registered plots as per the cadastral data. Of the total registered areas, 69.843 acres are chhuzhings constituting around 46.6% of the total registered area.



Map 7.52 Precinct Map of Zone 27_PVDP 2016



Map 7.53 Rationalized Precinct Map of Zone 27

The following table shows the comparison of the precinct area and the net area change after the rationalization.

Table 55 Precinct area breakup for Zone 27

Sl.No.	Precincts	Before		After		Net Area Change (acres)
		Area(Acres)	%	Area(acres)	%	
1	Rural Residential(LD)	30.679	15.39	43.404	21.77	12.725
2	Rural Residential	51.619	25.89	44.716	22.43	-6.903
3	Traditional Village	3.489	1.75	4.593	2.30	1.104
4	Heritage	0.407	0.20	0.000	0.00	-0.407
5	Agriculture	64.580	32.40	69.701	34.96	5.121
6	Environment Sensitive	14.900	7.47	11.569	5.80	-3.331
7	Open Space	5.877	2.95	5.874	2.95	-0.003
8	Waterfront	16.750	8.40	10.052	5.04	-6.698
9	Forest	4.566	2.29	3.342	1.68	-1.224
10	Footpath	0.390	0.20	0.390	0.20	0.000
11	Access/Tertiary Road	1.430	0.72	1.432	0.72	0.002
12	farm Road	1.020	0.51	1.020	0.51	0.000
13	Secondary Road	2.714	1.36	2.714	1.36	0.000
14	Riverstreams	0.924	0.46	0.538	0.27	-0.386
	Total	199.345	100.00	199.345	100	0.000

Of the total 11 plots of land types other than chhuzhing falling under agriculture precinct initially, only 1 khimsa and 3 kamzhing plots fall under agriculture precinct after the rationalization. The exercise looked at rationalization of precinct boundaries, removal of buffer for the irrigation canal and designation of nearest appropriate precinct for 1 trapped chhuzhing plot measuring 0.358 acres of area.

Further, the plots falling initially under waterfront precinct have been designated with nearest appropriate precinct as per the approved strategies and one isolated heritage precinct has been subsumed under nearest prominent precinct.

Apart from 4 plots of land type other than chhuzhing falling under agriculture after the rationalization, there are also plots of various land types partially or fully affected by other precincts of the cultural landscape zone. The following table shows the details and areas of plot where no rationalization was possible.

Table 56 Affected Plots in CL Zone

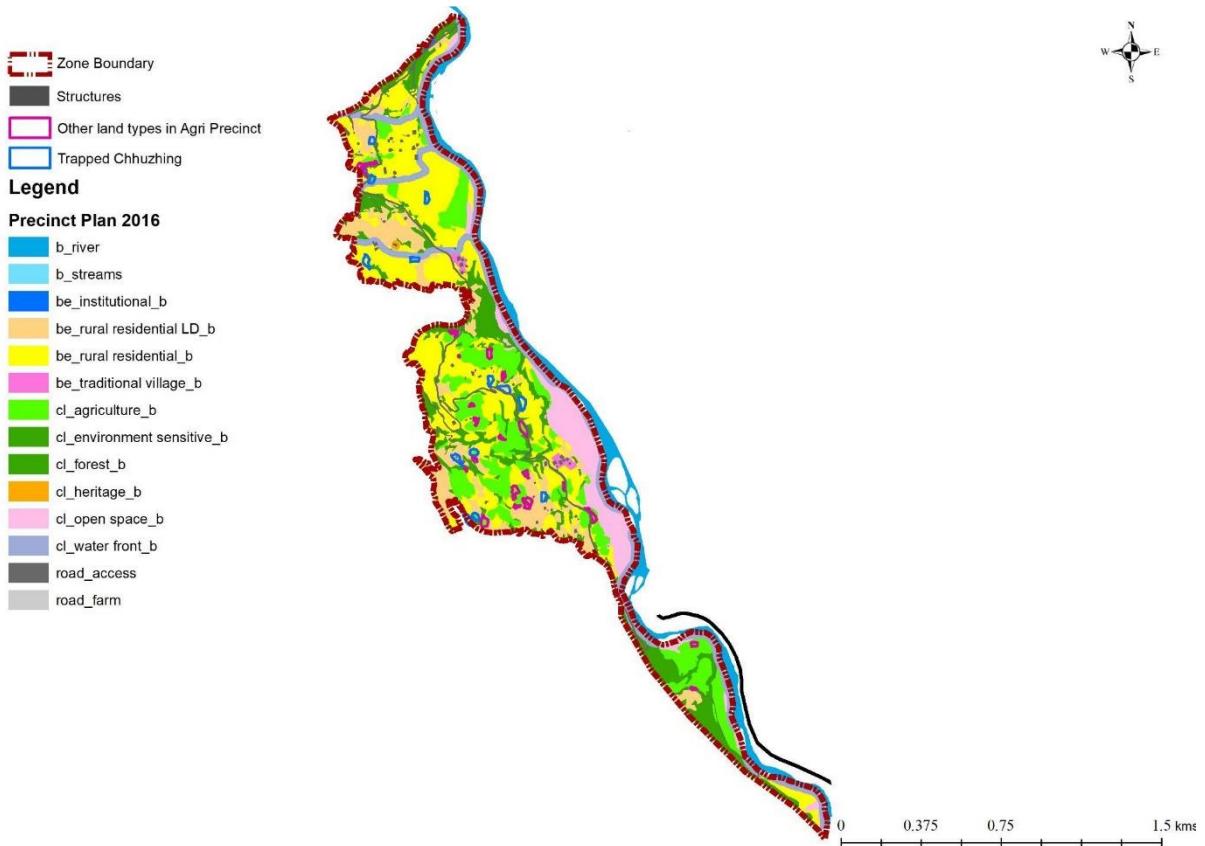
Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Khimsa	1	0.078
		Kamzhing	3	0.375
2	Environment Sensitive	Kamzhing	1	0.018
3	Waterfront	Chhuzhing	13	1.29
		Other Land Types	15	3.9
4	Road RoW		25	1.45
	Total		58	7.111

7.28 Zone 28 Gangri -Tilli

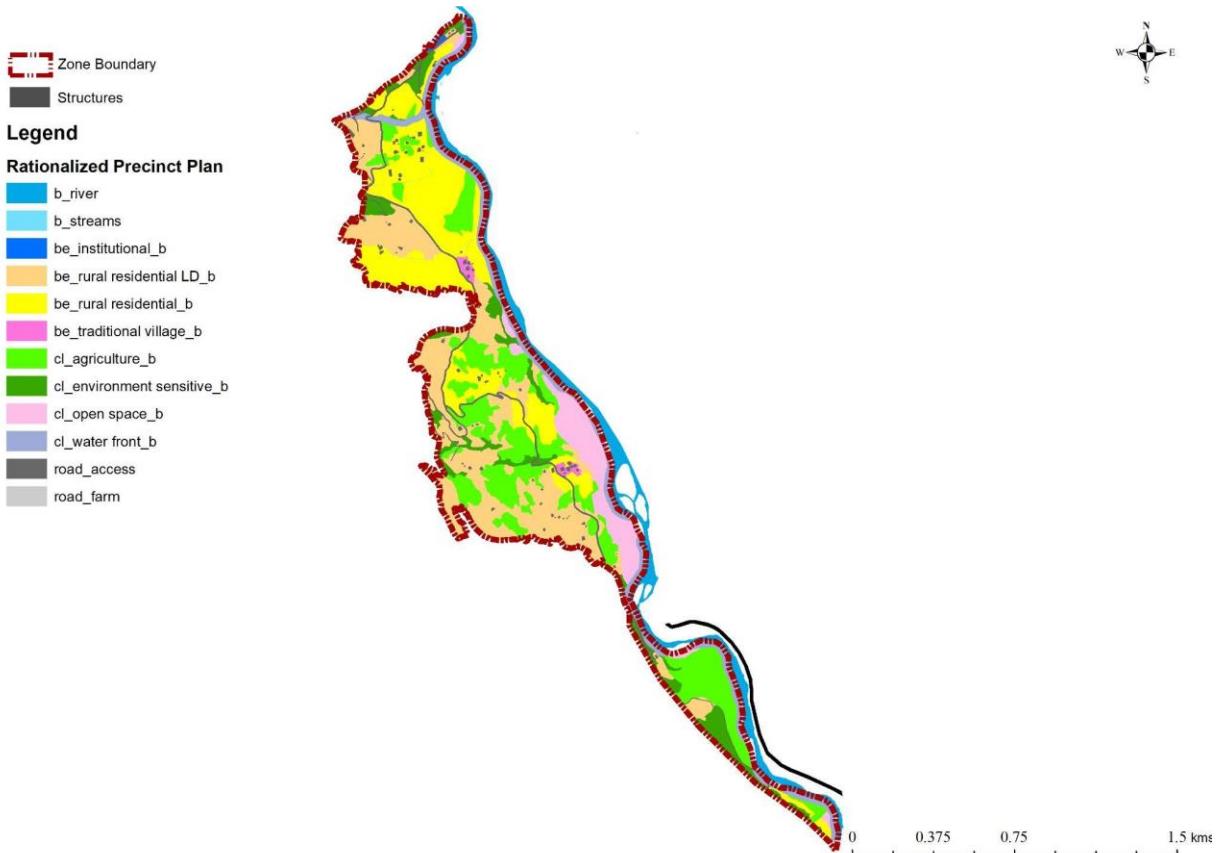
This zone has an area of 369.164 acres of which 230.373 acres are registered plots. Covering the areas of Shaba Gewog center, Karma academy and Gangri and Tilli villages, this zone has 74.984 acres of chhuzhings.

Of the 26 plots of land types other than chhuzhings designated under agriculture precinct as per 2016 PVDP, only 1 Khimsa and 2 kamzhings fall under agriculture precinct after the rationalization. Further, 15 trapped chhuzhing plots with total areas of 3.33 acres have been rationalized and assigned with nearest appropriate precincts of the built environment zone.

Apart from rationalizing the precinct boundaries, the buffers designated for 3 drains have been removed and areas are put under nearest appropriate precinct due to absence of perennial streams as per the site verification. Moreover, the fragmented forest precinct and heritage precincts have been subsumed under nearest prominent precincts.



Map 7.54 Precinct Map of Zone 28_PVDP 2016



Map 7.55 Rationalized Precinct Map of Zone 28

The change in the precinct area is as tabulated below.

Table 57 Precinct area breakup for Zone 28

Sl.No.	Precincts	Before		After		Net area Change (acres)
		Area(Acres)	%	Area(Acres)	%	
1	Rural Residential(LD)	47.514	12.87	99.003	26.82	51.489
2	Rural Residential	115.825	31.37	88.863	24.07	-26.962
3	Traditional Village	1.393	0.38	2.768	0.75	1.375
4	Institution	0.292	0.08	0.618	0.17	0.326
5	Heritage	0.377	0.10	0.000	0.00	-0.377
6	Agriculture	62.551	16.94	77.408	20.97	14.857
7	Environment Sensitive	59.790	16.20	28.427	7.70	-31.363
8	Open Space	26.962	7.30	25.039	6.78	-1.923
9	Waterfront	40.160	10.88	33.846	9.17	-6.314
10	Forest	0.838	0.23	0.000	0.00	-0.838
11	Access/Tertiary Road	9.740	2.64	9.740	2.64	0.000
12	farm Road	2.543	0.69	2.543	0.69	0.000
13	River/streams	1.179	0.32	0.909	0.25	-0.270
	Total	369.164	100.00	369.164	100	0.000

The table below shows the details of the number of plots affected by various precincts of the cultural heritage zones after the rationalization.

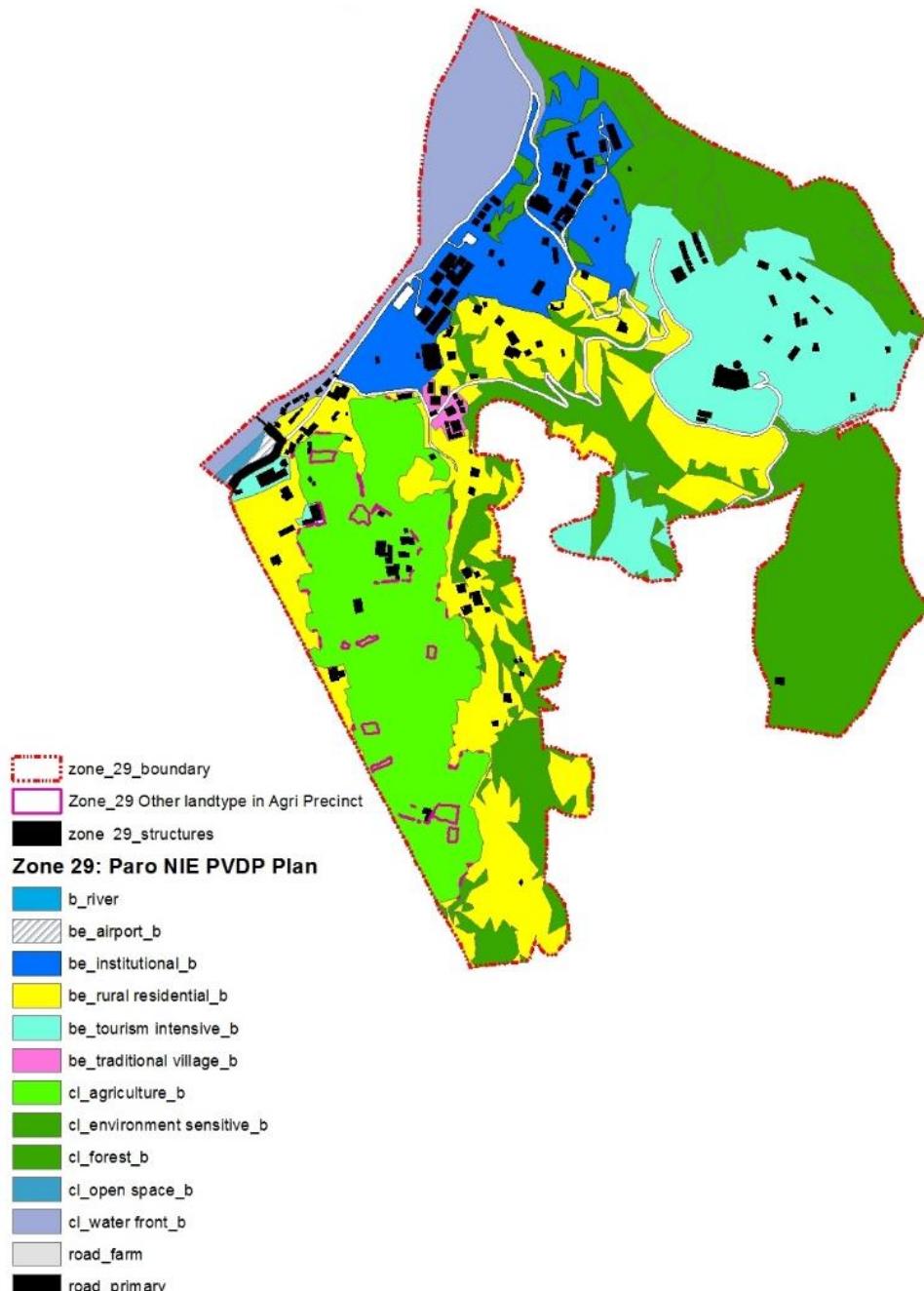
Table 58 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Khimsa	1	0.132
		Kamzhing	2	0.137
2	Environment Sensitive	Khimsa	4	0.065
		Kamzhing	4	0.468
3	Waterfront	Chhuzhing	42	5.28
		Other Land Types	25	3.9
4	Road RoW		44	1.43
	Total		122	11.412

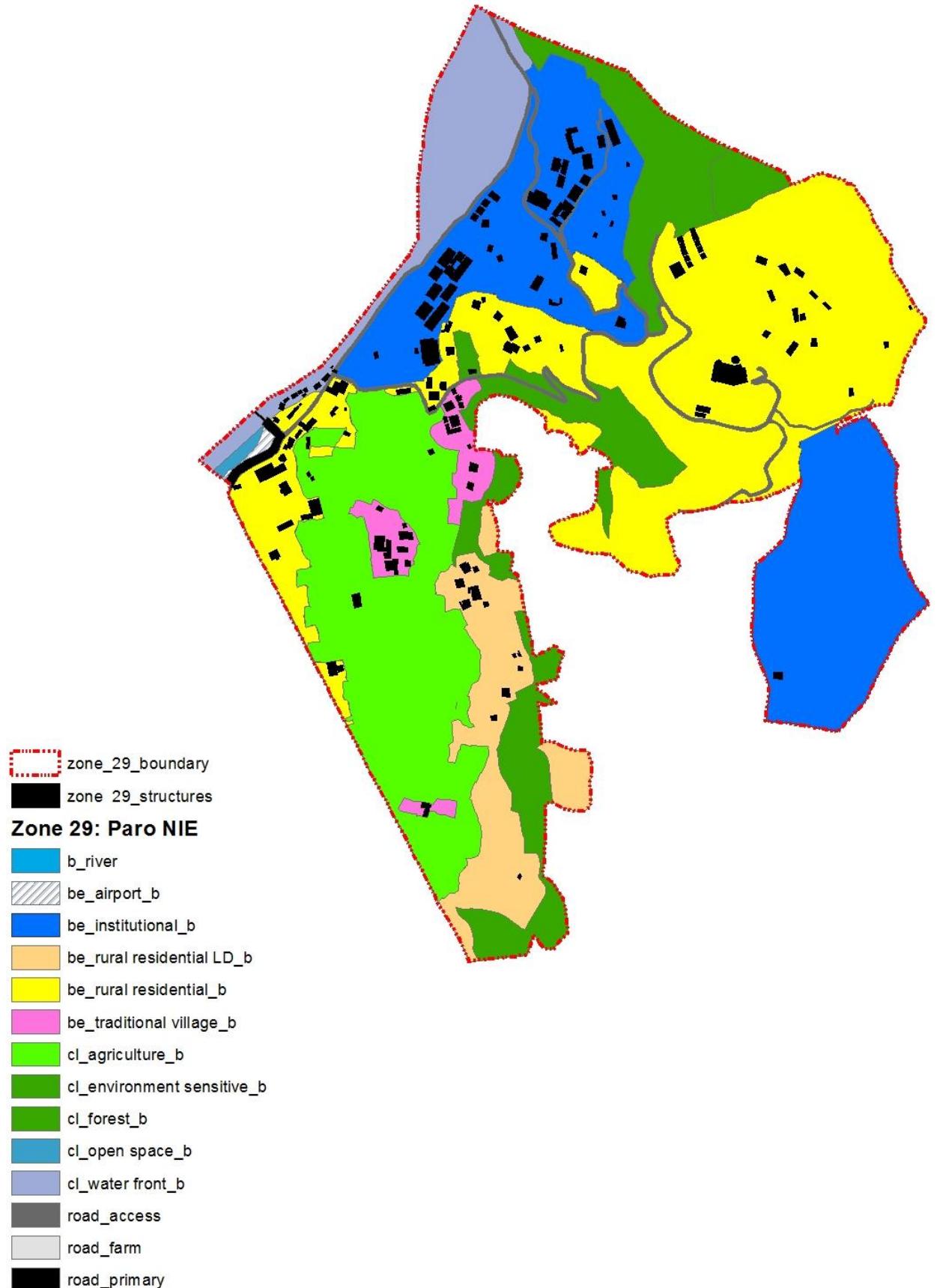
7.29 Zone 29 Paro NIE

Zone 29 covers the area of Paro NIE with an area of 260.71 acres (1.08 sq.km) of which 205.68 acres are registered land as per the cadastral data.

As per the approved PVDP, there are a total of 8 plots of land type other than chhuzhing in the Agriculture precinct out of which 3 plots have been designated the nearest appropriate precinct based on the strategies mentioned in the previous section.



Map 7.56 Precinct Map of Zone 29_PVDP 2016



Map 7.57 Rationalized Precinct Map of Zone 29

The change in the precinct area is as tabulated below.

Table 59 Precinct area breakup for Zone 20

Sl.#	Proposed Precinct	Before		After		Net area Change (acres)
		Area (Acre)	%	Area (Acre)	%	
1	Rural Residential	47.35	18.16	78.89	30.26	12.10
2	Rural Residential(LD)	0.00	0.00	18.38	7.05	7.05
3	Traditional Village	1.34	0.51	0.61	0.23	-0.28
4	Institutional	26.01	9.98	61.13	23.45	13.47
5	Tourism Intensive	40.01	15.35		0.00	-15.35
6	Agriculture	44.08	16.91	43.84	16.82	-0.09
7	Environment Sensitive	36.31	13.93	31.62	12.13	-1.80
8	WaterFront	16.50	6.33	16.11	6.18	-0.15
9	Access/Tertiary Road	6.08	2.33	6.08	2.33	0.00
11	Primary Road	0.76	0.29	0.76	0.29	0.00
12	Open Space	0.54	0.21	0.54	0.21	0.00
13	Forest	41.73	16.01	2.74	1.05	-14.95
		260.71	100.00	260.71	100.00	0.00

The figure and the area of plots falling under Cultural Landscape zone in the precincts of agriculture, environment sensitive, waterfront, open space and under road right of way are as tabulated below.

Table 60 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	3	0.16
		Religious	2	0.19
		Total	5	0.35
2	Environment Sensitive	Khimsa	1	0.09
		Kamzhing	12	6.62
		Institution	1	0.24
		Orchard	1	0.68
		Total	15	7.63
3	Waterfront	Other Land Types	8	2.51
		Total	8	2.51
5	Road ROW		5	3.23
	Total		34	13.9

7.30 Zone 30 Airport

This zone has an area of 198.816 acres covering the area under the Paro International Airport. No major changes have been made in this zone except for rationalization of the precinct boundary as per the registered plot boundary and removal of internal road for area calculation.



Map 7.58 Precinct Map of Zone 30_PVDP 2016



Map 7.59 Rationalized Precinct Map of Zone 30

The table below shows the precinct area distribution and change in precinct area after the rationalization.

Table 61 Precinct area breakup for Zone 30

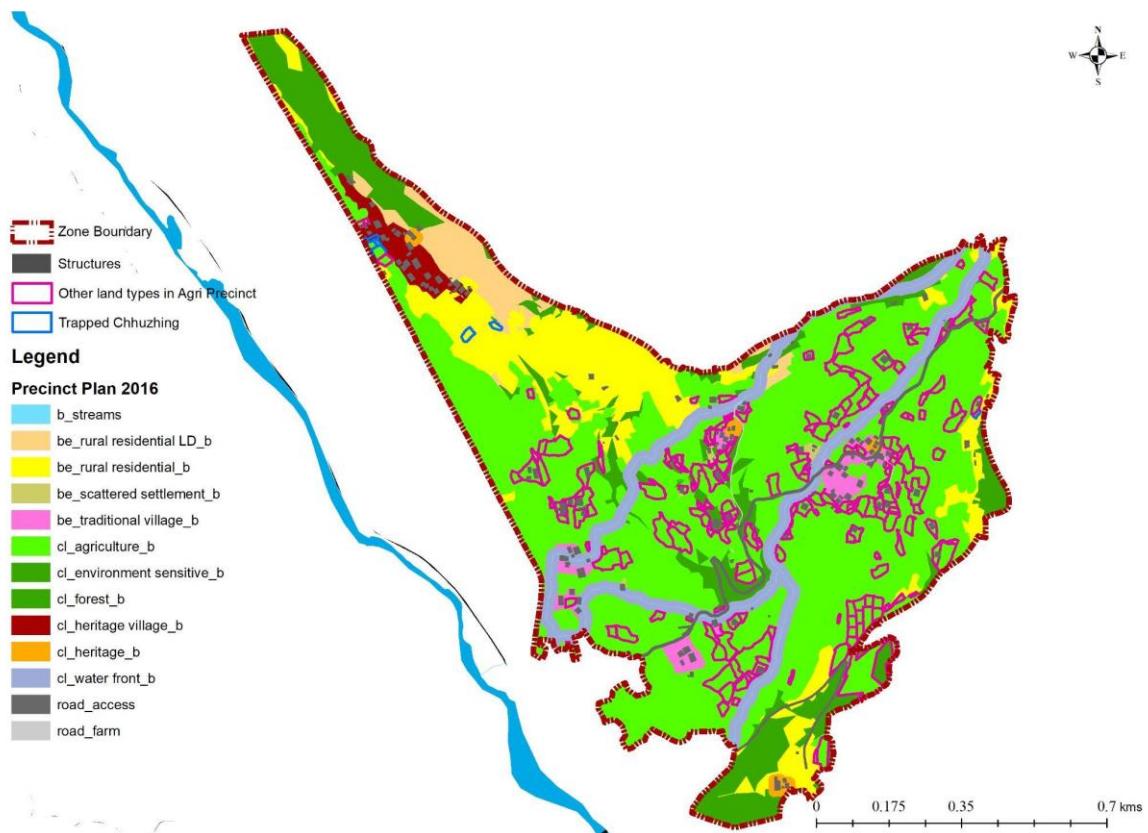
Sl.No.	Precincts	Before		After		Net area change(acres)
		Area(Acres)	%	Area(Acres)	%	
1	Air Port	161.065	81.01	178.200	89.63	17.135
2	Open Space	3.486	1.75	1.114	0.56	-2.373
3	Waterfront	6.974	3.51	3.969	2.00	-3.005
4	Access/Tertiary Road	15.217	7.65	3.467	1.74	-11.750
5	Road Primary	11.498	5.78	11.498	5.78	0.000
6	River/streams	0.576	0.29	0.568	0.29	-0.008
	Total	198.816	100.00	198.816	100	0.000

7.31 Zone 31 Chang Dungkar_Jantana

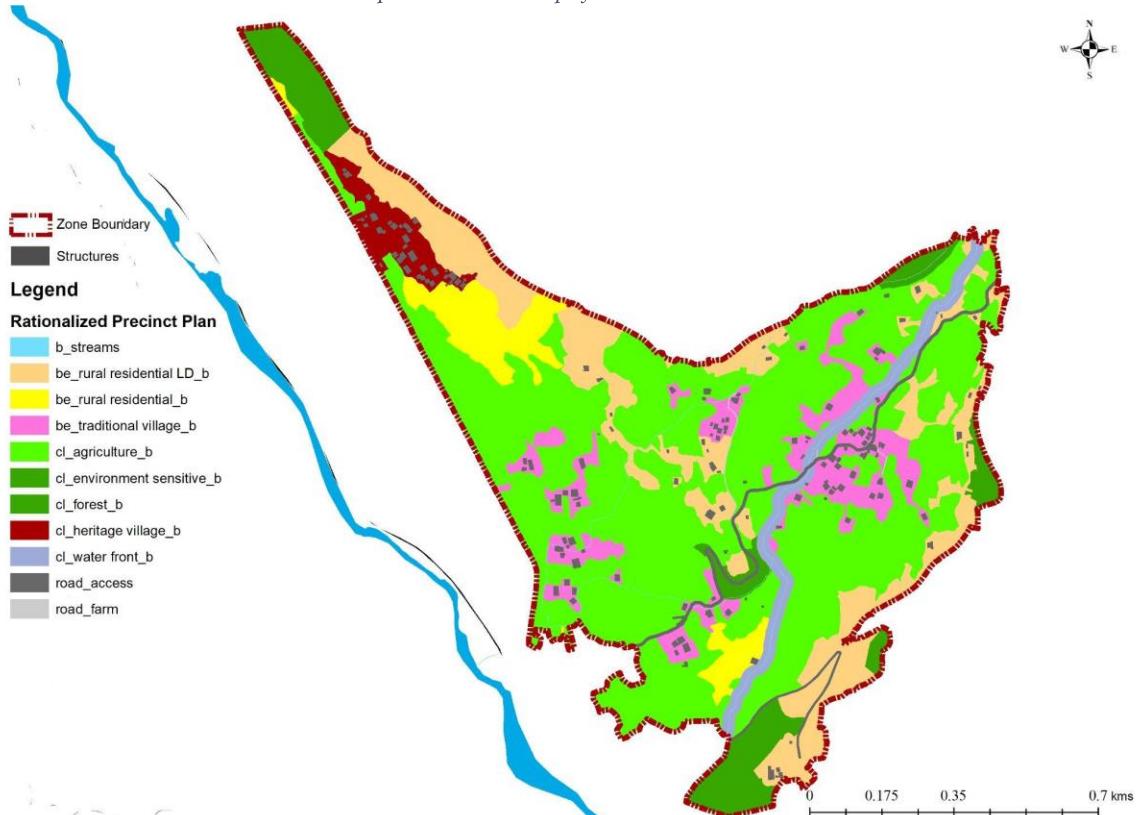
This zone has a total area of 310.648 acres covering the Changdhungkar and Jantana villages. Of the total area, 248.077 acres are registered plots as per the cadastral data. While the place is located fairly on a higher slope, the chhuzhing constitutes 64.47% of the total registered area with 159.95 acres.

As per the 2016 PVDP, there are 215 plots of land type other than chhuzhings designated as agriculture precincts. However, after the rationalization of the precinct, only 20 plots of land type other than chhuzhings with a total area of 3.196 acres fall under the agriculture precinct.

Through the exercise, buffers for 2 irrigation canals are removed and affected plots are assigned with nearest appropriate precincts apart from rationalization precinct boundaries through validation of presence of prominent natural or man-made features. Further 9 trapped chhuzhing plots are assigned with the nearest appropriate precinct of the built environment zone.



Map 7.60 Precinct Map of Zone 31_PVDP 2016



Map 7.61 Rationalized Precinct Map of Zone 31

The table below shows the precinct areas distribution and change in net precinct area after the rationalization. The scattered settlement and heritage precincts are removed and the same areas have been subsumed under nearest prominent precincts.

Table 62 Precinct area breakup for Zone 31

Sl.No.	Precincts	Before		After		Net area change(acres)
		Area(Acres)	%	Area(Acres)	%	
1	Rural Residential(LD)	10.173	3.27	52.258	16.82	42.085
2	Rural Residential	40.072	12.90	16.233	5.23	-23.839
3	Traditional Village	5.788	1.86	27.174	8.75	21.386
4	Scattered Settlement	1.137	0.37	0.000	0.00	-1.137
5	Heritage Village	5.307	1.71	8.393	2.70	3.086
6	Heritage	1.733	0.56	0.000	0.00	-1.733
7	Agriculture	176.357	56.77	165.800	53.37	-10.557
8	Environment Sensitive	35.170	11.32	22.256	7.16	-12.914
9	Waterfront	26.414	8.50	11.013	3.55	-15.400
10	Forest	2.488	0.80	2.211	0.71	-0.277
11	Access/Tertiary Road	3.435	1.11	3.435	1.11	0.000
12	farm Road	1.698	0.55	1.698	0.55	0.000
13	River/streams	0.877	0.28	0.177	0.06	-0.700
	Total	310.648	100.00	310.648	100	0.000

There are also plots of various land types falling under various precincts of the cultural landscape zone. The following table shows the number of plots and total area falling under each precinct of the cultural landscape zone.

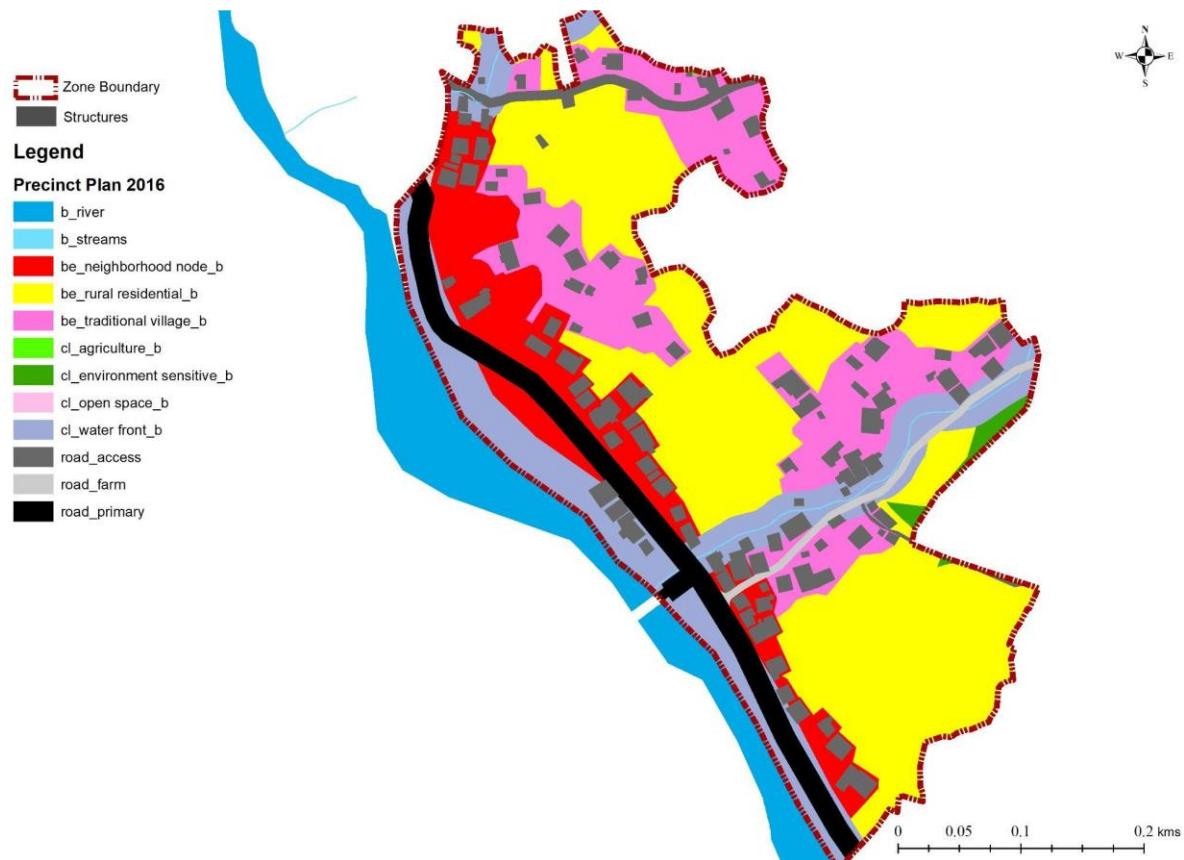
Table 63 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Khimsa	2	0.315
		Kamzhing	11	2.027
		Religious	5	0.624
		Orchard	2	0.232
2	Waterfront	Chhuzhing	49	4.33
		Other Land Types	32	2.18
3	Road RoW		23	0.40
	Total		124	10.108

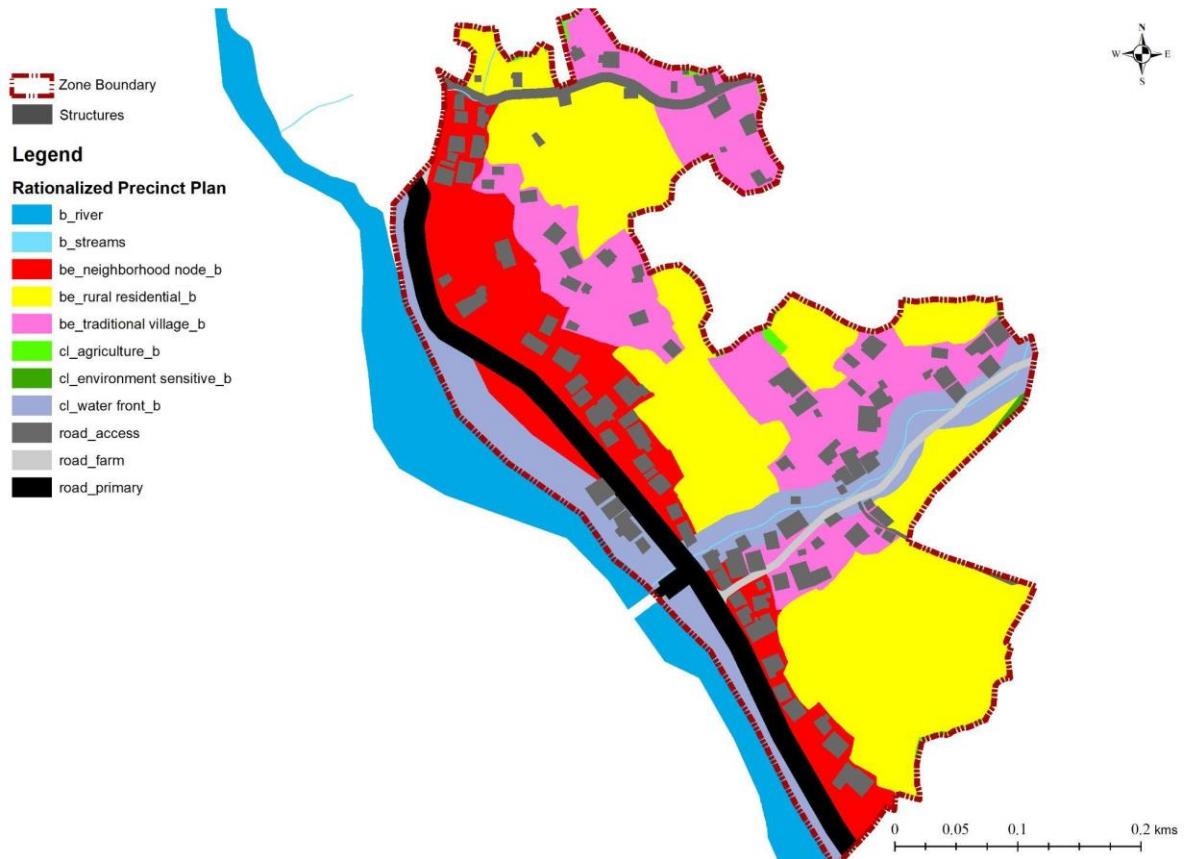
7.32 Zone 32 Bondey

Covering the areas of Bondey town and its surrounding traditional village clusters, this zone has a total area of 43.507 acres of which 33.935 acres are registered plots as per the cadastral data.

Except for removal of buffers for irrigation canals and realigning of precinct boundary along the cadastral boundary, not much changes have been made in this zone.



Map 7.62 Precinct Map of Zone 32_PVDP 2016



Map 7.63 Rationalized Precinct Map of Zone 32

The change in the precinct area is as tabulated below.

Table 64 Precinct area breakup for Zone 32

Sl.No.	Precincts	Before		After		Net area Change (acres)
		Area (Acres)	%	Area (Acres)	%	
1	Neighbourhood Node	6.202	14.59	7.618	17.92	1.416
2	Rural Residential	16.570	38.98	15.697	36.93	-0.873
3	Traditional Village	9.201	21.65	9.473	22.29	0.272
4	Agriculture	0.038	0.09	0.328	0.77	0.290
5	Environment Sensitive	0.315	0.74	0.072	0.17	-0.243
6	Waterfront	6.000	14.12	5.171	12.17	-0.829
7	Access/Tertiary Road	0.611	1.44	0.611	1.44	0.000
8	farm Road	0.498	1.17	0.498	1.17	0.000
9	Primary Road	2.918	6.86	2.918	6.86	0.000
10	Riverstreams	0.154	0.36	0.121	0.29	-0.033
	Total	42.507	100.00	42.507	100	0.000

Regarding the affected plots by the cultural landscape zone, 1 kamzhing plots falls under the environment precinct and 63 plots are partially or fully affected by the waterfront precinct and road RoW. The table below shows the details of affected plots.

Table 65 Affected Plots in CL Zone

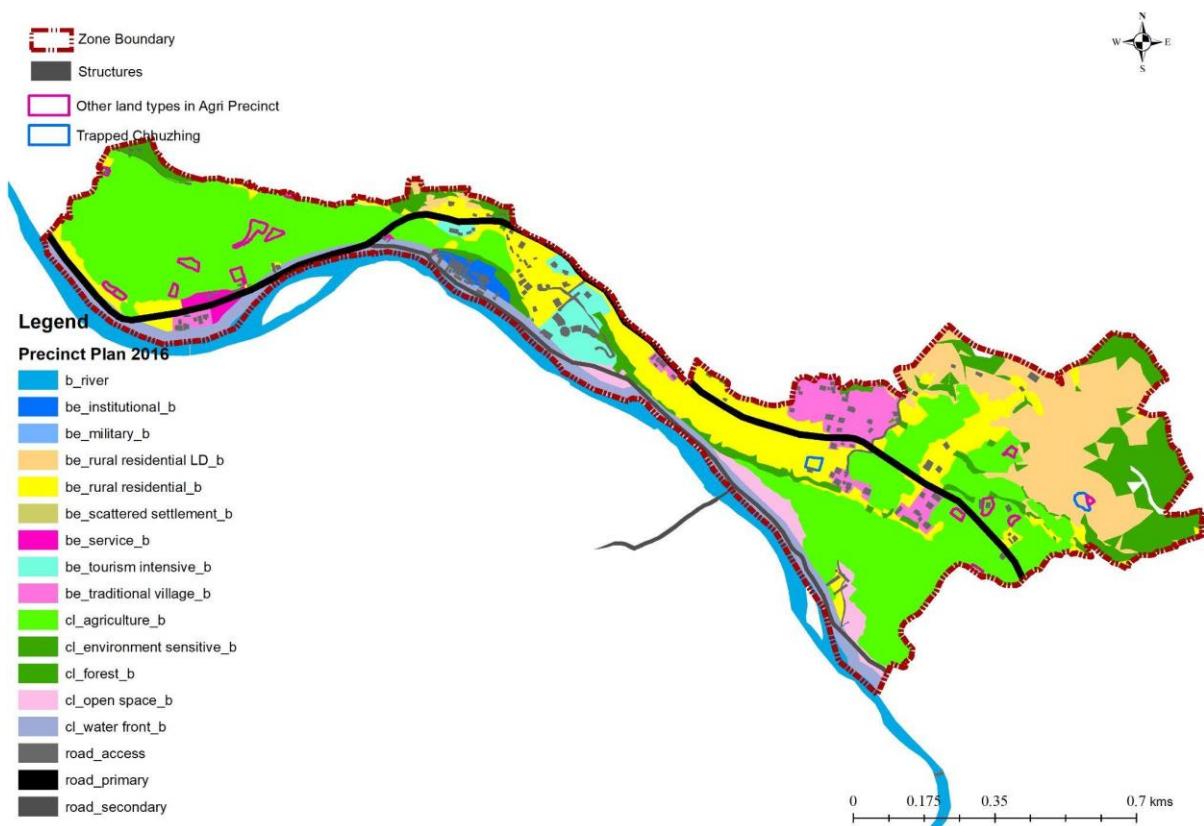
Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
2	Environment Sensitive	Kamzhing	1	0.012
3	Waterfront	Chhuzhing	1	0.04
		Other Land Types	41	2.73
5	Road RoW		21	0.44
	Total		64	3.222

7.33 Zone 33 Shaba RBA

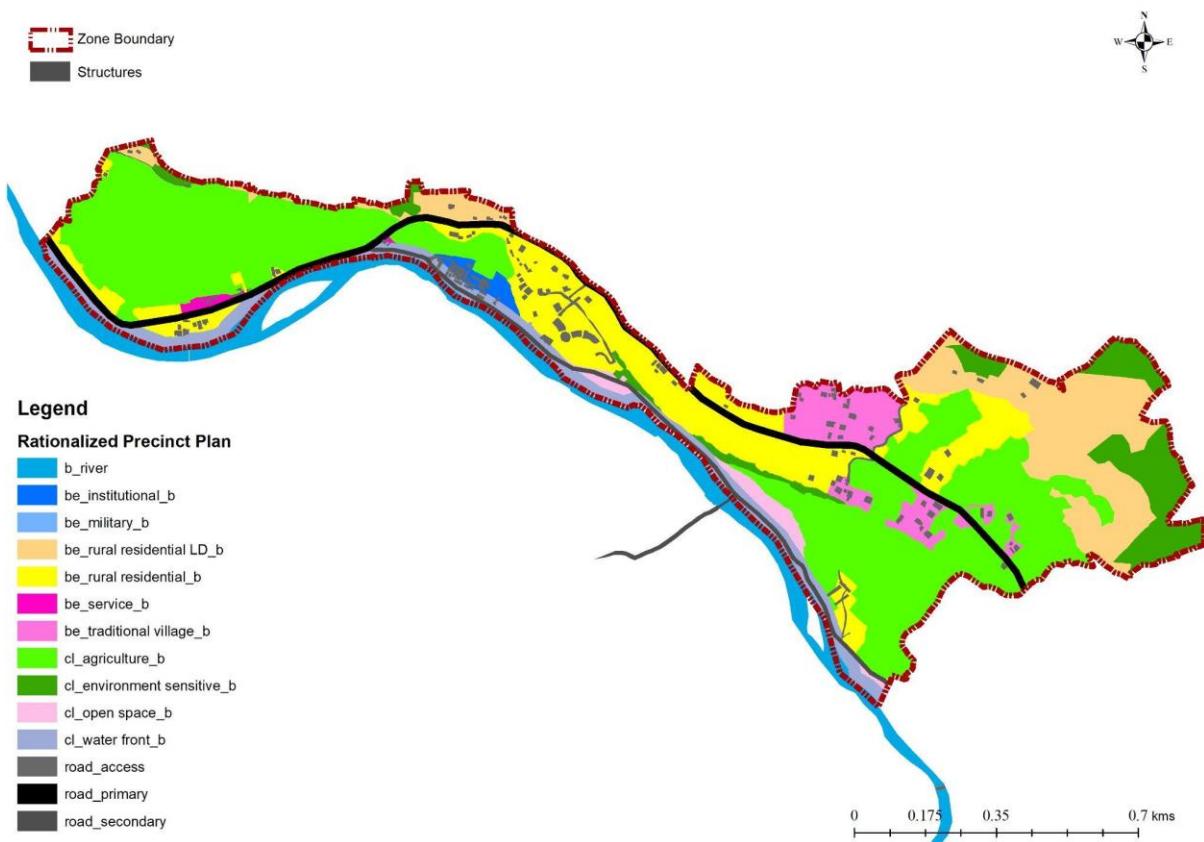
The zone 33 has a total area of 254.823 acres of which 202.029 acres are registered plots as per the cadastral data. It covers the areas of traditional village clusters at Shaba with chhuzhings on the lower plains and developable lands along the highway. Of the total registered land areas, 99 acres are chhuzhings.

This zone had initially 16 plots of land type other than chhuzhing with areas of 2.206 acres falling under the agriculture precinct of which 9 plots have been rationalized and assigned with nearest appropriate precincts. Further, 2 trapped chhuzhing plots and 1 chhuzhing plot already under the existing service infrastructures are designated under various precincts of built environment zones.

The rationalization exercise also looked at the precinct boundaries and precinct type and accordingly the tourism intensive precinct has been removed and use has been changed to rural residential precinct.



Map 7.64 Precinct Map of Zone 33_PVDP 2016



Map 7.65 Rationalized Precinct Map of Zone 33

The change in the precinct area is as tabulated below.

Table 66 Precinct area breakup for Zone 33

Sl.No.	Precincts	Before		After		Net Area Change (Acres)
		Area (Acres)	%	Area (Acres)	%	
1	Rural Residential(LD)	32.947	12.93	34.832	13.67	1.885
2	Rural Residential	38.118	14.96	44.426	17.43	6.308
3	Traditional Village	11.523	4.52	13.693	5.37	2.170
5	Institution	1.996	0.78	2.310	0.91	0.314
6	Military	0.000	0.00	0.051	0.02	0.051
7	Tourism Intensive	6.211	2.44	0.000	0.00	-6.211
8	Agriculture	95.203	37.36	103.167	40.49	7.964
9	Environment Sensitive	27.960	10.97	19.580	7.68	-8.380
10	Open Space	4.967	1.95	3.313	1.30	-1.654
11	Service	1.242	0.49	0.826	0.32	-0.416
12	Waterfront	13.499	5.30	12.755	5.01	-0.744
13	Forest	1.290	0.51	0.000	0.00	-1.290
14	Access/Tertiary Road	1.420	0.56	1.422	0.56	0.002
15	Secondary Road	4.580	1.80	4.579	1.80	-0.001
16	Primary Road	11.262	4.42	11.262	4.42	0.000
17	River/streams	2.606	1.02	2.606	1.02	0.000
	Total	254.823	100.00	254.823	100	0.000

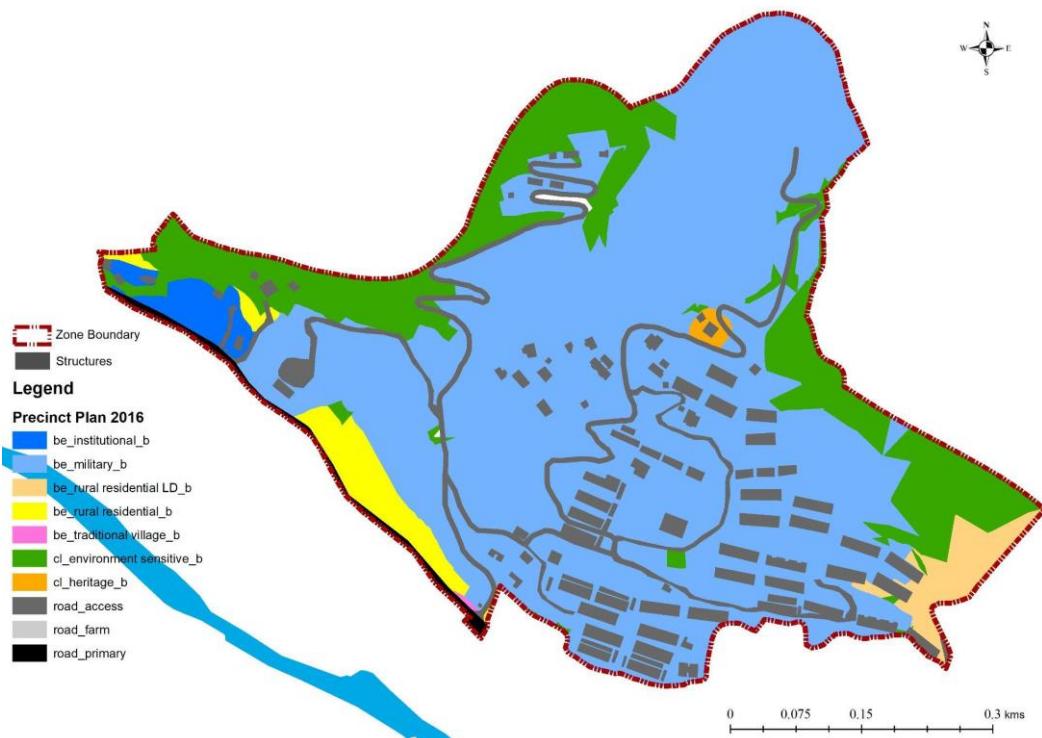
The following table shows the number of plots and its total areas falling under various precincts of the cultural landscape zone. A total of 93 plots are partially or fully affected by the cultural heritage zone. However, for development purposes most of the affected areas may fall in the set back or some affected plots are chhuzhings where the development is already restricted. The total affected area comes to 22.455 acres which needs to be resolved through conduct of EIA or preparation of Local area plan.

Table 67 Affected Plots in CL Zone

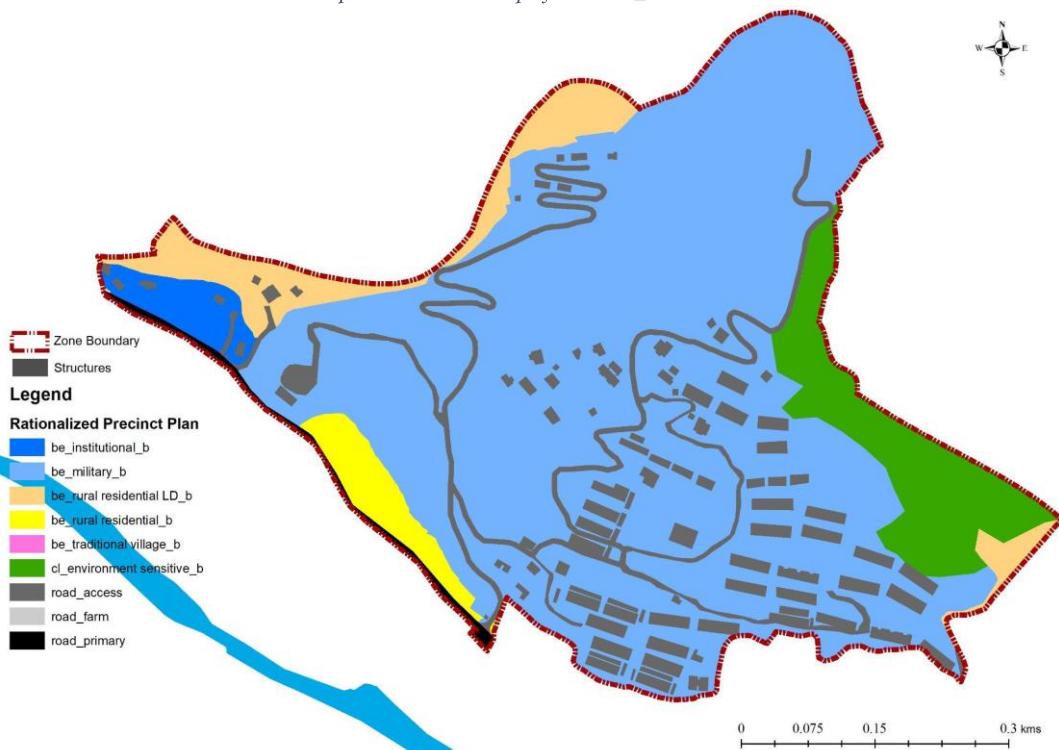
Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Khimsa	1	0.11
		Kamzhing	4	0.317
		Religious	3	0.782
		No data	1	0.138
2	Environment Sensitive	Chhuzhings	3	0.103
		Kamzhing	4	5.203
		Orchard	2	7.852
3	Waterfront	Chhuzhing	4	0.8
		Other Land Types	11	2.83
4	Open Space		5	1.47
5	Road RoW		55	2.85
	Total		93	22.455

7.34 Zone 34 Shaba Tomja

This zone covers predominantly land under RBA with a total zone area of 98.320 acres of which 88.954 acres are registered plots as per the cadastral data. Of the total registered land areas, 82.852 acres fall under RBA land.



Map 7.66 Precinct Map of Zone 34_PVDP 2016



Map 7.67 Rationalized Precinct Map of Zone 34

The table below shows the change in precinct areas:

Table 68 Precinct area breakup for Zone 34

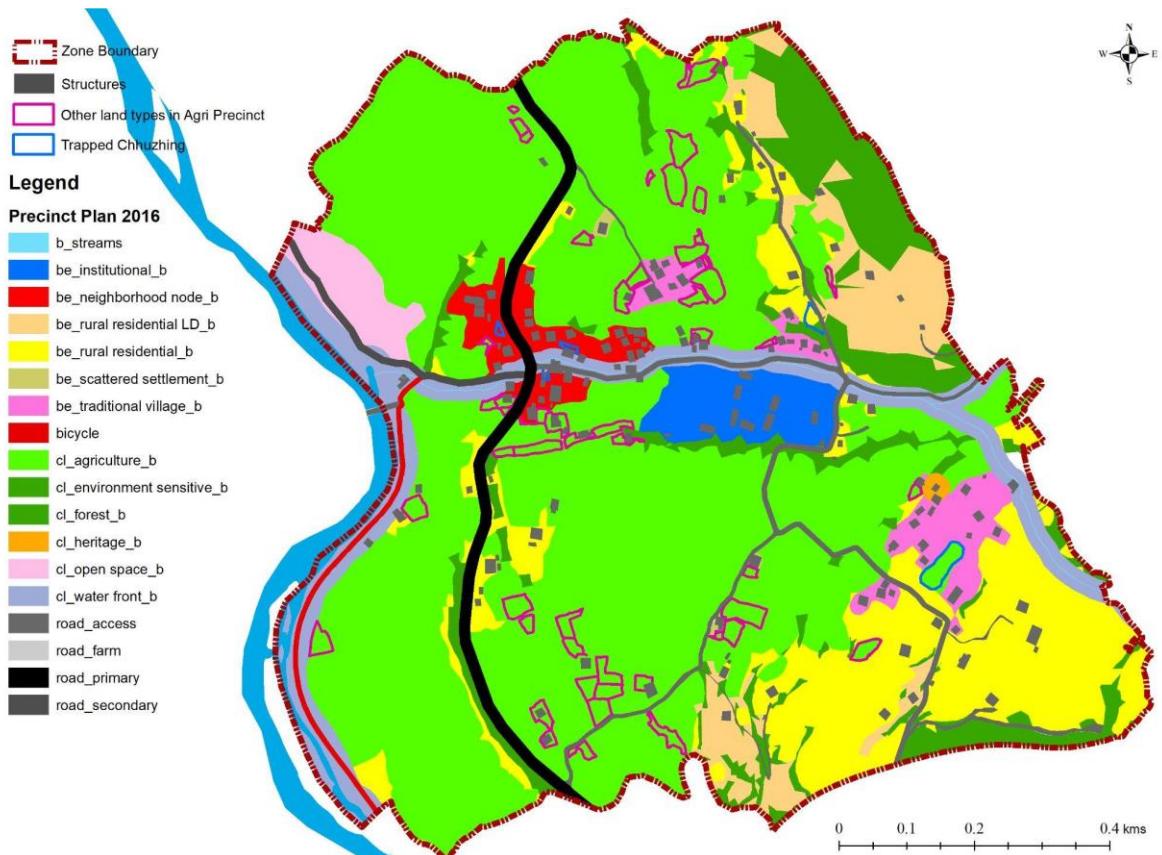
Sl.No.	Precincts	Before		After		Net Area Change (Acres)
		Area (Acres)	%	Area (Acres)	%	
1	Military	68.180	69.34	73.034	74.28	4.854
2	Rural Residential(LD)	2.541	2.58	6.321	6.43	3.780
3	Rural Residential	2.676	2.72	2.489	2.53	-0.187
4	Traditional Village	0.047	0.05	0.012	0.01	-0.036
5	Institution	1.753	1.78	2.177	2.21	0.424
6	Heritage	0.328	0.33	0.000	0.00	-0.328
7	Environment Sensitive	16.531	16.81	8.023	8.16	-8.508
8	Access/Tertiary Road	1.960	1.99	1.960	1.99	0.000
9	farm Road	3.355	3.41	3.355	3.41	0.000
10	Primary Road	0.949	0.96	0.949	0.97	0.000
	Total	98.320	100	98.320	100	

7.35 Zone 35 Shaba Denka

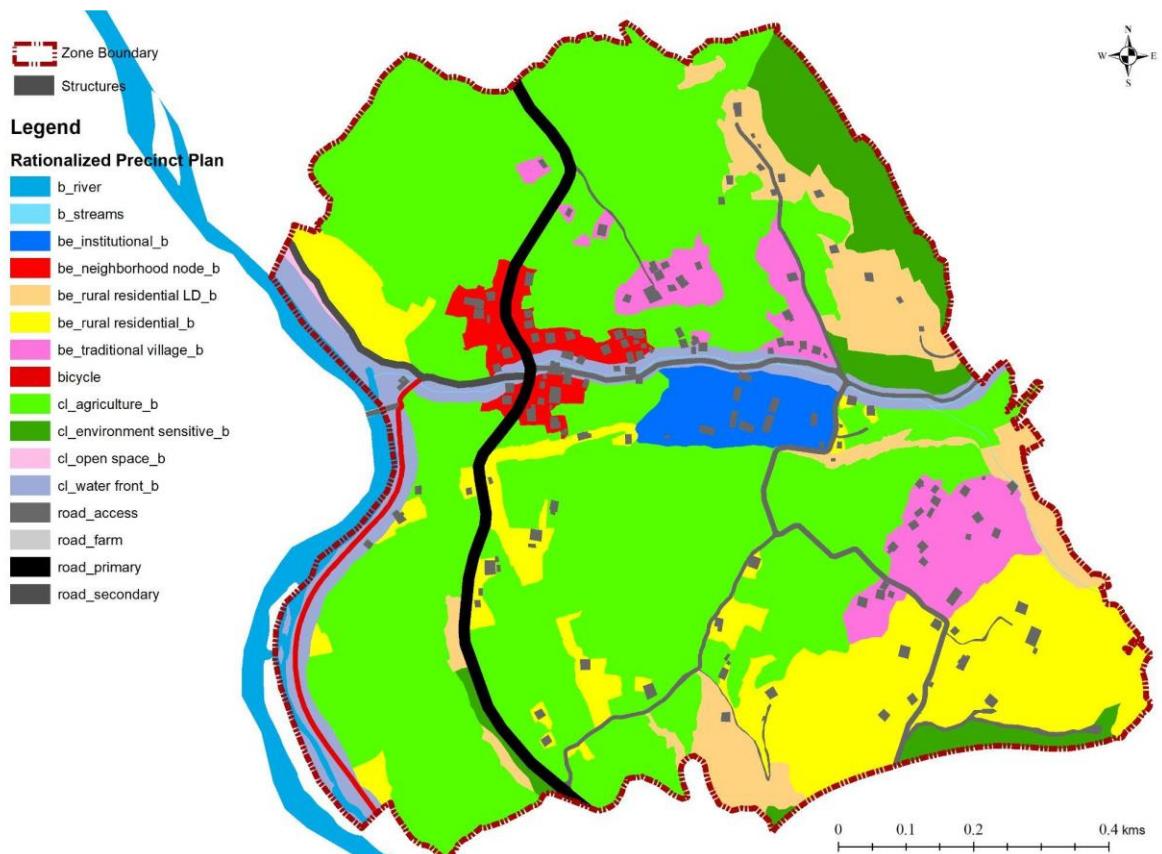
This zone has a total area of 270.485 acres covering the Shaba Denkha town, school and the traditional village clusters surrounded by the chhuzhings. Of the total zone area, 214.038 acres are registered plots in which 134.499 acres are chhuzhings constituting more than 50% of the total registered area.

Through the rationalization, 65 out of 77 plots of land type other than chhuzhings falling under agriculture precinct as per the 2016 PVDP are designated under various precincts of the built environment zone. Further, 5 trapped chhuzhing plots are assigned with the nearest appropriate precinct as per the approved strategy for chhuzhing plots.

Apart from rationalization of the precinct boundaries, the buffers for small drains are removed and the areas are put under the nearest appropriate precinct.



Map 7.68 Precinct Map of Zone 35_PVDP 2016



Map 7.69 Rationalized Precinct Map of Zone 35

The change in the precinct area is as tabulated below.

Table 69 Precinct area breakup for Zone 35

Sl.No.	Precincts	Before		After		Net Area Change (Acres)
		Area (acres)	%	Area (Acres)	%	
1	Neighbourhood Node	5.589	2.07	5.997	2.22	0.408
2	Rural Residential(LD)	14.475	5.35	18.677	6.91	4.202
3	Rural Residential	37.126	13.73	40.132	14.84	3.006
4	Traditional Village	7.143	2.64	15.206	5.62	8.063
5	Scattered Settlement	0.583	0.22	0.026	0.01	-0.557
6	Institution	6.709	2.48	7.181	2.65	0.471
7	Heritage	0.346	0.13	0.000	0.00	-0.346
8	Agriculture	142.558	52.70	141.704	52.39	-0.854
9	Environment Sensitive	23.000	8.50	14.421	5.33	-8.579
10	Open Space	4.197	1.55	0.224	0.08	-3.973
12	Waterfront	10.294	3.81	10.887	4.02	0.593
13	Forest	1.842	0.68	0.000	0.00	-1.842
14	Cycle	1.408	0.52	1.408	0.52	0.000
15	Access/Tertiary Road	3.850	1.42	3.850	1.42	0.000
16	Farm Road	1.717	0.63	1.717	0.63	0.000
17	Secondary Road	1.190	0.44	1.190	0.44	0.000
18	Primary Road	5.121	1.89	5.121	1.89	0.000
19	River/Stream	3.337	1.23	2.744	1.01	-0.593
	Total	270.485	100.00	270.485	100	0.000

The following table shows the number of plots and total areas falling under various precincts of the cultural landscape zone. 1 khimsa and 8 kamzhing plots fall under agriculture precinct as these plots are currently vacant and trapped by chhuzhings on all sides. Further, 11 plots other than chhuzhings are affected by environment sensitive precincts and 46 plots of various land types fall partially or fully under waterfront precincts. There are also 28 plots partly or fully affected by road RoW. These affected plots need to be rationalized through preparation of LAP or conduct of EIA.

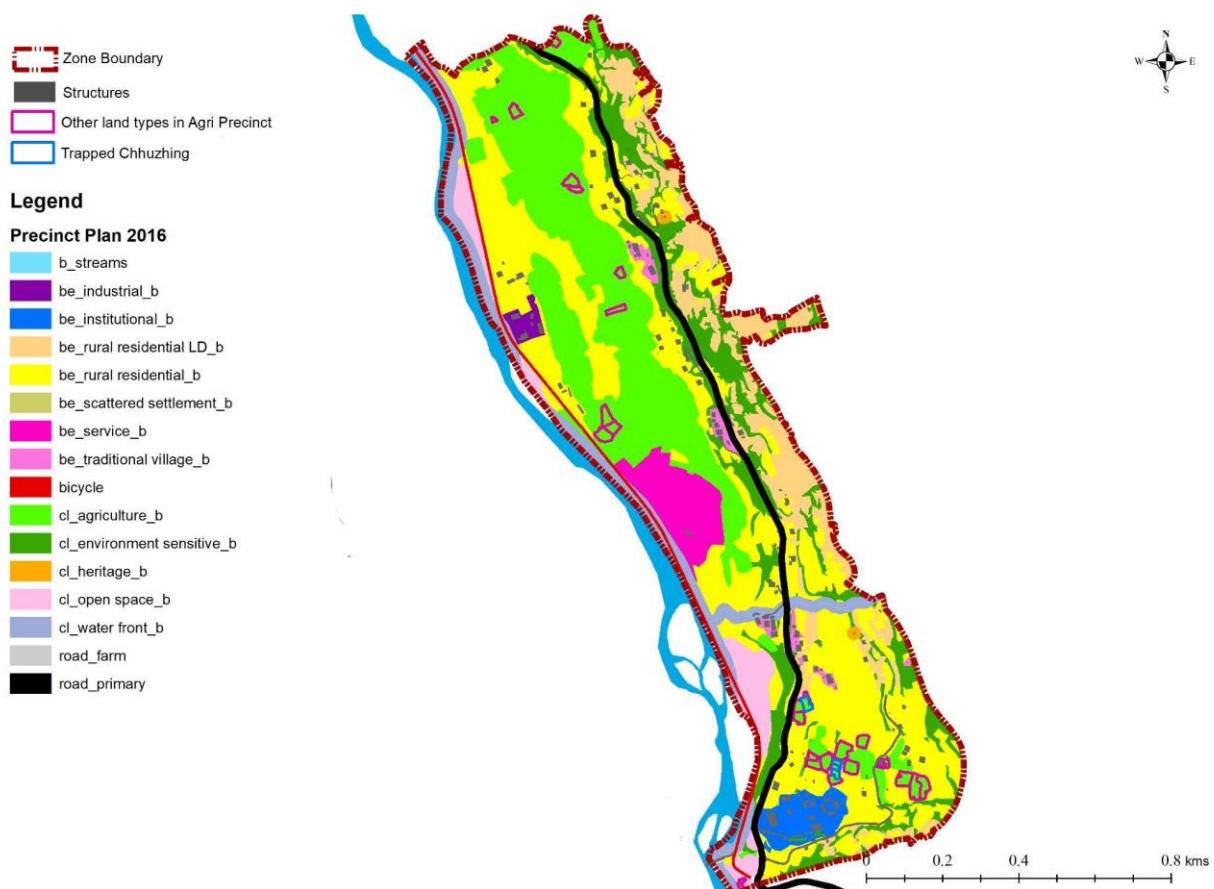
Table 70 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Khimsa	1	0.129
		Kamzhing	8	1.252
2	Environment Sensitive	Kamzhing	10	3.852
		Orchard	1	0.728
3	Waterfront	Chhuzhing	15	1.31
		Other Land Types	31	2.97
4	Road RoW		28	0.66
	Total		94	10.901

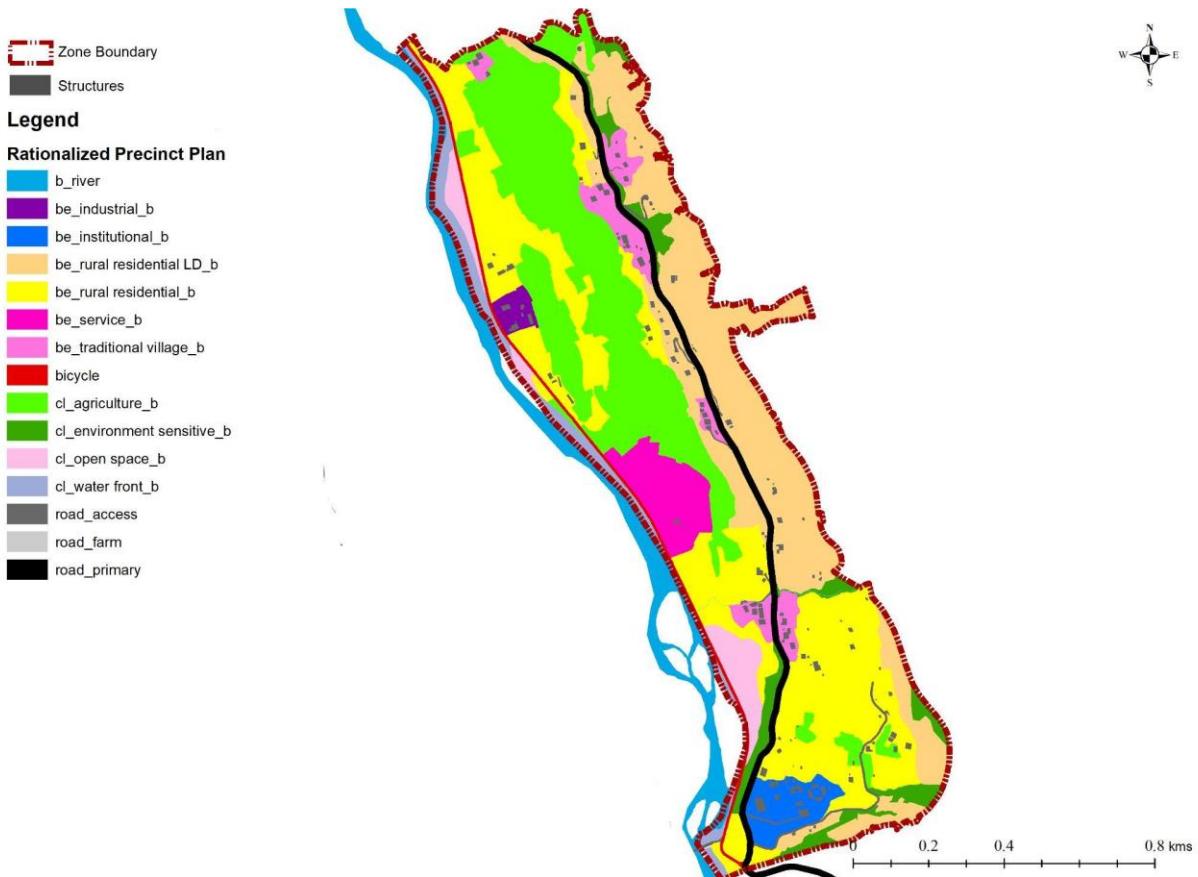
7.36 Zone 36 Shaba Bara

This zone covers the areas of Shaba, Bara and Chorten Sarp. With total zone areas of 303.889 acres of which 227.648 acres are registered plots as per the cadastral data. Of the total registered areas, chhuzhing area comes to 68.472 acres which are designated under agriculture precinct except for 2 trapped chhuzhing plots with area of 0.362 acres which are put under nearest appropriate precinct of the built environment zone.

This zone had 32 plots of land type other than chhuzhing falling under agriculture precinct as of 2016 PVDP. However, after the rationalisation only 6 kamzhing plots fall under agriculture precinct as these plots are currently vacant and trapped by chhuzhing on all sides.



Map 7.70 Precinct Map of Zone 36_PVDP 2016



Map 7.71 Rationalized Precinct Map of Zone 36

The change in the precinct area is as tabulated below. The scattered settlement precinct and heritage precinct are removed and plots are assigned with the nearest appropriate precinct.

Table 71 Precinct area breakup for Zone 36

Sl.No.	Precincts	Before		After		Net Area Change (Acres)
		Area (Acres)	%	Area (Acres)	%	
1	Rural Residential	98.534	32.42	80.774	26.58	-17.760
2	Rural Residential(LD)	30.977	10.19	70.146	23.08	39.169
3	Traditional Village	3.443	1.13	11.981	3.94	8.537
4	Scattered Settlement	0.045	0.01	0.000	0.00	-0.045
5	Industrial	1.798	0.59	2.495	0.82	0.697
6	Institution	6.690	2.20	7.374	2.43	0.684
7	Heritage	0.580	0.19	0.000	0.00	-0.580
8	Agriculture	73.726	24.26	70.343	23.15	-3.383
9	Environment Sensitive	33.360	10.98	12.556	4.13	-20.804
10	Open Space	9.359	3.08	8.550	2.81	-0.809
11	Service	10.743	3.54	11.389	3.75	0.646
12	Waterfront	15.980	5.26	9.694	3.19	-6.286

13	Cycle	4.669	1.54	4.669	1.54	0.000
14	Access/Tertiary Road	1.075	0.35	1.075	0.35	0.000
15	farm Road	1.145	0.38	1.146	0.38	0.001
16	Primary Road	10.343	3.40	10.343	3.40	0.000
17	River/Stream	1.420	0.47	1.354	0.45	-0.066
	Total	303.889	100.00	303.889	100	0.000

The table below shows the number and areas of plots falling under various precincts of the built environment zone. There are 6 plots each of land type other than chhuzhing falling under agriculture precinct and environment precinct respectively. Further, 1 chhuzhing and 7 other land types are partially or fully affected by the waterfront precinct. There are also 4 plot and 25 plots of various land types respectively falling partially or fully under open space and road RoW.

Table 72 Affected Plots in CL Zone

Sl.No	Precinct	Land type	No. of Plots	Area (Acres)
1	Agriculture Precinct	Kamzhing	6	0.818
2	Environment Sensitive	Kamzhing	1	0.525
		Orchard	5	1.092
3	Waterfront	Chhuzhing	1	0.95
		Other Land Types	7	0.49
4	Open Space		4	4.4
5	Road RoW		15	0.89
	Total		39	9.165

8. Development Control Regulation

As per the instruction of the Ministry received on July 2, 2021 during the 36th PPCM the building heights for the precincts on the basis of the BBR 2018 with 3 floors as the minimum standard has been amended. The following precinct schedule and the permissible limits shall be read in conjunction with the Paro Valley Development Control Regulation (PVDCR) 2016.

Table 73 Precincts schedule under Cultural Landscape Zone

Precinct	Characteristics/Use Permissible	Objective	Special Conditions/Restrictions
Agriculture Precinct	Predominantly Chhuzhing located along the low lying plains of the valley.	Preserve and promote cultivation of agricultural produce	As a matter of principle, buildings and infrastructure will be prohibited. Exceptions, only for agricultural purposes, include small-scale structure and infrastructures as well as linking footpaths.
Religious Precinct	Places of religious, cultural and historical significance along with the immediate surroundings. Chortens, Mani Walls, Lhakhangs, prayer wheels, statues, monasteries and Heritage Village. Extensions and facilities directly related to the religious and heritage structures are allowed. Basic tourism related infrastructure may be permitted (e.g. information kiosk and toilets). Time-bound camping with basic facilities during festivals may be allowed nearby the religious and heritage sites.	Preserve and enhance in order to maintain the sanctity of the place	Clearance from MoHCA is required for development in the core and buffers areas of the heritage structures and sites. The provision of heritage Management plans will be used as an overlay.

	Transportation infrastructures, public parking may be allowed to enhance accessibility and connectivity.		
Dzong Precinct	Rinpung Dzong and its immediate surrounding areas. Restoration works and provision of amenities and services related to the Dzong precinct enhancement	Preserve and enhance	Clearance from MoHCA for any development in this precinct
Royal Precinct		Preserve and enhance	Development will be under royal prerogative
Open-space Precinct	Recreation, playgrounds and parks. Open parkways, children's playground, rock garden, water fountains, amphitheaters, gazebos, trellis, outdoor cafes, information kiosks, public toilets, and recreational landscape elements. Infrastructure related to sports and recreational facilities in the designated area may be permitted.	Preserve and enhance. Provide recreational facilities in strategic locations with adequate access.	Construction of public amenities like toilets, changing rooms and supporting structures for recreational activity may be permitted subject to clearance from MoWHS.

Waterfront Precinct	<p>Buffer of 30 m for Pachhu and Dochhu. 15 m for major streams.</p> <p>This buffer has been incorporated into the open space system and will form part of the open recreational area.</p> <p>No development is allowed within 30 meters from the two rivers and 15 meters from the edge of the stream.</p> <p>Footpaths to allow easy access for residents to move between the forest and the riverside may be permitted.</p> <p>Open space amenities like parks, gardens, and active recreational sports facilities like soccer fields, outdoor basketball and tennis courts etc. may be permissible.</p>	Preserve and enhance identified waterfront development areas	<p>Sporting facilities and sewage treatment plants may be permitted subject to clearances from relevant authorities.</p> <p>Water-based agriculture activities like fisheries and ponds may be permitted subject to clearance from relevant authorities.</p> <p>Construction of public amenities like toilets, changing rooms and supporting structures for recreational activity may be permitted subject to clearance from relevant authorities.</p>
Environmentally Sensitive Precinct	<p>Slope more than 50% and high hazard areas.</p> <p>Areas that are environmentally fragile in terms of slope and flood hazard.</p> <p>No constructions are permitted.</p> <p>Activities related to environmental enhancement and protection be permitted.</p> <p>Existing structures with prior approval may be retained.</p>	Preserve	
Forest Precinct	<p>Existing Government reserved forest and community forest.</p> <p>Footpaths, cycle tracks, walkways, and landscape elements for public parks will be permitted.</p>	Preserve	<p>No buildings should be constructed in the forest precinct with the exception for land identified for substitution in lieu of chhuzhing conversion.</p>

	Preservation of existing vegetation and use as passive outdoor recreation area		However, the land substitution will have to be allocated in clusters and not as individual isolated areas and due process for change in precinct will need to be followed.
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Table 74 Precincts schedule under Built Environment Zone

Precinct	Characteristics/Use permissible	Objective	Special Conditions/restrictions
Town Centre Precinct	Tshongdue area, high density mixed use and commercial development,	Promote high density mixed use and commercial development.	Residential, incidental to and limited to 50% of the built up area can be permissible. NOTE: <i>The Plot coverage and Floor height for Tshongdue will be as per the approved Layout plan for Tshongdue.</i>
Neighborhood Node Precinct	Medium density mixed use and commercial development for amenities and services	Provisioning of amenities and facilities accessible within comfortable distance at Shaba, Bondey, Lamgong and Luchi	LPG delivery centres and Fuel stations can be permitted under the fulfilment of all relevant safety norms.
Rural Residential Precinct	Medium density residential and mixed use area. Areas within 0 to 30 degree slope	Promote medium density residential and mixed use development with basic amenities.	Maximum of 3 floors with 40 % ground coverage shall be permitted. Institutional use may be permitted on a minimum plot size of 1000 sq.m Resorts, Hotels with boarding and lodging facilities in a minimum of 2,500sq.m plot may be permitted. Clearance from MoHCA is required for development in the plots of heritage structures and sites.

Rural Residential Precinct LD (Low Density)	Low density residential area. Areas within 31 to 50 degree slope	Promote low density residential development in the higher slopes.	Maximum of 3 floors with 30% ground coverage shall be permitted. Resorts, Hotels with boarding and lodging facilities in a minimum of 2,500sq.m plot may be permitted. Clearance from MoHCA is required for development in the plots of heritage structures and sites.
Traditional Village Precinct	Low density residential development Traditional mixed use settlements. Existing settlement clusters with rich traditional architectural features. Activities related to local handicraft and Home Stay may be permitted.	Preserve and promote traditional villages/clusters	Ancillary structures like store and cattle sheds of up to one storey only will not be considered under the coverage. Stringent Facade control Detailed scrutiny for architectural facades and materials. Clearance from MoHCA is required for development in the plots of heritage structures and sites.
Heritage village Precinct	Historic or traditional mixed use settlements earmarked for conservation. Activities related to local handicraft and Home Stay may be permitted.	Preserve and enhance	Renovation and restoration should be done with necessary care and attention after getting necessary clearances from the MoHCA. Stringent Facade control Detailed scrutiny for architectural facades and materials. Special approval from MoWHS required
Institutional Precinct	Land earmarked for Schools, offices and other institutions.	Medium density development for institutional purposes.	Residential and other activities incidental to the institutional use, provided only 20 % of the site is used for such activities.

Industrial Precinct	Medium Density development for economic activity.	To promote economic activities.	Subject to clearance from authorities such as the National Environment Commission (NEC)/ Dept. of Trade and Industry.
	Land earmarked for industrial and manufacturing units.		Provision for sewerage treatment plant within the premise
	Residential dwelling only for industrial workers and other public utility service staff, working within the industrial premises		
Military Precinct	Land earmarked for Military use	Security	The building construction will have to be in line with the traditional architectural guidelines and the Building Colour Code for Paro.
Service Precinct	Services such as but not limited to bus terminal, Taxi stand, Truck parking, workshops, stores and warehouse, fuel station, substations. Water treatment plants, settling tanks, sewage treatment plant.	To promote economic activity and services	
Airport Precinct	Existing Airport Area	As per Dept. of Civil Aviation	The building construction will have to be in line with the traditional architectural guidelines and the colour code for Paro.

The revised DCR is as follows:

Table 75 Revised DCR of PVDP

Sl#	Precincts	Revised DCR					
		Minimum Plot Sizes Decimal	Max. coverage %	Max. Height Floor	Min. Set Back(Meter)		
Front	Sides	Rear					
1	Town Center Precinct	5.5	60%*	5*	1.5	2	3
2	Neighbourhood Node Precinct	13	40%	4	3 or 5	3	3
3	Rural Residential Precinct	13	40%	3	3 or 5	3	3
4	Rural Residential Precinct(LD)	25	30%	3	3 or 5	3	3
5	Traditional village Precinct	13	40%	3	3 or 5	3	3
6	Heritage Village	13	50%	3	3 or 5	3	3
7	Institutional Precinct	25	30%	3	3 or 5	3	3
8	Industrial Precinct	25	50%	3	3 or 5	3	3
9	Military Precinct	-	-	-	-	-	-
10	Service precinct	13	50%	3	3 or 5	3	3
11	Airport Precinct	As per Department of Civil Aviation					
12	Agriculture	-	-	-	-	-	-
13	Forest	-	-	-	-	-	-
14	Water front	-	-	-	-	-	-
15	Environment Sensitive	-	-	-	-	-	-
16	Heritage	As Per Dept. Of Culture, MoHCA					
17	Dzong						
18	Open-space	-	-	-	-	-	-
19	Royal	-	-	-	-	-	-

Note 1 *: The Plot coverage and Floor height for Tshongdue will be as per the approved Layout plan for Tshongdue. The maximum allowable limits are not applicable to Tshongdue traditional building line.

Note 2 : Plot coverage: The maximum plot coverage shall be within the setback rules as prescribed in this regulation

Note 3 : All plots directly abutting the primary road shall have minimum front setback of 5 meters

Note 4: Clearance from MoHCA is required for development in the plots of heritage structures and sites which are under precincts other than Heritage precinct.

Note 5: Projected Balconies - Cantilevered balconies (not enclosed) projecting up to 1.5 m in the setback area from the ground floor level external wall face shall be permitted. Projections beyond 1.5 m may be permitted provided they do not extend into the setback areas and they are structurally safe. Such projections/structures shall not be allowed in the front elevation of a building. In case of buildings, where the setback is less than 3 meters, cantilevered balconies shall not be allowed only at the rear.

Note 6: The above setback and coverage requirement shall not be applicable for single storey ancillary buildings (temporary or semi-permanent farm related structures like cattle sheds and farm produce storage facilities).

Note 7: For the detailed Precinct Schedule that addresses the local level issues please refer to the Precinct Schedule framed under each LOCAL AREA PLAN.

9. Way Forward for Implementation

With the release of the rationalized precincts and amended Development Control Regulations, the Dzongkhag Administration is required to take due cognizance of the rationalized precincts and the amended Development Control Regulation while taking up any developmental activities within the planning boundary. While PVDP is a strategic document and only provides for broad land use and its permissible limits to regulate the development, the Dzongkhag need to take necessary action for proper implementation of plan and to achieve the overall vision and objectives of the PVDP:

- 1. Preparation of Local Area Plan (LAP):** The valley development plan as a higher level plan needs to be supported by lower level plans or the Local Area Plans (LAPs) for implementation to achieve the intended goals. The Dzongkhag needs to initiate the preparation of LAPs to resolve the issues related to plot access, buffers and replacement/readjustments.
- 2. Initiate conduct of EIA:** The Buffers for water bodies as provisioned in the the form of Waterfront Precinct are based on the requirement of National Environment Commission. However, there are existing structures on some buffer areas through reclamation of land and mitigation works. Without the proper EIA, the field verification alone could not validate the actual buffer requirement for the water bodies. Therefore, the Dzongkhag Administration needs to initiate the conduct of EIA to validate and establish the clear buffer line based on updated topographic data for water bodies.
- 3. Land type conversion:** The Dzongkhag should ensure that the PVDP is referred to and complied with at the time of proposing and recommending conversion of Chhuzhings to Khimsa.
- 4. Right of Way for storm water drainage:** A right of way of 2 meters on either side on small streams and natural gorges have been identified as an overlay for storm water drainage. No structure should be placed within the right of way. No construction improvements such as pools, fences, sheds or other structures within the drainage right of way should be allowed.

- 5. Prepare Infrastructure Plan:** The Dzongkhag should initiate preparation of infrastructure designs for road, water supply, waste water, storm water, utilities (telecom and electricity), etc. in coordination with relevant agencies.

- 6. Updation of Flight Funnel Map:** The Dzongkhag should facilitate the updation of the flight funnel map.