

CHAPTER 10 PRESENT CONDITION OF THE HERITAGE AREA

10.1 Heritage Conservation

10.1.1 Historic Buildings in the Heritage Area

(1) Overview of Historic Resources in the Heritage Area

During the British colonisation, most of the buildings from the Kandyan Period were demolished and replaced, except for the Temple of the Tooth Relic; Malwatta and Asgiriya Temple; the four temples Natha Devale, Vishunu Devale, Kataragama Devale, and Patthini Devale; and some buildings once part of the palace complex, such as Palle Wasala and Meda Wasala. The grid street pattern of the Commercial Grid was developed during the Kandyan Period and it should be also considered as an important historic resource as not so many buildings survived from the Kandyan Kingdom. Most of the historic buildings were built during the British colonisation.

Due to high development pressure particularly after the 21st century, buildings which date back to the Colonial Period were also demolished to make way for modern buildings.

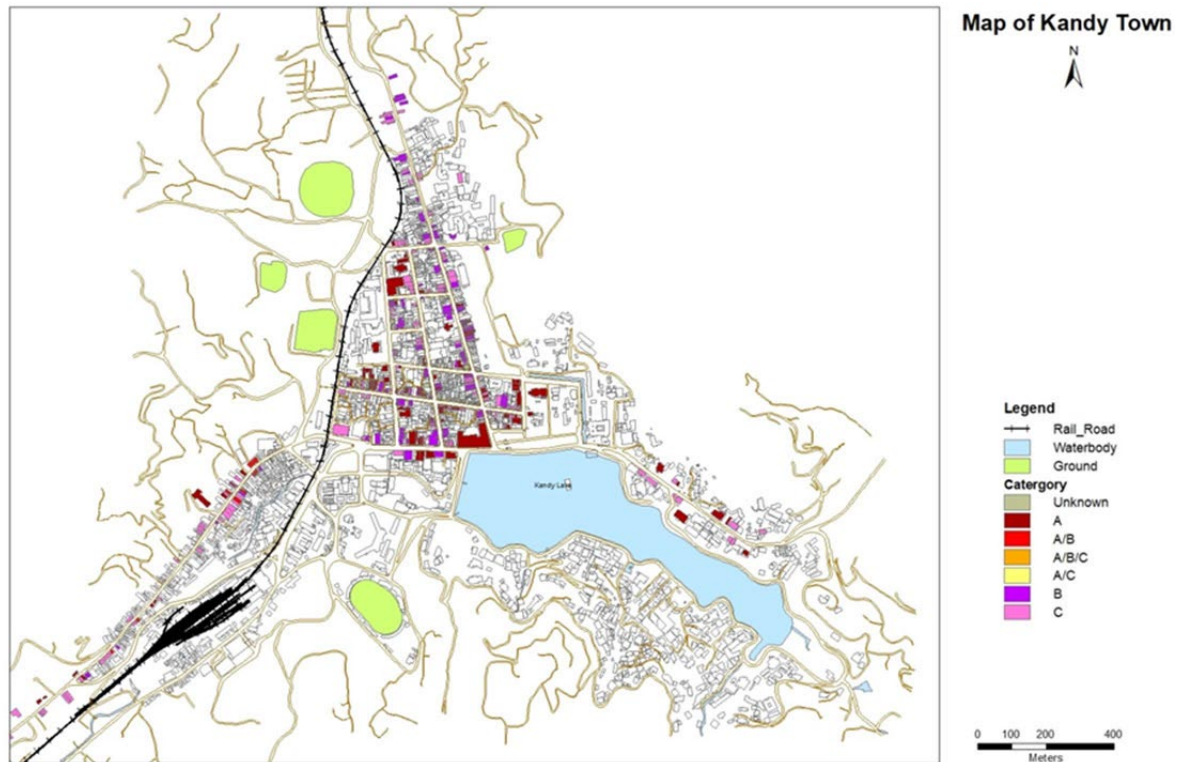
(2) Analysis of the List of Conserved Buildings gazetted by UDA

1) Overview

There are 488 buildings in the UDA's list of conserved buildings¹ while the separate list "Special Buildings within the City of Kandy" contains 23 buildings. They are both gazetted by UDA in 2001. The major difference between the former and latter list is in building ownership². UDA's list mostly contains privately owned buildings, while the list of special buildings includes those owned by public institutions such as Bogambara Prison, Remand Prison, police barrack, old Post Office, and Police Station Buildings, which are highlighted in red in the map below (see Figure 10.1.1).

¹ In the report, the term "conserved building" is used for the buildings designated in the DOA and UDA lists, while the term "heritage building" is used for both listed and non-listed historic buildings.

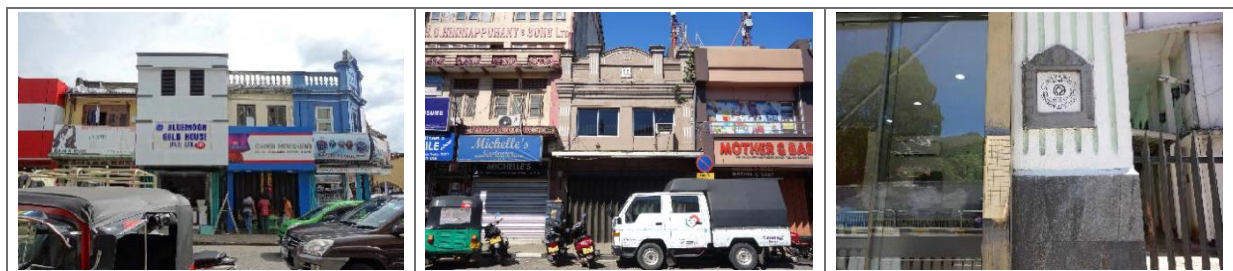
² Several buildings are designated in both the lists.



Source: UDA

Figure 10.1.1 Conserved Buildings in the City of Kandy

The UDA list contains mostly shophouse buildings along with some religious buildings, houses, larger commercial buildings like banks, utility buildings such as stable, and institutional buildings like schools (see Figure 10.1.2). The authorities put plaques on the buildings.



Source: The JICA Team

Figure 10.1.2 Typical Shophouse Buildings in Kandy and Plaque

In Sri Lanka, such shophouse buildings of Colonial Period have not been academically studied yet. These buildings designed for the needs of local people can be considered as “vernacular architecture”. In Japan and other countries, these everyday buildings are recognised as one of the important historic resources that represent past development pattern. They are not usually recorded as part of the official history of a country, state, or city. The special research method for vernacular architecture has been developed.

Most of the books on historic architecture in Sri Lanka (e.g., De Silva and Chandrasekara, 2009 “Heritage Buildings of Sri Lanka”; Lewcock et al. 1998, “The Architecture of an Island: The Living Heritage of Sri Lanka”) did not include the shophouse typology or other small houses that consist mostly the UDA list. In Colombo, similar shophouse buildings are found in Petah (see Figure 10.1.3), and in Slave Island (see Figure 10.1.4) districts of

Colombo but they are not protected by law, or their architectural significance has not explored yet. Due to strong development pressure, buildings of this type are likely to make way for new and bigger buildings.

Similar to the historic buildings in Colombo, Kandy’s vernacular architecture is not widely studied or recognised yet. Hence, a more detailed survey on such resource is needed to establish common values that people who are not necessarily interested in architecture can respect.



Source: The JICA Team

Figure 10.1.3 Shophouse in Petah, Colombo



Source: The JICA Team

Figure 10.1.4 Shophouse in Slave Island, Colombo

2) Responsibility and Process of Listing

To figure out how and who made the UDA list, the JICA Team conducted several interviews with the current senior staff at the UDA, KMC, CCF, and DOA as well as some scholars at the Architecture Department of the University of Moratuwa, and the professor at the University of Sri Jayewardenepura who was involved in the historic building conservation projects in Kandy right before and after the inscription of the “Sacred City of Kandy” as World Heritage. Based on these interviews, it was learned that the list was generated based on an agreement of four parties (UDA, KMC, CCF, and DOA) made around 1999, but no architectural historians were involved in the project. In fact, the quality of data that seemed to have been used to make the list was not extensive and, in some ways, inappropriate.

3) Relationship with the UDA List and World Heritage Status

Although the buildings in the list are often referred to as “World Heritage,” there is no proof that the classification is officially coming from UNESCO. All the official records, reports, and minutes of meetings regarding World Heritage properties are provided in the website of UNESCO’s World Heritage Centre. Kandy was inscribed by UNESCO as a World Heritage being “The Sacred City of Kandy.” However, based on the Advisory Body’s evaluation of the International Council on Monuments and Sites (ICOMOS) retrieved from the UNESCO World Heritage Centre website (<https://whc.unesco.org/en/list/450/documents/>), there was no reference to those buildings built after 1815.

Although, as previously discussed, since Kandy’s inscription as World Heritage is one of the examples in the earlier period for UNESCO, core properties and buffer zone were not clearly mentioned in this recommendation. However, this four-page document clearly points out the significance of the development of the Temple of the Tooth Relic (with the plan and photo in 2 pages). It pays attention to the history of Kandy during the Kandyan Period and also specifies the Royal Palace with the great Audience Hall, the Palace of Sri Wickrama, Queen’s apartments and bathing house in the northern area of Kandy Lake, as well as the three monumental groups of Dewala (temples), Malwatte and Asgiriya Temples, and Esala Perahera as important components of the World Heritage.

In this evaluation, a very brief reference was made to the phrase “sacred city” in Criterion VI, but it does not mention any colonial development pattern after the Kandyan Period. In fact, the criteria (see Figure 10.1.5) do not mention the inclusion of any development during the Colonial Period.

- Criterion IV. The monumental ensemble of Kandy, rebuilt under the reign of Keerti Sri Rajasimha, is an outstanding example of a type of construction in which the Royal Palace and the Temple of the Tooth of Buddha are juxtaposed. Since the 4th century it has been customary to do this. In the descriptive account left by the Chinese traveller Hiuen Tsiang in 629, the Temple of the Tooth of Anuradhapura was in close proximity to the palace. The same was true for the temples built in every place where the relic, a true palladium of the Sinhalese monarchy, was carried each time the capital was changed.

- Criterion VI. The Temple of the Tooth, the palatial complex and the sacred city of Kandy are directly and tangibly associated with the history of the spread of Buddhism, one of humanity's great religions. Built to house the relic of the tooth of Buddha, which had come from Kalinga (Orissa State, India) to Sri Lanka during the reign of Sri Meghavanna (310-328), when it was transferred a final time, the Temple of Kandy bears witness to an ever flourishing cult.

Source: ICOMOS (1988), Advisory Body Evaluation (<https://whc.unesco.org/en/list/450/documents/>) (retrieved on February 1st, 2017)

Figure 10.1.5 Excerpts of the World Heritage Criteria for “The Sacred City of Kandy”

Additionally, the buffer zone map is not available at the UNESCO World Heritage Centre website, and it is highly likely that the lack of determination of core properties influenced the lack of designation of buffer zone. The Team’s interviews with the UDA, DOA, CCF, and the person in charge of UNESCO in Sri Lanka shared that the buffer zones were considered several times but have not been finalised yet.

Interviews with the Chair of the Galle Heritage Foundation and a UDA senior staff who oversee Galle Fort, also a World Heritage, clearly indicated that Kandy’s case could be easier to manage in terms of designated properties compared with Galle in terms of management of World Heritage properties. This is because Galle Fort’s designation is for the entire fort development, including the buildings within the area; whereas in Kandy, the main property has been specified which is the Temple of the Tooth Relic.

It is not quite clear why and how the 488 buildings in Kandy have come to be considered as “World Heritage” based on the available documents and interview results, but it can be understood as Sri Lanka’s effort to control the development near the Temple of the Tooth Relic.

Having said that though, most of the buildings, when collectively seen, represent the past development patterns of Kandy after the year 1815 and can be considered as historic resources, if there are only enough data that could support this. The current information indicated that the list is not enough to make a strong case that the buildings are worthy of preservation despite the strong demand for real estate in Kandy. A professional assistance in conducting the detailed historic building survey is necessary.

4) DOA’s List

There is a separate list of important historic buildings gazetted by the Department of Archaeology (DOA) based on the Antiquities Ordinance, and these buildings are the ones which meet the criteria stipulated by the ordinance and mainly the ones which are 100 years

or older. The DOA's list, which was gazetted on July 8th in 2005 (No. 1401), contains 104 properties that quite overlap with the UDA's list. There are mainly two reasons why DOA's list contains fewer properties than that of UDA. One reason is the way DOA counts the buildings which somehow differs from UDA's approach. DOA assigns the number per building, while UDA does the counting per shop unit (shop ownership). There are many cases when one building has multiple shops with separate ownerships. DOA counts the entire building as one, while UDA counts the number of shop owners in the building.

Another reason is that DOA is simply more selective than UDA. For instance, DOA selects fewer buildings on D.S. Senanayake Veediya, Colombo Street, and Peradeniya Road than UDA. UDA includes some buildings on Kumara Vidiya, but DOA skipped this area. DOA's list contains only the assessment numbers of the buildings and indicates their uses and names. It does not have any accompanying text to explain why the buildings were selected nor provide detailed information on the buildings, such as year of construction and architectural style. The project team has yet to receive the detailed information for the DOA's list.

DOA's list and UDA's list might be made based on the same survey judging from the same sequence of the buildings and the streets in both lists. Considering the fact that DOA's list was gazetted later in 2005, the two lists are highly likely to be based on the same survey or the same method of determination.

Although DOA and UDA include the same buildings in their respective lists, they do not work closely together to manage these resources which could streamline their work and increase its effectiveness. They do not even merge the lists to see which ones overlap. The buildings which are either in DOA or UDA's list or in both should mainly be monitored by DOA, as its policing power is stronger than that of UDA in terms of the regulation of historic and cultural resources.

5) Errors and Lack of Information in UDA's list

In addition to the street elevations which were drawn by German architects, no detailed information was found for the 488 buildings in UDA's list. CCF had conducted a survey where its staff mostly revisited the sites and recorded the present condition of the buildings, but there was no interpretation or study to show what these historic resources represent or how they were developed over time. UDA, KMC, CCF, and DOA cannot provide definite information on what these buildings are when requested by the JICA Team.

By closely looking at the list (see Table 10.1.1), there are errors and lack of detailed information that could justify conservation, which is the most important reason why a building is designated as "heritage" or "historic". Table 10.1.1 shows some examples. No. 107 and 287 actually refer to the front and back façades of the same building, and hence should have been counted as one. No. 106 is a new building which should not be included in the inventory. Some accounts shown under "Importance of / Reason for Conservation" (e.g., Nos. 286, 311, 315, 364) are too mundane and weak in reasoning. In No. 364, for instance, if the building has "no distinctive features", then there could be no reason why the building has been included in the list.

Considering the fact that the survey is the only source of information on these "heritage" buildings, its quality may not be sufficient and needs enhancement.

Table 10.1.1 Excerpts from UDA’s List: Problematic Entries

Seq. No	Name of Establishment	Assessment No	Street	Present Use	Grade	Year of Construction	Character of Building	Importance for conservation	Notes
286	Boutique	13	Colombo Street	Shop	C	1950-1988		Small scaled humble building	Building with no distinctive features apart from the half round tile roof.
311	Mangalika Stores	169	Colombo Street	Shop	B	1900-1950	British Colonial	Charming building with half round tiled roof.	Two storied with timber/glass doors and windows.
315	Wickrama traders	243	Colombo Street	Shop	D			Corner building with humble appearance.	Small scale building with fairly altered façade.
316	Crown tea Stores	245		Shop					
360	Bowatta Ayurvedic Pharmacy	144	Colombo Street	Shop	C	1850-1900			
364	Sri Muthumara Stores	150	Colombo Street	Shop	B	1900-1950	Dutch/Kandyan	Building clusters with others	No distinctive features other than the valance
106	Union Bank	15/ 1	Temple Street	Office	B/C				Modern construction yet sympathetic to the existing. Form of the Old Empire.
107	Old Empire Hotel	21	Temple Street	Hotel	A	1857	Dutch/British	Gorgeous front arches and cast iron balustrade on upper floor.	Low rise two storey building with half round tile roof and simple timber valance board.
287	Pan of the Old Empire Hotel	21	Colombo Street		A	1857	British Colonial	Building with typical British moulded arches and columns. Fine form with timber/glass windows	Two storey building. Half round tile roof.

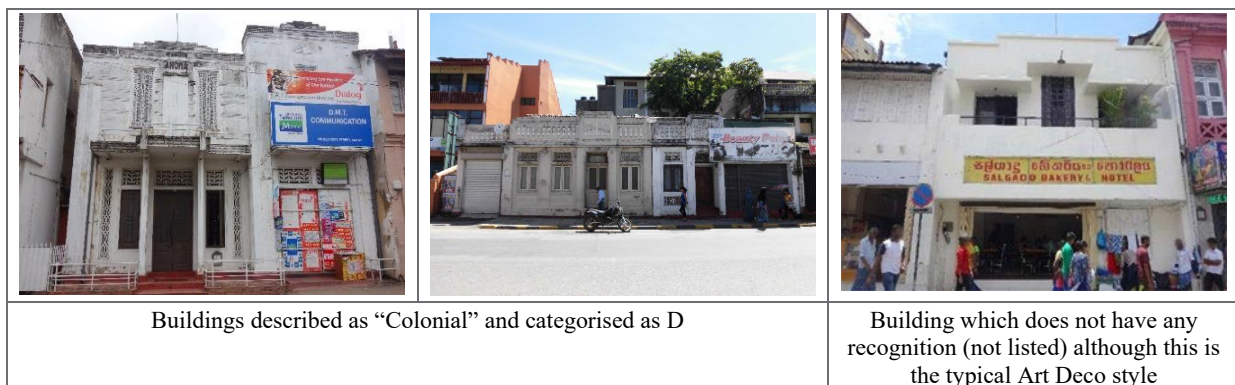
no info (except for Notes)

green letter: same bldg. red letter: inappropriate description (e.g. too subjective, not reasonable)

Source: The JICA Team³

6) Misunderstanding of Styles

Further analysis should be done by the architectural historian, but there is a clear misunderstanding of some styles, particularly the newer style such as Art Deco (see Figure 10.1.6). An on-site survey by the JICA Team showed that there are several Art Deco style buildings in the area, and not all of them have been included in the list. Furthermore, some of the buildings included in the list were inaccurately described as “Colonial”.




Source: The JICA Team

Figure 10.1.6 Art Deco Buildings in the Grid City

³ Retyped by the JICA Team to include the “Grade” which was added by hand writing on the original list.

7) Unclear Determination of Building Grades

In addition to lack of proper description and analysis of the buildings in the UDA list, the grades of the buildings do not quite seem to be consistent and reasonable (see Figure 10.1.7). For instance, the Giragama Walawwa is known as one of the few remaining *Walawwa* (headman’s house of the Kandyan Kingdom) in the Heritage Area, and therefore it should be categorised as grade A if its rarity is considered in the selection process. Also, some buildings classified as grade A seem to have identical features with those classified as grade C (e.g., nos. 93 to 97 Colombo Street and 45 Colombo Street).

Grade A			
	Queens Hotel	93-97 Colombo Street	45 Colombo Street
Grade B			
	Giragama Walawwa	Salvation Army	Bank of Ceylon
Grade C			
	49 Colombo St.	85-91 Colombo St.	

Source: The JICA Team

Figure 10.1.7 Grade Classification of Heritage Buildings

8) Monitoring the Buildings in UDA’s List

JICA Team has figured out that the buildings in UDA’s list have not been monitored properly for nearly twenty years. It is not even digitised and the authorities are using the old hard copies. Additionally, no one from the authorities has been tracking the changes or renovations of the buildings. In fact, there were several conserved buildings which were demolished without proper permit, by neglect on purpose, or significantly altered; but these are still in the list.

Aside from the need to update and/or amend UDA’s list, more academic and thorough research are necessary under the guidance of an architectural historian who has a lot of experience in researching the vernacular architecture in other Colonial cities.

(3) Analysis of Parameters, Grades, and Criteria⁴

The following are the identified guidelines including the description of parameters, grades, and criteria. However, these are not clearly indicated in the list (or in any related documents), and so is the reason for the selection of the buildings to be conserved. The “List of Parameters” should rather be understood as categories of values. The translation itself is not appropriate.

List of Parameters

Value parameters for selection of buildings to be conserved are the following ten values:

- Archaeological Value
- Architectural Value
- Cultural Value
- Construction Technology
- Raw Material Technology (Used)
- Usage of the Building
- Cultural and Context Environment of the Building
- Present Utilisation of the Building
- Purity of the Building
- Contextual Value of the Building

The preparatory survey also identified the respective grades and criteria of the buildings to be conserved. According to the interview of DOA, based on the value parameters referenced above, the buildings to be conserved are classified into three grades: A, B, and C, and each grade corresponds to the percentage of meeting the above parameters as shown in Table 10.1.2.

Table 10.1.2 Grade and Criteria for Classifying Buildings

	Percentage of Meeting the Value Parameters
A	80 ~ 100%
B	50 ~ 80 %
C	Less than 50 %

Source: DOA interview

A criteria D was also identified in some cases. These criteria are gauged by only looking at the architectural features of the façade and may not be sufficient to determine the values of the historic buildings to be conserved, particularly in cities like Kandy where land valuation is high. If the private property right is to be regulated, clearer values need to be established based on thorough research and data. Additionally, no one from the authorities quite understand what these criteria mean today. Several interviews with UDA, DOA, CCF, and KMC staff members did not give a quite firm definition. Some people believed that these A to C (sometimes even D shows up) criteria reflected the age of the buildings, which clearly does not correspond to the percentage criteria.

In most cases of building preservation in the world, the current conditions of the buildings are usually thoroughly described and researched, particularly in terms of architectural history and social history. This is to prove that a certain building is significant based on several reasons, as multiple reasons to designate a property are more convincing to the citizens, including the owners.

⁴ The guidelines indicated in this section were identified in the preparatory survey, and were not the regulations stipulated in the formal documents but the internal regulations for the relevant authorities in Kandy.

(4) Analysis of the Guidelines for Building Conservation

Guidelines were identified as shown in Table 10.1.3. Each grade has respective rules regarding building rehabilitation. However, the content has to be simplified, and the provisions or terms do not sound reasonable to the building owners for them to continue using their properties. Hence, the guidelines should be revised to ease the burden to the owners.

It is clear that grade A buildings cannot be demolished and both the exterior and the interior should not be altered, which is not quite fair to the owners who need to use the buildings for their daily activities. The JICA Team’s study revealed that in the 1990s, the authorities did not do any survey on the interior of the buildings, and they were quite sceptical if the buildings were worthy of preservation. If grade A buildings are to be regulated, both interior and exterior should have a detailed survey to prove that the interiors of the buildings are worthy of preservation and there is legitimate justification to regulate them.

The building conservation guidelines failed to consider the fact that these buildings continue to be used in a variety of ways. For instance, it is reasonable to ban building demolition; however, the law should allow some changes for the continuous use of the buildings to some extent, such as the removal of the decaying roofing materials or window panes. To just prescribe as “cannot be changed,” referring to the structure of the heritage building, is not quite respectful and realistic. No. 2 (no space to use raw materials) also does not make a reasonable sense.

Additionally, if the property is categorised as B/C, it is quite difficult to know which guidelines shall apply. Both grade system and guidelines need to be revised for the sake of the owners and users of the buildings.

Table 10.1.3 Guidelines for Conservation of Buildings

Grade	Guidelines
A	<ul style="list-style-type: none"> • Cannot be altered or demolished. • If it is necessary to do any changes to these buildings, it shall be compulsory that the plan is approved by the Technical Sub-Committee of the World Heritage Building Conservation and the Planning Committee of the KMC. <ol style="list-style-type: none"> 1. The plan shall be administered by the Technical Sub-Committee of the World Heritage Building Conservation. 2. The use of unnecessary raw materials is prohibited. 3. Only conservation is permitted. No modification is allowed. 4. Roof and the façade shall remain unchanged. 5. The plan shall be administered by the Technical Sub-Committee of the World Heritage Building Conservation. 6. Height of the building is not to exceed 40 feet within the World Heritage limits. 7. Owner shall agree to give permission to official supervision of the renovation of building, from the commencement to completion stage, by the World Heritage Buildings Conservation and Technical Committee. 8. The plan shall be submitted and supervised by a Chartered Architect. 9. The recommendations made by the World Heritage Sub-Committee shall be directed to the World Heritage Committee for information.
B	<ol style="list-style-type: none"> 1. Changes in the internal structure may be allowed. 2. Façade shall remain and be maintained as it is. 3. It is not necessary to consider 100% quality or usage of raw material for renovation. 4. Height of the building shall not exceed 40 feet within the World Heritage Boundary. 5. Distortion or destruction of the historical or cultural context is not allowed. 6. Renovation shall be fully controlled by the Planning Committee. 7. Approval shall be obtained from the World Heritage Committee.

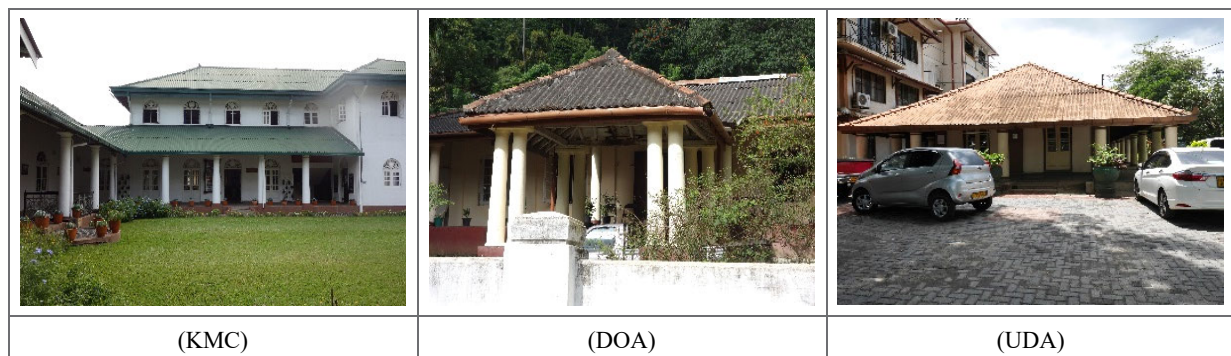
Grade	Guidelines
	8. Colouring shall be chosen in such a way that blends with the cultural heritage. 9. The designs of the floor and the roof cannot be altered. 10. The floor and the roof covering could be changed as appropriate.
C	1. If the façade of the building has ancient characters, these shall be protected. 2. Renovation may be allowed.

Source: DOA interview

(5) Analysis of Condition of the Listed Buildings

Most of the buildings in UDA’s list are deteriorating, except for the temples, the buildings rehabilitated through CCF’s fund such as Giragama Walawwa, CCF Information Centre and Salvation Army, and school buildings.

Even the buildings of the authorities that promote heritage conservation lack proper maintenance (see Figure 10.1.8), particularly their roofing since they are still asbestos or metal sheet instead of the traditional clay tile roofs. Generally, lack of maintenance on the roofs of the listed buildings is a major issue, and the cost of the clay tile roofs is high and the owners have not been provided any budget allocation. According to the sales manager at the Samson Rajarata Tiles, the largest manufacturer of clay tiles in the country, the cost of the clay tile roofing is approximately 1.5 times higher than that of asbestos roof. Several owners confirmed that in addition to the high cost of the clay tiles, there are two reasons that prevent them from using clay tiles: safety concern because of the heaviness of the material (structural issue) and incidents of monkeys trampling on the roofs and picking up the tiles.






Source: The JICA Team

Figure 10.1.8 Roofs of KMC, DOA, and UDA Offices

Another common issue is the lack of rehabilitation work in general (see Figure 10.1.9). Based on interviews with the building owners, they do not have enough money to cover the rehabilitation expenses, or they do not want to get into trouble in dealing with the authorities who do not give permit or do not give them enough instructions. There are several cases where such façades are covered by metal claddings (see Figure 10.1.10). However, in this case, the original façades were retained.

The subdivision of ownership causes another issue to the listed conserved buildings. In the course of time, one building could be subdivided into several units to be owned by different individuals. In general, no one among these owners facilitates the repainting or rehabilitation of the building, or the owners do not cooperate for its redevelopment. As a result, the building tends to lose its integrity (see Figure 10.1.11).

		
<p>Source: The JICA Team</p> <p>Figure 10.1.9 Deteriorating Condition Shows Lack of Maintenance</p>	<p>Source: The JICA Team</p> <p>Figure 10.1.10 Historic Façade Covered by Metal Cladding (Jewel Lanka shop)</p>	<p>Source: The JICA Team</p> <p>Figure 10.1.11 Lack of Integrity as One Building Due to Shop Owners' Uncoordinated Interventions to Alter the Structure</p>

In most of these cases, the buildings are occupied; listed conserved buildings that are vacant are few due to the high demand for real estate in the central part of Kandy. According to interviews with the authorities, there are some owners who are opposed to the inclusion of their properties in UDA's list due to the burden incurred by this, and intentionally neglect or accelerate the buildings' decay (e.g. by breaking the roofs) so that they can legally rebuild new structures.

There are several cases wherein historic buildings were torn down and replaced by much bigger buildings, while still "carrying" the heritage plaque. (See Figure 10.1.12). This poses a problem, since the original building cannot be identified anymore. Additional constructions visually dwarf small conserved buildings without regard for the original historic value of the structures. The worst practice is when listed conserved building are completely demolished to be reconstructed without any permit from the authorities, such as in the case of the building shown in Figure 10.1.12. In the field of heritage conservation (historic preservation), any intervention should be minimal and reconstruction is considered as the most radical intervention, which should be done when the building is already demolished.



Source: The JICA Team

Figure 10.1.12 Demolition of Most Parts of an Original Heritage Building in Kandy

<Reference Case of Galle Fort: Rehabilitation works and recent issues>

Galle Fort, located in the southern part of Sri Lanka, was also inscribed as a World Heritage Site in 1988. Unlike Kandy, which is the second largest city in Sri Lanka, Galle is a small and quiet fishing village mostly of Sinhala and Muslim communities. It has gone through significant social changes while the historic buildings within the area were rehabilitated.

■ **Galle Heritage Foundation**

Since the entire area within the fort is considered core properties of Galle Fort, there was a necessity to manage the changes of the hundreds of privately owned and actively used buildings. Hence, there was a need to establish a special organisation for this purpose which will also coordinate with the relevant authoritative stakeholders, such as UDA, Galle Municipal Council (GMC), and CCF. The law to establish the Galle Heritage Foundation (GHF) was passed in 1994 which allows it to acquire and dispose of properties confined to that area, and obtain funding for conservation works of historic buildings (Stubbs and Thomson 2017). According to the Chair of the GHF, because of this law, the Sri Lankan government granted some money for the employment of their staff.

■ **House Owners Programme**

Around 2007, GHF received the fund from the Dutch cultural grant and started the House Owners Programme. With the architectural professor of Moratuwa University as its conservation architect, the aim of the project was to rehabilitate the historic, privately owned houses located within the Fort. At first, even with the funding, the owners were not quite interested in the programme, but after hearing the explanation of the significance of such historic buildings, they started to become interested and began to cooperate. In the end, sixty buildings were rehabilitated. As a result, the streetscape of Galle Fort has been changed and now, the place has become one of the major destinations in Sri Lanka with so many hotels and restaurants catering to guests which do not necessarily benefit the local residents.

■ **Surge of private investments by foreigners**

By year 2000, it has become the trend to own a holiday home in Galle Fort among the investment bankers who worked in Asia (Samarawickrema 2012). By word of mouth, the reputation of Galle as a resort was increasing and a lot of foreigners purchased properties within Galle Fort, rehabilitated them with their own money, and sometimes resold them for capital gain. JICA Team identified several real estate agents' office within the Fort that facilitated the sale of popular historic properties within the Fort. The cultural properties have become sort of "consumed" just like commodities.

■ **Gentrification in the Galle Fort**

Although the buildings were improved, there has been an issue of displacement of existing local communities. Due to the increased property value, some Sri Lankan owners sold their properties to foreigners and went out of Galle, where they did not have any friends or relatives. The sudden increase of real estate values also made it impossible for the local people to buy or rent properties in the area. According to Professor Amanda Rajapakse of the University of Moratuwa, who emphasised the value of the communities in the Galle Fort as an important element of living heritage, it is true that the remaining Sri Lankan owners can benefit by earning extra income from renting one or two rooms to tourists. However, their community life has been negatively impacted by the increase in new unknown people who come and go, causing them to gradually lose their residential character.

When considering the heritage management in the living city, too much emphasis on preserving the physical characters and less attention to the people who live there can undermine the sense of place of Kandy where the people's activities (commercial and residential) are part of the elements of the streetscape.

Stubbs and Thomson (2017), "17 Sri Lanka and Maldives", *Architectural Conservation in Asia: National experiences and practice*. London: Routledge. Pp399-426

Samarawickrema, Nethra (2012), *Remaking the Fort: Familiarization, Heritage and Gentrification in Sri Lanka's Galle Fort* (master's thesis, Dalhousie University)

Rajapakse, Amanda (2018). "Exploring the Living Heritage of Galle Fort: Residents' Views on Heritage Values and Cultural Significance." *Journal of Heritage Management* 2(2), pp.95-111, <http://journals.sagepub.com/doi/abs/10.1177/2455929617743583>

10.1.2 Analysis of Relevant Regulations on Heritage Conservation

The Antiquities Ordinance, Urban Development Authorisation (UDA) Act, and the Central Cultural Fund Act are analysed with regard to heritage conservation. UDA’s “Development Plan for Urban Development Area of Kandy (Kandy Municipal Council Area) Volumes 1 and 2 (hereinafter referenced as “Development Plan) were also studied along with the relevant Gazette.

(1) Application of the Antiquities Ordinance in Kandy

As discussed previously in this chapter, UDA designated and gazetted approximately 100 buildings under the Antiquities Ordinance.

According to a senior staff member of DOA, in Kandy, the Temple of the Tooth Relic, Council Chamber, Queen’s Bath and Kandy Lake have been provided a 400-yard radius buffer zone each. Other colonial buildings which DOA believes to be more than 100 years old are also designated as monuments. However, it is not quite clear if each one also has this 400-yard radius buffer zone, which could virtually cover most of the Heritage Area if DOA strictly applies this buffer-zone rule. Nonetheless, some of these DOA-gazetted buildings are not maintained well or have already been demolished. Based on interviews, DOA does not have enough human resource to monitor such type of violation.



Source: The JICA Team. Information and data were provided by DOA; map done over Google Map

Note: Locations of the Royal Palace and Council Chamber may not be accurate. The centre point of the Kandy Lake was assumed.

Figure 10.1.13 Map Showing the Approximate Buffer Zone of Four Historic Places

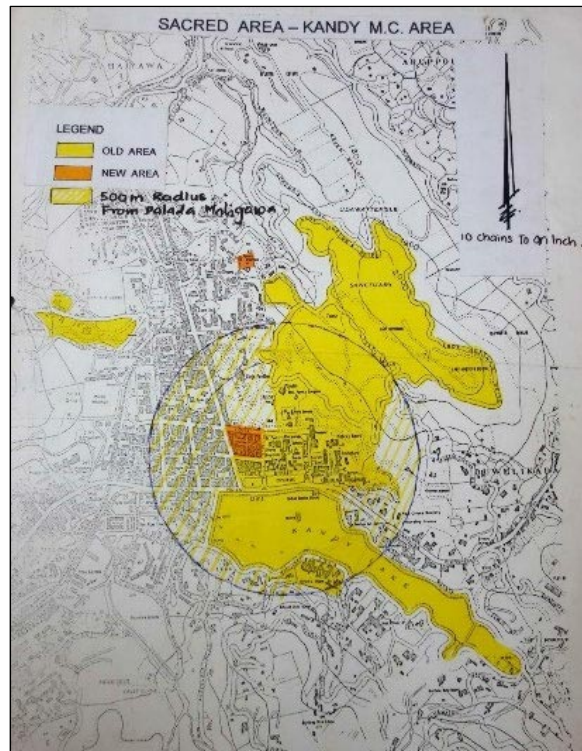
(2) Analysis of the Development Plan based on UDA Act

1) Zone for Conservation as an Area for Religious Purposes

In the case of Kandy, by using a Gazette (No. 301 of 08.06.1984 and 1209/19, November 08, 2001), UDA designated the precinct of the Temple of the Tooth Relic, Kandy Lake, Udawattakele Sanctuary, Asgiriya Temple, Malwatte Temple, Rama Temple, and the block that includes the Remand Prison as “a zone for conservation as an area for religious purposes.” These properties (except for Remand Prison block and Rama Temple) were included in the evaluation report of ICOMOS for the World Heritage Site. UDA applies the regulation to this area by imposing height restriction (rooftop to be 12 m or lower); restrictions on uses, signs, and design of new construction; and the use of chartered architects

only during planning and/or renovations works. However, these regulations in the gazette, being too technical, are not easy to understand by the public. Additionally, no official map that indicates the boundaries of the zone is attached to the Development Plan, making it really difficult for users.

The map (see Figure 10.1.14) from UDA, which was probably made for its study, shows a 500 m radius for the conserved area, but this map is not gazetted. Yellow and orange zones on the map indicate the “zone for conservation as an area for religious purposes,” while the circled area shows the extent of the buffered area that is not gazetted.



Source: UDA Kandy

Figure 10.1.14 Study Map of the Conservation Zone for Religious Purposes

2) Contextual Development Guideline

In Section 3.0 (Heritage) in the Development Plan, in which the above-referenced gazette is part of, UDA lists the heritage buildings for preservation. However, no detailed regulation is discussed in the gazette.

In the zoning section of the Development Plan, most of the current Heritage Area, excluding the above-cited protected religious and sanctuary zone, is classified as Commercial Zone 1. In this zone, the planner tried to apply the concept of contextual development by regulating the height of the buildings, mandating the use of the pitched roof with tiles, and encouraged a mixed-use character. Almost all commercial uses are allowed in this zone, but there is a restriction on the size of the offices, dispensaries, and hotels and an increase on this during development is not allowed. Also, the height restriction of 12 m (from the ground to the roof top) on buildings applies to this zone, while the minimum requirement of slope for the roof is 22.5 degrees. Although in other parts of the Development Plan, no clear association between 12-m maximum height requirement for a building and their proximity to the Temple of the Tooth Relic is discussed, Section 10.5.1 (Permitted Use) indicates that this height limit can be relaxed if the site is far from the Temple of the Tooth Relic. However, there is no clear indication of the relaxed for area.

3) Regulation on Signboards

The Development Plan contains the regulation on signs which applies to the Sacred Area Zone and Commercial Zone 1. This regulation clearly tries to minimise the size and number of signboards that can be installed within the Commercial Zone 1 (which includes the Grid City), and to make the listed conserved buildings stand out within the streetscape. If this regulation has been implemented appropriately, the proliferation of signboards and aluminium claddings which often go with the deteriorated historic buildings could have been prevented.

Table 10.1.4 Schedule IV Form “I”- Regulation and Specification for Notices and Advertisements within the Sacred Area Zone and Commercial Zone -I

Description
Standards and Specifications
<ol style="list-style-type: none"> 1. Signboards (Name Boards) of commercial/other institutions (including public institutions) and commercial advertisements <ol style="list-style-type: none"> i. One board not exceeding an area of 1/8th of the front façade of shop/office/other commercial advertisements ii. Shall not cover any window or prominent architectural features and shall not extend beyond the outer walls of the building iii. Height of the board shall not exceed 60 cm and shall not go beyond 60 cm from the front façade of the vertical plane. iv. Shall have a vertical clearance of not less than 2.5 m from the street level up to the lower plane and shall not exceed 5 m from the street level to the upper plane of the Name Board. v. Buildings abutting more than one street shall be allowed to display more than one Name Board facing each of these streets. vi. In case of conserved buildings, the Name Boards specified in 1 above shall be fixed outdoor so as to prevent the concealment of prominent architectural features specified in Form –H of Schedule-IV. vii. Neon lights and luminous lettering shall not be permitted.

Source: UDA’s Development Plan for Urban Development Area of Kandy

4) Past Effort to Implement Signboard Regulation

During the term of Mayor Ratwatte (2011-2015), there was a plan to introduce a rule on uniformly designed signboards to improve the streetscape of Kande Veediya. According to Mr. Ratwatte, since the Kandy Municipal Committee did not have enough financial resource to incentivise the change of existing signboards to uniform signboards, the Municipal Council agreed that the building owners would not pay a permitting fee for the installation of the first signboard and they will be charged only for succeeding signboards. However, this did not work as an incentive, as the owners were not willing to pay any amount for this uniform signboard. Furthermore, the merchants were reluctant to change their signboards by claiming that they had recently installed new ones. In the end, only one shop owner changed and introduced a new signboard.

According to KMC, this effort was in response to the above signboard regulation. However, the UDA regulation did not mean to enforce the uniform signboard, rule but just to allow variety as long as the signboards are modest in size and number. Therefore, there was a misunderstanding on the aim of the uniform signboard regulation and the application did not work out well.

10.1.3 Enforcement

Interviews with the authorities and professionals in architecture in Sri Lanka indicate that illegal construction activities persist. This does not only apply to Kandy, but also to other cities such as Galle. Additionally, the authorities emphasised that they do not have enough capacity to monitor such violations, and their decision-making process is hampered at times when some politicians intervene.

Judging from the text of relevant laws and regulations, both DOA and UDA have the mandate to penalise and file law suits. However, this mandate is not practiced to a maximum extent. This has created the situation wherein certain violations are overlooked and no penalties are imposed.

10.1.4 Organisations Involved in Historic Preservation in Sri Lanka

(1) ICOMOS Sri Lanka

ICOMOS Sri Lanka is a non-governmental organisation for the conservation of the historic resources in Sri Lanka and the national committee of the International Council on Monuments and Sites (ICOMOS)⁵. It was established in 1983 in association with the Cultural Triangle Project (CTP), and its headquarters is located in Colombo. It experienced a major expansion when Dr. Roland Silva was involved, who is the first Asian to become the president of the ICOMOS International⁶. The organisation has been instrumental in the research and conservation works in Sri Lanka not only in the CTP projects, but in other projects as well. For instance, after the disaster caused by tsunami in 2004, the organisation had conducted surveys and advocacy efforts for the historic monuments affected. The organisation regularly provides a lecture series on pertinent issues, and this is open to the public.

In Kandy, the direct involvement of ICOMOS Sri Lanka in conservation or any advocacy on the 488 listed conserved buildings has not been recognised yet.

(2) National Trust Sri Lanka

Established in 2005, the National Trust Sri Lanka is a relatively new, non-profit organisation advocating for the protection of the tangible and intangible heritage of Sri Lanka, which are not protected by any institution of the government. It is a member of the International National Trust Organisation. Its major roles are advocacy work through the provision of public lectures (mostly held in Colombo), tours, and publication of historic and cultural heritage.

In Kandy, its direct involvement in conservation or any advocacy activities on the 488 listed conserved buildings has not been recognised yet.

10.1.5 Potential Resource of the Detailed Research on Listed Historic Buildings in Kandy

In order for the cultural resource agencies in Sri Lanka to conduct the detailed survey on vernacular architecture which, as discussed previously in this chapter, the old documents (e.g., census, building permit, shop directories, phone books, newspaper features, and historic maps) that can potentially indicate the architects, original owners, year of construction, plans, drawings, and historic uses are the indispensable resources. In Kandy, the Department National Archives, Kandy Branch has collected and managed such information.

⁵ ICOMOS Sri Lanka website, <https://www.icomos.lk/index>

⁶ Stubbs and Thomson (2017), p.404

(1) Department of National Archives, Kandy Branch

The Department of National Archives is under the Ministry of Education. Its head office is located in Colombo, and the branch office is located in the area behind the Temple of the Tooth Relic (see Figure 10.1.15).

According to a staff member at the Kandy Branch, their office received the old public documents from the Kandy Municipal Council. Below (see Table 10.1.5) is the list of information that are useful for the research of vernacular architecture in Kandy. In general, all the documents are stored by file and no description or summaries are attached to each file and therefore, the researchers have to read the handwritten documents by themselves, which takes so much time.

For instance, the team has found the result of the first census of Kandy which was held in 1868 (see Figure 10.1.16).

The document shows all the occupations of the residents in Kandy in 1868. During this period, based on the list, there was no tea-related business but only coffee industry, which died out later. There is one known building (the Olde Empire Building at Temple Street) used as coffee factory and Coffee Planters' Fountain in the Grid City. Hence, the census gives information on the social background of the people during that period when these buildings and monuments were constructed.

This office is a very useful resource for the cultural agencies to advance the detailed research on the listed conserved buildings and to figure out not only their architectural, but also their social significance.

Table 10.1.5 Examples of Documents Found in the National Archives, Kandy Branch

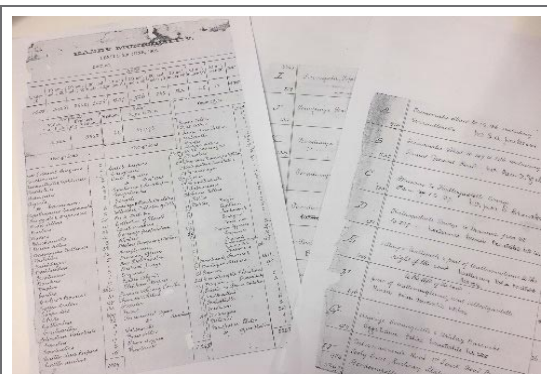
Archives Number	Year	Description	Findings
113-119	1868-1922	Census	Provide information on the society in Kandy during the Colonial Period.
911-924	1843-1924	Documents for Town Hall/ Kandy Town	The hall at KMC functioned as the public hall for the citizens to enjoy lectures and concerts.
1418-1479	1872-1933	Building Applications	Some of the documents have plans and the history of alterations can be traced.
1491-1691	1870-1930	Building Plans	

Source: The JICA Team



Source: The JICA Team

Figure 10.1.15 Department of National Archive, Kandy Branch



Source: The JICA Team

Figure 10.1.16 First Census in Kandy 1868

10.1.6 Citizens' Perception on the Listed Conserved Buildings and Advocacy

(1) General perception

Through public consultation meeting (PCM) and individual interviews with selected owners to be discussed in detail in a latter section, the JICA Team had found that the general perception on the listed conserved buildings is low. That is, the people do not quite understand why the buildings are called “heritage” as they are not related to the Kandyan Kingdom and were built by the British (a perception which is quite incorrect). At the PCM, the participants tend to say that they wanted to preserve the heritage, but none of them are relating to the building types in the UDA list except for the Giragama Walawwa, whose close relationship with Headman’s House during the Kandyan Period is now known; and the Queen’s Hotel, which is a landmark and semi-public building. Even the intellectuals such as the university professor and lawyer openly expressed that they did not understand why they have to preserve the buildings which were built by the Colonial monarch. Mayor Ratwatte also shared a story that there was an opposition from the public to the conservation of the Salvation Army Building through support from the Central Cultural Fund, as these people claimed that this was a building for the British.

There is basically no civic organisation that conducts research and advocacy for the preservation of the listed conserved buildings (civic involvement) and there is no public constituency for this type of historic resources.

(2) Heritage Club in Schools

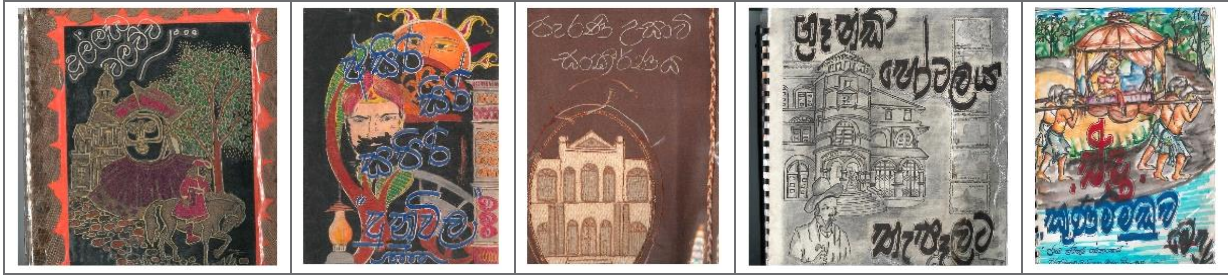
According to the Sri Lanka government’s report to UNESCO⁷, the Heritage Clubs were established by the Heritage Committee at the schools in Kandy. The JICA Team met the teacher and two students of the Heritage Club at the Trinity College. According to them, there are about six Heritage Clubs in Kandy, and they hold a Heritage Day to present a play portraying the Kandyan Kingdom. According to KMC, the Heritage Clubs were quite active when there was a strong support from the mayor, and they were engaged in research works and published the outcomes (see Table 10.1.6 and Figure 10.1.17). But the clubs are not quite active recently without the proper guidance. Considering the titles of their reports and interview results, the Heritage Clubs only focused on the heritage of the Kandyan Kingdom. The members researched on some Colonial buildings such as Queen’s Hotel and Post Office, which are landmark buildings with aesthetic aspect that is easy to understand. However, their interest or research was never extended to the small historic buildings of Colonial era like the shophouse buildings in Colombo Street.

Table 10.1.6 Reports Made by Heritage Clubs

No.	Title
1	Dullewa Walawwa (current Queen's Hotel)
2	Dunuwila Walawwa (current KMC Building)
3	Old Court Complex
4	Grand Hotel to the Post Office
5	Kunammaduwa - Those Days and Today

Source: The JICA Team

⁷ State Party: Democratic Socialist Republic of Sri Lanka (2003), “Periodic Reporting Exercise on the Application of the World Heritage Convention: Section II State of Conservation of specific World Heritage properties, The Sacred City of Kandy”. (<https://whc.unesco.org/en/list/450/documents/>)



Source: KMC

Figure 10.1.17 Reports by the Heritage Clubs (From left to right: Nos. 1 to 5 in Table 10.1.6 Reports Made by Heritage Clubs)

(3) Building Owners’ Club

In the government’s report to UNESCO in 2003, it refers to the authority’s attempt to create heritage (listed conserved buildings) building owners’ club to discuss pertinent problems. However, the Team’s interviews with several building owners and KMC staff confirmed that presently, there no such club exists. As a result, there is no consolidated group of heritage building owners, which makes it difficult for the authority to communicate with them efficiently and effectively.

10.1.7 Analysis of Conservation Practice

The Team had a chance to visit the conservation project site of the Remand Prison in May 2018 with Dr. Ota, who is an architectural historian and has many research experiences on Asian shophouse buildings. In the premise of the Remand Prison, there are three buildings. One is the main building which is the former Ehelepola Walawwa, and two other buildings which seem to have been used as prison cells. These two buildings were already rehabilitated. Dr. Ota pointed out that the way they conserved the buildings did not quite seem appropriate as almost all the historic materials were removed, and then replaced with new materials. One of the prison buildings (see Figure 10.1.18) even has automatic doors which obviously did not exist at the time of the original construction. The Team has identified the old materials stored on site, and they were not significantly deteriorated and can be reused if repaired appropriately. Intervention to the historic buildings is too extensive and the buildings look completely like a new one. In conservation work, it is a basic concept that the original historic materials should be kept as much as possible.



Source: The JICA Team

Figure 10.1.18 Prison Building at Remand Prison Site

10.1.8 Redevelopment Plan for the Heritage Buildings

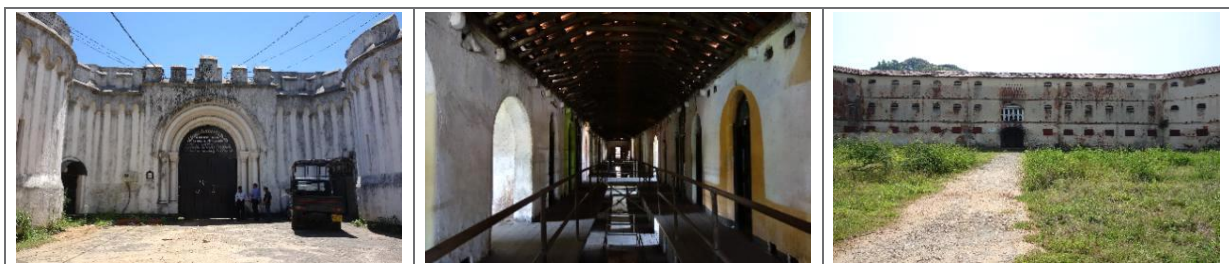
Currently, three projects to rehabilitate and adaptively reuse the heritage buildings have been identified. They are all projects by UDA comprising of conserved buildings that are DOA gazetted.

(1) Bogambara Prison

Bogambara Prison (Figure 10.1.19), which is located in the middle of the Civic Hub Area, will be turned into a mixed-use building with public open space in front. It is now owned by UDA, but some of the buildings behind the Bogambara Prison are still owned by other authorities at this point.

The redevelopment plan is not finalised yet, but the Ministry of the Megalopolis and Western Development has proposed to turn the main building into a pilgrim hotel by taking advantage of the small cells, local food restaurants, and local craft workshops and stores. Several small buildings located behind the prison, which do not date back to the original date of construction of the prison, are planned to be demolished and to be replaced by new, low-scale buildings which will accommodate some office use.

Currently, no decision has been made on who will redevelop the major part of the prison buildings. However, the open space in front of the old prison gate is under construction to be upgraded into a public park by UDA.



Source: The JICA Team

Figure 10.1.19 Bogambara Prison

(2) Remand Prison

The Remand Prison (Figure 10.1.20) is located at King Street and very close to the Temple of the Tooth Relic premises. There are three buildings in its vicinity. One is the single-storey, masonry building with a central courtyard which is considered to be a former Ehelepola Walawwa. Most parts of this building are not yet rehabilitated, but there is a temporary shed structure over the roof to prevent water damage to some extent. The other building in the vicinity is the two-storey prison building which housed the cells. The third one is the building right behind the Walawwa building, but it is not quite clear if it has been there before together with the other two buildings, or if this was a latter construction.

Currently, the buildings are under renovation by UDA who owns these sites. UDA is renovating the site without a clear idea of its future use, but it is considering to turn the place into a local food restaurant and a craft store, similar to its plan for Bogambara Prison.



Source: The JICA Team

Figure 10.1.20 Remand Prison

(3) Lawyer's Building

The Lawyer's Building (Figure 10.1.21) is adjacent to the Temple premises and has been used as lawyers' offices due to its proximity to the court, which is now relocated outside the Heritage Area. It is a two-storey, elongated, Neo-classical building with a series of round arches on the front façade. Each opening accommodates a lawyer's office. The black signboard that indicates the names of the lawyers holding offices in the building characterised the place.

The building owner claimed that he could not rehabilitate the building in accordance with the Heritage Committee regulation due to lack of financial resources, and he made an offer to UDA to purchase it. UDA has been considering to acquire it and adaptively reusing this building.



Source: The JICA Team

Figure 10.1.21 Lawyer's Building

10.1.9 Issues on Heritage Conservation in Kandy

There are many issues that have made the preservation of listed buildings by UDA and DOA improbable.

(1) Given Heritage: Opposite Process of Heritage Conservation

In general, heritage conservation, also known as *historic preservation*, is a bottom-up process, particularly when it comes to the vernacular buildings like shophouse buildings. In Japan, during the 1970s, after the new development almost wiped out the historic urban neighbourhood of shophouse buildings, people started to miss such types of historic resources. In response to the people's sentiment, the government has created the system to protect these resources as preservation districts. They were acquired heritage, and it is clear in the people's mindset that these resources are not created or given by the government.

In Kandy, on the other hand, the 488 listed buildings have become "heritage" through the intervention of the authorities. Unfortunately, there is no strong public constituency to protect these buildings as the people, in general, do not see the buildings built during the Colonial Period as part of their heritage. Without strong public support, heritage conservation could be very difficult, particularly in an urban area like Kandy where the land and property values are high. Historic buildings cannot maximise business profit due to high maintenance costs and regulations that limit changes in such structures. Heritage conservation cannot be achieved without the citizens' understanding and participation.

(2) No Leadership in Heritage Conservation in Kandy

Currently, no authority, not-for-profit organisation, or individual is taking the leadership in promoting heritage conservation in Kandy. In the past, there were some scholars and government officials that had strong leadership in promoting it, but these efforts had faded. In particular, the authorities just impose to the owners of such buildings to follow rules and regulations but failed to instil the values to get their cooperation, which is an indispensable process in successful historic preservation practices in the world.

(3) Lack of Academic Research on Heritage Buildings and Lack of Convincing Values Supported by Such Survey

As discussed previously in this chapter, the 488 buildings in UDA's list were classified without clear and strong reasons supported by thorough academic research. For instance, most of such buildings are shophouses which, when viewed individually, cannot be justified for preservation, but when considered collectively, such structures form the historic streetscape significantly represent the past development pattern of Kandy. The past research only looked at the buildings individually and paid attention to the aesthetic aspect. In order to better understand and instil the value of "heritage", more detailed and comprehensive architectural survey is indispensable. Without such scientific survey, it is quite difficult to convince the people to cooperate. Particularly, the socio-historic value of the shophouse buildings need to be explored to create the value that they represent, i.e. the social and commercial history of the ordinary people of Kandy, by exploring and analysing the raw data stored in the National Archives.

(4) Too Many Heritage Buildings to Manage

Given the lack of capacity, strong public support, support by the owners, education system, or financial support system (which were discussed in detail in Chapter 2), trying to protect nearly 500 historic buildings within a busy urban area is too ambitious and improbable. Even in Japan, the designation of historic and cultural properties virtually requires the owners' consent (agreement). In Kandy's case, prior consultation to the owners or asking permission from them have been overlooked. Explaining the necessity of conservation and asking permission from them should have been done. If they feel they were not incorporated into the process or their sentiments were not heard, they could not cooperate fully. Just sending letters of notice after the authority decided to designate the properties as heritage cannot be considered as consent acquisition; this shortcut will not suffice.

(5) No Obvious Relationship Between World Heritage Status and DOA or UDA's Listing

No obvious relationship between the World Heritage inscription in 1988 and the listing of 488 buildings by UDA in the late 1990s has been found. How the DOA, CCF, UDA, and KMC have decided to list so many Colonial buildings with the plaque of World Heritage during the 1990s is not quite clear, as those involved in such initiative were not available for interview. It is highly likely that there was a misunderstanding of the nature of Kandy's World Heritage status due to the ambiguous title "Sacred City of Kandy", which has given the incorrect notion of the properties that constitute World Heritage. Therefore, after a comprehensive research on Kandy's Colonial buildings, the list will be scaled down based on a more stringent evaluation to make the conservation plan of actions realistic and manageable.

(6) Lack of Proper Document Management System for Historic Resources

Most of the heritage-related documents (such as boundary maps, regulations, and list of conserved buildings) are being managed using the manual paper-based systems. Hence, there are difficulties in organising them well. It is partly because the staff at UDA, DOA, and KMC lack sufficient computer units to systematise their work. For the efficient management of information, it is highly recommended to improve the capacity of the authorities and help them communicate better with the citizens by giving easy access to the most up-to-date planning information.

(7) Lack of Professionals, Especially Architectural Historians, That Enable a More Appropriate Heritage Conservation in Kandy

Under the regulations of the conserved buildings, the owners have to hire chartered architects who are familiar with the system and design of historic buildings. However, in Kandy, such architects are not easily available. For instance, those who rehabilitated Oak Ray Restaurant

Building (along Deva Veediya) and Royal Bar and Hotel, which are two of the few buildings rehabilitated in the Heritage Area, were rehabilitated by architects based in Colombo.

According to a UDA staff, carpenters who can deal with the old buildings are also declining. On the other hand, according to a DOA staff in Kandy, they have pooled a group of skilled workers who can work on traditional building projects.

The access to traditional building materials also has to be assessed to make heritage conservation more realistic.

As there is no architecture and planning department in any of the universities in Kandy, no one from the architectural history or preservation field can pay attention to the neglected historic buildings of Kandy.

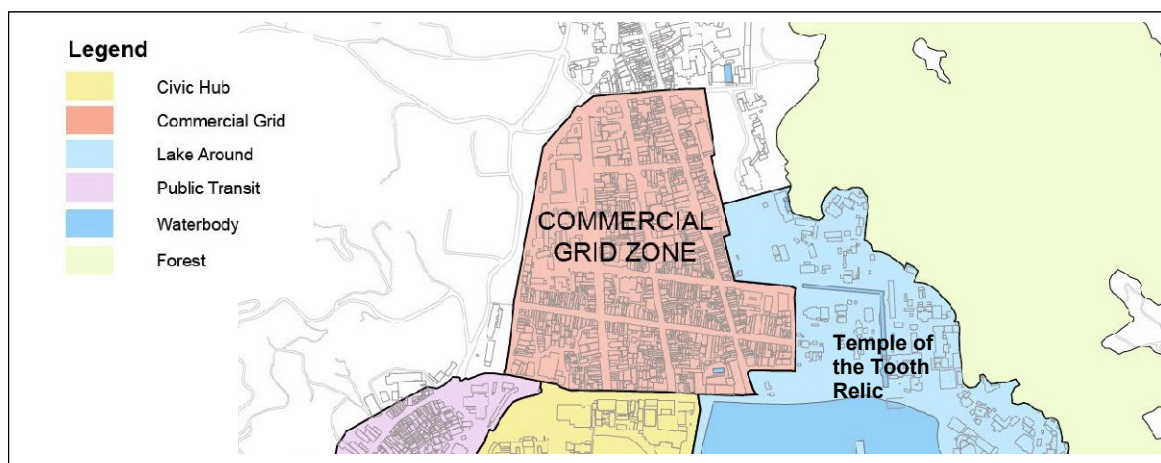
10.2 Landscape and Urban Design

10.2.1 Commercial Grid Zone

(1) Overview of Commercial Grid Zone

The Commercial Grid Zone, which is also referred to as “Grid City” in this study, is the area adjacent to the Temple of the Tooth Relic (see Figure 10.2.1). This area was laid out on a grid street pattern even before the British Colonisation in 1815, and according to an architectural expert in Sri Lanka (Prof. Manawadu of Moratuwa University), the grid was introduced by the Sinhalese king who adopted the idea from other cities in Sri Lanka which were occupied at that time by other Europeans. It was said that along the street, there were approximately twenty walawwa (headmen’s mansion who served Kandyan King). After 1815, these walawwa were mostly razed, although there were some such as Giragama Walawwa, Remand Prison, and Queens Hotel which were converted into houses by the British. During the British period, the entire area served as commercial area for merchants (i.e., first were coffee merchants, and later, merchants involved in tea industry). Until today, the buildings in the Grid City are utilised for commercial and institutional (e.g., government offices, schools), purposes. The use of the area is quite mixed.

In the JICA study, the eastern boundary of the Commercial Grid Zone is expanded to the adjacent Lake Around Zone, since the newly incorporated blocks are in similar urban situation to the original blocks of the Commercial Grid Zone shown in the Greater Kandy Master Plan.



Source: The JICA Team

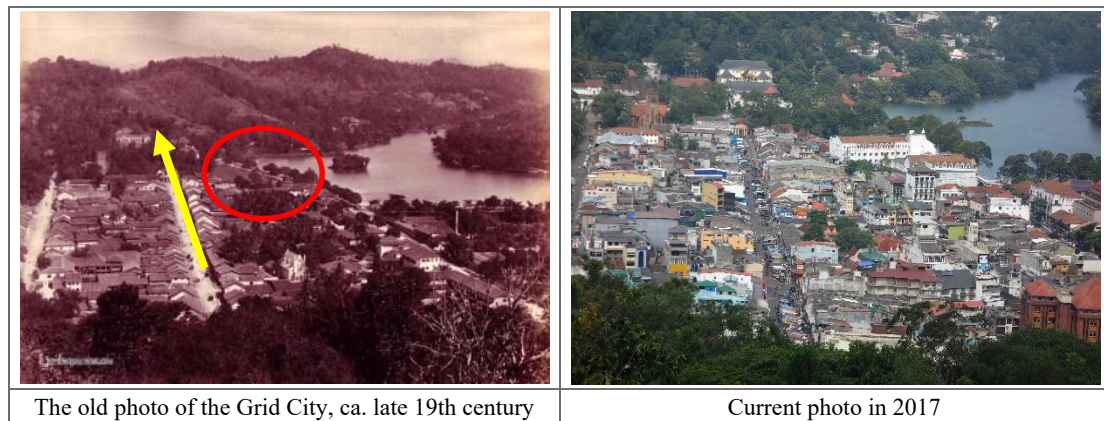
Figure 10.2.1 Location of the Commercial Grid Zone

(2) Landscape Characters and Analysis: Distant View Analysis

Only a few historic photos that can show an overview of the old Commercial Grid Area are available. One of these photos (see Figure 10.2.2, left) dates back to the late 19th century, which clearly indicates that around the turn of the century, the buildings in the Commercial Grid Zone were small-scale (both in terms of height and width of the buildings) and lined up along the streets. In this historic photo, it also shows that some greeneries existed, particularly around the block of Kataragama Devale (see spot circled in red in Figure 10.2.2). No trees along the streets were recognised within the Commercial Grid Zone in the past. Due to the lack of automobiles, relatively wide streets, along with lower-scale and less bulky buildings, the streets of Kandy (e.g., Colombo Street and King Street) almost served as visual corridors to the Temple of the Tooth Relic and the hills, which are located behind the temple, from the view point on the hillside. It is also noticeable that the roofs in the area

were mostly pitched roofs with clay tiles, which is the one suitable to the typical rainy weather condition of Kandy.

As expected, the current photo (see Figure 10.2.2, right) indicates a lot of difference from the photo taken in the late 19th century period. The buildings in the area have become much bigger and taller. The view of Commercial Grid Zone from the hilltop (in this case, from the mountain where the Bahiravokanda Vihara Buddha Statue is located) does not have any harmonious landscape. Additionally, the width of some of the buildings (such as the Queens Hotel, Casamara, and other office buildings) is too large to be harmonious with the remaining small-scale buildings. However, due to the consideration to the Temple of the Tooth Relic, most of the buildings are still relatively kept shorter and the view to the Temple and the mountains has no obstruction at this point.



Source: Left photo from Lankapura, Historic Images of Sri Lanka <http://lankapura.com/>, red circle and yellow arrow were added by the author. Right: JICA Team

Figure 10.2.2 Transition of the Distant View of the Commercial Grid of Kandy

(3) Mid-Distance View Analysis

1) Non-Contiguous Historic Streetscape

Although separate, a detailed historic building survey is required. It is highly likely that the listed conserved buildings and DOA gazetted buildings are not concentrated enough in each street within the Commercial Grid by the preliminary street elevation. The JICA survey has revealed that several conserved buildings were already demolished or significantly altered without proper permits. Hence, the authenticity and integrity of the historic resources are lost (unfortunately, the demolitions of these buildings were not reflected in the list of 488 conserved buildings), and the subsequent streetscape of Grid City cannot be easily recognised as historic. In order to claim that a certain street or neighbourhood has “historic” value as streetscape, a higher concentration of historic buildings, which are worthy of preservation, is necessary. However, in the case of Commercial Grid, while some streets such as Colombo Street (south side, between D.S. Senanayake Veediya and Kotugodella Veediya) still retains the relative concentration of listed buildings with the plaque, other streets such as Yatinuwara Veediya and Kumara Veediya are mostly lined up with new buildings which are taller and whose façades are not quite compatible with the historic façade materials. To preserve the historic streetscape, certain streets whose historic characters are more contiguous need to be selected as a future step.

2) Continuous Street Wall

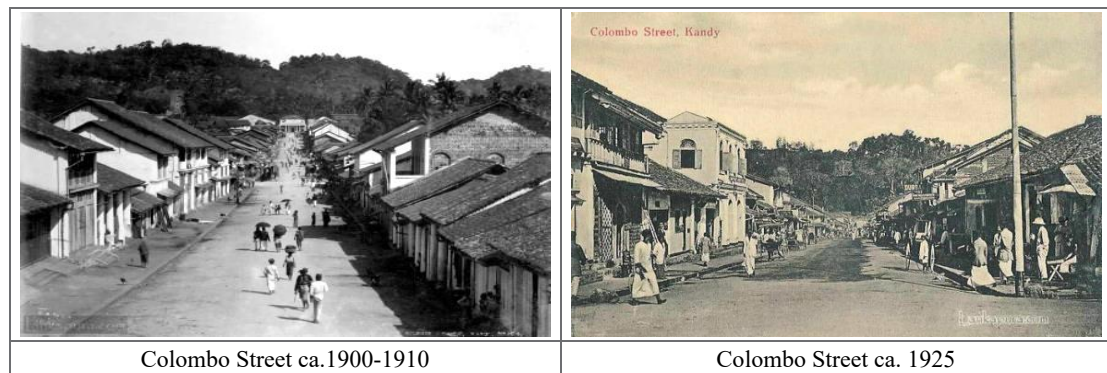
One of the most obvious landscape features of the Grid City is the continuous street wall or façade line.



Source: The JICA Team

Figure 10.2.3 Continuous Street Wall of the Grid City

As seen in the Figure 10.2.3, the building façades are lined up on the edge of the streets, and this feature is still recognisable throughout the Commercial Grid. Two historic photos taken at the turn of the century (Figure 10.2.4) also indicate this alignment of the building façades.



Source: Lankapura, Historic Images of Sri Lanka <http://lankapura.com/>

Figure 10.2.4 Old Photos of Kandy's Commercial Grid Zone

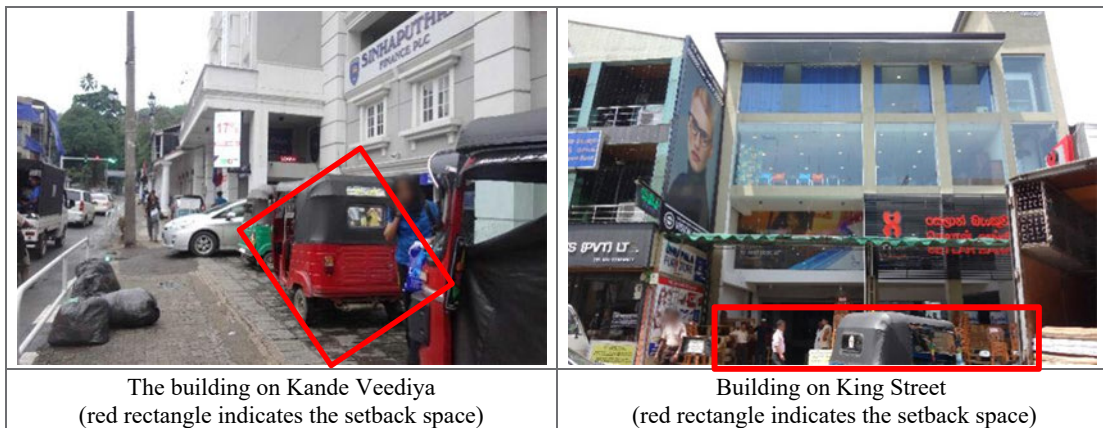
Historically, the Grid City is a mixed-use neighbourhood, and there have been non-commercial use buildings, such as houses and churches, in the area. These building typologies usually have setbacks from the edges of the streets; however, it can be recognised that there had been effort to create harmony with the other buildings lined up at the street edge. For instance, St Anthony's Church, whose entrance is located in Yatinuwara Veediya, and the house on D.S. Senanayake Veediya (Figure 10.2.5), have setbacks from the street edges; however, their walls are on the edges of the streets, which contribute to the continuous street wall or façade line.



Source: The JICA Team

Figure 10.2.5 Walls Constructed to Create Harmony with Other Buildings

However, there are some new constructions in the area that have broken this rule of continuous façade line by having the setback space, or having no fences or walls on the edges (Figure 10.2.6), breaking the continuous street walls.



Source: The JICA Team

Figure 10.2.6 Buildings That Have Setbacks

3) View of the Surrounding Mountains (including Udawatta Kele Sanctuary)

The historic photos of Colombo Street shown in Figure 10.2.7 clearly indicates that the hills of Kandy could be recognised from the street level. Today, due to the increase in the height and massing of the buildings along the streets in the Commercial Grid, the extent of greenery that can be seen from the street level is decreasing. Still, the landscape structure that shows hills as background can be recognised, and this should be retained as a character of the streetscape of the Commercial Grid.



Source: The JICA Team

Figure 10.2.7 View of the Surrounding Mountains

4) Small-Scale Neighbourhood (Height of the Buildings)

The overall height of the buildings in the Grid City is still relatively maintained low. Most of the buildings are 2 to 3 storeys high. (Further analysis is required to see the concentration of the small-scale buildings by using GIS. A GIS map showing the heights of the buildings in Commercial Grid Zone is to be generated later in this study when the information is fully available.) Notably, there are many new buildings that exceed 4 storeys, which are not compatible with the historically small-scale neighbourhood. Some of these buildings could have been built before the introduction of UDA’s Development Plan, whose target year was 2016, that tried to regulate the height of the buildings in the area.

5) Shorter Width of Buildings (Rows of Storefronts)

Most of the old shops and houses on the streets in the Commercial Grid have narrow openings on the façades. They are usually 3 to 5 metres wide. The continuation of the narrow storefront is an important historic character of the area (also recognised in the historic photos shown in Figure 10.2.8), as this has retained the historic land use pattern of the area wherein there has been a concentration of commercial buildings. This continuation of the small storefronts contributes to the vibrancy by creating the rhythm in the streetscape.



Source: The JICA Team

Figure 10.2.8 Width of the Buildings in Commercial Grid Zone

However, this character, which reflects the historic land use pattern, has been significantly altered today, and some new, large-scale buildings built by merging small lots are recognised. These are not compatible with the small-scale neighbourhood (Figure 10.2.9).



Source: The JICA Team

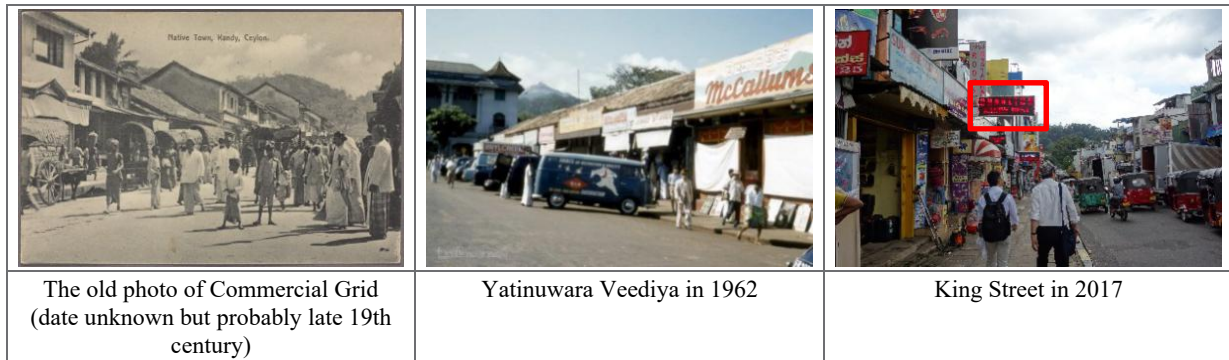
Figure 10.2.9 New Bank Buildings at Kotugodella Veediya

6) Signs

The signboard issue will be discussed in detail in a latter section of this report. However, it is worth noting as a mid-distance view analysis that the abundance of large-sized signage and several kinds of materials (including neon signs) recognised on the street level are obviously visually obtrusive. It is probably related to motorisation. Transition of the streetscape from the late 19th century through 1960s to present (Figure 10.2.10) clearly indicates an increase in the amount and size of the signage with the increase in car traffic. For instance, the photo of the Commercial Grid probably taken before the 20th century (below left) shows that the shops on both sides of the streets did not have large signs. In the past, when mobility was mostly done by foot or horse-drawn carts, the speed of travel was slow and most of the signboards that needed to be recognised by the pedestrians or passengers did not have to be huge. Additionally, it is likely that these commercial buildings were once used as storefront for the wholesale of tea or other commodities, and not as retail shops which usually required signs. At present, the buildings along the streets are more recognisable because their façades are more exposed whose details can be distinguished.

It is plausible that as people started to travel by cars, and there had been a shift from wholesale to retail in the overall commercial trend in the area, and store owners might have felt that it was necessary to install bigger signs for the sake of better recognition by the passengers who travelled through this area by car. The photo of the Yatinuwara Street in the 1960s shows that the signs were large, and one of the signs (on the right of the photo) was installed over the awning, along with the existence of cars on the street. The other signboards were hanged below the eaves, although the volume of signboards had become bigger. However, most of the signs seemed to have been installed below the eave line.

Today, just as shown in the rightmost photo below, there are several types of signs on the street (e.g. signboards, neon signs not shown in this photo with some free-standing sign posts). Due to the subdivision of the buildings and rental to the tenants, one building has the tendency to have multiple signs on the façade. This is obviously obtrusive to the streetscape. The colours of the signs (some have vivid colours like red, blue, and yellow) do not match with the historic buildings. In addition to the signboards which are placed on the façades and the hanging signs below eave lines (which will be discussed below), there are some signboards that stick out to the sidewalks, which further exacerbate the visual nuisance of signage in the streetscape.



Source: Left: New York Public Library (NYPL) Digital Collections <https://digitalcollections.nypl.org/>, Middle: Lankapura, Historic Images of Sri Lanka <http://lankapura.com/>, Right: JICA team

Figure 10.2.10 Changing Signs in the Commercial Grid Over the Years

Along Colombo Street and D. S. Senanayake Veediya, historically known as commercial streets, some rows of small, hanging signs which are right under the awnings of the storefronts are recognised (see Figure 10.2.11). Based on the design of the characters and physical deterioration of the signboards, these seem to be older (at this point, the average age of the signboards is not known, but it is likely that they have been there for at least twenty years) patterns on the street signage in the area. As they are small and fitted under the eaves and awnings of the buildings, they are not visually obtrusive. They are also likely to be designed for the pedestrians who walk on the pavements. If they are to be upgraded and designed in a nice manner, this type of small hanging signs can create the harmonious look of the commercial street on the pavement level.

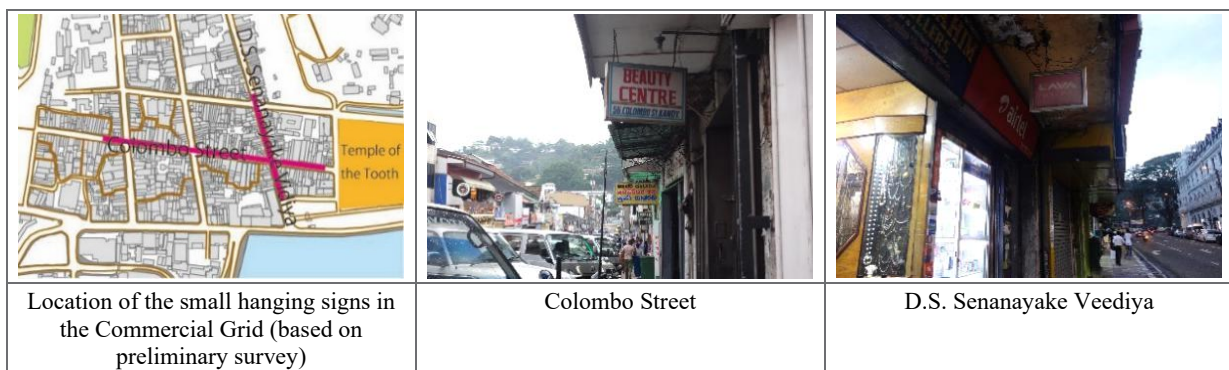


Figure 10.2.11 Small Hanging Signs in Colombo Street and D.S. Senanayake Veediya

(4) Close-up View Analysis

Analysis shown below mostly discusses the historic buildings, and further research is required. Some issues, such as signage can overlap with the mid-distance analysis, are discussed above, but this section mainly deals with the building level.

1) Design of Some Historic Corner Buildings in Major Commercial Streets

Some historic buildings which are located in the corner of major commercial streets tend to have chamfered corners and either dorms or pediment. These buildings were clearly designed to be seen from a distance and catch the eyes of the pedestrians and drivers as well. Such examples are the Queens Hotel, right in front of the Temple of the Tooth Relic and in the corner of two major commercial streets (Dalada Veediya and D.S. Senanayake Veediya), Muslim Hotel & Restaurant in the corner of Dalada Veediya and Yatinuwara Lane near the

Clock Tower, and the Shariff Building in the corner of Colombo Street and Kotugodella Veediya.

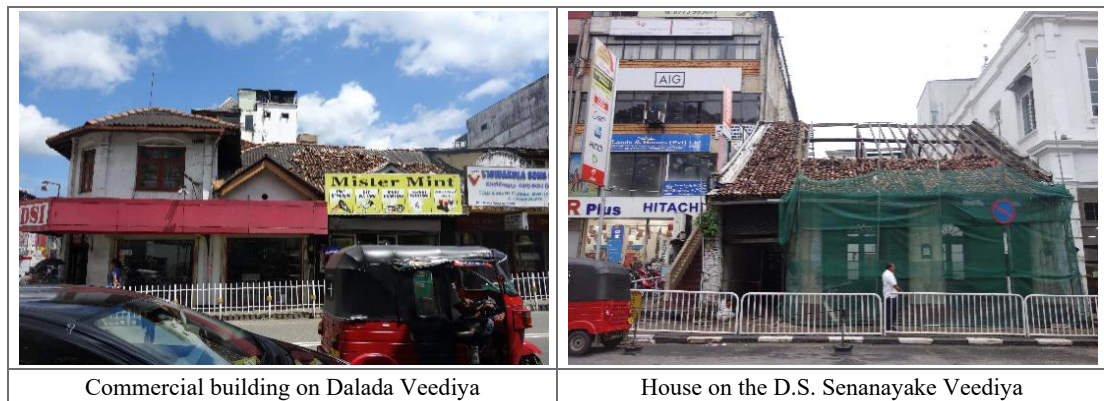


Source: The JICA Team

Figure 10.2.12 Designs of Historic Corner Buildings

2) Deterioration of the Façades or Exterior of the Buildings Due to Lack of Maintenance or Intention of “Demolition by Neglect”

In general, roofs are notable features in the streetscape. In the Commercial Grid and other parts of Kandy, historic roofs are being neglected (Figure 10.2.13). In particularly the clay roofs were replaced by asbestos sheets whose colours had faded and had become white or grey. There are some historic buildings where the roof is broken and the water leaks inside. This condition will definitely escalate the building damage and hence, the building could collapse by itself. This phenomenon is called “demolition by neglect” and is often observed in historic areas where people do not pay attention to the historical value of the buildings. Letting the windows or roofs be broken, or allowing graffiti on the walls, gives a bad visual influence on the entire neighbourhood, and it sometimes decreases the property values of the adjacent sites.



Source: The JICA Team

Figure 10.2.13 Deteriorated Façade and Exterior of Historic Buildings

3) Cladding on Historic Buildings

There are several buildings whose façades are covered by aluminium or other metal siding materials, and the view of façade is blocked (see Figure 10.2.14). In an interview with a listed building owner, it was revealed that even though the owners wanted to rehabilitate the historic façades, they could not afford it, and so they just covered the façades to make these look acceptable to their customers. The building owner also indicated that the authorities did not mind the proliferation of such cladding on the listed buildings.



Source: The JICA Team

Figure 10.2.14 Cladding on Historic Buildings

4) Past Signage Installation Pattern and the Recent Oversized Signage

Although there is an influx of newly installed, large-size signage – which are visually obtrusive – in the Commercial Grid Zone, the remains of the older signs which seem to be more compatible with the buildings still exist. An on-site examination of the older signs based on the styles and condition of the boards indicates that they are more harmonious with the façades. As seen in the rectangular marked areas in the photos below (see Figure 10.2.15), there are two signs per shop (two signs for the same shop) and the older style signs are placed under the awning or eaves, while the new ones are located above them. The former installation type seems to be more common in the past, and this location of the sign does not quite stand out and thus is harmonious with the historic buildings.



Source: The JICA Team

Figure 10.2.15 Old and New Signs in Historic Buildings

There are many cases where the signs almost cover the entire façade of the building (see Figure 10.2.16), which obviously does not meet the requirement stipulated in UDA's Development Plan. Based on the design and the condition of the signboards, many of them seem to have been installed after the enactment of the Development Plan, but the owners have not been penalised by KMC. On the other hand, KMC collects fees from those who install the signboards, and this system is likely to prevent the authority from penalising those who are not compliant with the UDA sign regulation.



Buildings on the D.S. Senanayake Veediya

Buildings on Kande Veediya

Source: The JICA Team

Figure 10.2.16 Signs Which Cover the Building Façades

5) Colours of Historic Building Façades

There are several cases wherein the colours of the façades are quite vivid and do not match the ambience of a historic neighbourhood (see Figure 10.2.17). Due to the subdivision of building ownership, one building could have several different colours, with no harmony or scheme, which undermine the integrity of the historic façade. Some kind of coordination among tenants or owners is necessary to have an integral façade colour in the future.



Blue historic corner building on Colombo Street

Building painted with three different colours on Kotugodella Veediya

Source: The JICA Team

Figure 10.2.17 Colours of Historic Building Façades

(5) Other Urban Design Resource: Alleyways

Within the Commercial Grid Zone, particularly in the blocks bounded by Dalada Veediya and King Street, there are some networks of alleyways (Figure 10.2.18). Some are used as back lanes, but most of them are used as commercial streets, where the shop openings are lined up on both sides (see Figure 10.2.19). These shops mainly cater to the local people. This vibrant streetscape along the alleyways can be also appealing to the foreign tourists who want to see the real urban life of Kandy.



Source: The JICA Team

Figure 10.2.18 Network of Alleyways in the Grid City



Source: The JICA Team

Figure 10.2.19 Typical Street Scene in a Commercial Alleyway

The widths of the alleyways are not uniform and their configuration is organic. This gives a great contrast with the wider, straight, and planned development of the grid street pattern, which can add attractiveness to the diverse walking experience of the pedestrians.

The narrowness of most of the alleys prevents cars from coming in, or at least, limits the through-traffic flow and keeps streets more pedestrian-friendly. Although their street patterns are organic and not straight, they are connected to the wider streets (grid streets), creating almost no dead ends, and function as part of the pedestrian circulation network of the entire Commercial Grid Zone. If a pedestrian wants to go to the Temple of the Tooth Relic from the train station, he or she has an alternative to walk on this way instead of having to use Dalada Veediya or Colombo Street.

A historic map of Kandy Town in 1928 (Figure 10.2.20), which was obtained from the British Library by Prof. Ota – who was commissioned to conduct a detailed architectural sample survey as part of the GKUP project – clearly shows that the street patterns of these alleyways were already developed by then, and they have been there for nearly 100 years. Therefore, this can be also considered as important historic resource. It is highly plausible that based on the fact that these alleys are recognised in this 1928 map and painted in the same colour as the other major roads, they have been granted the status of public roads.

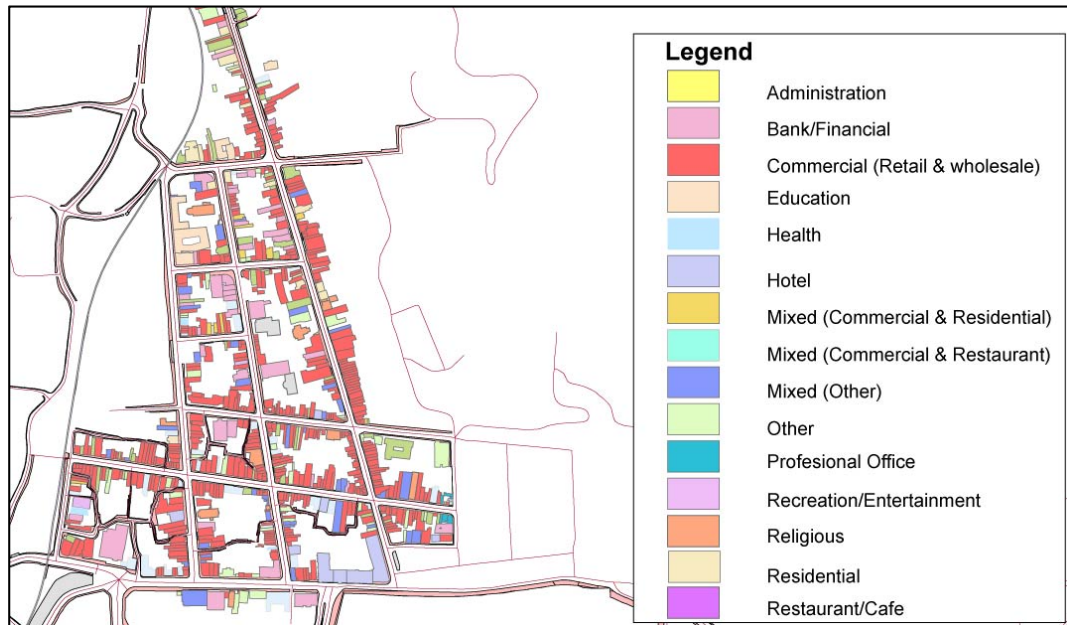


Source: Kandy showing municipal limits excluding the suburbs of Katugastota, scale, 12 Chains to an inch (Ceylon: Survey Dept., 1928), archival document of the British Library (U.K.).

Figure 10.2.20 Part of the Map of Kandy Showing the Network of Alleyways in the Grid City Area in 1928

(6) Building Uses

The Commercial Grid Zone is a mixed-use neighbourhood of commercial, institutional (e.g. government office, schools), and residential, with strong emphasis on commercial activities (Figure 10.2.21).



Source: The JICA Team

Figure 10.2.21 Building Uses in the Commercial Grid (2017)

1) Commercial Uses

The types of commercial activities are diverse such as restaurants, cafés, bakery, hotels, vegetable shop, dried fish shops, jewellery shops, Buddhist altar fittings, clothing shops, textile shops, shoe shops, building material wholesale outlets, auto parts shop, printing shops, banks, and offices. As Kandy has been the largest city in the Central Province, this Commercial Grid has been the centre of commerce in the province.

Most of the shops in the zone cater to the local people. There are some restaurants, cafés, and souvenir shops that target foreign tourists, but they are not so concentrated and are located mostly along Dalada Veediya, Temple Street, Colombo Street, and King Street.

These local retail and wholesale businesses tend to be housed in old (including heritage buildings), small buildings. Some of such businesses have been around for approximately 100 years, such as Nagalingams Jewellers and Banda's Boot Works, which makes custom-made leather shoes.

Wholesale activities are concentrated on Colombo Street, while the building material shops are concentrated on King Street between D.S. Senanayake Veediya and Kotugodella Veediya.

Even though not geographically concentrated, the buildings used for banks or any other financial institutions are also often seen in the area (Figure 10.2.22). They tend to occupy the taller buildings (4 or more storeys), some of which were newly built with large footprints, which are out of character of the originally small-scale neighbourhood (Figure 10.2.23).



Source: The JICA Team

Figure 10.2.22 Location of the Bank / Financial Buildings (2017)



Source: The JICA Team

Figure 10.2.23 Examples of Bank Buildings

2) Historic Buildings for Residential Use

There are some historic purpose-built residential buildings, and some of them are still being used as such. These buildings are particularly seen on northern part of D.S. Senanayake Veediya, Kande Veediya (Hill Street), and Cross Street (Figure 10.2.24). Based on interviews with the occupants of these residential buildings, until about 20 years ago, there

were more residential buildings in the Commercial Grid Area. But the urban living condition has become exacerbated due to the increased concentration of commercial activities and increase in car traffic, and these made their neighbours decide to leave the area for good.



Source: The JICA Team

Figure 10.2.24 Examples of Purpose-Built Residential Buildings

(7) Other Planning Issues

1) Excessive Use of Spaces by Vehicles

Currently, a huge portion of the Commercial Grid Zone is occupied by automobiles, despite the original character of being a human-scale neighbourhood. As it has been already recognised, the traffic volume on the streets of the Commercial Grid Zone is very high, as these are connected by arterial roads such as Dalada Veediya and D.S. Senanayake Veediya. The proliferation of cars is not only visually obtrusive, but also deprives pedestrians of the safe walking space as well as clean air.

In general, most of the streets in the Commercial Grid Zone are used as on-street parking spaces (see Figure 10.2.25) due to lack of off-street parking space and efficient public transportation system that can decrease people’s dependence on the use of personal vehicles. Most parts of the right-of-way are occupied by so-called angle-parking, which undermines the smooth flow of traffic. These cars, trucks, three-wheelers, and motorbikes on the streets do not just hinder safe walking, but also prevent the passers-by from appreciating the listed conserved buildings along the streets. Some blocks in the zone are particularly congested with parked trucks. Colombo Street between the railway track and the Kotugodella Veediya are mostly occupied by trucks of wholesale businesses (see Figure 10.2.26).



Source: The JICA Team

Figure 10.2.25 On-Street Parking Space in Kotugodella Veediya



Source: The JICA Team

Figure 10.2.26 Trucks Parked Along the Street

Figure sidewalks in the Commercial Grid do not have uniform width. Some are wider than others, but there are many places where the sidewalks are approximately 1.5 m in width with a busy flow of pedestrians during the daytime (see Figure 10.2.27). In addition to the congestion of cars on the rights-of-way, the pedestrians are not comfortable, in general, as they walk on deteriorated sidewalk pavements (see Figure 10.2.28).



Source: The JICA Team

Figure 10.2.27 Narrow Sidewalk in Colombo Street



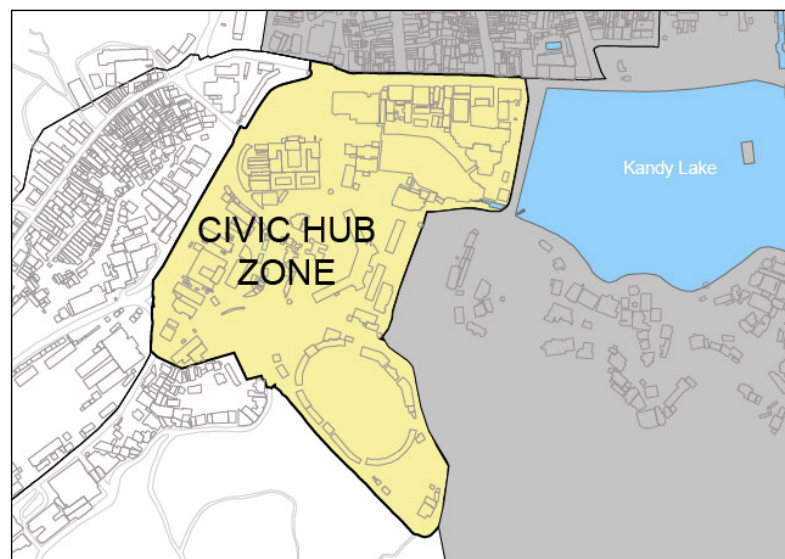
Source: The JICA Team

Figure 10.2.28 Deteriorated Sidewalk Pavement

2) Lack of Open Space

In the Commercial Grid Zone, there is no designated park or open space except for the plaza in front of the Temple of the Tooth Relic. Interviews with the heritage building occupants (which will be explained in detail later in this chapter) revealed that in the past, the streets with much fewer traffic were once used as playground by children. According to some residents, they could even play cricket on the streets back then. An increase in traffic volume seems to be exacerbating the issue of open space shortage in this zone. Also, the lack of open space would result in a problem not only in amenity for citizens and visitors, but also in disaster prevention in the zone where buildings are densely assembled.

10.2.2 Civic Hub Zone

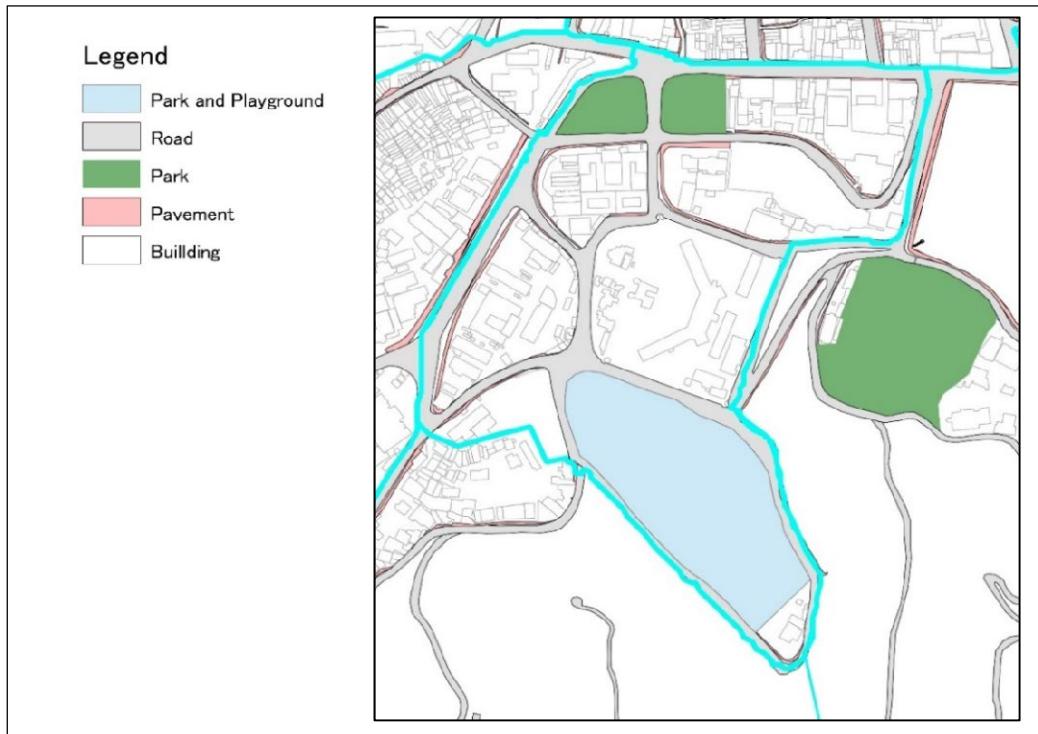


Source: The JICA Team

Figure 10.2.29 Civic Hub Zone Situation and Analysis

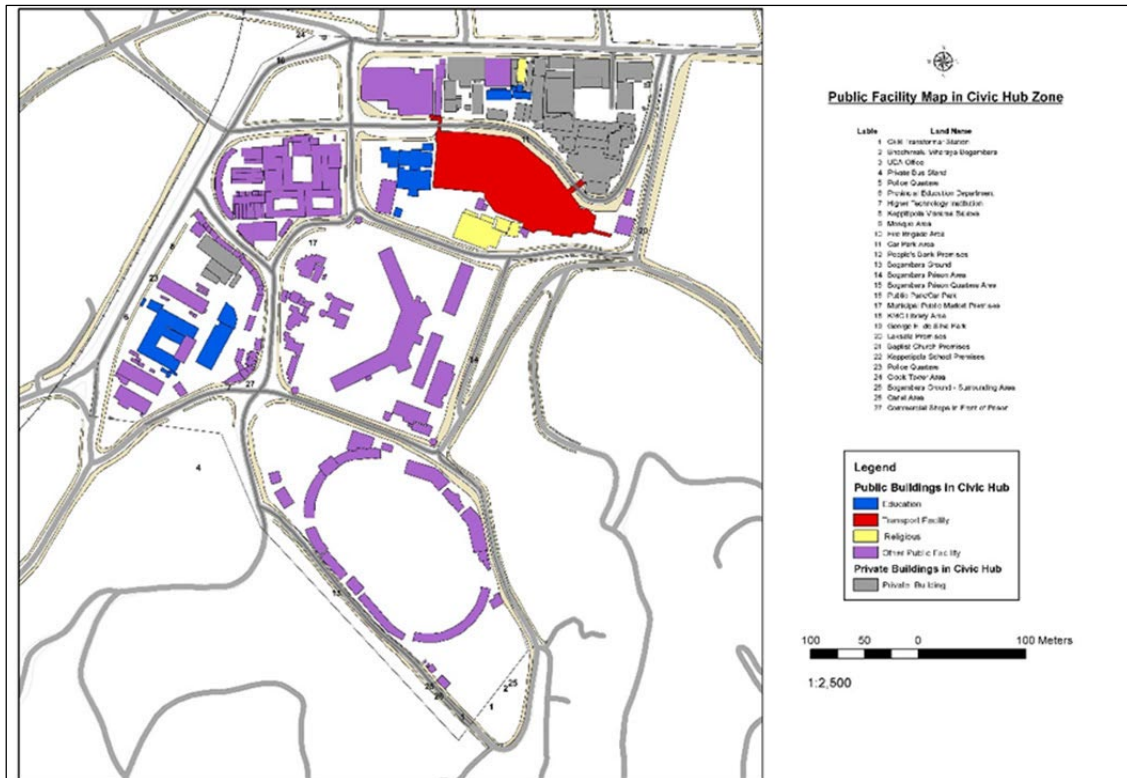
The issues associated with the Civic Hub Zone are as follows:

- Bogambara Prison must have adaptive reuse for it to serve as an intermediary point between the arrival and destination of tourists. This, along with other major destinations, can be considered for planning of pedestrian movement.
- Most of the public facilities (as shown in Figure 10.2.31) and public lands are not open for public use, thereby making them impervious for pedestrians to move through; for example, the lack of integration of Bogambara Prison precincts with tourists' flow.
- There is a lack of clarity on the flow of tourists through Civic Hub which gets complicated by the unguided pedestrian movement and discontinuous pedestrian infrastructure. The ped-shed analysis (5 minutes or 400 metres walking distance) of four major places (shown in Figure 10.2.32) – Railway Station, Clock Tower, Temple of the Tooth Relic and Bogambara Prison – shows that there is a need to have intermediary spaces between the two major nodes (e.g., Station and Tooth Relic Temple).
- In many places, the pedestrian network is discontinuous as shown in Figure 10.2.30. Moreover, pedestrian spaces are neither safe nor comfortable at all.
- Due to the inappropriate road alignment, roads are always jammed at the intersections.
- From the railway station to the Temple of the Tooth Relic, there is an unorganised flow of pedestrian movement as shown in orange and blue colours in Figure 10.2.32. The path behind Kandy City Centre can be integrated with the pedestrian flow with improved pedestrian environment, as shown in red-dotted colour in the same figure.
- The wholesale activities that took place in the KMC City Market have been transferred to the Katugastota Manning Market, thereby limiting its vibrancy. However, it is still a major destination for domestic tourists.



Source: The JICA Team

Figure 10.2.30 Open Space and Pedestrian Network for Civic Hub



Source: The JICA Team

Figure 10.231 Public Facility Map in Civic Hub



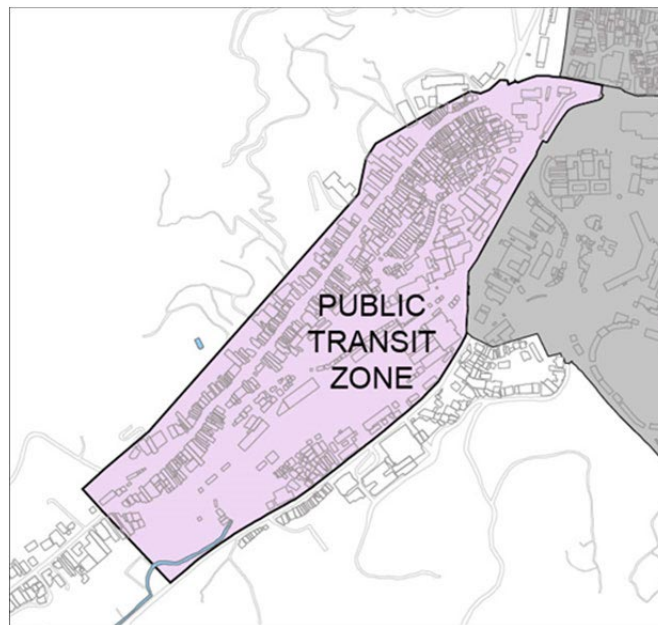
Figure 10.232 400-Metre Radius from Major Destination for Pedestrian Planning



Source: The JICA Team

Figure 10.2.33 Irregular Pedestrian Movement in the Central Market Area

10.2.3 Public Transit Zone



Source: The JICA Team

Figure 10.2.34 Public Transit Zone

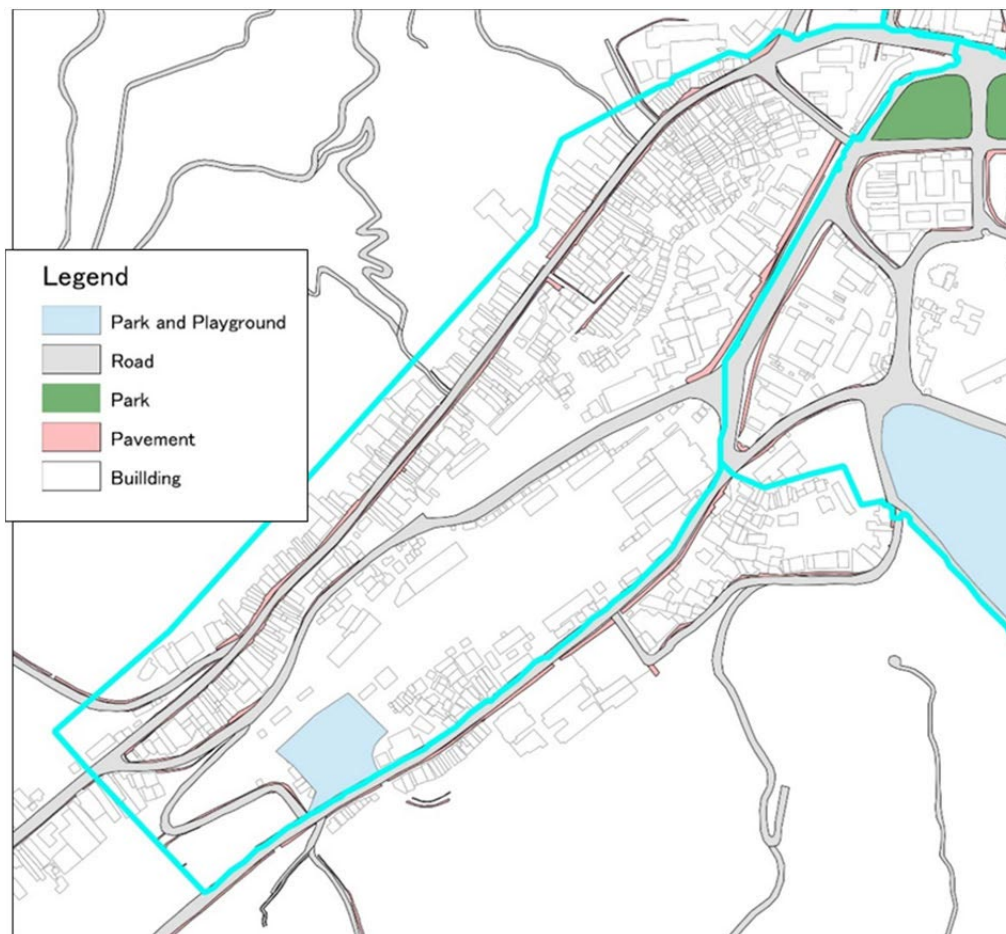
(1) Situation and Analysis

As per the Space Syntax analysis in the Kandy City Region Strategic Development Plan 2030 (KCRSDP-2030) (2015), the locations along Sirimavo Bandaranayake Mawatha (Peradeniya Road) have a higher integration with other parts of the city region. This also contributes to the increased footfall and traffic, which the current structure and zoning of the road is not capable to handle.



Source: The JICA Team

Figure 10.2.35 Goods Shed Bus Stand with Filling Station Bringing All the Buses Behind the Railway Station from Either Direction



Source: The JICA Team

Figure 10.2.36 Open Space and Pedestrian Network in Public Transit Zone

The issues associated with the Public Transit Zone are as follows:

- The flow of tourists through this hub lacks clarity and order because of unguided movement, and it does not contribute to a continuous townscape (see Figure 10.2.39).
- There is an expansion for specialised commercial use, namely: Medical Counselling Centre located in Peradeniya Road, car sales centres located in Katugastota and along the roadside of Colombo Road, and wholesale shops. The peak of the Peradeniya Road which has many clothes shops, medical counselling service centres, religious facilities and private hospitals cause traffic congestion in the area (see Figure 10.2.37 and Figure 10.2.38).



Source: The JICA Team

Figure 10.2.37 Presence of Religious Organisations Having Exit and Entry Points at Peradeniya Road



Source: The JICA Team

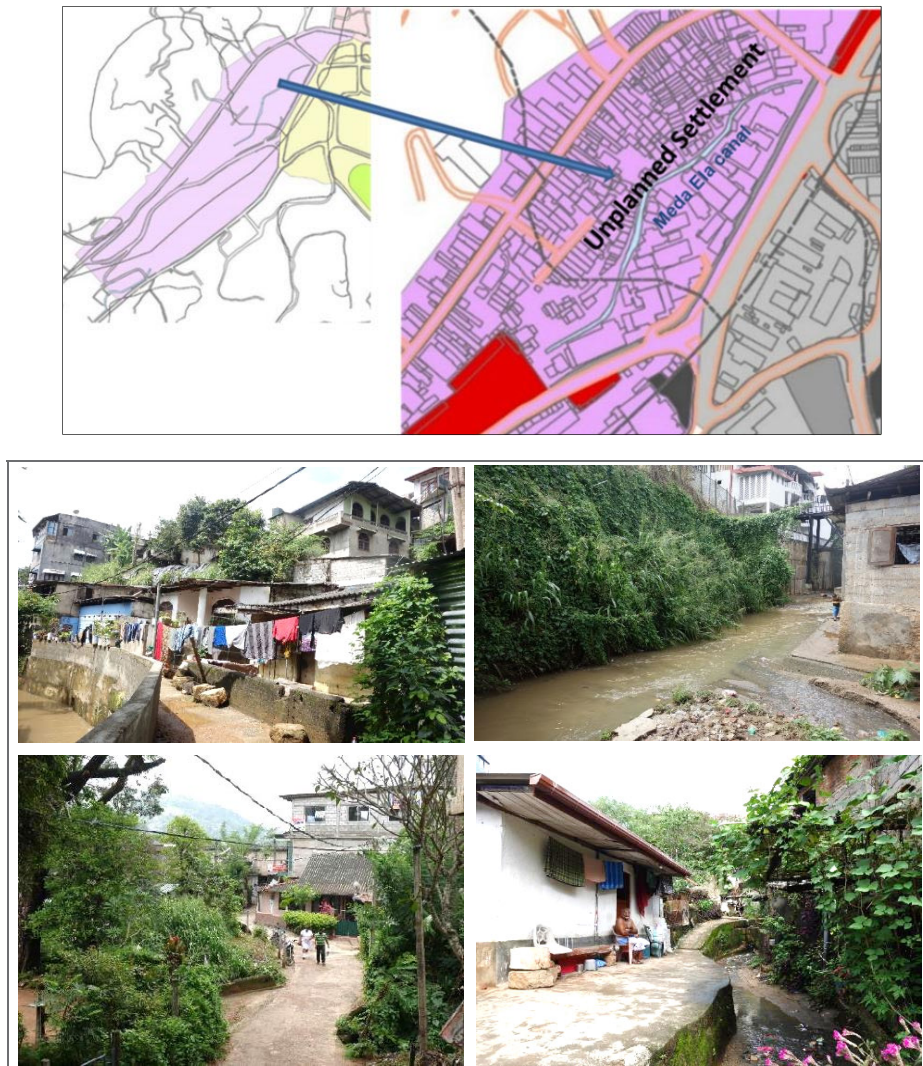
Figure 10.2.38 Inadequately Accessible Lanes (Station Road) Between Peradeniya Road and William Gopallawa Mawatha



Source: The JICA Team

Figure 10.2.39 Few Identified Heritage Structures Are Scattered and Do Not Contribute to a Continuous Townscape

(2) Public Transit Zone – Unplanned Settlement



Source: The JICA Team

Figure 10.2.40 The Built and Unbuilt Conditions in the Unplanned Settlement in Public Transit Area



Source: The JICA Team

Figure 10.2.41 Local Residents Who Were Involved in the Beautification Exercise Within the Unplanned Area



Source: Google Earth

Figure 10.2.42 Comparative Satellite Images of the Unplanned Settlement in 2003 and 2017

Issues

- Risk to life and property due to disaster occurrence, such as floods and fire
- Inadequate emergency infrastructure to deal with any disaster, such as access for fire tenders
- Minimum standards of living environment are lacking, such as inadequate open space, and unsound built-up structures
- Failure to comply with the minimum required distance from property boundaries or between buildings, and from the Meda Ela (canal).

10.2.4 Lake Around Zone

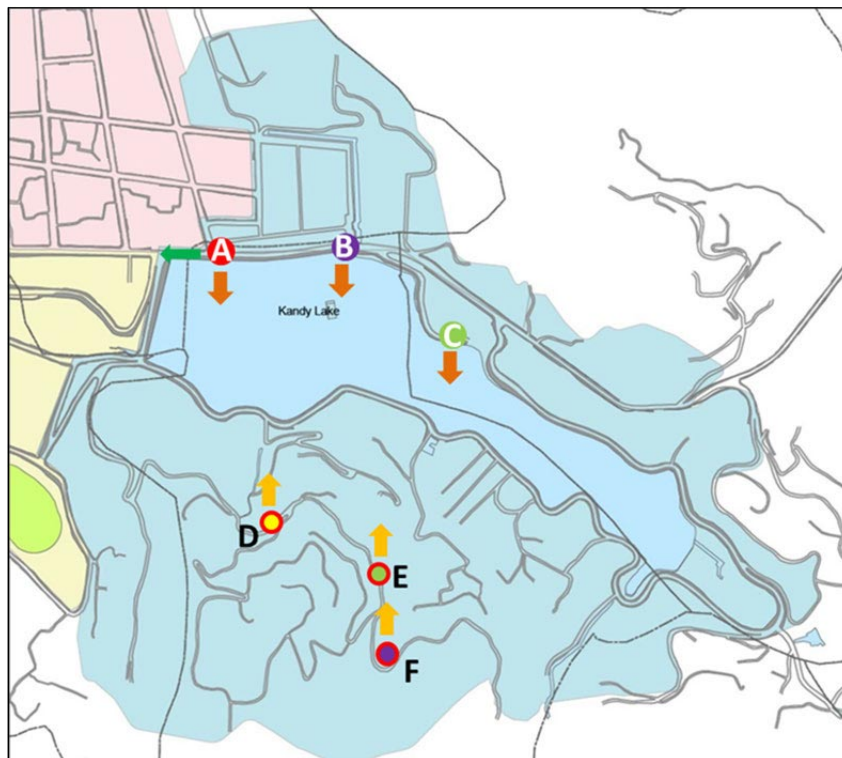


Source: The JICA Team

Figure 10.2.43 Lake Around Zone Defined by the Boundary of Nature Conservation Zone (Forest Area) in the North and South

The boundary of the Lake Around Zone is determined by the boundary of the natural conservation zones (forest areas) located in the north and south sides of the zone (see Figure 10.2.43), which is widespread from the initial study period. This is because considering the current urbanising and encroaching situation of the areas surrounding the zone, the controlling regulations of urban development by the proposed detailed plan have to be covered for such sprawling areas. Also, the sacred area with the Temple of the Tooth Relic is included in the zone, since the landscape of the sacred area needs to be controlled in an integrated manner with the Lake Around Zone.

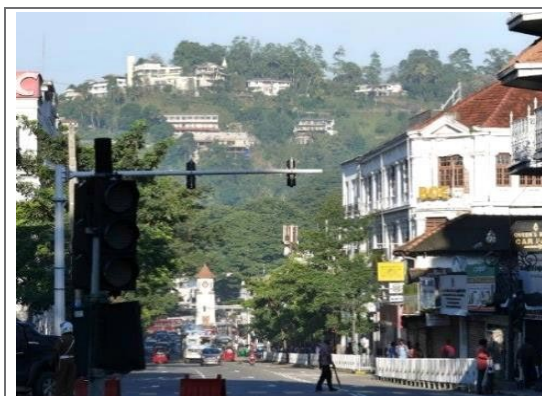
(1) Situation and Analysis



A-F are the view points subsequently indicated

Source: The JICA Team

Figure 10.2.44 Important Viewpoints of Lake Around Zone



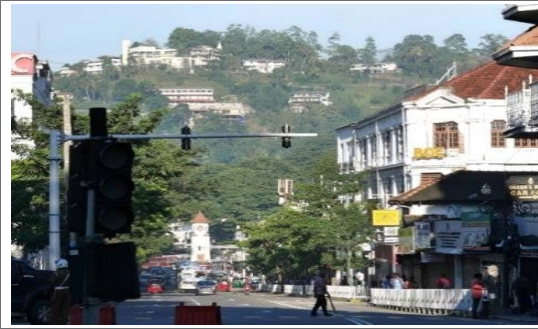
Source: The JICA Team

Figure 10.2.45 View at Human Scale on Dalada Veediya Towards the Bahirawa Kanda Buddha (from Point A)



Source: The JICA Team

Figure 10.2.46 Houses on the Hill Slope Visible from the DS Senanayake Veediya Beside Queen's Hotel (from Point A)



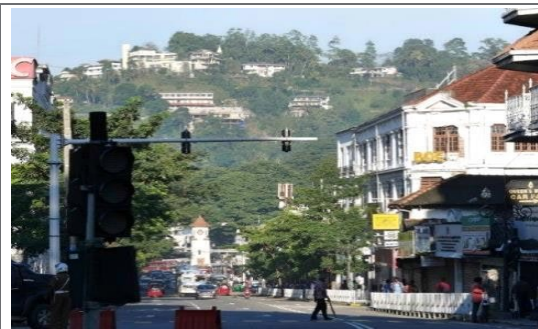
Source: The JICA Team

Figure 10.2.47 View at Human Scale on Dalada Veediya Towards the Bahirawa Kanda Buddha (from Point A)



Source: The JICA Team

Figure 10.2.48 Houses on the Hill Slope Visible from the DS Senanayake Veediya Beside Queen's Hotel (from Point A)



Source: The JICA Team

Figure 10.2.49 View at Human Scale on Dalada Veediya Towards the Bahirawa Kanda Buddha (from Point A)



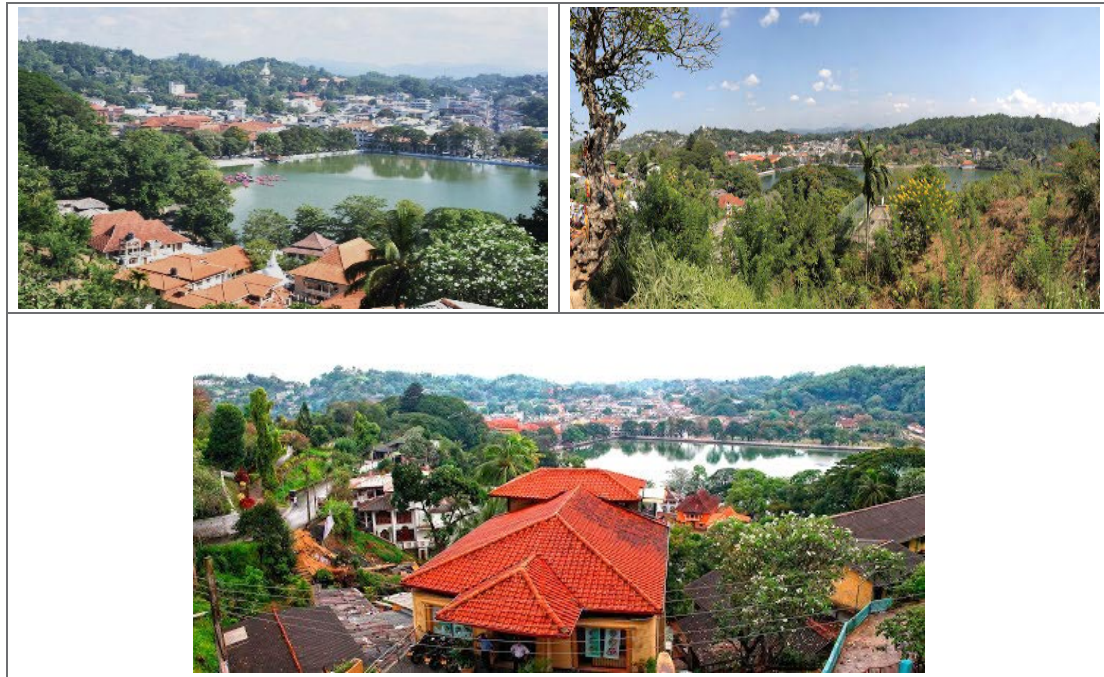
Source: The JICA Team

Figure 10.2.50 Houses on the Hill Slope Visible from the DS Senanayake Veediya Beside Queen's Hotel (from Point A)



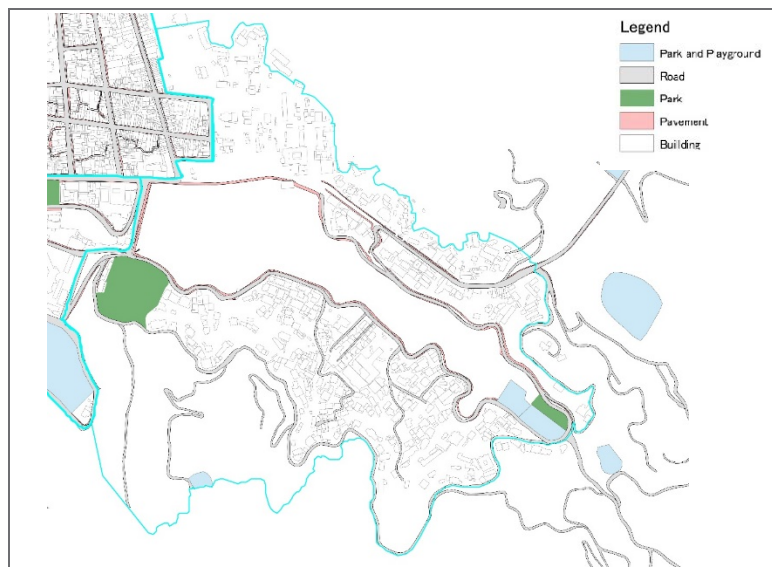
Source: The JICA Team

Figure 10.2.51 View at Human Scale Across the Lake, with a Zoom View of the Structures (from Point A)



Source: The JICA Team

Figure 10.2.52 Views of the City from Points C, D, and E, Respectively



Source: The JICA Team

Figure 10.2.53 Open Space and Pedestrian Network in Lake Around Zone

The issues associated with the Lake Around Zone are as follows:

- Destruction of scenic beauty and visual blight that affect the ecological balance in the area (Figure 10.2.44 - Figure 10.2.52).
- The zone is experiencing tremendous pressure for development – i.e. increased demand for residential units, tourist accommodation, and commercial and educational areas.
- Monitoring: The development of the hillside area has not been properly controlled; prevailing building regulations do not have any provisions to regulate unsafe mid-rise buildings on higher slopes vis-a-vis plot size and building heights. Strict monitoring and implementation mechanism is required to monitor the new construction and to

sustain the mechanism to preserve the natural scape of the hill slopes.

- **Unsafe Building Structures:** Shift from low-rise buildings to the mid-rise buildings which cover the higher altitudes (more than 575 m from the mean sea level) of the hill slopes along the lake.
- **Open Space and Pedestrian Network:** The open space and pedestrian network shown in Figure 10.2.53 tells the tale of the potential and dearth of public infrastructure. While the path around the lake is well laid out, it does not encourage pedestrian movements (i.e. of residents and tourists). On the other hand, there is scarcity of open space in the city which has abundant greeneries.
 - i. The perimeter around the lake is approximately 2.75 km, which is frequented by tourists and residents alike. This path lacks viewing platforms and resting place for the tourists, especially at points which have magnificent views of the natural landscape and/or manmade townscape. Figure 10.2.54 shows the views from the EL Senanayake Children's Park which has a high potential to be one such viewpoint.
 - ii. The pedestrian path along the lake is exposed to the negative impacts of vehicular traffic, such as air and noise pollution, especially during peak hours.
 - iii. Inadequate open space which can function as social, resting, or recreational space.
- The natural drainage of the hill slope is being affected by the cutting of slope for new developments as well as blockage by the concrete structure and hardscape.



Source: The JICA Team

Figure 10.2.54 Magnificent Landscape Views from EL Senanayake Children's Park along the Waterfront

Different and specific building regulations are required to control and monitor the activities in the Lake Around Zone, especially because of the difference in topography from the rest of the zones in the city of Kandy. The basic regulations considering site selection and location, layout, design and materials, safety, services, and visual appropriateness will address the current issues. While the current regulations (i.e. Development Plan for Urban Development Area of Kandy, Kandy Municipal Council Area Volume 1 and 2) address most of these factors, there is scope for improvement and better implementation. The type of development for (i) which the zone is primarily intended is defined but the zone details must also define the following two categories of development: (ii) which may be permitted by a competent authority, and (iii) which may not be permitted. The Mixed Residential Development Zone 2 shown in Figure 10.2.55 seems to encourage the establishment of hotel and tourism facilities on the hill slopes. The provisions for such development should be well defined to develop it as tourism priority zone, but the interests of the local residents should not be compromised. Therefore, this zone should function with the building uses permitted by competent authority on a case-to-case basis, weighing the vision against the need of the residents.

Overall hill slope development: Most of the large-volume building structures coupled with high FAR and coverage have only limited light, air and ventilation, which may lead to

environmental chaos and affect human health. Therefore, there is a need to establish guidelines considering the site selection and location, layout, design and materials, safety, services, and visual appropriateness. As shown in Figure 10.2.55, there is extensive development above 600 m (shown in red contours) at Point B, as well as mid-rise structures at more than permissible 8-m height shown at point A which is in the range of 575 to 600 m above mean sea level.



Source: The JICA Team

Figure 10.2.55 Contour Overlay with the Development on the Hill Slopes of Lake Around Zone

10.3 Feedbacks of Heritage Building Owners and Tenants

10.3.1 Purpose of the Interviews

Due to difficulties in identifying the actual building owners and tenants of the listed buildings in the household surveys and public consultation meetings, separate interviews were conducted to see if it is possible to locate the heritage building owners and/or tenants and to ask their opinions. They are the ones who are directly affected by the regulations on the listed buildings, and therefore, even though the extensive survey may be difficult to conduct, it is worth trying to give an in-depth analysis of the heritage building owners and/or tenants. This study is still incomplete and the results discussed in this report are preliminary.

The detailed purposes of the interview are as follows:

- To understand how the heritage building owners value their properties and their plan to keep their respective buildings
- To understand their difficulties in dealing with historic buildings
- To understand the character of the Grid City in terms of social and commercial aspects

10.3.2 Study Methodology

The interviewees were selected by the following three methods:

- Those who showed some interest in the JICA project during the household survey
- Those who seemed to have been running their business for a long time (e.g. based on the year of establishment shown on the signboards)
- Introduced by those who were previously interviewed by the JICA Team

The interviews were conducted in August and October 2017.

10.3.3 Results

(1) Overview

Most interviews were conducted in the Commercial Grid, except for one which was done at the Public Transit Zone. A total of fourteen interviews were conducted. Most of the interviewees were the owners and occupants of the buildings at the same time (i.e. business owners). This has been confirmed by visiting the shops directly, and asking the interviewees regarding the ownership of the building. Most of the people we approached were cooperative and eager to talk to us. There were some people who showed some hesitation or worries in talking about the buildings.

Regarding the use of the buildings, 12 out of 14 of them are being used as commercial buildings, most of which are purpose-built commercial buildings (Note: Two were originally built as stables, but were converted into a commercial space a long time ago). Two out of 14 are used as residences, which were the original purpose of these buildings.

The ethnicities of the owners are mixed. Most of them acquired the buildings by inheritance. Regarding the residence of the interviewees, except for the buildings used as residences, most of the owners do not live in their buildings or in the commercial zone, but they mostly live in the residential part of Kandy such as at Lake Around or Peradeniya. The separation of the workplace and the residence is not a recent trend, but has been practiced for generations. One building owner/tenant lives outside of Kandy (Colombo) while operating a restaurant and accommodation business for the foreign visitors in Kandy.

Table 10.3.1 List of Interviewees

No.	Zone	Tenure	Class	Building Type	Current Use	Ethnicity of Interviewees	Measure of Acquisition	2nd floor	Location of Residence
1	Commercial Grid	Owner & Tenant	A	Commercial	Tea Store	Muslim	Inheritance	Yes	Peradeniya
2		Owner & Tenant	A	Commercial	Jewelry	Tamil	Purchase	Yes	North of Grid
3		Owner & Tenant	A	Commercial	Jewelry	Tamil	Inheritance	Yes	Lake Around
4		Owner & Tenant	A	Commercial	Textile Shop	Muslim	Inheritance	Yes	Peradeniya
5		Owner & Tenant	A	Commercial	Restaurant	Sinhala	Inheritance	Yes	Lake Around
6		Owner & Tenant	A	Commercial	Restaurant	Sinhala	Purchase	Yes	Peradeniya
7		Owner & Tenant	A	Commercial	Restaurant	Sinhala	Inheritance	Yes	Outside of Kandy
8		Owner & Tenant	C	Commercial	Auto Parts Shop	Sinhala	Inheritance	Yes	Peradeniya
9		Owner & Tenant	C	Commercial	Shoe Shop	Sinhala	Inheritance	Yes	Aruppola
10		Owner & Tenant	D	Residential	House	Sinhala	Inheritance	Yes	Commercial Grid
11		Tenant	A	Commercial	Office	Sinhala	Unknown	Yes	Aruppola
12		Tenant	B	Commercial	Sourvenir Shop	Sinhala	Unknown	Yes	Peradeniya
13		Tenant	C	Commercial	Hotel	Muslim	Unknown	No	Outside of Kandy
14	Public Transit Zone	Owner & Tenant	A	Residential	House	Tamil	Inheritance	Yes	Public Transit Zone

Source: The JICA Team

1) Listing Process

Almost all the respondents confirmed that there was no action on the part of the governmental to explain the intention as to the listing of their buildings as monuments by DOA, or as conserved buildings by UDA; and they were not satisfied with this process. Some respondents still kept the letter of notification, saying that what happened was just a one-way communication and the owners' consent were not considered during the process, which has created complaints to the authorities.

Additionally, some of them clearly indicated that there was no explanation about why these buildings were significant.

Regarding classification by categories (A, B, C, and D), one respondent indicated that the authority did not tell him which class his building has been categorised.

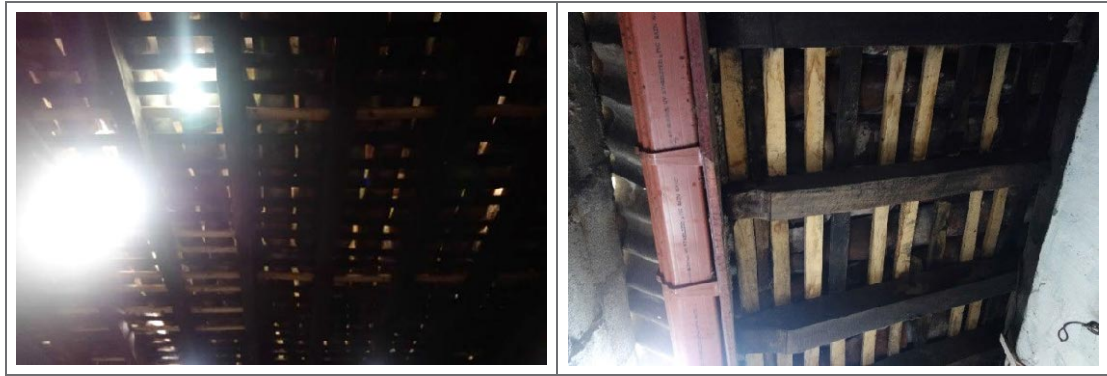
Almost all of them expressed that they are not sure what they can do with their buildings, and they are not familiar with the regulation or permitting process.

2) Discontent of the Authorities

Most of the interviewees had experience in rehabilitating buildings or showed intention to do so. Those who tried going through the prescribed process indicated that they had a hard time dealing with the authorities. First of all, the owners were not sure who they should contact (DOA, UDA, or KMC) for the purpose. Then, they were told they "cannot change anything in the building." Figuring out what to do, they spent some time to obtain the rehabilitation permit. Furthermore, there was a case wherein the permit issued by KMC was overturned by UDA, and the case was sent to DOA. They also testified that it took one-and-a-half years to get a permit for re-roofing, and so the leaking roof caused a lot of trouble. One of the interviewees said that although there was a crack on the wall of his store, he just ignored this even if it was unsafe since it was quite onerous to go through the authorisation process. In most of these cases, the owners reported that they had to follow up with the authorities so many times as they do not respond to the owners immediately.

3) Insufficient Advice from the Authorities

Some of the respondents indicated that they did not receive technical advice from the KMC or DOA which put them into difficulties since they were not familiar in dealing with historic buildings. Additionally, the advice given by KMC for repairing the roof was not quite appropriate and after the repair work following the advice, the leaking was exacerbated. In other cases, DOA did not give any advice on roof repair.



Source: The JICA Team

Figure 10.3.1 Repaired Roof

4) Use of Second Floor: Underutilised Space

The typical typology of the historic buildings in the Commercial Grid seems to be the shophouse with ground floor for retail business, and the upper floor for residential purposes. Although the Team did not have the chance to access the upper floors during the survey, in some cases, the upper floors are not used or underutilised (see Figure 10.3.2) while in other buildings, they are used as resting space for the employees. The ones unused are usually in bad condition and are not maintained well. Most of the roofs are leaking and the space is not quite suitable for any use.



Source: The JICA Team

Figure 10.3.2 Underutilised Upper Floors

5) Intention to Preserve the Buildings

Since most of the owners/occupants acquired the buildings from their father, or these were inherited from their grandparents, the preservation of the buildings is important for them to carry on the tradition of their family and their business. Some of them (not only Sinhala owners, but also Tamil owners) believed that it was an honour that their buildings were listed as heritage of Sri Lanka.

It can be said that their families have contributed to the preservation of the buildings by continuously using and handing them down to the next generation without asking for grant or subsidies for rehabilitation works. There were some families who wanted to rehabilitate the buildings but could not afford it, or there were some disputes over ownership with other family members, which prevented them from rehabilitating the buildings.

6) Law-abiding Spirit

All the respondents said that they consulted the authorities when they planned to touch up their buildings, and that they tried to follow the rules. They also expressed disapproval to those who built a 6-storey building which they believed was a show of disrespect to the Temple of the Tooth Relic, and to the authorities who allowed such construction and did not penalise the violators. They themselves did not express the desire to extensively increase the height of their buildings due to their respect for the Temple of the Tooth Relic, but showed some intention to add some floors for their businesses to be more profitable.

7) Comfort of Historic Houses

The two residential building owners indicated that their houses were quite comfortable as living space. For instance, even during hot weather when the temperature is high, they could do without air conditioning. The ventilation of these houses is good and the use of stucco over masonry walls probably kept the room temperature steady.

8) Owner's Difficulties in Dealing with Authorities

There is one building both gazetted by UDA and DOA located along Peradeniya Road. Under UDA's list, it is categorised as "A" and the owner, Mr. C, described this classification as "the same status as the Temple of the Tooth Relic". Unfortunately, this building was demolished and there is no way to know what the building looked like as there is no list that contained its photo.

Mr. C's sister was the owner of this property and he was the caretaker because she lived in other country. He claimed two major difficulties:

(a) No information on the heritage building status available at the time of purchase

First of all, when they purchased the building about ten years ago, the family did not know its heritage status, as the building had no heritage plaque or its status was not written in the deed of sale. Even though they spent a lot of money on this property as the land price in Kandy central business area is high, they cannot develop the site to maximise their profit just like the other adjacent modern taller buildings along the same street.

(b) Conflicts in decision over new construction by several relevant authorities

Mr. C gave us the copies of the correspondences between him and the relevant authorities (DOA, KMC, UDA, and RDA). The Team have read through them and analysed what transpired between him and authorities based on these letters (see Table 10.3.2). Unfortunately, not all the relevant correspondences were included, but the Team tried to figure out the entire situation.

The original listed building on Peradeniya Road was lost. The Team was not sure if the demolition was done on purpose or not, but Mr. C claimed that the building fell down due to heavy rain.

Then, somehow, Mr. C started negotiations with the DOA as it was a DOA-gazetted building, and it was the one which ordered the reconstruction of the building following the plan prepared by a DOA conservation architect. Mr. C agreed to it and started to reconstruct the building based on the plan.

After the construction had started, he was approached by KMC and UDA who pointed out that he did not obtain the proper construction permit from KMC and asked him to demolish the building. KMC then further contacted RDA, asking for its opinion, and RDA required Mr. C to demolish the building and have a setback as there had been a plan to widen

Peradeniya Road. RDA also pointed out that the building had one-and-a-half original columns in front, and so this was no longer a historic building to be demolished right away. However, if Mr. C was to have a setback by 15 feet as required and reconstructed the original building which was ordered by DOA, the actual buildable space would become really small and he cannot expect enough gain against his investment (purchase of the plot and building). No one had coordinated between the concerned parties, and so Mr. C left the building unfinished. Due to this uncertain situation, there was a group of people who tried to claim false ownership on this unused land, which further put Mr. C into trouble and filed complaints to the police.

The series of correspondences clearly illustrates that there is no functioning system to coordinate among the relevant authorities. It is the Heritage Committee that is responsible for coordinating the issues between different agencies, but this occasion has proved that the committee is not functioning on the said aspect. This is a typical example where the heritage building owners have absorbed the disbenefits of having a heritage property. This situation can be improved by the proposed new organisation that consists of four major institutions.

Table 10.3.2 Letters Regarding the Listed Building at Peradeniya Road

Date	From	To	Summary of the contents
09 June 2011	DOA	Owner*	<ul style="list-style-type: none"> - In the owner's letter addressed to the President and others, the owner agreed to do the conservation of the historic monument building under the advice and plan of DOA. - Upon request of the owner, DOA appointed Architect Mr.Y in order to draw a proper plan. - All the construction work must be done in accordance with the advice and plan of DOA; otherwise, a legal action will be taken.
09 Nov 2011	DOA	Owner	<ul style="list-style-type: none"> - Regarding the investigation that took place at Kandy Police Station on 11 Aug 2011, DOA cited that the owner had promised in front of the police inspector to do the conservation work for the building within 3 months. - DOA reminded that the above period would end on 11 Nov 2011, and a legal action would be taken thereafter.
11 Nov 2011	KMC	Owner	<ul style="list-style-type: none"> - As mentioned in a letter from DOA dated 23 Sep 2011 to KMC (copy furnished to the owner), the owner is being asked to submit an application for renovation work of the conserved building very urgently in order to restore the damage that he (owner) caused to the building, and after obtaining the approval, undertake the renovation work.
06 Feb 2012	KMC	Owner	<p>"Notice under Urban Development Act of 1978 No.41 and Urban Development Authority Act of 1982 No.4 and its Amended Act of 1984 No.44"</p> <ul style="list-style-type: none"> - It has been reported that demolition and reconstruction work of an archeologically valuable building is being done as of 12 Oct 2011. - Such development work shall be stopped and the original situation of the land or the site shall be restored on or before 21 Feb 2012. - If you fail to do so by the above date, the unauthorised construction will be demolished by obtaining a court order without any further notice, under the section 28 (?) (3)(a) of the above Act.
29 Feb 2012	KMC	Owner	<p>"Unauthorised construction/ change of usage"</p> <ul style="list-style-type: none"> - The date informed in KMC's letter dated 06 Feb 2012 has passed. - As you failed to fulfil what shall be done, a case against you will be taken at the Kandy Magistrate Court. - Prior to this, 14 days will be given to you from the date of this letter so that you can try to legitimise the construction work.
28 March 2012	KMC Planning Division	Owner	<p>Bill for charges for a building application No. BA/175, 2012 Please pay the following amount to KMC accountant and submit the receipt to this Division.</p> <p>01. Building inspection fee 1,000.00 06. VAT 120.00</p>

Date	From	To	Summary of the contents
20 April 2012	KMC	RDA Chief Engineer Kandy	- As a result of the discussion at the City Planning Committee, the application is referred to RDA for its comment.
14 May 2012	UDA	Owner	- It was reported to me that the historic building is completely demolished and a new construction is being done. All such unauthorised construction shall be immediately suspended and all the parts constructed in an unauthorised manner shall be demolished by 23 May 2012. - Please submit to UDA the original of building plan approved by KMC, development license or other relevant documents together with the documents recommended by DOA, before the above date.
19 June 2012	RDA	KMC	- The road in the area is planned to be expanded to 3 lanes in the future, and the construction is restricted up to 15 m from the centre of the road. - As a result of site survey, it was found that the roof of planned building will project toward the road and it is only 5.9 m from the centre of the road. - There is only one pillar and a half of another pillar as an old structure. Others are newly constructed by the applicant and have no archaeological value. - Therefore, the application for the construction cannot be approved.
05 July 2012	KMC	Owner	- RDA Chief Engineer informed that the application for construction cannot be approved, as the road is planned to be expanded to 3 lanes in the future.

Source: Created by JICA Team based on the letters between relevant parties

* “Owner” in this situation refers to the owner’s relative who has been overseeing the property and representing the owner.

It is also questionable that at the time, there would be widening of the Peradeniya Road. If the city, as a whole, decided to preserve the series of historic buildings along the said road, the plan to widen it will damage these original historic fabrics. The original location and the allocation of the building (i.e. the distance between the building and road) also indicate an important historic fact and hence, the building should not easily be demolished and reconstructed as such. Demolition means the loss of original structure and it is the biggest intervention to the original, which should be avoided in the theory of historic preservation. However, if widening the road was considered to be a more important public good than preserving a small historic building along the street, then said building should not have been listed as conserved as there would be a conflict of public interest. In urban areas where land prices are high, unless there is a strong public support or strong owners’ intention of preserving the buildings, the designation of historic buildings is quite unrealistic.

9) Questionable Practice of “Reconstruction”

At the site, the Team had seen the ongoing reconstruction of the building, which DOA had ordered the owner to do so based on their drawing. The quality of reconstruction work does not meet the appropriate level of conservation work. Construction (see Figure 10.3.3 and Figure 10.3.4) with too much joint cement does not seem right as a way of building historic masonry walls. The correct way for historic buildings is to lay out the bricks more tightly to function as structural walls and the pointing should not stand out too much.

This construction had another structural issue. The way of constructing brick walls with too much joint cement is often seen in the construction of low-cost buildings in Southeast Asia as a non-engineer construction technique, which is not suitable when dealing with heritage buildings.

Additionally, it could also be difficult to keep the intensity of the building and the arches may fall apart in the future, which is quite dangerous.

According to Mr. C, he hired a regular contractor and the building was constructed just like what it is today. He was instructed to hire a contractor who is knowledgeable with historic buildings or was not given any technical advice by the DOA.



Source: The JICA Team

Figure 10.3.3 Reconstructed wall



Source: The JICA Team

Figure 10.3.4 Close-up view of the reconstructed wall

The reconstructed “heritage” building as it is could no longer be considered as original or equivalent to the original. The people will not be able to learn anything from it. The historic building is significant not only for its façade, but the entire building should be appreciated including how it was constructed in the past. This is the essence of preservation for public good.

As discussed earlier, since the detailed survey to establish the justification of these heritage buildings was not done, it is quite questionable if this building should have really been listed and the use of the property should have been regulated like this, considering the lack of understanding of these resources, high land price, lack of public support as well as the authorities’ strong support system in terms of technical and financial aspect.

10) Traffics for Delivery

Mr. D owns a restaurant business. It was first established by his father and the business is expanding. Currently, he owns 4 or 5 shops in addition to the main shop. His main shop is located in the listed conserved building along the Dalada Veediya. He added the building behind this heritage building to accommodate the restaurant and kitchen/bakery and storage. This addition is adjacent to the other road on the backside and he has a loading dock space in the backside of the building.

He himself is a member of the Sinhala Traders Association and is quite familiar with the business condition of others as well. He basically agreed with the GKUP Plan which was presented during the second owners’ meeting, and he was concerned about the lack of space for delivery trucks, which is crucial to his business as well as to other businesses in the Grid City. According to him, 90% of his bakery products are made at this location and three trucks carry them to the other locations frequently. He said that he is lucky to have a loading dock at the backlane and does not always have to move goods from Dalada Veediya. He added that small businesses in Colombo Street only have street access in this location, and if this access is hindered, it will damage their businesses as well.

Aside from his business, there are several establishments which have bakery and restaurant in the Commercial Grid Area and they are part of the citizens’ daily life as well as that of tourists. Therefore, their business practice should not be hindered excessively by the imposition of rules on historic preservation. This issue may be resolved if the authority and

traders associations can work together to set the designated time for delivery cars, either early in the morning and/or at night when the traffic is relatively low.

(2) Analysis

As seen in the different parts of the report, there is virtually no subsidy or incentive for the heritage building owners to preserve and rehabilitate the buildings. However, about half of them have maintained their buildings well by making their own investment and continuing to use the buildings. Almost all of them who acquired the properties through inheritance indicated that they will continue to own, preserve, and rehabilitate the buildings if they have enough funding.

For them, the buildings are family heritage. Therefore, their personal attachments to the buildings work as their motivation and mechanism for the rehabilitation of the heritage buildings. Existence of such long-time building owners is quite important for the preservation of historic buildings in an urban context like Kandy where the land values are extremely high and most people do not pay attention to keep the historic buildings, in addition to the lack of public funds which support the rehabilitation of the historic private properties. Creating the condition where these long-time, owner-occupants who have attachment to the listed buildings and who feel like staying there for a long time will function as a mechanism for preservation of historic buildings.

Additionally, there should be a better two-way communication system between the authorities and the owners. Also, the advisory system and technical assistance from DOA or CCF who are supposed to be the experts in rehabilitating historic buildings should be in place. However, since the current allocation of responsibilities of these agencies is not clear, the request for support from owners is shifted around within them. To address this issue, a “one-stop-service window” to offer various administrative support for the conservation of historic buildings is needed.

On the other hand, there also exist people who have been living in the heritage buildings under a long-term lease and do not have the option to move out to live in other places as they are not affluent. They live in the heritage buildings by chance and not by choice. They will continue to occupy these buildings, but they are not likely to afford the expensive rehabilitation works. In such occasion, some kind of financial assistance to them is inevitable to keep these buildings.

10.4 Detailed Historic Building Sample Survey in the Commercial Grid

10.4.1 About the Survey

(1) Background of the Survey

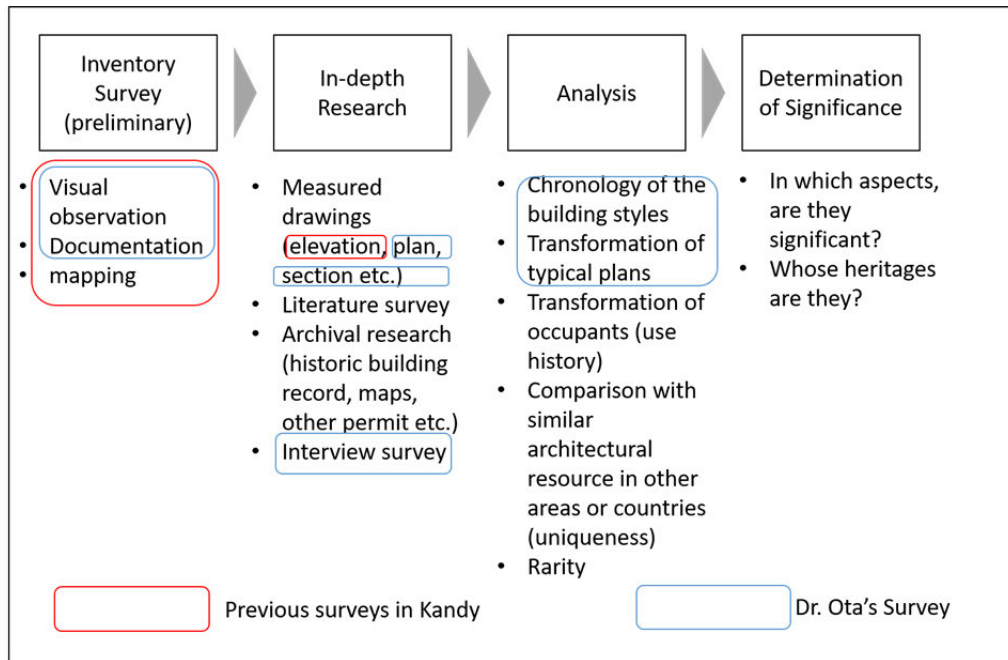
As already pointed out in the previous section of this chapter, there has been insufficient research and analysis to justify why these listed conserved buildings will be worth preserving from the public and the owners' perspective, given the high land price and demand for speculation. In addition, most of the buildings in the list are vernacular architecture built after the Colonisation era and the public, in general, do not understand why the buildings which were built by the conquerors should be preserved. No detailed explanation is given specifically on why these buildings are significant based on concrete evidence and academic analysis, which are actually the basis of historic preservation.

Although there were time constraints on the JICA study, additional research was commissioned to improve this situation by inviting Dr. Shoichi Ota, a Japanese architectural historian who has several research experiences on vernacular architecture in the Colonial cities in Southeast Asia. Dr. Shoichi Ota has obtained his doctoral degree in architecture at the University of Tokyo and has had numerous research experiences in Southeast Asian countries like Vietnam, Thailand, and Myanmar.

For this survey, the Commercial Grid Zone was selected as among four zones, since this is the area where most of the vernacular buildings (particularly shophouse buildings and residential buildings) are located.

(2) Positioning of this Survey

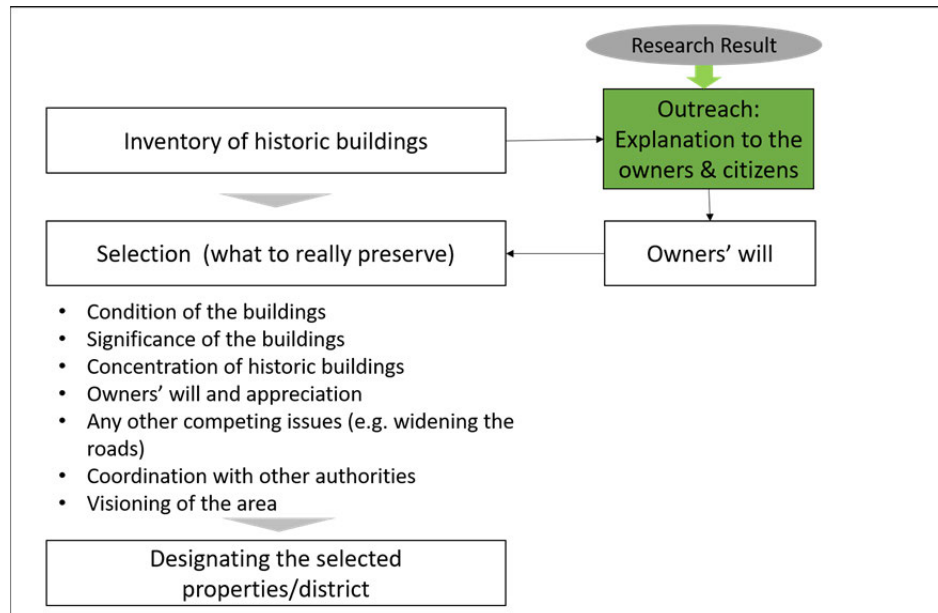
Figure 10.4.1 shows the general process to determine the significance of the historic resources. The survey, which was done in Kandy, is basically a preliminary survey by the collective efforts of UDA, KMC, DOA, and CCF. These historic resources in the Heritage Area have not been studied or analysed in detail, which are critical steps to determine their significance and to eventually grant their designation status. Due to lack of time, this additional survey cannot cover the entire process of a detailed survey. In order to raise the level of surveys and diversify the ways to understand the resource, part of an in-depth survey was conducted. It was also meant to be a technology transfer initiative meant for the staff of the four organisations, particularly the agencies responsible for cultural resource management.



Source: The JICA Team

Figure 10.4.1 General Process of Determination of the Significance of Historic Buildings

Although it was not covered in this survey as shown in Figure 10.4.2, other factors to be considered in addition to the significance of the buildings include the physical condition of the buildings, the level of public constituency, and the owners' consent to the designation. The vision of how to position these historic resources in the future of the town should also be considered to narrow down the list of buildings to be conserved, as public financial and human resources for conservation are usually limited. Among these, the owners' consent and understanding of the citizens are quite important to create a situation where the designated buildings are actually preserved, maintained, and rehabilitated. Particularly in Kandy, where the people and the owners do not have the correct understanding of historic buildings and thus, do not feel the necessity of preserving the buildings, the research results play a critical role as a tool for public outreach to make the people interested in the stories behind the historic resources, be proud of them, and be convinced as to why they have to preserve the buildings as their own heritage.



Source: The JICA Team

Figure 10.4.2 Importance of Detailed Survey for Outreach Activities

(3) Overview of the Survey

To understand the situation of Kandy, Dr. Ota was invited twice to Sri Lanka. Table 10.4.1 was the schedule of each visit. The first visit was for the preparatory survey to make him familiar with the historic built environment not only in Kandy, but also in Slave Island and Pettah Districts in Colombo where similar shophouse buildings remain. He met the representatives of four agencies to greet and explain the purpose and method of the survey. The second survey was the main survey. He and his five students from the Kyoto Institute of Technology in Kyoto, Japan, which is one of the historic capital cities of Japan, were invited. The students were all either master or doctoral students who have experienced similar survey works to efficiently support Dr. Ota.

Table 10.4.1 Schedule of Dr. Ota's Survey

No.	Period (including travel to and from Japan)	Purposes
1	1st-7th May, 2018	<ul style="list-style-type: none"> • Site visit to Kandy • Meeting with UDA, KMC, DOA, and CCF • Meeting with Prof. Manawadu of Moratuwa University • Site visit to downtown Colombo (e.g., Slave Island and Pettah)
2	5th-11th May, 2018	<ul style="list-style-type: none"> • Sample survey in the Commercial Grid • Presentation to the authorities in Kandy

Source: The JICA Team

(4) Content and Methodology of the Survey

The content and methodology of the survey are indicated below.

1) Content of the Survey

For the main survey during the second visit, the following activities were conducted:

(i) Inventory survey

To identify the features of a shophouse as a constitutive element of townscape, architectural feature, history of habitation and usage, site specification, and building appearance were investigated focusing on the buildings with historic feature located in the designated area.

(ii) Measuring survey

Selected examples, which have typical features of shophouses in Kandy, maintain original styles which dated back to the completion, and for the ones with owners' agreements on the survey, measuring works were conducted.

(iii) Interviews

Interviews with the occupants or owners of the shophouses were conducted about the history of dwelling, usage, and occupation. In the course of the survey, interviews were done as needed along with inventory survey or measuring survey.

2) Methodology of the Survey

(i) Inventory survey

Inventory survey targeted the shophouses in the Grid City by collecting the information indicated in the documentation sheet. Researchers in charge filled the forms and took photos, and conducted interviews with occupants such as dwellers or shopkeepers with the help of Sinhalese translators. The surveyed items are as below:

- Independent items, including address/ GPS coordination/ building name/ building owner/ tenant/ structure/ finishing material/ construction period/ alteration and its period
- Description of building features
- Location map
- Façade
- Detailed description of façade design

The information above were collected through various methods, such as address indication from signboards or interviews, ownership from interviews, building structure and finishing material from observation, construction year from the sign on the façade (if available) or interview (which may not be necessarily accurate but may give some important clues), and year of alteration as cited during the interview.

The data of GPS coordination was collected by GPS loggers. While surveying, the researchers read the GPS data from loggers then wrote these on the sheets. The GPS data were afterwards related with the photos in order to indicate the location of each photo shooting. After the on-site survey, the GPS data were collected and utilised to display the location of buildings on the base map.

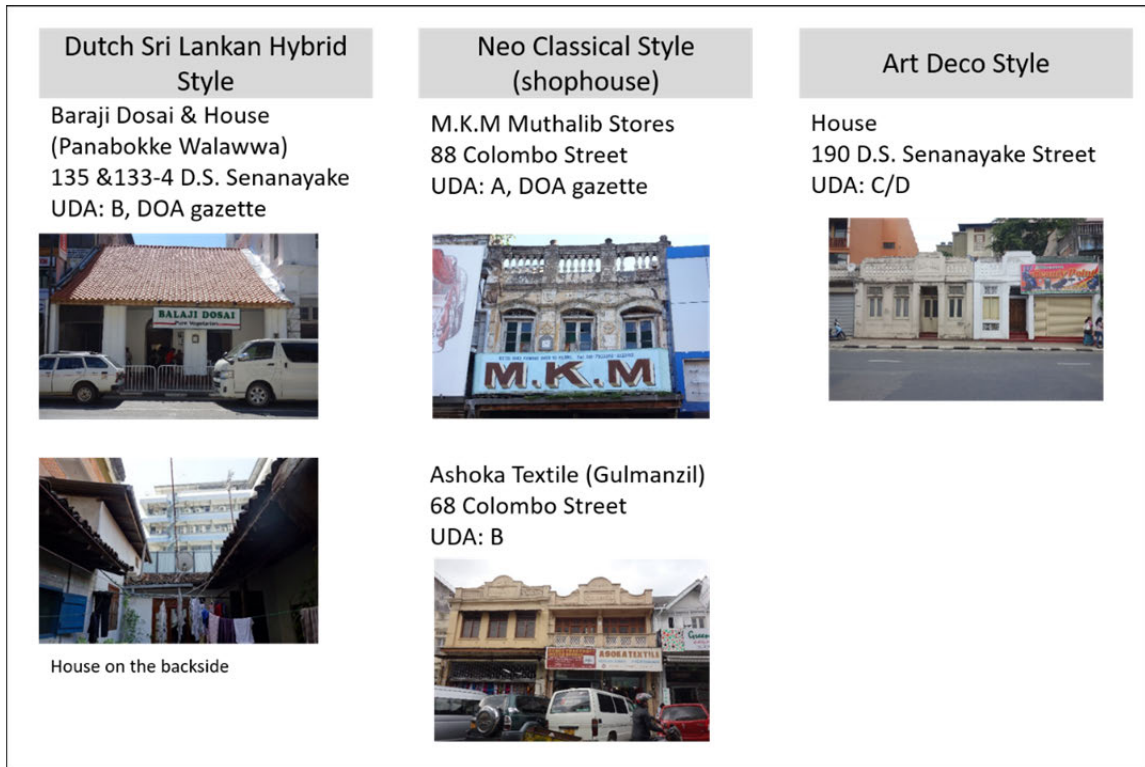
The Photo shooting was orderly conducted. First, the face-front position of the façade was taken, followed by the details of the façade, then the interior. The design of the details was also recorded through sketching to prevent influence from weather condition or photographic condition, and the architectural features found on site were detected.

(ii) Measuring survey

The plan (of each floor if it is a multi-storeyed building) and section were drawn at the targeted buildings illustrated in Figure 10.4.3. As for the façade drawing, due to the restricted time and workforce, a photograph was used instead, which was occasionally accompanied by sketching in case of outstanding design in details. The drawing of vestige on the building surface (original façade design elements) is also made if it is identified. In the course of survey, recording the present condition was mainly aimed. Observation was only conducted within eye-sight domain to reduce the burden of the informants.

(iii) Interviews

As mentioned above, interviews were conducted along with inventory survey or measuring survey. This was done to investigate the history of targeted buildings. In many cases, the informants did not remember the years of addition, alteration, or repair. However, the purpose was to grasp the approximate timescale through hearing the histories of the lives of the informants’ families or their business careers.



Source: The JICA Team

Figure 10.4.3 Buildings for the Measured Drawings

(5) Schedule of the Main Survey

Table 10.4.2 shows the detailed schedule of the main survey.

Table 10.4.2 Schedule of the Main Survey

Day	Date	AM	PM
Day 0	July 5 th	Departure from Japan	Arrival in Kandy
Day 1	July 6 th	Orientation on the Grid City	Documentation
			Measured Drawing No. 1
Day 2	July 7 th	Documentation	Documentation
		11:00 Measured Drawing No. 2	Measured Drawing No. 2
Day 3	July 8 th	10:00 Measured Drawing No. 3	Measured Drawing No. 3 Documentation
Day 4	July 9 th	10:00 Measured Drawing No. 4	Measured Drawing No. 4
Day 5	July 10 th	Documentation	Presentation

Source: The JICA Team

(6) Final Presentation

On the last day of the survey, a final presentation was given by the GKUP Team and Dr. Ota at the Queen’s Bath Building. There were about thirty participants, who were mostly representatives and staff of the UDA, KMC, DOA, and CCF. Two experts were invited to

represent the heritage conservation practice in Sri Lanka. One is Senior Prof. Samitha Manawadu of the Moratuwa University and the other is Mr. Channa Daswatte), a leading Sri Lankan architect and chair of the Galle Heritage Foundation who is originally from Kandy.

10.4.2 Preliminary Survey Results

This section shows the preliminary survey results drawn based on Dr. Ota's analysis of the survey outputs.

(1) Inventory Survey

Due to the restriction of time and manpower, complete inventory survey was not aimed. Therefore, a sample survey with limited domain was planned. The research area included two principal streets, Colombo Street and D.S. Senanayake Veediya, between Temple Street and Cross Street, where historic shophouse buildings are densely located in the midst of urbanised area.

This survey focused on the ones with the characteristics of historic building based on two criteria. One is having a history of fifty years or more, and having the design features of historic architectural styles prior to Modernism, or Modernism at its initial stage. A fifty-year timescale is often used as one of the criteria to identify historic buildings in the world.

The similar survey of historic buildings in the Grid City, Kandy, had been carried out by UDA, KMC, CCF, and DOA in 1990s. However, some of the historic buildings that this survey identified were dropped off from the list and it excluded post-historic design such as Art Deco style, even if the buildings are old enough to be "historic". Also, the buildings which are less than fifty years old or those which mostly lack the historic characteristics were included. Responding to these problems, this survey was planned to include these once-neglected parts of the historic environment of the city as well as to remove ones which have already lost historic styles, or the ones which do not have legitimate reasons to be included.

Another problem on the former survey was that the estimated age of construction was quite obscure, so that the formation of the timescale of the architectural design in local condition was highly promoted at this occasion by collecting as many examples with clearer sign of the construction year as possible to enable to grasp the historic buildings on the timeline.

In terms of counting the buildings, the number of building itself was employed in this survey, while the former survey counted the number of tax lots (ownerships). Therefore, one building had been counted multiple times, which did not correctly identify the buildings.

Following these principles, a total of 110 buildings were investigated during the survey.

(2) Measuring Survey

Following the premises, the four houses shown below were selected for measuring works:

1. No.190 D.S. Senanayake Veediya
2. No.88 Colombo Street
3. No.68 Colombo Street
4. No.135 and 133-4 D.S. Senanayake Veediya

The plan of each floor and section of the buildings above were drawn. Additionally, another drawing of section, cut lateral to the street, was also made if necessary.

Through these measuring surveys, the following preliminary results were derived.

1) Lack of Correct Recognition of the Historic Resources in the Grid City

The survey was conducted for the historic buildings located in Colombo Street and D.S. Senanayake Veediya, which constitute the historic streetscape of the area with high density historic buildings. For the survey, the list of the heritage buildings by UDA, KMC, DOA, and CCF in 1990s was referred to. There were some buildings that were potentially historic but not included in this existing list. Therefore, some new buildings which were not listed but identified as a historic building were also surveyed this time. On the contrary, some buildings in the list which were significantly altered or had lost their styles due to new developments were dropped from the list, which were confirmed during the interviews. It is presumably understood that more historic buildings potentially exist in Kandy than it was ever imagined, which does not necessarily mean the authority needs to designate them all. A separate selection process will be necessary to determine which ones are really worthy of preservation and need to be regulated. It can be also said that currently, some buildings need to be delisted due to their loss of historic characteristics.

2) Diversity of Styles

The surveyed buildings are preliminary classified into several types such as: Dutch Bungalow with Colonnade; Bargeboard-Verandah; Western Classical; Gable Roof; Classical Façade; and Art Deco. The composite styles are also found. In general, shophouses are diverse in their forms, and it is difficult to define their strict typologies. On the other hand, analysis of the plan draws two distinctive types as illustrated in Figure 10.4.4. One is “main house with attached house” type, or main house with street-facing frontage occupying most of the lot and attached house on its back. The other is “front house with inner house” type, or street-facing, rectangular house and a large courthouse on the back side of the deep lot. The former type is introduced here as the street-facing shophouse, which has a common feature and almost no difference with the shophouse type found in Southeast Asia (Shophouse Raffrecia). On the contrary, the latter is supposed to be a remnant of courtyard house, namely genealogy of Walawwa⁸ or the local courtyard house, and its front part has distinctive similarities with bungalow housing⁹. Likewise, the two types of the planning suggest the formation process of shophouse in Kandy.

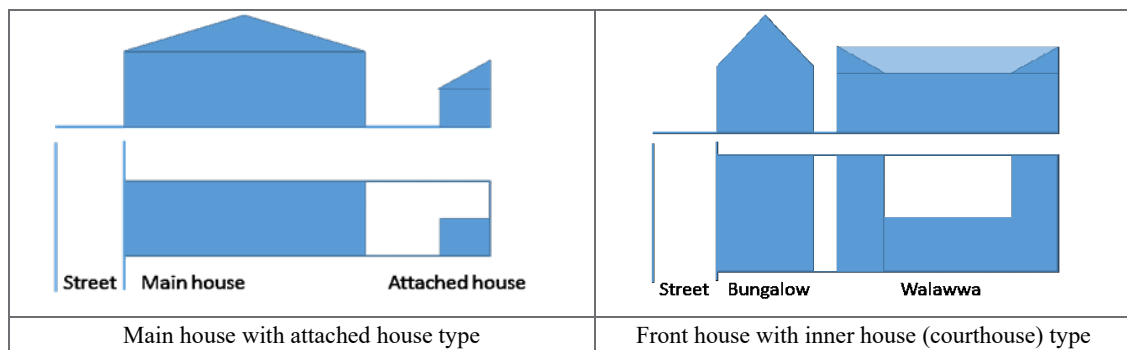


Figure 10.4.4 Two Types of Shophouse Identified in the Survey

3) Typology of Shophouse as Historic Building – Based on the Classification of Façade

Through analysis of the design of façade, roughly six types are preliminary identified as shown below.

⁸ Walawwa or Wallauwa is the name given to a feudal or colonial manor house in Sri Lanka of a native headmen.

⁹ Bungalow is a type of building, originally developed in the Bengal region in South Asia. The meaning of the word bungalow varies internationally. Common features of many bungalows include verandah and being low-rise.

(a) Dutch Bungalow with Colonnade Type

This type has a colonnade consisting of Doric column of thick proportion on its façade, and this colonnade composes the veranda. Single-storey and two-storey are found in Kandy. In the latter case, the colonnade is located on both floors, or only on the upper floor, in this case the ground floor has arches. Topped with a gable roof, the structure is made by brick and finished with stucco, and its floor is in rectangular form. The construction could date back to the 19th century, which is relatively old in the Grid City. This type is distributed both on D.S. Senanayake Veediya and Colombo Street (see Figure 10.4.5).



Source: The JICA Team

Figure 10.4.5 Example of the Dutch Bungalow with Colonnade Type

(b) Bargeboard Verandah Style

A verandah is set under a triangle gable on the upper floor façade with a delicate wood-carved barge board beneath the roof edge. There are some varieties of this style without triangle gable roofs. The roof shape is a gable roof and the entrance is located at the roof-end side, and some has pointed gable, slanted shaper at its middle to the top. This type is originated from bungalow housing, introduced by the Westerners, and it was probably used for decoration purpose. This type of shophouse is often found side by side in Colombo Street (see Figure 10.4.6). According to the interviews, based on the years marked on some of the buildings in the Grid City and the historic photos, this type is likely to be built in the early 20th century.



Source: The JICA Team

Figure 10.4.6 Example of the Bargeboard Verandah Style

(c) Western Classical Type

Designed in Western Classical style, buildings of this type have various features of the Western Classical architecture (e.g., colonnade, balustrade, urn) in detailed design (see

Figure 10.4.7). These buildings were probably not designed by chartered architects or professionals, but by contractors or builders. Therefore, irregularity in proportion or detail is observed, or design in details is omitted. Such features are frequently observed; hence, the one having the basic form of Western Classical design is categorised here.



Source: The JICA Team

Figure 10.4.7 Example of the Western Classical Type

(d) Gable Roof Type

While the basic form of a shophouse has a gable roof with roof-end approach, this type is characterised with roof, from its top to the end, directly facing the street side (see Figure 10.4.8). It has various compositions in its façade design such as window topped with lintel or arch, or successive window frame at its width. Typical roofing materials are half-round clay tiles and small, rectangle clay tiles called Calicut tiles. In case of reroofing, they are sometimes roofed with corrugated metal sheet or asbestos sheet. Roof pitch is also variable one by one. This type has rich varieties and it is difficult to generalise to one type in terms of building typology, but in general, these are the buildings with deep roofs that accommodate several units within one building.



Source: The JICA Team

Figure 10.4.8 Example of the Gable Roof Type

(e) Classical Styled Façade Type

This type has a structure in gable style, with a façade designed in Classical elements attached to the body. In this case façade is just a skin and is structurally and aesthetically separated from the main body (see Figure 10.4.9). The motifs that are employed in the façade have so many varieties. In this kind of structure, drain pipes must be installed between the façade and the roof-end.



Source: The JICA Team

Figure 10.4.9 Example of the Classical Styled Façade Type

(f) Art Deco Type

Art Deco was invented at the occasion of the International Exhibition of Modern Decorative and Industrial Arts in Paris in 1925 (Art Deco Expo), which is characterised with geometric or mineral-like decorative design. The style has survived after the Art Deco Expo itself, and the so-called Post- Art Deco style has continuously existed up to the 1950s or the 1960s in the world. In Kandy's case, one example dating back to the 1970s is also found. As a general feature of this style, on the contrary to another modern design movement which has theoretical background or professional training, the Art Deco type was generated and succeeded as an opportunism to these trends by historicism party. Naturally, this type of design has some remnants of the basic forms of historicism design, or quotations from historicism after simplifications. Generally, Art Deco was followed by Modernism; however, in the former British Colonies, the Modernism style was not quite developed. Therefore, Art Deco thrived for a relatively longer time. In this context, Art Deco has rich varieties, and in Kandy, some common features in its design vocabulary are recognised (see Figure 10.4.10), which means a limited number or schools of design could have once existed here.



Source: The JICA Team

Figure 10.4.10 Example of the Art Deco Type

This typology indicated above should be regarded as a preliminary result of the survey conducted in limited area and limited period. Hereafter, if the boundary of the targeted area is widened, a reconsideration of these results is indispensable. Inventory survey is generally meant to check the exterior of the buildings so that genuine analysis of typology should be conducted along with structural and spatial understanding through measuring survey.

(3) Analysis on the Plan of Shophouse

As previously pointed out, the plans of shophouse can be classified in two types: main house with attached house type; and front house with inner house type. Below are some in-depth analysis on the plans.

1) Main House with Attached House Type

This type is characterised to have a street-facing main house, occupying major part of the lot, and an attached house at its backside. The main house normally has a gable roof style with approach at its end, and its structure consists of brick walls at both sides and beams spanned between the walls. Topped with roof tiles in most cases, flat tiles and half-round tiles are also observed depending on the construction periods. In many cases, a façade designed in Western classical motifs is attached to the body like a signboard panel.

In the case of the buildings that were measured in this survey, the ground floor is used as commercial, and the upper floor as storage, but formerly used as owners' or employees' living space or sleeping space. For these kinds of usage, the interior has a wider space without partition. With the exception of a staircase or some attached use, only a minor partition is installed in the measured house in this occasion. On the back side of the main building, spanned over the small courtyard, an attached house is built. As service and utilities are not installed in the main house, the attached house is equipped with facilities such as wash room, bathroom, or kitchen.

From the observation in the Grid City in Kandy, this type of building is mainly a two-storeyed house which has the upper floor covering the full depth of the ground floor and has the same height on both floors, while a single-storey type and an upper storey with lower floor height are also found. In the old photographs, more variations are identified.

Of these types, the two examples of the measured ones are typical examples of a two-storeyed type. From the analysis shown above, this type was newly introduced at some period, instead of locally developed.

A detailed analysis of the individual buildings is discussed below.

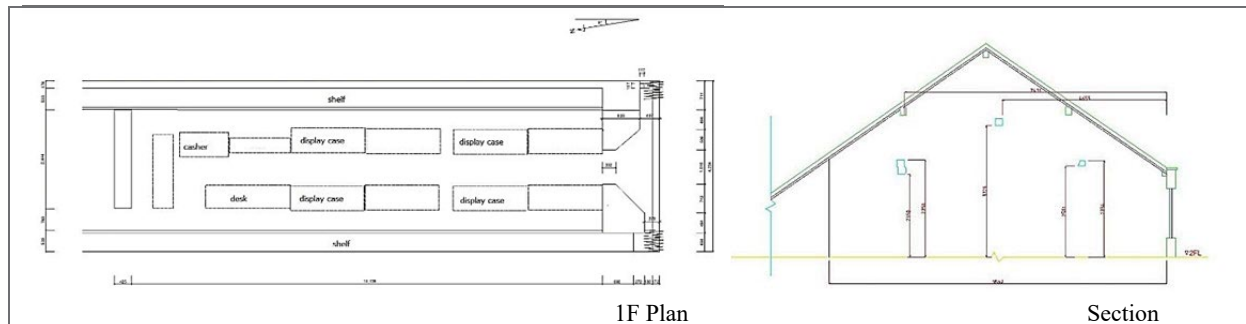
(a) 88 Colombo Street

This is a two-storey shophouse, and its ground floor is used as a textile shop without partition and the upper floor as storage, also with no partition (see Figure 10.4.11 and Figure 10.4.12). Having no ceiling and finishing planks beneath the roof makes it looks broader than it is. The main building was once extended and attached toward the back side, which consequently altered the roof shape so as to cover the inner space under single gable. On the wall of the upper floor, the traces of the old beam are recognised. Its façade is designed in Western Classical manner with three bays on the sign board-like skin which was attached onto the body structure with a gable roof.



Source: The JICA Team

Figure 10.4.11 Surveyed Shophouse at 88 Colombo Street



Source: The JICA Team

Figure 10.4.12 Measured Drawings of 88 Colombo Street Shophouse

According to the owner, this building was built in 1930s by Mr. Senanayake, who owned many buildings in Colombo Street. In 1942, the father of the owner rented this building, started his business, and gained the ownership in 1962. Approximately fifteen employees lived on the upper floor. They stayed there in weekdays, and during weekends went back to their homes in the suburban area, as it was difficult to commute from the rural area to the city every day. On the floor, bunk beds or folding beds were located for their usage. In Colombo Street, this sort of residential style is common everywhere; hence, such places are more vibrant at night-time.

(b) 68 Colombo Street

This is a two-story shophouse. The ground floor is used for shop and the upper floor for storage, just like the 88 Colombo Street building (see Figure 10.4.13 and Figure 10.4.14). Presently, due to the division of succession, the building is presently divided into two parts at the central line of the plan. The right part is occupied by a textile shop and the left by a machinery shop specialising in tractor parts. As the upper floor mostly belongs to the textile shop, a broad space is still reserved with a small partition on the back side. Also, no ceiling is installed and the finishing planks are put beneath the roof. The façade consists of the two spans, which is suitable to separate ownerships. The façade is just a flat plate attached onto the main body with the gable roof. The left wall is slanted into the interior side, supported by an additional iron flame. At the back side of the main building, the attached house, spanning a small courtyard and also divided into two parts, was built, and the right side is currently

covered with roofs to make it an interior space. It has a flying bridge on the upper floor to be connected to the main house, showing a dynamic spatial composition. The left side maintains the original courtyard space and the attached house is for a washroom commonly used by the two shops. The attached house, even if divided into two, is connected by a door.

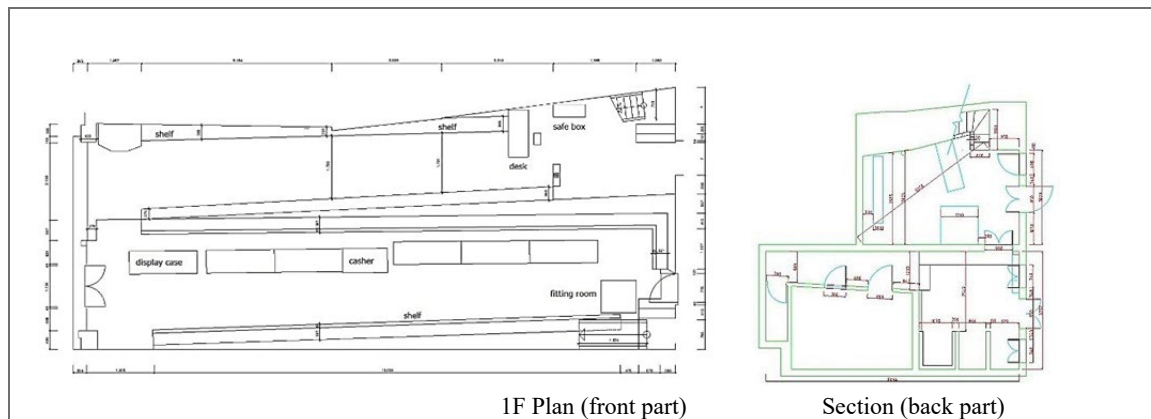
According to an interview with the owner of the textile shop, the house was originally owned by a Pakistani, who owned four houses including this one but returned to his home country due to the expiration of his resident permission. The present owner bought this house in 1974 and then moved from No. 58 Colombo Street. His brother once ran a tractor shop at 74 Colombo Street and was invited by his brother to join here. Then, the shop space was separated by wooden shelves.

When the owner moved to the house, the main house and the attached house were there as it is today. The backyard is open-air and vacant space, which afterward became a covered inner space with the installation of a roof. In the past, there lived cooks and employees with their family. Twenty people were accommodated in total, and the owner also stayed there. They all worked from nine in the morning to four in the afternoon, following the shop regulation at that time, and went to pray at the temple in the evening, had a meal at the balcony or chatted together. The street then was not so busy and the windows could be left open. Even at the upper floor, it was not so hot because it was covered with a tent-like fabric to prevent the dust from falling. As most of the buildings in the neighbourhood were small, they were able to enjoy the nice breeze. When the riot broke in 1983, many houses in Colombo Street were burnt down and they were replaced with bigger structures with three to four floors. This building might have been burnt under such circumstances, but fortunately, it survived. This store was closed for six to seven months during the riot in the 1980s.



Source: The JICA Team

Figure 10.4.13 Surveyed Shophouse at 68 Colombo Street



Source: The JICA Team

Figure 10.4.14 Measured Drawings of 68 Colombo Street Shophouse

2) Front House with Inner House Type

This type is composed of a frontage house, street-facing in rectangular plan, and a courtyard house as the inner house stretched to deep length. The frontage house, compared with the shophouse type, has relatively not so deep length in rectangular shape with the longer side set to the street direction. It is a variation of bungalow style with a colonnade onto the façade, or a mansion type with a salon (reception room). The two houses – the frontage house and inner house – are structurally independent, and an intermediating courtyard is inserted in between. The inner house is the inheritance of Walawwa, a traditional mansion-type housing, or its remnants. In this case, the two houses, both at the front and at the back side, generally have no service facilities so that the attached house is built in the lot, or an additional part attached to the main house is constructed to accommodate them. The inner house has a colonnade facing the courtyard. The kitchen is sometimes installed at the back side. The courtyard basically functions as a source of ventilation and lighting, and is well-treated by the owner for decorative gardening.

At present, this type is found at D.S. Senanayake Veediya. Accordingly, the inner houses inherited the shape of Walawwa physically or spatially. Walawwa was not initially facing the street, and lately, the vacant space between the streets is filled with housing. Subsequently, this typology is supposed to be generated. The earlier case of the frontage house would be in bungalow style, which would later be converted into mansion type.

Hereafter, the examples of measuring work are shown.

(a) 190 D.S. Senanayake Veediya

The front house is designed in Art Deco style with eye-catching plural straight line portions (see Figure 10.4.15 and Figure 10.4.16). The interior decoration has the same motif as the one on the façade till the second span, and the hind side is not decorated but has chamfering on the column, which is a detail design of Gothic style. The house was designed by an architect with knowledge of classical design. The façade itself is attached to the gabled structure, such as the shophouses which were previously discussed. The backside of the front house has a lower roof attached to make a verandah space. The inner house behind it is a rectangular structure stretched to the deeper side with a colonnade facing the courtyard. Its column is Doric style in thick proportion, evoking the remnant of Dutch bungalow. At the same time, it also evokes the composition of Walawwa, surrounding and open to the courtyard. This house is located at the east side of D.S. Senanayake Veediya.

According to the interview with the owner, her father bought this house in 1962, and the family has continuously lived here since the following year. At that time, the parents and their four children lived in this house, including their Tamil house servant. Before, one

owner also owned another house next door aside from this house, and the two houses had the same design. Beside the garage attached to this house, a small pathway leading to the back side was secured and the Tamil cleaner took this path to collect the garbage and sewage. Initially, the pathway was commonly used by the residents next door for the same purpose. Later on, a washroom was installed and this path was enclosed.

Since then, this house had almost remained untouched. Some minor alterations were made, such as creating the dining room by enclosing part of the exterior space. The small hut which stood at the end of the courtyard was a toilet for servant, who stayed in the room in front of the kitchen. The parents' bedroom was located just next to the entrance and the adjacent room was used as the children's bedroom. A small window on the wall of dining was filled because of the advice of a fortune teller. The ceiling was originally made by wood but had been damaged by termites. The original materials are still there in the current owner's bedroom, facing the courtyard. The house was originally roofed with Sinhalese tiles, but these were taken by monkeys so they were replaced with asbestos sheets.

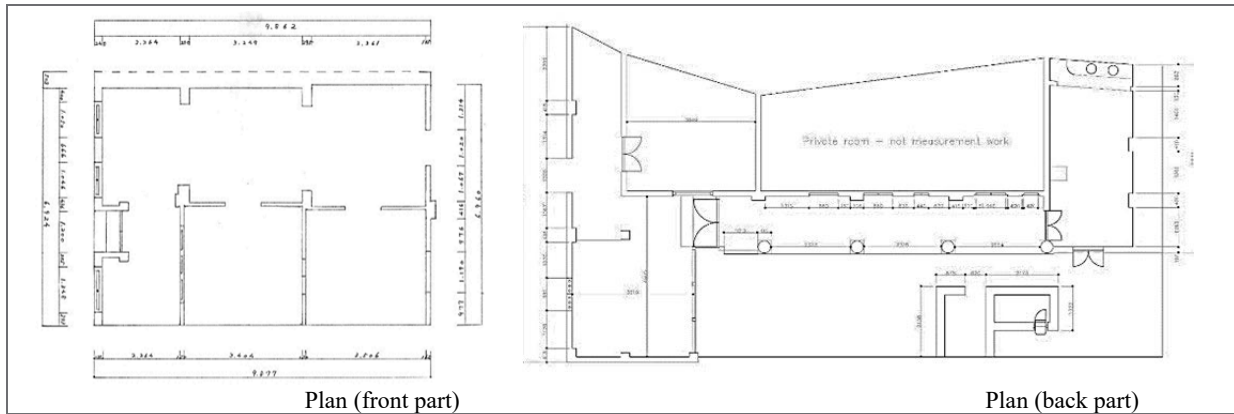
According to the respondent, in her childhood, the neighbourhood consisted of similar style residential buildings, and the residents enjoyed conversation on the street in the evening. Now, almost all have left the street as the living condition is deteriorating due to heavy traffic and air pollution.

During the term of President Rajabaksa, a five-storeyed big house was built just behind this house, and the borderline was traced by barbed-wire entanglement, removing one column of the house without any permission.



Source: The JICA Team

Figure 10.4.15 Surveyed House at 190 D.S. Senanayake Veediya

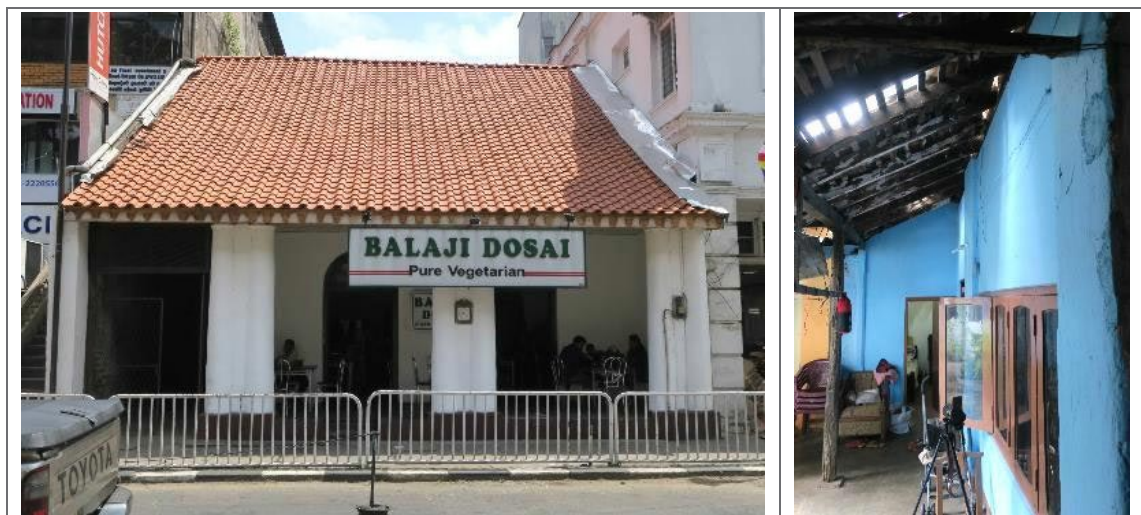


Source: The JICA Team

Figure 10.4.16 Measured Drawings for 190 D.S. Senanayake Veediya House

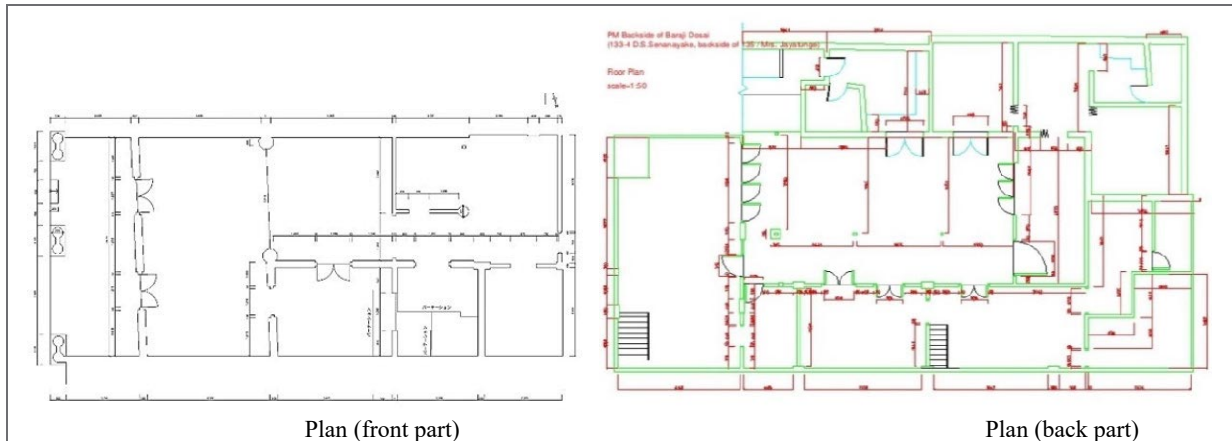
(b) 135 and 133 D.S. Senanayake Veediya

The front building is in Dutch bungalow style with colonnades at the façade and the back (see Figure 10.4.17 and Figure 10.4.18). Behind the house is a small backyard surrounded by attached structures. At the bottom of the lot, the inner house (former Walawwa) is still surviving. The frontage house and the inner house are completely divided as per usage, and a small pathway is secured as the approach to the inner house. This composition of the lot means that a Walawwa once stood on this plot and the vacant space between the house in the back and the street was occupied by the bungalow house. Presently, the front house is used as an Indian restaurant while the inner house has become a residential building for a large family. The inner house is composed of four buildings, enclosing the courtyard; however, the one on the south side is a new construction, so that the original condition was supposed to have three houses. Facing to the courtyard verandah is equipped, as a remnant of Walawwa. The inner house is of brick-made structure, along with a wooden frame at the roof structure and the verandah.



Source: The JICA Team

Figure 10.4.17 Surveyed Houses at 135 and 133 D.S. Senanayake Veediya



Source: The JICA Team

Figure 10.4.18 Measured Drawings for 135 and 133 D.S. Senanayake Veediya House

3) Conclusion of the Analysis on the Shophouse Plan

(a) Relationship Between the Typology of Façade and the Plan

The two houses, which were surveyed this time, have common features and well-developed composition of this sort of setting. Nevertheless, there are many other types of buildings which require further analysis of planning or structure to be recognised. Structurally, the ones in the genealogy from single storey to two storeys, wooden house without brick partition wall, or consecutive housing are some of the supposed typology. A shophouse could also have some varieties, such as the one in similar proportion with bungalow detected through the inventory survey, could show the genealogies of bungalow or shophouse. It is highly recommended to conduct further investigation on the plan and the structure to also shed light on the relationship between the typology of the façades.

(b) Relationship Between Historic Building and Urban Structure

In the surveyed examples, the distribution of the houses has distinctive features, as the shophouse located in Colombo Street or the inner house inherited from Walawwa located in D.S. Senanayake Veediya. The former, along with the genealogy of shophouse structure, could show the formation process of the commercial district in the Grid City. The latter could show a trace of distribution of Walawwa with further research. Likewise, based on the compiled results of surveys, even the developing process of the city can be traceable. In this sense, further research activities are to be expected.

(4) Formation Process of the Grid City in Kandy

For the formation process of the Grid City, no detailed literature study has been conducted. Hence, some preliminary studies are discussed below based on geomorphological analysis.

The Grid City consists mainly of five streets of south-north direction and six streets of east-west direction. It is plausible that there is no tightly-fixed planning control prevailing over the whole area, but micro-scaled ad-hoc intervention had been compiled to form the street pattern in the area.

Among those in the north-south direction, D.S. Senanayake Veediya is outstanding and longest. From the geomorphological standpoint, it runs vertically at the foot of the hill, where the Temple of the Tooth Relic and the Royal Palace are located at the east end of the city, and it is estimated to have been existed since earlier times. The two streets found west of the D.S. Senanayake Veediya running parallel to it seem to have planned naturally. The east-end

street was probably built to terminate at the Royal Palace and the Temple of the Tooth Relic. The west-end street also runs to enclose the City, along with the railroad.

Among east-west streets, the first, second, third, and sixth streets (from the north-end of the Grid city) relatively run parallel, while the fourth and fifth streets run diagonally in the southeast-northwest direction. The reason could be that the fourth street, Raja Veediya (King Street), which stretches from the Royal Palace, runs transversely through the Grid City to be planned in the earlier stage. The direction of this street could be fixed to terminate at the mountain-top on the west side of the city. The fifth street, Colombo Street, was laid to run parallel to the fourth, and the sixth was formed to trace the edge of the lake. Basically, the east-west streets are short in their length and supposed to be laid to span over the north-south streets. Judging from the reasons discussed above, the street pattern in the Grid City was presumably developed centring on D.S. Senanayake Veediya in the north-south direction, and Raja Veediya in the east-west direction. These two axis streets were built in the very early stage of the development of the city.

Additionally, the relationship between streets and lots are to be examined in terms of the formation process of the city. Through careful observation as to which street has priority at every corner or crossing of the streets, the formation process of the area can be traced. At the corner, the lots of the preceding street had been developed. If both sides of the corner or crossing are equally developed to form a diagonal back-line at the bottom of the lots, it is estimated that the two streets were laid and developed at the same time. Following this principle, D.S. Senanayake Veediya has priority to all streets on its east side. On the other hand, on the west side, the diagonal back-lines are observed at the crossing between the fourth and the fifth streets, which mean the area around these streets had synchronically developed. Between the sixth street and Queens Hotel is located and its huge site would be secured at the earlier stage, when the two streets were laid.

On the west side of D.S. Senanayake Veediya, the east-west streets have priority, and they would follow the geomorphological feature of the area, slanting from east to west.

Inside the blocks in the Grid City of the grids, the back streets were laid out in the earlier time period. These alleys are especially found in the southern part of the Grid City, particularly in the blocks bounded by Colombo Street and Dalada Veediya. In the map of Kandy in 1928 preserved at the British Library, these back streets are distinguished by the colour in the same manner as a regular street, which might mean the back street was also regarded as public street. This evidence shows the condition of the street layout at the time; back then, it shows the back-lane in its authentic meaning as service space did not exist, and it functioned to subdivide the lots. It coincides with the accounts of the one of the interviewees, who indicated that a long time ago, the pumping service went through the interior of the house, which represented the feature of the streets as they were. Also, for the same reason, the deeper lots have never been developed in the area, indicating the relatively short history of the development of the shophouse.

CHAPTER 11 PUBLIC CONSULTATION IN THE HERITAGE AREA

11.1 Approaches to Public Consultation

11.1.1 Present Condition and Regulatory Provisions

(1) Present Condition

People have various opinions about their own city. However, due to lack of communication among the community members, the issues are not shared to all. These kinds of issues are happening in Kandy. Therefore, it is necessary for the citizens of the heritage district to start by sharing the problem consciousness in their daily lives. For instance, there are some community groups, such as the KMC-led environment improvement group that tackles the problem of dengue fever. There is a potential to formulate such community groups where people can share issues in their locality and identify common interests for heritage preservation. For this purpose, GKUP proposed the cooperation of sharing of opinions regarding the detailed plan formulation and selecting a group of citizens to participate in a citizen-led planning.

(2) Regulatory Provisions

Public consultation is gaining popularity in the urban planning sector, in addition to other sectors such as rural development, social development, etc. The local community is the one that understands the local conditions and issues the most and expects a better living environment for their future cities and towns.

On the contrary, public consultation has not been institutionalised especially in developing countries. In the case of urban planning system of Sri Lanka, the details of the procedure for the formulation and approval of the development plan stipulated by the Planning Procedure in Section 8 of the UDA Law (Amendment), Act No. 4 of 1982 are as follows:

- 1) The draft development plan is to be prepared by UDA and submitted to LAs
- 2) The draft plan will be reviewed by LAs, including public views, for 60 days
- 3) The draft plan, together with the comments from the LA, will be examined by the Planning Committee
- 4) Based on the recommendation of the Planning Committee, the plan will be submitted to the Minister for approval or modification
- 5) Upon the approval of the Minister, the development plan will be Gazetted and translated into 3 languages: English, Sinhala, and Tamil

In this procedure, the local communities are only able to review the draft plan for 60 days and provide comments to LAs, if any. The local communities are not fully involved in the planning process, including analysing of issues, visioning and formulating plans, and projects formulation.

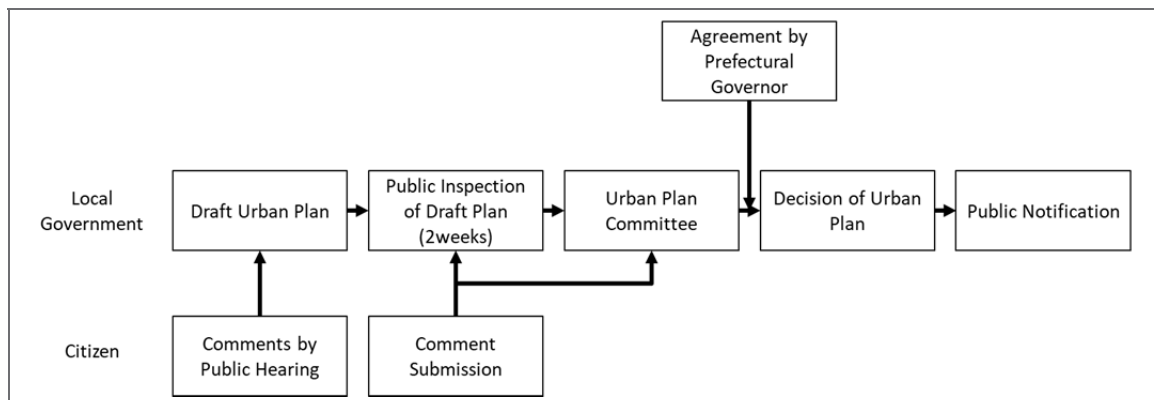
Headed by the mayor, the Planning Committee members are composed of the secretary of UC or PS, technical officers, engineers, UDA town planners, and other requested officers (i.e. from RDA, CEA, NBRO, NWSDB, etc.). This Committee is not open to the public.

(3) The Case of Japan

In the case of Japan, in addition to public inspection of the draft plan for two (2) weeks (similar to UDA Plan) according to the Urban Planning Law of Japan, public hearing meetings are conducted by the local government to collect comments on the draft plan (see Figure 11.1.1).

In addition to the legal system of public consultation for urban plans, Japan has a lot of experience on public involvement which the local communities initiate (see Figure 11.1.2)

Additionally, there is a District Plan (special area plan) system in Japan which aims to preserve the appropriate living environment and the townscape. The District Plan in Japan is proposed by the local residents and approved by more than two-thirds of affected landowners under the property owners' agreement.



Source: The JICA Team

Figure 11.1.1 Public Involvement in Urban Planning System in Japan

In addition to the legal system of public consultation for urban plans, Japan has a lot of experience on public involvement which the local communities initiate.

The Case of Ise Kawasaki, Mie Prefecture: This is a historical commercial town with traditional townscape along the river. In 1978, members of the local communities were opposed to the dam construction plan by the Ministry of Construction, and conflicts arose between the citizens and the government. The citizens launched a movement against the River Improvement Plan along with a movement for townscape preservation. This movement contributed to the formulation of the “Kawasaki Town Planning Improvement Project” by the communities and experts, which is in line with the Ise City Master Plan by the government.

After the establishment of Ise Kawasaki NPO, the group organised various projects and events, including architecture survey in collaboration with universities, coordination/ matching system between historic building owner and people who are interested to buy it and conduct a new business there.



Source: The JICA Team

Figure 11.1.2 NPO Activities in Ise Kawasaki, Japan

Nara Machizukuri Center (NMC) was the oldest town planning NPO in Japan. It aims to restore Japan's "spiritual home", Nara, and to promote citizen-centred and government-supported community development.

In 1989, NMC proposed the Naramachi Museum town scheme to Nara City Government, in which vacant houses and storehouses should be revitalised as museums and galleries.

After this, NMC conducted various projects by utilising historic properties with local community initiatives. At present, Nara Machi is considered one of the popular tourism destinations.



Source: The JICA Team

Figure 11.1.3 NPO Activities of Nara Machizukuri Centre, Japan

11.1.2 Objectives and Approaches of Public Consultation for Detail Plan

Detail plans of heritage areas could constrain the rights of owners of land/buildings by limitation of the land code. Infrastructure design (e.g. installation of vehicle-free streets, traffic control) could also disturb the community life.

For this, the original objective of the PCM was to provide a forum for the community to participate in the formulation of the Detail Plan for the historical areas to build consensus among the property owners and to share an understanding/opinion/direction for heritage preservation.

However, it was found that (i) most of the heritage buildings are rented out by the owners living outside the Heritage Area, and accordingly, it is necessary to collect the opinions of business owners (tenants), (ii) it is difficult to collect the opinions of the owners through a public consultation meeting since many of them do not live in the Heritage Area and they hesitate to speak about issues and opinions to the government and other citizens, and (iii) local citizens who are not heritage building owners are interested more in transport, socio-economic and environmental issues which directly affect their daily lives rather than heritage preservation.

As such, the JICA Team has taken three (3) approaches which include the following: (a) interview survey of households and business owners to grasp their attributes and concerns as well as information on their buildings (see 11.2), (b) meetings with the heritage owners where they feel easier to speak out on the difficulties and constraints of heritage preservation (see 11.3), and (iii) Public Consultation Meeting (PCM) with the local communities to discuss various issues including heritage preservation with community initiatives (see 11.4).

Using these approaches, public consultations were undertaken in order to share comments and common understanding of urban issues and draft plans and projects, to encourage participatory planning and consensus building, and to strengthen partnership and trust between the public and the citizens.

11.2 Interview Survey of Households and Business Owners in the Heritage Area

11.2.1 Approaches

(1) Objectives

To formulate the Detail Plan of the Heritage Area, it is necessary to understand the people – both visitors and residents – in the Heritage Area. Specifically, the opinions and concerns of the households (owners or lessees) inside the Heritage Area are indispensable for the validation of the detail plan and effective implementation of the guidelines.

For this purpose, the interview survey was conducted in the Heritage Area targeting (1) Sri Lankan and foreign tourists, and (2) owners/ lessees of buildings.

(2) Methods

A household/ business owner interview survey was conducted in the Heritage Area to grasp the following:

- A) Information regarding household/ business owner: name, race, religion, type of house/ building ownership, house/ building ownership period, business operation at home for household, type of activity of business owner, vehicle ownership, parking condition, etc.
- B) Concerns for urban issues in Kandy City: assessment of urban issues (economic, social, transport, infrastructure), assessment of environmental issues, favourite places
- C) Concerns for historic preservation (experiences in renovation, compliance with zoning regulation, awareness and designation of conserved building, etc.)

The interview sampled 2,000 households/ business owners, which is more than half of all the buildings in the Heritage Area.

Table 11.2.1 Samples of Interview Survey

	Household	Business Owner	Total	%
Commercial Grid	93	1,005	1,098	55%
Cultural and Religious ¹⁾	14	76	90	5%
Lake Around	110	78	188	9%
Civic Hub	31	88	119	6%
Public Transit Zone	173	332	505	25%
Total	421	1,579	2,000	100%

Source: The JICA Team

¹⁾ When this interview survey was conducted, the sub-zones were categorised into five (5), including the cultural and religious zone around the Temple of the Tooth Relic. After consultation with counterparts, the sub-zones were categorised into four (4), and cultural and religious zone were split and merged into Commercial Grid Zone and Lake Around Zone.

11.2.2 Attributes

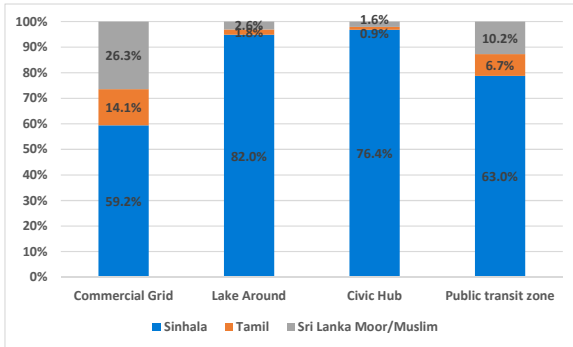
(1) General Attributes

Ethnicity and religion (See Figure 11.2.1 and Figure 11.2.2): The Sinhalese and Buddhist ethnic groups account for more than half of all the zones and make up the majority in the Lake Zone, in particular. The Tamil and Muslim ethnic groups account for over 10% in the Grid, Cultural, and Transit Zones, respectively.

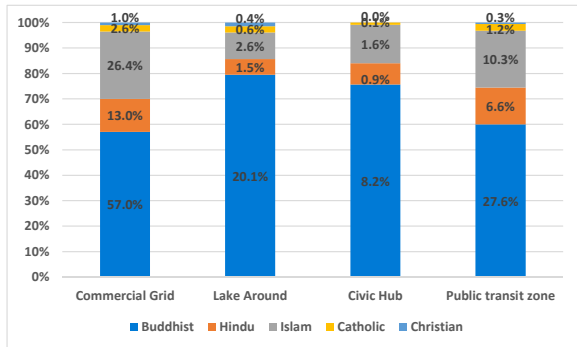
Type of ownership (See Figure 11.2.3 and Figure 11.2.4): Over 40% of housing is rented or owned. Businesses account for half of housing that is rented. About 30% are owned. In both cases, the percentage of long-term rental contracts is low.

Employment situation of the head of the household (See Figure 11.2.5): About half of the households do not work or engage in business, with 19% operating business or working at home and 29% working outside the home.

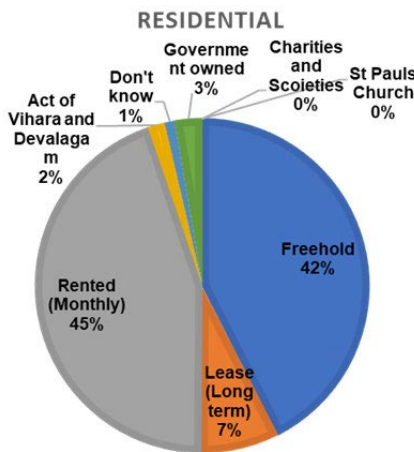
Description of business (See Figure 11.2.6): Retail, offices and services comprise 40%, respectively, followed by arts and crafts and restaurants/cafés.



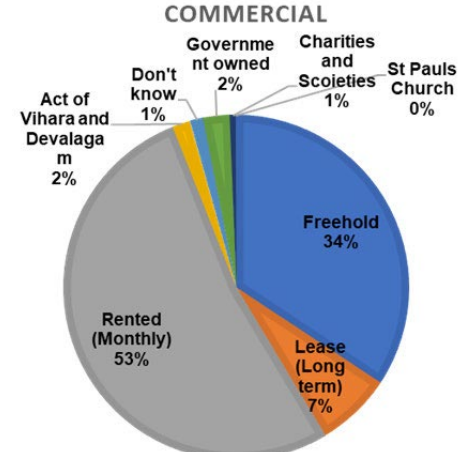
Source: The JICA Team
Figure 11.2.1 Percentage of Ethnic Groups by Zone



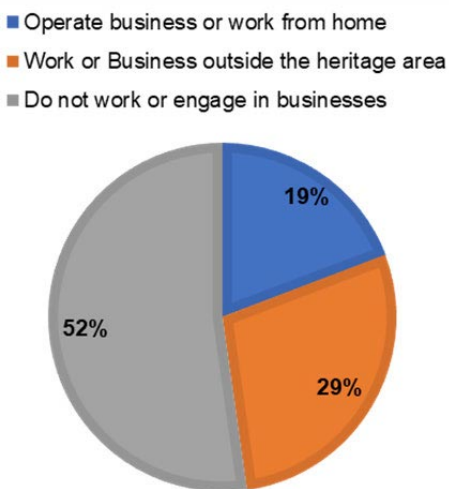
Source: The JICA Team
Figure 11.2.2 Percentage of Religions by Zone



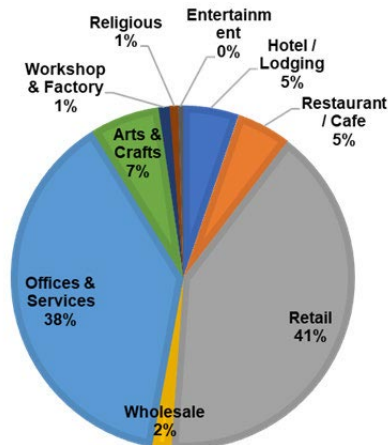
Source: The JICA Team
Figure 11.2.3 Form of Housing Ownership



Source: The JICA Team
Figure 11.2.4 Form of Business Ownership



Source: The JICA Team
Figure 11.2.5 Employment Situation of the Head of the Household



Source: The JICA Team
Figure 11.2.6 Type of Business

(2) Attributes Related to Buildings Designated for Preservation

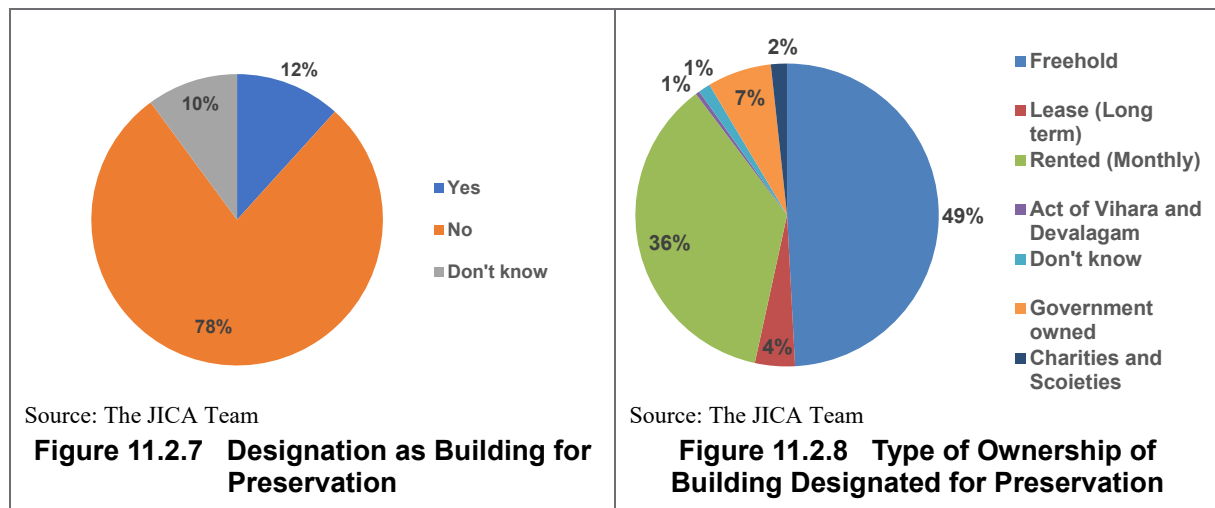
Of those interviewed, there were 234 cases, or 12% of the total, who responded that they own or use a building designated for preservation. Although this is a self-declaration based on the awareness of the respondents, it is assumed that a little less than half of the 488 buildings designated for preservation (i.e. buildings that the UDA has designated as a historic building for preservation in a gazette) are included in this number. (Note: There is a possibility that this number may not be strictly half, as there are cases with multiple households in one building.)

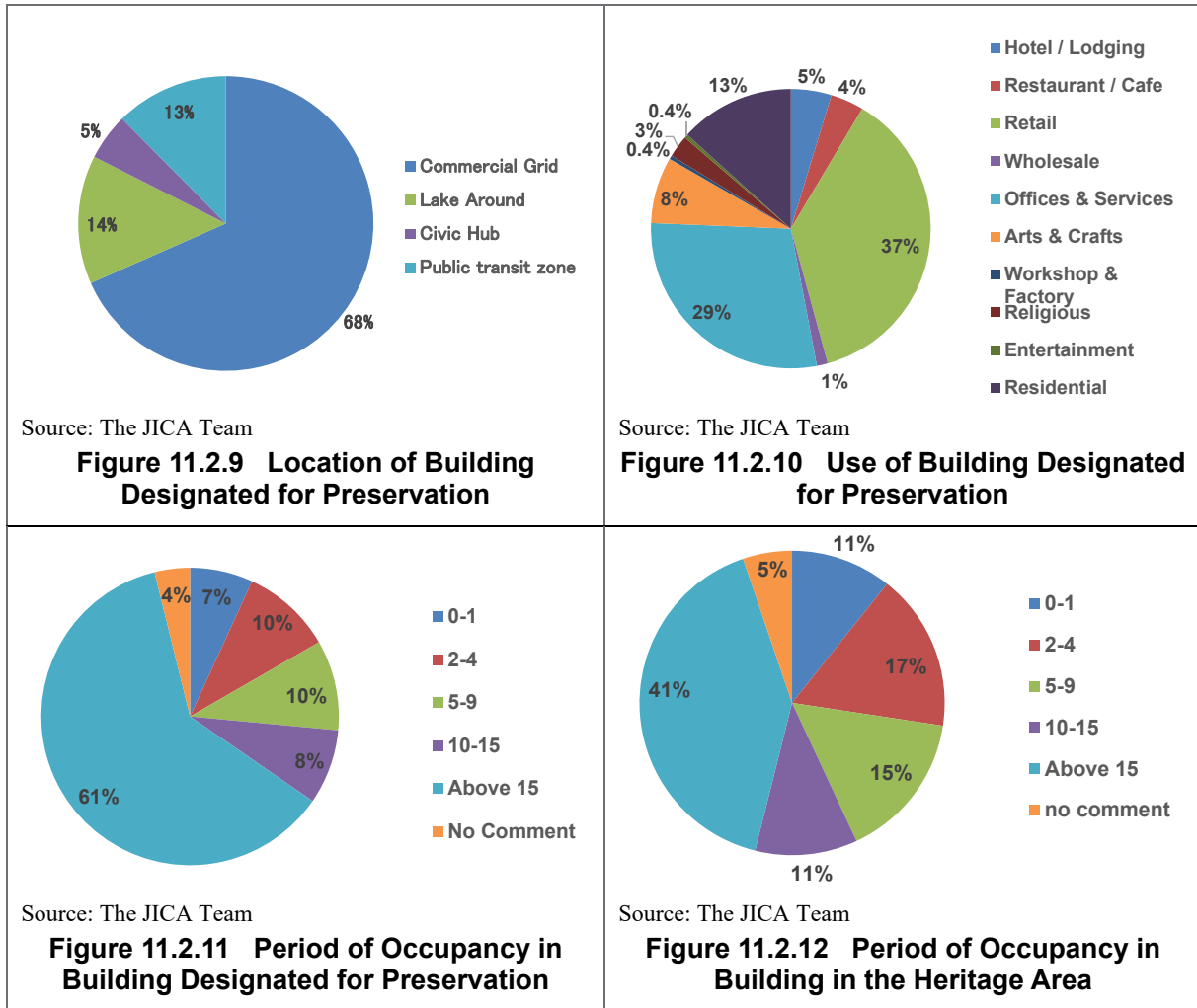
About half of the 234 households above that occupy a building designated for preservation own the house (freehold, 49%), with short-term leases as the next largest type (rented monthly, 36%). The overall trend is roughly the same as the figures for overall ownership. However, the results show that the percentage of ownership is somewhat higher in buildings designated for preservation (see Figure 11.2.8).

Figure 11.2.9 shows the locations of the buildings designated for preservation that are understood in this survey, with about 70% located in the Commercial Grid.

The largest percentage of responses on the use of buildings designated for preservation are as follows: retail (37%), followed by offices and services (29%) in second and residential (13%) in third. Restaurants and cafés that are commonly found in historical cities account for 4% of the whole and hotels/lodging are as low as 5%, showing how buildings designated for preservation are more commonly seen for everyday use rather than for tourism (see Figure 11.2.10).

The largest percentage of the respondents has lived in the buildings designated for preservation for fifteen or more years, which accounts for 61% of the total. The results of the survey on households in the heritage area showed that as many as 41% have lived in these buildings for fifteen or more years, with those who have lived in the area for ten or more years accounting for the majority. However, households living in buildings designated for preservation characteristically tend to live in those buildings longer than the overall trend (see Figure 11.2.11 and Figure 11.2.12.)





(3) Favourite Sites of Residents

The average number of respondents selected about two places as “favourite sites”, or places familiar to residents, from both selections and open-ended responses (up to three selections). Sixty-two people responded “no comment”, which accounts for 3% of the total of 2,000 households surveyed.

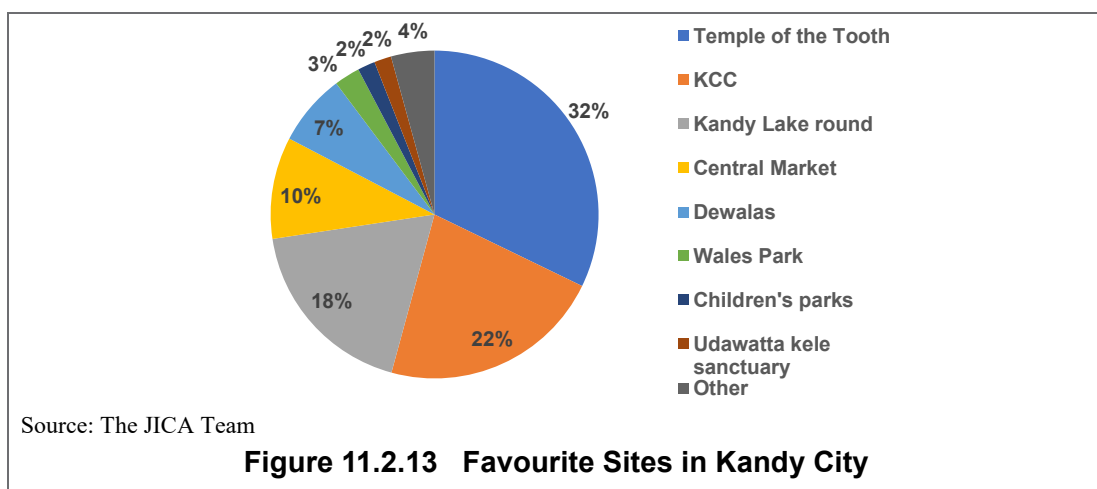
Of the ten options – which included historical buildings, nature, parks, religious facilities, and shopping centres – the top four places accounted for 80% or more of the responses (out of the number of valid responses, excluding no responses). The most popular response was Temple of the Tooth Relic, followed by Kandy Shopping Centre (KCC) in second place, Kandy Lake Around in third place, and Central Market in fourth, showing a bias to specific places (see Figure 11.2.13).

Other than the Temple of the Tooth Relic and Kandy Lake Around – both popular destinations in Kandy – and the recently constructed modern and convenient shopping centre, it is noteworthy that the Central Market, which is not a popular tourist destination, is ranked high. Even in the public consultation meetings that were held separately, comments were made in agreement that the Central Market was one of three popular tourist areas, together with the Temple of the Tooth Relic and the Peradeniya Botanical Garden.

Seventeen percent of the responses about parks included Wales Park (Children’s Park), Dewalas (Religious Places), and Udawatta Kele Sanctuary. However, despite the fact that there were places for the respondents to write in their comments, there was no mention of buildings like the shophouses in the Grid City, which account for majority of the buildings

on UDA’s Conserved Building List. This also highlights the lack of attachment of the residents to such buildings. To promote these buildings, educational or awareness activities may be needed.

When viewing the responses to “favourite places” by zone, although the Temple of the Tooth Relic and the Kandy Shopping Centre are ranked high in each zone, zones that are at a distance from lakes, such as the Public Transit Zone (21%) and Civic Hub Zone (19%), ranked higher than the Lake Around Zone (13%). This indicates a situation where large-scale green spaces and open spaces that are not in residential areas may be preferred. For those living within the vicinity of the Central Market, a higher percentage was seen in the Lake Around Zone (20%) and Cultural Religious Zone (16%) than the Civic Hub Zone (12%), where the Kandy Central Market is located. Although it seems that the convenience of the Central Market is high as many retail facilities have moved in, residents who live in the vicinity of those areas may feel the negative influence from the facility itself in terms of traffic and sanitation.



11.2.3 Historical Environmental Conservation Relationship

This section clarifies the awareness of the general residents towards height regulations in the Grid City area where there are a number of designated buildings; aesthetic regulations for signs; understanding of the outline of general renovation work in the heritage area; outline of households that account for buildings designated for preservation; and trends for modifications of occupied buildings under the UDA Development Plan. Since there was no way to specify the owner or occupant of a building designated for preservation in advance at the start of this survey, it was decided that the owner or occupant would be identified when the household was visited. Although not all buildings designated for preservation could be covered, the analysis was conducted with the assumption that the sample size would be small, but that it would be able to capture a particular trend.

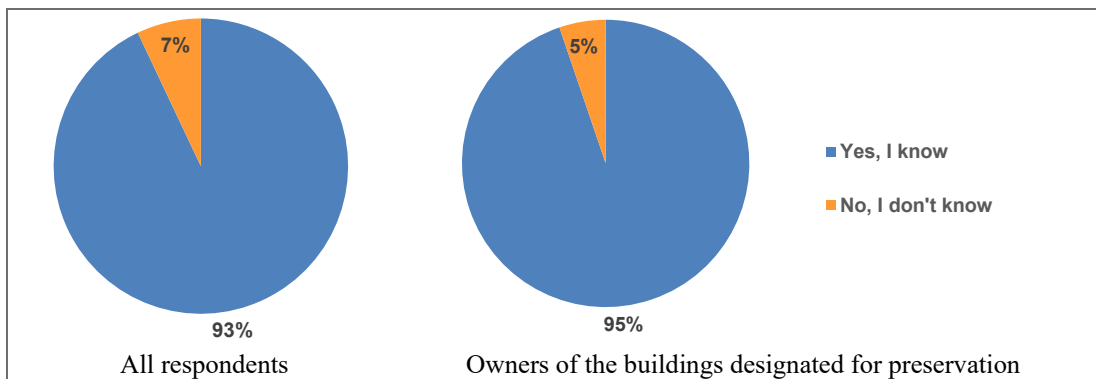
(1) Aesthetic Regulations

Awareness of aesthetic regulations: The degree of awareness on height regulations in Kandy’s heritage district (max. 12 m in consideration of the height of the Temple of the Tooth Relic – see Figure 11.2.14) and signboard regulations in consideration of the historical streetscape (see Figure 11.2.15) are extremely high in both cases. Ninety-three percent of the respondents are aware of height regulations, and 85% of the respondents are aware of signboard regulations. It is clear that this greatly differs from buildings that do not meet the regulations for building height and the size and use of neon in signboards.

Buildings with eight or more storeys, such as the Commercial Bank Building along Kotugodella Vidiya and the Casamara Hotel, have likely existed before the above regulations were put into place. However, there are buildings that are over 12 m (i.e. Ceyloni Inn, which was developed after the historical building on Cross Street was torn down) that were completed after March 2017 when this survey began, which indicates that there are cases in which these regulations are being broken even as there is awareness of such regulations.

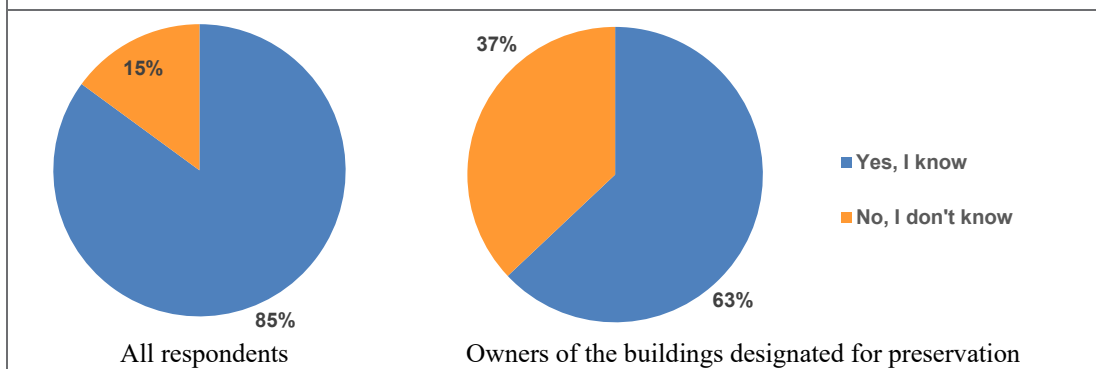
There are a number of signs in the heritage district that seem to have been installed prior to the 21st century due to the typesetting, design, and physical deterioration of the signboard itself. However, even though there is awareness of the existence of these regulations, it appears that these signs, although illegible, continue to be used without any changes even after the signboard regulations have been introduced. However, as a general theory, it is almost impossible to have the owners freely change the signboards that were installed prior to the introduction of regulations to smaller ones that are consistent with the regulations.

Restrictions on height and signboards differ for each zone. In particular, strict regulations are stipulated in the Commercial Grid Zone. When looking at the responses by zone, the level of awareness in all the zones about both regulations is high and there seems to be no difference in the degree of awareness by zone. However, looking at the responses of the owners of the buildings designated for preservation about these regulations, although awareness of height restrictions is nearly the same as the numerical value of all the respondents on this regulation, the percentage of awareness on signboard regulations is decidedly lower when compared with all the respondents. As mentioned above, since signboards have been installed on existing historical buildings prior to regulations in many cases, the difference in this figure seems to reflect the current condition of the use of existing illegible signboards, with little to no observation of these regulations.



Source: The JICA Team

Figure 11.2.14 Degree of Awareness of Height Regulations



Source: The JICA Team

Figure 11.2.15 Degree of Awareness of Signboard Regulations

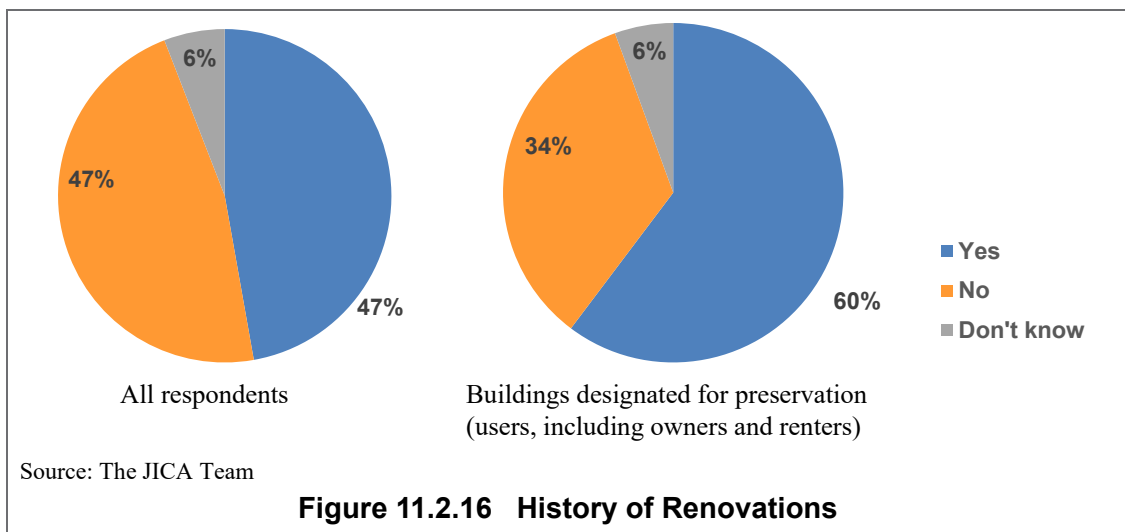
(2) Renovations

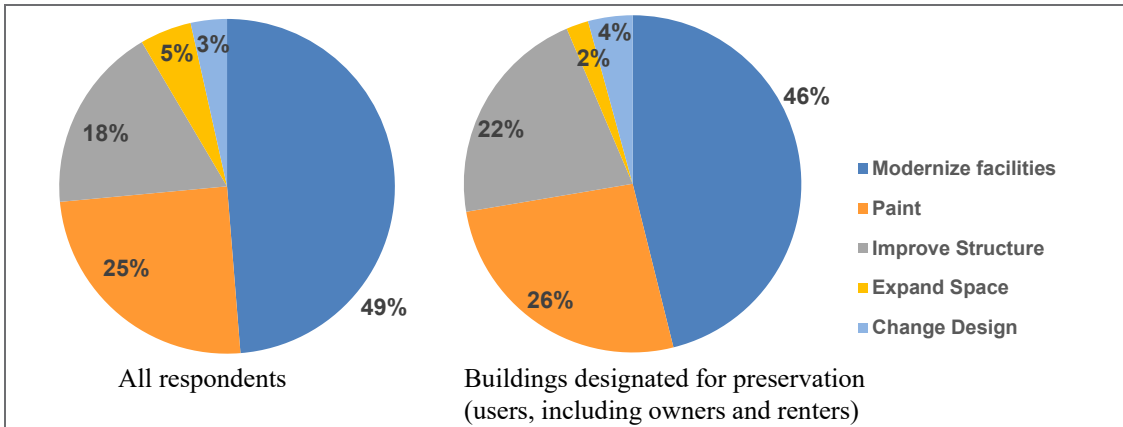
The percentage of the respondents who responded that they had done some renovation work was 47%, which was nearly the same as the percentage of people who had never done any renovation work. However, the percentage of the respondents who owned or rented a building designated for preservation who responded that they had performed renovations was slightly higher than the percentage for all respondents at 63% (see Figure 11.2.16). Since the buildings designated for preservation are deteriorating, it seems that more renovations will be required compared with general buildings.

When asked about the reasons for renovation, out of the 944 responses stating that some renovations had been done, about half was to modernise facilities (49%), followed by painting (25%), with improving structures (18%) in the third place. Responses by respondents who own or rent buildings designated for preservation for this question are almost the same, with renovations to structures slightly higher (See Figure 11.2.17).

For the question on the type of renovations, about half of the respondents painted or changed the colour of the outer walls, followed by painting or changing the colours on the interior only at 37%, and expansion/addition at 8%. Demolition and rebuilding is low at 6% of the overall responses (see Figure 11.2.18). However, the figures for the respondents who owned or rented buildings designated for preservation are almost the same as that for all the respondents, although some respondents (7%) decided to tear down and rebuild the building. Since this is considered to be illegal, there are cases in which the regulations for preserved buildings are not being observed.

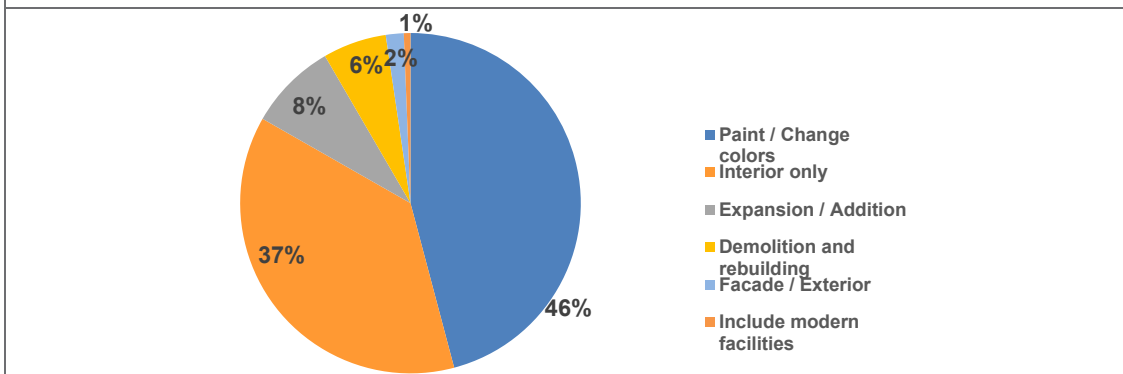
There is a large bias in the timing of renovations. The number of renovations carried out prior to the 21st century is low, and most renovations were found to have been done after the 21st century. Of these, about half of the cases have been implemented in the last two years (2016-2017), which indicates a recent rise in the need for renovations (see Figure 11.2.19). Responses by respondents who own or rent buildings designated for preservation show a similar tendency. However, these buildings age faster than the general buildings, so the rate of renovations is slightly higher prior to 2008 when compared with figures for all the respondents.





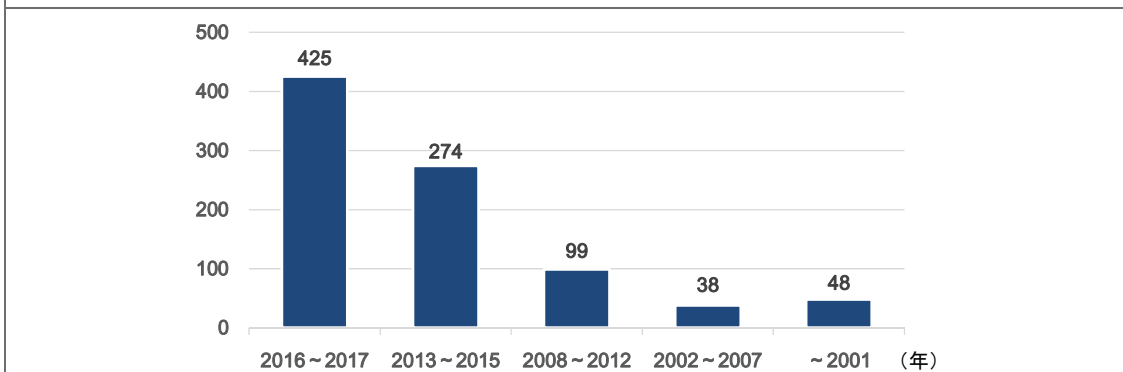
Source: The JICA Team

Figure 11.2.17 Reason for Renovations



Source: The JICA Team

Figure 11.2.18 Type of Renovation (All Respondents)



Source: The JICA Team

Figure 11.2.19 Period of Renovation (All Respondents)

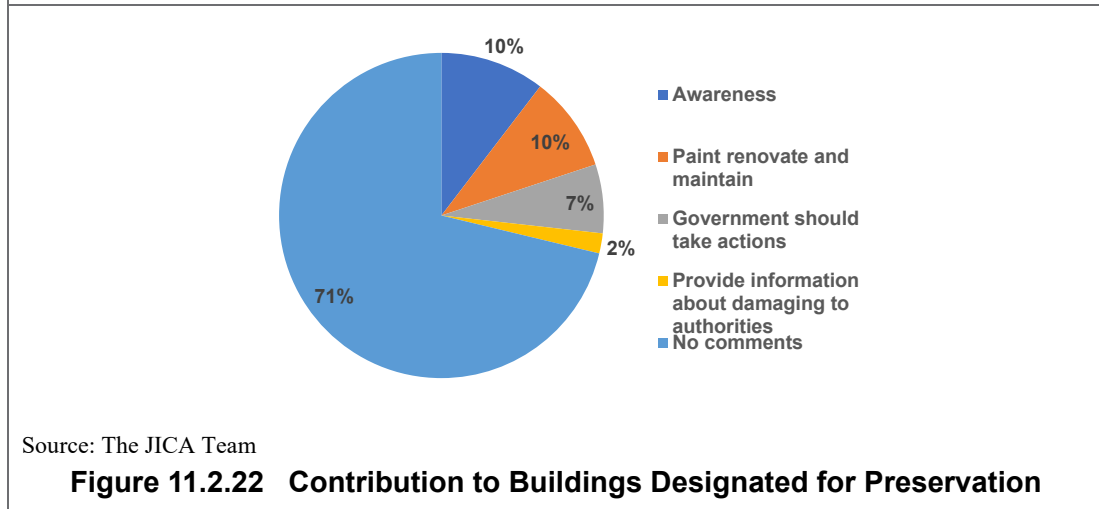
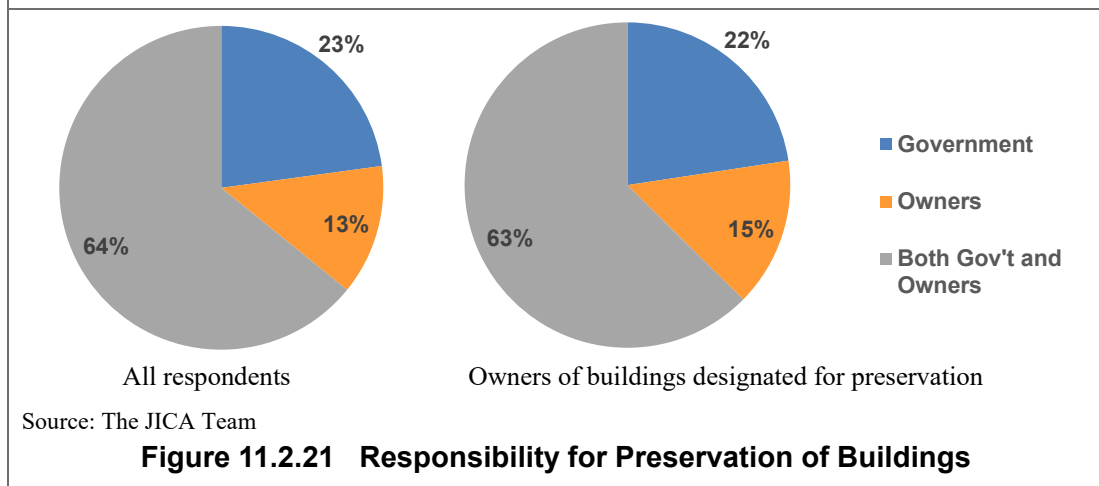
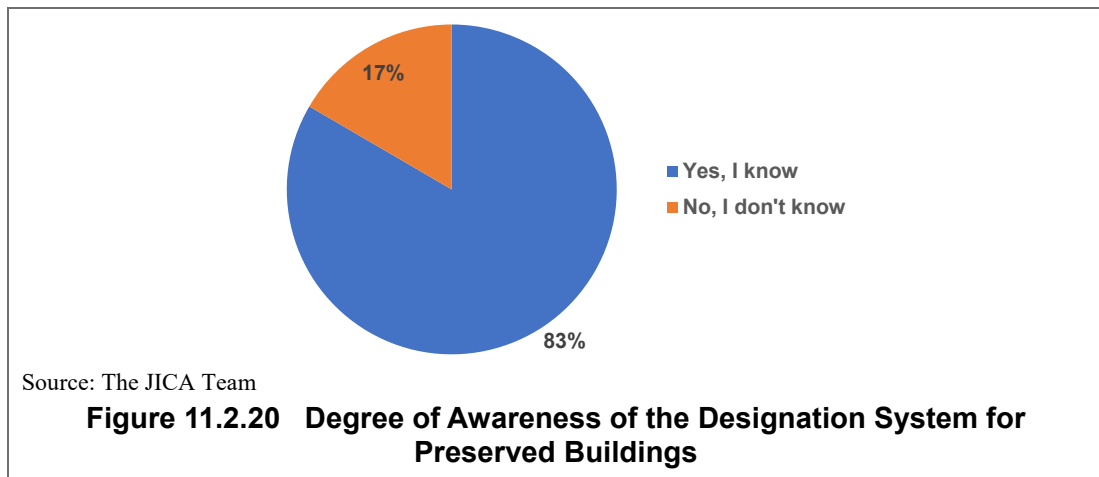
(3) Awareness of the Designation System for Preserved Buildings

About 83% of the respondents indicated that they were aware of the system in place to designate and preserve buildings considered to have historical significance, which shows a high level of perception of the system itself (see Figure 11.2.20).

In response to the question on who should be responsible for preserving the designated buildings, 64%, or more than half of the respondents, responded that the responsibility is on both the government and the owner. The next largest response is the government (23%). As a whole, it seems that there is an expectation for government involvement in the renovation of

designated buildings. Responses to the question that owners are responsible for renovations of designated buildings are also almost the same (see Figure 11.2.21).

About 70% of the survey respondents on awareness of the preservation of historical buildings in the heritage district (open-answer) left this unanswered, telling a story of low concern. However, if questions for which a relatively large number of answers are compiled, a clear story can be seen, such as degree of awareness (10%), paint renovation and maintenance (10%), government should take actions (7%), and provide authorities with information about damage (2%) (see Figure 11.2.22). There were no responses regarding donations for buildings designated for preservation.



11.3 Heritage Building Owners' Meeting

11.3.1 Approach

According to the Team's interviews with UDA, KMC, DOA and CCF, no one has managed and tracked the most up-to-date heritage owners' information. Based on a recent survey by the UDA which was conducted in April 2017 which covers part of the Grid City, there are approximately sixty owners' information including the result of the individual interview with the owners which took place from August to December 2017 and the invitation letters were handed over to the owners.

This owners' meeting was held as per the request of UDA. Two meetings were to be held, one of which was to collect the information and opinions of the heritage building owners.

The first meeting was held at the Kandy City Centre on 9th May 2018 from 4 pm to 6 pm. Evening time was selected, as most of the prospective participants were merchants who ran their businesses during the daytime. Particularly, there were so many individual shop owners who had difficulty in leaving their businesses during the daytime. Twenty people attended the meeting, but three people represented one building and two represented another building.

The second meeting was held on 19th June 2018 at the Kandy City Centre from 4 pm to 6 pm. Eighteen people participated in the second meeting. Among them, ten people joined the first one as well.

11.3.2 Profile of Participants (Analysis of the Participants of the First Meeting)

There were twenty participants who represented seventeen heritage buildings (three employees of the building on Dalada Vidiya came for one building owned by the corporate owner and two employees of the restaurant on Colombo Street for one building).

The profile and background of the participants were collected and analysed based on the questionnaires that were distributed beforehand with the invitation letters. Out of seventeen owners, fifteen owners submitted the questionnaires. Due to the small size of the samples, the data is mostly shown as tables.

(1) Age and Gender

Age and gender groups are shown as follows. The majority of the participants are over 50 years old. Due to the characteristic of the area (commercial area), most of the owners who participated are male.

Table 11.3.1 Age Group (Left) and Gender (Right) of the Participants

Age Group	No.	Gender	No.
From 40 to 50	2	Male	12
From 51 to 60	7	Female	3
From 61 to 70	5	Total	15
Unknown	1		
Total	15		

Source: The JICA Team based on Heritage Owners' Meeting

(2) Acquisition of the Buildings

Although five people did not provide answers, all except one have owned their buildings for more than ten years (Table 11.3.2). Two buildings have been owned by the same people for more than 30 years. Relatively long-time owners participated in this meeting.

Table 11.3.2 Period of Ownership

Ownership period (years)	No.
1 to 10 years	1
11 to 20 years	4
21 to 30 years	3
over 30 years	2
No answer	5
Total	15

Source: The JICA Team based on Heritage Owners' Meeting

Among the fifteen owners, nine acquired the building by purchase, while six by inheritance from relatives (Table 11.3.3).

Table 11.3.3 How to Acquire the Buildings

Way to acquire the building	No.
Inherited from parent/spouse	6
Purchased	9
Total	15

Source: The JICA Team based on Heritage Owners' Meeting

(3) History and Background of the Buildings

Only two owners knew when their buildings were built by indicating the exact year. Additionally, no one knows the architect of their buildings.

(4) Location of the Owners' Residence

All survey respondents live in the vicinity of Kandy and only one – who lives in Colombo – is from outside of Kandy District (Table 11.3.4). Among the five owners who live in the heritage buildings, three are shop owners and two are house owners. This means that these three people use the heritage building as their live/work spaces.

Table 11.3.4 Location of Residence of the Owners

Residence of owner	No.
The same heritage building	5
Other places in Kandy Municipality area	6
Outside of Kandy Municipality area, but in Kandy District	3
Outside of Kandy District	1
Total	15

Source: The JICA Team based on Heritage Owners' Meeting

(5) Current Users of the Buildings and Their Intention to Continuous Use

All fifteen buildings were occupied by the owners themselves and no one at the meeting rents out the space. They all expressed their intention to continue to own the buildings. No one in the meeting had any immediate plans to sell their buildings.

(6) Uses of the Buildings

Majority of the buildings are used for commercial/business activities. Two are used as residential, which are purpose-built residential buildings (Table 11.3.5). One person uses his building (shophouse typology) as a live/work space.

Table 11.3.5 Primary Use of the Building

Primary usage of the building	No.
Commercial/ business	12
Residence	2
Commercial & residence (live/work)	1
Total	15

Source: The JICA Team based on Heritage Owners' Meeting

(7) Type of Business and Customer Base

Of the thirteen people who are engaged in commercial activities, most of them are engaged in the retail business (see Table 11.3.6).

Table 11.3.6 Type of Business

Type of business	No.	Note
Retail	9	e.g. electronic goods, auto parts, optical goods, jewellery
Wholesale	2	
Tea shop, café, restaurant	1	
Service	1	printing shop
Total	13	

Source: The JICA Team based on Heritage Owners' Meeting

All of them target the local customers, while half of them also target the foreign customers (Table 11.3.7). However, no one is solely focused on the foreigners. Majority of their businesses are not catering to the tourists (see Table 11.3.8).

Table 11.3.7 Customer Base

Main customer type	No.
Local customers	7
Foreign customers	0
Both local and foreign customers	6
Total	13

Source: The JICA Team based on Heritage Owners' Meeting

Table 11.3.8 Target of the Business

Catering to the tourists	No.
Yes	2
No	9
No answer	2
Total	13

Source: The JICA Team based on Heritage Owners' Meeting

(8) Intention to Sell the Buildings in the Future

Although three people did not reply, all but one expressed their intention to keep the buildings, while one person has not decided on what to do with his property.

Table 11.3.9 Intention to Sell the Building in the Future

Do you plan to sell your buildings?	No.
Yes	0
NO	11
Undecided	1
NO ANSWER	3
Total	15

Source: The JICA Team based on Heritage Owners' Meeting

(9) Perception of Heritage Listing in the Late 1990s

The Team had asked the owners if the authorities had fully explained to them why their buildings were listed as heritage and why they had to shoulder the burdens incurred by the regulation related to the heritage listing. Although three people did not respond, among the rest (twelve owners), half of them felt that the authority did not provide enough explanation on why their buildings were significant (Table 11.3.10). Only one person felt that he or she got sufficient explanation and one cannot remember. Regarding the regulation, although more than half of the owners did not respond, only one person felt that the authority explained it fully (Table 11.3.11).

Table 11.3.10 Explanation on the Reason Why Their Buildings Were Listed as Heritages

Did you get enough explanation from the authority?	No.
No, not explained	6
I was not the owner at that time	4
Yes, fully explained	1
Cannot remember	1
No answer	3
Total	15

Source: The JICA Team based on Heritage Owners' Meeting

Table 11.3.11 Explanation on the Regulation on Heritages

Did you get enough explanation on the regulation?	No.
No answer	8
No, I did not	4
Cannot remember	2
Yes, I did	1
I was not the owner at that time	0
Total	15

Source: The JICA Team based on Heritage Owners' Meeting

(10) Problems of Living and Working in the Heritage Buildings

Multiple answers were allowed for this question. Three out of 15 did not provide any answers, but the rest gave one out of three answers per person. Table 11.3.12 shows the typical answers. In other section, they provided the issue of slow approval process of the authority, high cost of maintenance, lack of washroom and ventilation.

Table 11.3.12 Problems with the Heritage Buildings

Problems with the heritage buildings	No.
Leaky roof	8
Cracks on the walls	6
Deterioration of wooden parts(such as ceiling, staircases, window frames)	6
Others	4

Source: The JICA Team based on Heritage Owners' Meeting

(11) Good Aspects of the Heritage Buildings

Multiple answers are allowed to this question and eight people gave their answers. No one gave additional comments other than the given answers and the current owners do not positively recognise the good aspects of the heritage building so much. The answers are summarised as below (Table 11.3.13).

Table 11.3.13 Good Aspects of the Heritage Buildings

Good aspects of the heritage buildings	No.
Good atmosphere	4
Beauty of the exterior/interior appearance	4
Customers/ people can easily recognise and remember the building	4
Cool, airy, comfortable to stay in	2

Source: The JICA Team based on Heritage Owners' Meeting

(12) Summary of the Participants

Although the sample is small, these participants were mostly merchants/business people who catered to the normal Sri Lankan people (meaning they did not cater to foreign tourists). It was partly because the UDA only had the information of the owners in the Grid City. The owners tend to suffer from the physical problems of the old buildings. All of them expressed their intention to keep the buildings and showed their willingness to use their properties continuously and not sell them to others.

11.3.3 First Owners' Meeting

The first owners' meeting was held on 9th May 2018 at the meeting room in the Kandy City Centre.

(1) Programme

- A) Opening remarks by the representative of UDA Kandy
- B) Presentation of the GKUP project (overview of the project)
- C) Presentation on the heritage buildings in Grid City: How to “read” the buildings based on the historic photos and interviews
- D) Group discussion by the participants (approximately 40 minutes)
 - (i) How did you feel about the process of listing your building as heritage?
 - e.g. “Did the authority explain why your building is important?”, “Did the authority ask if you are okay with the listing?”, “Did they tell you the category of your building and the regulation?”
 - (ii) What are the difficulties in rehabilitating your building?
 - e.g. “Getting permit from the authorities”, “High cost of materials”, “Lack of technical advice/professionals”
 - (iii) How do you want your area should be in the future?
 - e.g. “Do you want to do business/ live in this area?”, “Would you like to do tourist-related activities or not?”, “What kind of issues need to be resolved to make the place better?”
- E) Presentation by each group



Source: The JICA Team

Figure 11.3.1 Group Discussion



Source: The JICA Team

Figure 11.3.2 Presentation by Group

(2) Results of the Group Discussion & Presentation

The participants were divided into four groups, each of which consisted of five people. The summaries of the discussion are shown below:

(i) How did you feel about the process of listing of your building as heritage?

Discussions among all four groups indicated that they were not satisfied with the initial process of heritage listing.

First of all, there was not enough explanation on the reason why their buildings were listed as heritage or what the values were. Just as the Team has heard during separate individual interviews, the owners all testified that all of a sudden, the authorities visited their buildings and installed the plaques. Some pointed out that there were buildings which were listed but the plaques were not installed.

The second issue that has frustrated the owners was that upon the installation of the plaques, they were not informed of the category (e.g. A, B) of the buildings, criteria and relevant regulations. One of the groups even raised the questions regarding the purpose of the listing and the difference between heritage and non-heritage buildings.

They were only informed by the UDA through a letter, but no other details were conveyed to them. The letters do not remain or if the properties are sold, the information is often lost.

Therefore, the owners are not sure of what they can do and cannot do with their properties.

(ii) What are the difficulties in rehabilitating your building?

Major comments were made with regard to the following issues:

First of all, there are several building owners/merchants who are frustrated with the heritage listing as it prevents them from expanding their businesses.

Second, several testimonies were made which indicated that the process of getting permit from the authorities are not clear, and sometimes, the relevant authorities give contradicting instructions, which troubled them.

Third, the extra cost of rehabilitating the buildings is burdensome for the owners. One of them indicated that cost to prepare several drawings for the sake of rehabilitation is high. The other mentioned that it was also difficult to hire the appropriate architects or interior designers.

Lastly, most of the groups indicated that they are frustrated by the fact that they cannot get any assistance from the authorities and do not know what to do.

One of the building owners who came to approach the Team later also pointed out the difficulties of coordinating with the neighbouring owners of the overall buildings.

(iii) What do you want your area should be in the future?

This question was not directly answered by the groups, but based on the results of the questionnaires, the owners basically want to continue to stay in their current location and do not consider relocating and prefer to continuing to grow their business in current sites.

Several aspects of the city were raised with regard to this question. Major topics were upgrading of the city centre environment and assistance in heritage conservation.

Regarding the upgrading of the city environment, the necessity to provide more public facilities – such as sanitary facilities, street lamp and patrol – for the safety and comfort of both locals and tourists were mentioned.

Regarding the provision of assistance in heritage conservation, the owners strongly felt that the Municipal Council and other relevant authorities in heritage conservation need to discuss this issue. Additionally, the owners were all aware of the necessity to rehabilitate their buildings for improved appearance, but requested government assistance, both financial and technical, to make the rehabilitation happen.

11.3.4 Second Owners' Meeting

The second meeting was attended by eight owners who did not come to the first meeting. Out of these eight, four people agreed to be featured in the “Memories of the Old Buildings” exhibit in the GKUP’s pilot project. One of them even invited two owners who did not attend the first meeting. The direct communication with the building owners throughout the individual interviews and the preparation for the pilot project helped establish a certain degree of relationship between the Team and the owners. Based on this experience, it is also recommended for the four relevant authorities to reach out to the owners who are the important stakeholders of the heritage conservation in Kandy, listen to them and build trust with them, which are not recognised at this point.

The purpose of the second meeting was to show the GKUP plan, particularly the plan and regulation that is related to the Grid City, where most of the listed heritage buildings are located, and the improvement of the current heritage conservation system (through financial assistance programme) and organisation (through the creation of one central organisation that oversees all the heritage issues to provide a one-stop service to the building owners in terms of getting permit and so on).

The overall perception of the plan was good. However, during the Q & A session, there were a couple of issues in which some of the owners raised their questions and reconsiderations.

(1) Relocation of Distribution Business

Two participants raised their opposition to the idea of relocating the distribution functions from the Grid City. Mr. A, who is engaged in the wholesale business on Colombo Street, was particularly against the idea as the relocation will affect their business (loss of customer base), and also claimed that they have been doing their business for a long time. Mr. B, who has his retail business on Colombo Street, also supported Mr. A’s argument on the negative impacts of the relocation of wholesale businesses by citing an example involving his two friends who were also engaged in retail business in town who relocated and ended up losing customers and sales. He also claimed that the beautification of the street should be done in a different way. It was explained to them that the storage place would be built for them in Katugastota area, but they were not quite satisfied.

In fact, there were some misunderstandings of the plan on their sides as one of them considered that the plan was simply for beautification, but the other purpose was to improve

the safety of the pedestrians in the Grid City as well. The multiple purposes of the plan need to be more clearly communicated in future opportunities.

It is encouraged that the authority should closely work with the traders associations and develop a detailed relocation plan.

(2) Delivery Trucks

Mr. B also raised the concern on the impact of the plan on the delivery trucks. Although he does not have to park his truck all the time during the business day as Mr. A, he still claimed that the retail businesses require the delivery trucks to add products to their shops, and the trucks need to be parked on the streets.

The JICA Team conducted the follow-up interview with him and found out that he misunderstood “pedestrian-oriented” as “pedestrian-only”. However, according to him, the delivery truck comes every day and it is part of his business.

In the GKUP presentation, the consideration for the delivery trucks were not discussed properly, but the Team has recognised the necessity of the delivery trucks’ loading and unloading of the goods during the daytime. In future occasion, the team should make sure that the aim is not to make the streets pedestrian-only but pedestrian-friendly, and the cars can still be parked including the delivery trucks. In fact, if the through traffic and tourist buses that run through the Commercial Grid area are to be eliminated according to the plan, it would also benefit the cars whose destinations are the shops in the Grid City area.

11.4 Public Consultation Meeting

11.4.1 Objectives and Approaches

In order to realise a better future, it is important that the residents share the problems in the historical heritage area, propose various “menus” and programmes for solutions to such problems, and then integrate these into a long-term plan. This is called “participation in the planning”. The purpose of the PCM is to discuss the participation of the people in the area regarding the plans to pass on the historical heritage to the next generation.

For this, the objective and expected outcomes of the PCM are as follows:

- 1) Objective
 - to provide a forum for the community to participate in the planning of the detail plan of the Heritage Area
- 2) Expected outcomes
 - Draft detail plan with guideline with consensus of local communities
 - Proposal of preservation mechanism

11.4.2 Participant Selection

(1) Considerations for Participant Selection

Participants of the PCM were those who live and/or work in the Heritage Area, and those who have concerns and interest in the preservation and improvement of the Heritage Area. The participants were selected by taking into consideration the following:

1) Consideration for Religious and Ethnic Aspects

First of all, to maintain religious and ethnic balance of the participants, the Traders Association of Sinhala (mostly Buddhist and partly Christian), Muslim (all Muslim) and Tamil (mostly Hindu and partly Christian) were informed and invited to the PCM. To keep the religious balance, four major religious people were invited through the chief administrator/guardian of the main Devalas and other religious leaders (i.e. Buddhist, Christian, Hindu and Muslim).

In case there were those who could not participate in the whole session of the PCM meeting for religious reasons, such as during Islam’s prayer, the PCM workshop was organised to accommodate their convenience, for example, by putting their presentation earlier than others.

2) Consideration for Language

In general, Sinhalese is the mother language for Sinhala people and for some Muslims, and Tamil is the mother language for Tamil people and for most of Muslims, though most of Tamil and Muslim people are multilingual. When considering the ethnic balance as mentioned in (a) above, the language aspect was also considered and reflected in the composition of the participants.

At the kick-off meeting, a Tamil translator was present to accommodate those who needed Tamil translation. For the zonal PCM workshops, the JICA Team and UDA Kandy asked Tamil and Muslim participants of each zone group in advance if they needed a Tamil translation at the PCM; their answer was that Sinhalese language was enough, so there was no need for a Tamil translator at the PCM workshops.

3) Consideration for Vulnerable People

During the selection process, efforts were made to ensure the diversity of participants not only in gender, religious or ethnic composition, but also in terms of social and economic composition of residents. For example, mothers with small children and the recipients of Samurdhi (public assistance for low-income families) were invited and participated.

As results of the PCM, the participants pointed out the necessity for addressing the needs of socially and economically vulnerable people such as aged people, children, sick people, low-income families, etc., which are common in all ethnic and religious groups. Major problems pointed out for the vulnerable people are lack of playground, lack of safe walkway and traffic environment for the aged and children, inconvenience of public toilet, inconvenient access to hospitals, less income opportunities, etc., which are further expected to be addressed in the master plan.

4) Heritage Owners

Many of the owners of the heritage buildings live outside the Heritage Area and even if they live in the Heritage Area, they are rather hesitant to participate in the PCM even though they were invited. Hence, not many heritage building owners participated in the PCM workshops.

For this, the JICA Team conducted individual interviews and the owners' meeting to reflect the citizens' voices in the plan. The interviewees and the participants of the owners' meeting represented all ethnicities and religions. It is noted that the difference in their opinions seemed to be influenced more by their social and economic status (i.e. business owners engaged in restaurant, retail, wholesale, etc.) than their ethnicities or religions. Furthermore, the owners of the heritage buildings which were featured in the Info Place pilot project covered all ethnicities and religions in a balanced manner.

(2) Selection Process

1) Selection of the Participants of the Kick-off Meeting

For the abovementioned purpose, the JICA Team, together with UDA, started discussions on how to select the participants for the PCM. In the selection, the JICA Team and UDA paid due attention to balance of the participants so that every stratum of the society is represented in the PCM.

To start with the PCM, the GKUP invited about 160 participants for the kick-off meeting conducted on 25th July 2017. Participants were selected as follows:

- First of all, based on discussions with the UDA Central Province Office, the local people in the Heritage Area and representatives of organisations concerned with the Heritage Area were invited.
- A person who played a central role in this selection work and facilitation of the PCM for this project is the JICA Team's Sri Lankan expert in charge of the PCM, who is also an environmental specialist and a professor and vice chancellor of University of Peradeniya with ample experience in social consideration work for various projects in Kandy Area, including those of RDA and SCDP. Thus, he is very familiar with the social context of the area. Based on his knowledge and social network, the JICA Team started the mapping of stakeholders in April 2017
- In the process of selecting the participants, KMC recommended that as GN Division is the smallest administrative unit and the GN (Grama Niladhari, or village officer) knows the area and the people very well, the GN is the first person to be consulted in any project involving community activities. As such, the JICA Team, together with UDA, requested the seven (7) GNs in the Heritage Area to select about 20 participants from each GN Division by accommodating all groups in terms of economic and social status, religion, ethnicity, gender, etc.

- In addition, the invitees covered a wide range of organisations, such as NGOs, citizen’s organizations, Sinhala Traders Association, Muslim Traders Association, Tamil Traders Association, Good Shed Association, Common Market Association, retired government officers and professionals from both inside and outside the Heritage Area.
- The JICA Team also met with some key religious figures to request them to participate in the PCM, including the Basnayake Nilame (chief administrator/guardian) of the main Devalas and the other religious leaders (Buddhist, Christian, Hindu and Muslim).

As mentioned above, the participants were selected to cover all the social segments as much as possible. Of all the participants at the kick-off meeting, 87 participants were those selected by the seven (7) GNs, and the others were invited by the JICA team with UDA Kandy.

2) Selection of Participants/Members for the Zonal Workshops

After the kick-off meeting, zonal workshops were held. The members of zonal workshops were limited only to local people (i.e. residents in the zone or people commuting to work in the zone). For this, participants for each zonal workshop were further selected by GN leaders.

At the subsequent zonal level PCMs, the participants reflected the gender balance, religions, ethnic, social and economic composition of residents in each zone (see Table 11.4.1 and Figure 11.4.1). The Public Transit and Civic Hub Zones included a mix of all religious/ethnic groups and also those who are represented at zonal committees. The Lake Around Zone has a majority of Sinhala residents. As for the Commercial Grid Zone, participants initially represented all the religious/ethnic groups, but later on, fewer participants came from the group of Tamil/Muslim business people. As the process was based on a voluntary participation, they were not forced to participate in the PCM activities.

It is noted that the Commercial Grid Zone has a specific characteristic in which most of the people are not residing in this zone, but are commuting from outside areas. There were few heritage building owners who participated in the PCM, and it was difficult to discuss the issues of heritage building preservation without the owners’ participation. As such, the JICA Team organised meetings with the owners of heritage buildings separately to discuss their specific issues (see 10.4 for details). The owners from all the religious/ethnic groups were invited and participated.

Table 11.4.1 List of Number of Zonal PCM Participants by Gender and Ethnicity

PCM	Zone	Total	Gender		Ethnicity			
			Male	Female	Sinhala	Tamil	Muslim	Buddhist
Total Number of Participants	Grid	93	78	15	72	8	11	2
	Transit	165	90	75	145	12	8	0
	Civic	134	80	54	106	13	10	5
	Lake	114	82	32	110	0	4	0
	Whole	506	330	176	433	33	33	7
%	Grid	100%	84%	16%	77%	9%	12%	2%
	Transit	100%	55%	45%	88%	7%	5%	0%
	Civic	100%	60%	40%	79%	10%	7%	4%
	Lake	100%	72%	28%	96%	0%	4%	0%
	Whole	100%	65%	35%	86%	7%	7%	1%

Source: The JICA Team



Source: The JICA Team based on PCM

Figure 11.4.1 Participants of the PCM

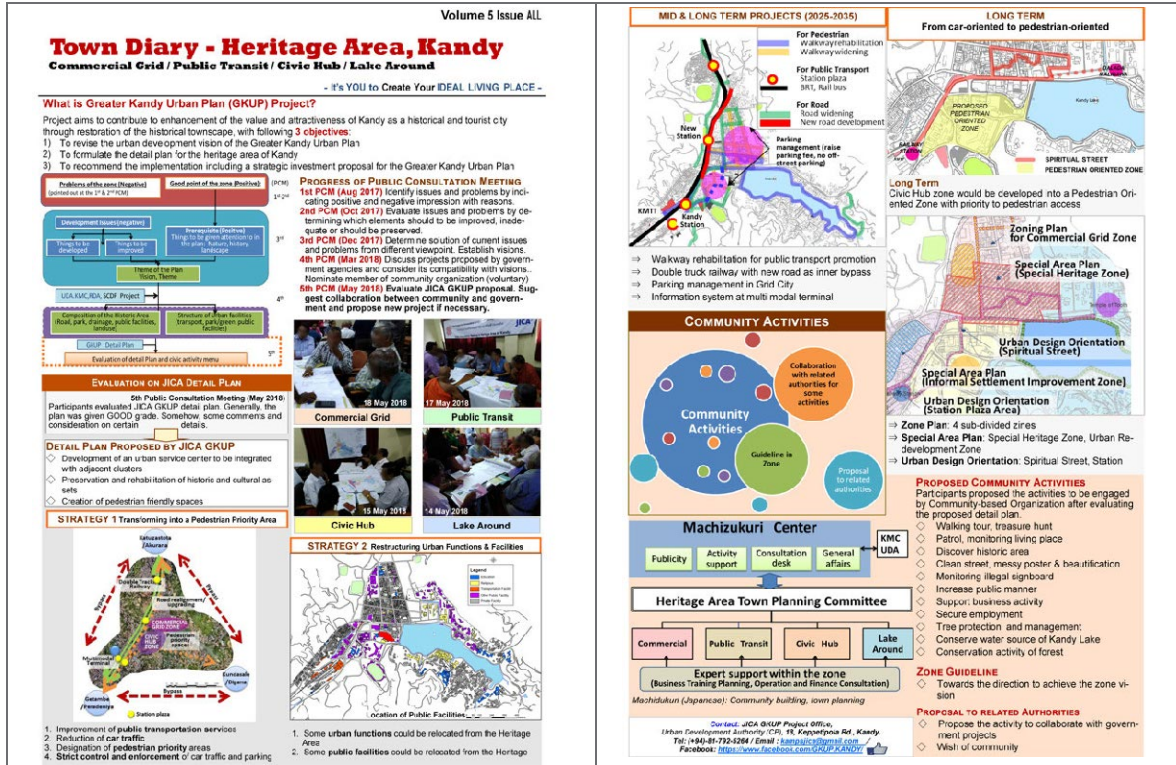
11.4.3 Facilitation and Arrangement of the PCM

To conduct active and effective discussions and exercises in the PCMs, the selection of facilitators is important. Facilitators are required to understand the present condition of the city; to listen to the concerns and willingness of the participants, including hearing out minor opinions; to facilitate different opinions; to describe and present the summary of discussion in a simple manner; etc.

In GKUP, the planning officers of UDA Central Province Office (UDA Kandy) as well as consultants of socio-economic and urban sectors participated in the PCMs as facilitators. Facilitators of UDA Kandy initially felt uncomfortable and were unfamiliar with facilitating group discussions with citizens, since this was their first experience to facilitate the participation of ordinary citizens. Gradually, they became confident in facilitating participants' discussions by listening to their complaints and proposals, providing technical advice, sharing common ideas, etc. It is noted that some of the UDA facilitators participated in the training in Japan where they learned the significance of public participation and the role of the public sector. After the training in Japan, the PCM activities became more active and well-organised due to initiatives of the UDA facilitators.

The PCMs were held in public offices such as General Post Office, Community Hall, YMCA, YBCA, etc., which are familiar and convenient venues for the local communities. There was cooperation with the GNs to be able to use these public facilities.

The results of the PCM were disseminated to the local community through the "Town Diary" (see Figure 11.4.2). The Town Diary is compiled after every meeting and distributed to the public for review. In addition, the result was released at the GN office where the Town Diary was shared so that it could be known by the local community, and everyone was welcome to participate in every PCM meeting. Also, the activities of GKUP, including the PCM, have been disclosed at the GKUP Facebook page (see Figure 11.4.3).



Source: The JICA Team based on PCM

Figure 11.4.2 Sample of Town Diary



Source: The JICA Team

Figure 11.4.3 GKUP Facebook Page

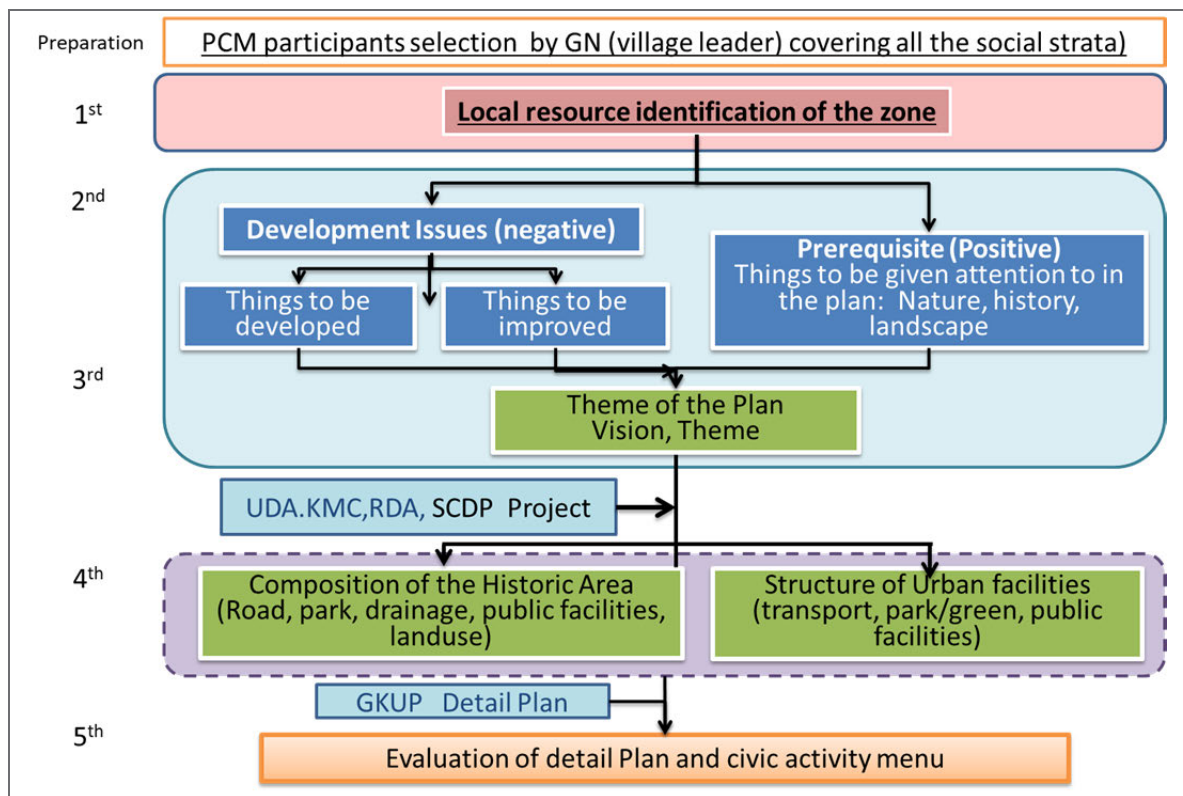
11.4.4 Approach

The PCM has to be led by members of the local community themselves. It is a common platform for the local community to share the problems and challenges of urban vision and heritage districts, examine solutions through collaborative work, and involve the public in plan formulation.

It is important for the PCM to accumulate the participation mechanism from the initial stage and promote it so that the necessity of planning, proposal, and realisation system can be shared. Therefore, the next stepwise approach was applied (see Figure 11.4.4).

- 1) Local resource identification of the Zone (1st PCM): Sharing of community development information such as community issues
- 2) Discussion on issues to be preserved, developed and improved (2nd PCM): Sharing of priorities of community issues
- 3) Visioning (3rd PCM): Sharing of vision by zone to identify local characteristics and attractiveness and to improve living environment and preservation
- 4) Review and integration with relevant plans and projects (4th PCM): Sharing of administrative planning information and cooperation in community activity
- 5) Proposals for future plans and role-sharing in community activities (5th PCM): Discussion on Detail Plan of Heritage Area and potentials of community participation

Through this process, trust between community and the government would be fostered. The community could share opinions at the latter part of plan and management mechanism. This would smoothen out the process of implementation by forming a consensus.



Source: The JICA Team

Figure 11.4.4 Flowchart of Public Consultation Meeting

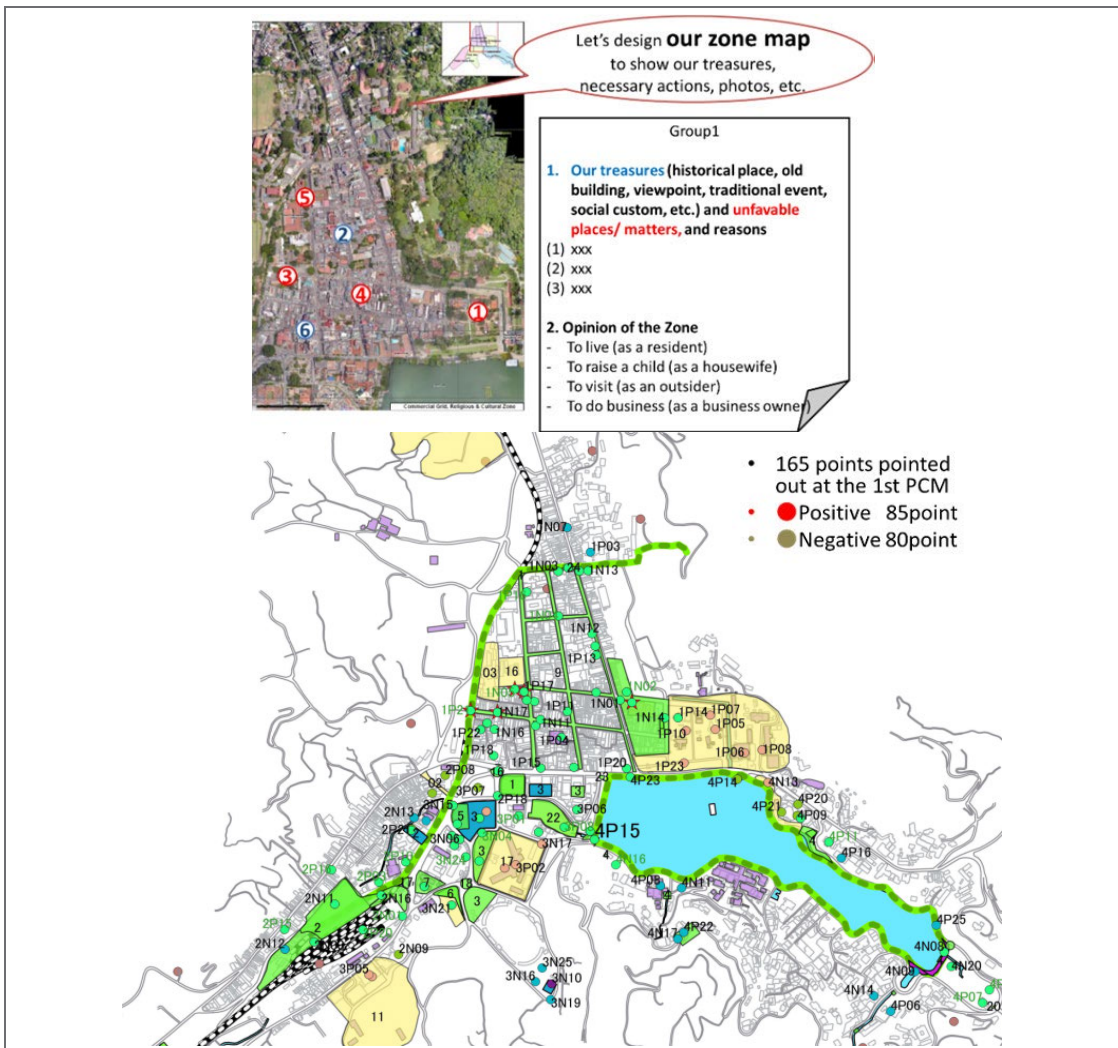
11.4.5 Outline of Each PCM

(1) 1st PCM, 10th – 18th August 2017

During the 1st workshop, a group discussion was conducted to discuss the following: (a) Our treasures (historical place, old buildings, vista points, traditional events, social custom, etc.) and unfavourable places/ matters, and reasons, and (b) Opinion about the zone as a place to live in (as a resident), to raise a child (as a parent), to visit (as an outsider) and to do business (as a business owner).

Due to active participation of local stakeholders of each zone, the places to be preserved and improved have been identified. Though conditions and issues vary among the zones, there are common issues in the Heritage Area such as clean-up activities, improvement of pedestrian space, provision of public toilets, promotion of tourism spots, facilities and services, traffic management measures for school buses and commuting by cars around schools, job opportunities, preservation measures with incentives, and relaxing regulations on conserved buildings.

The government needs to take the initiative in solving these issues, but the contribution and participation of the communities and the private sector are also required.



Source: The JICA Team based on PCM

Figure 11.4.5 Positive and Negative Point Map of Heritage Area (Output of 1st PCM)

(2) 2nd PCM, 12th – 20th October 2017

Based on the results of the 2nd PCM, the “Carte of Area Diagnosis” was prepared by the participants (see Figure 11.4.6). As a result, areas which are inadequate and need to be preserved and improved were identified (see Figure 11.4.7).

- To be preserved: Historic areas, landscape, areas related to healthy living environment, etc.
- To be improved: Traffic congestion, degraded buildings, pollution, etc.
- To be inadequate: Transport facilities and roads, public toilets, marketplace, etc.

Zone	Category	No.	Issues of the place
Commercial	Negative	①	Road congestion around ○ ○ school
Current Situation and Problems			
<ul style="list-style-type: none"> ● Road congestion due to transfer of students around ○ ○ school ● Especially peak between 8:00 – 9:00 when attending school, many waiting three-wheeled taxis are blocking traffic. 			
Position and Problem Diagram			
Location Map		Site Map	
Method to cope with the Problems and Issues (What to do?)			
<ul style="list-style-type: none"> ● Should move school ● School must be a bus ● Secure car space. 			
Role Sharing (Who needs to do what Who is in charge (for example))	Residents' Actions ● Local residents ● Student parents	Companies' Actions ● The school ● Miwa taxi company	Government's Action ● Traffic regulation, ● Strengthen control ● Make a parking space
No entry required (for secretariat)			
Issue Field	Big Goal	Medium Target	Small Goal
Traffic A school	Eliminate traffic congestion factors	Changing school means	Understanding of parents

Source: The JICA Team based on PCM
Figure 11.4.6 Carte of Area Diagnosis (Output of 2nd PCM)



Source: The JICA Team based on PCM
Figure 11.4.7 Location Map to be Preserved and Improved (Output of 2nd PCM)

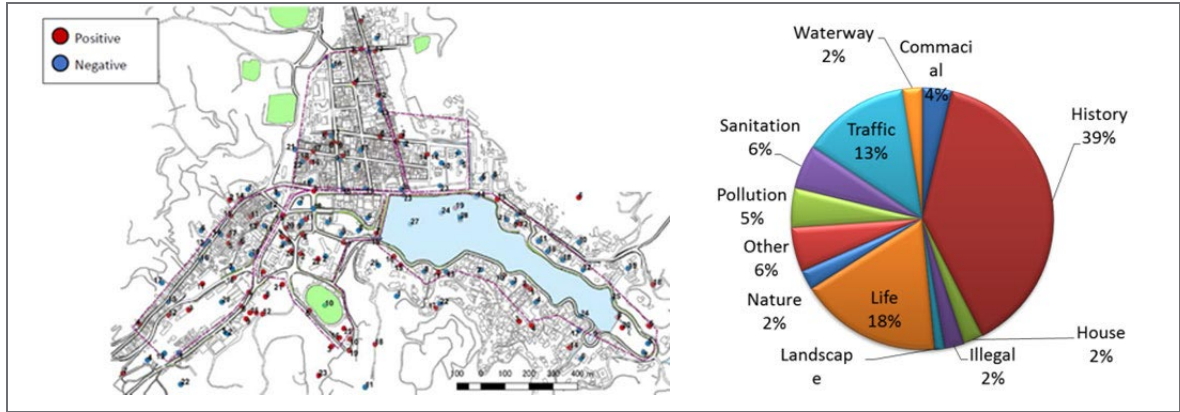
(3) 3rd PCM, 30th November – 14th December 2017

Discussions from the 1st and 2nd PCM were referred to and solutions to current issues and problems were determined from different viewpoints. Visions were proposed in order to cope with the issues (see Figure 11.4.8 and Table 11.4.2).

Participants were asked to form into few groups for the activities below:

- STEP 1: Note down the keywords about the town image of Kandy and write them on sticky notes.
- STEP 2: Categorise the group members’ ideas into different categories.
- STEP 3: Illustrate the relationship between the categories and present the vision / theme to show the town image of Kandy.

Discussion results were concluded based on four (4) aspects: economy, social, infrastructure development and regulation. Proposed visions were determined along with the proposal from the government in order to seek balance and to sustain development.



Source: The JICA Team based on PCM

Figure 11.4.8 Positive and Negative Point Location Map and Type of Points

Table 11.4.2 Proposed Visions by Each Zone

<p>Grid City Zone</p> <ul style="list-style-type: none"> • Awakened Commercial City of Kandy • Integrated Development of Urban and Transport • Prosperous Green City • Sustainable Mid Kandy 	<p>Civic Hub Zone</p> <ul style="list-style-type: none"> • Sustainable Living • Aesthetic Bogambara Village • Majestic Senkadagala Paradise
<p>Public Transit Zone</p> <ul style="list-style-type: none"> • Happy Journey • City Entrance/ Portal • Glory of Transportation of Greater Kandy • Hills Gate • Beautiful Hill Country 	<p>Lake Around Zone</p> <ul style="list-style-type: none"> • Green City • Wonderful Lake Beauty • Beautiful Lake Around

Source: The JICA Team based on PCM

(4) 4th PCM, 19th – 23rd March 2018

To consider the compatibility between the development plans and projects by governments and the proposed visions by PCM members, the projects proposed by government agencies were reviewed.

The potentials of collaboration between the community and the government as well as the new project and collaboration mechanism of the community and the organisation were proposed.

In the end, the representatives were nominated voluntarily by the participants themselves to establish Community-Based Organisations (CBOs) and proposed programmes (see Table 11.4.3).

Table 11.4.3 Proposed Programmes for Community-Based Organisations

<p>Grid City Zone (9 members) A: Improve facilities and services for daily needs B: Coordinate with government and community C: Neutrally gather the public opinions</p>	<p>Civic Hub Zone (9 members) A: Solve the social and environmental issues B: Share opinions to public C: Inspect to coordinate on the development project</p>
<p>Public Transit Zone (13 members) A: Coordinate with government B: Assist in implementation project C: Inspect development project D: Formalise the coordination work</p>	<p>Lake Around Zone (10 members) Gather public ideas and inspection activity Promote environmental awareness Share ideas and programme on social activity</p>

Source: The JICA Team based on PCM

(5) 5th PCM, 14th – 18th May 2018

The JICA Team presented the proposed Detail Plan of the Heritage Area. Afterwards, the participants assessed the programmes which should be incorporated into the projects proposed by relevant authorities and draft projects by the JICA Team.

For the next step, the participants proposed how the participants or/ and community-based organisations can improve the proposed plan by proposing their activities / programmes

Three (3) main points were raised: 1) Implement the guideline based on community perception; 2) Propose specific activities that community-based organisations can engage in; and 3) Support initiatives to establish community-based organisations.

To establish a platform for the CBOs to voice out their will and perception, a pilot website was established by the community to introduce the valuable elements of Kandy and its resources and at the same time, provide a platform for the people to interact with each other.

Table 11.4.4 Main Proposed Actions to be Taken by CBOs for Detail Plan Implementation

<p>Commercial Grid Zone</p> <ul style="list-style-type: none"> • Colour, building and streetscape formulation • Town monitoring organisation: Monitor the zone landscape, treasure hunt • Street cleaning activity (collaborate with KMC) • System of information transmission (web, information centre) 	<p>Civic Hub Zone</p> <ul style="list-style-type: none"> • Street cleaning (garbage cleaning around market and illegal poster sticking) • Community guideline
<p>Public Transit Zone</p> <ul style="list-style-type: none"> • Moral education (collaborate with school) • Beautification of street (cleaning activity in Meda Ela, instruction of cleaning, flowering activity, prevent illegal poster sticking) • Education on pedestrian manner and street parking prohibition • Community business (skills and occupation development such as coconut charcoal, water bottle, small-scale agriculture farm) 	<p>Lake Around Zone</p> <ul style="list-style-type: none"> • Beautification activities of Kandy Lake (re-planting old trees, measures against waste, monitoring activities) • Production of map around Lake Kandy (walking in town, historic building) • Creating a textbook on the history, economic environment, etc. around the Kandy Lake • Forest conservation activities (forest map)

Source: The JICA Team based on PCM

(6) 5th PCM, 21st June 2018

To conclude the overall PCM activities, a Joint Public Consultation Meeting was held with the attendance of 100 participants from the four (4) zones of Heritage Area, Kandy; the mayor of Kandy; JICA Sri Lanka representatives; and representatives from local authorities. The meeting was held for each zone to present and share each zone’s community-based activities in which the people would be initiatively engaged.

11.4.6 Major Outputs and Proposals to be Reflected in the Plan

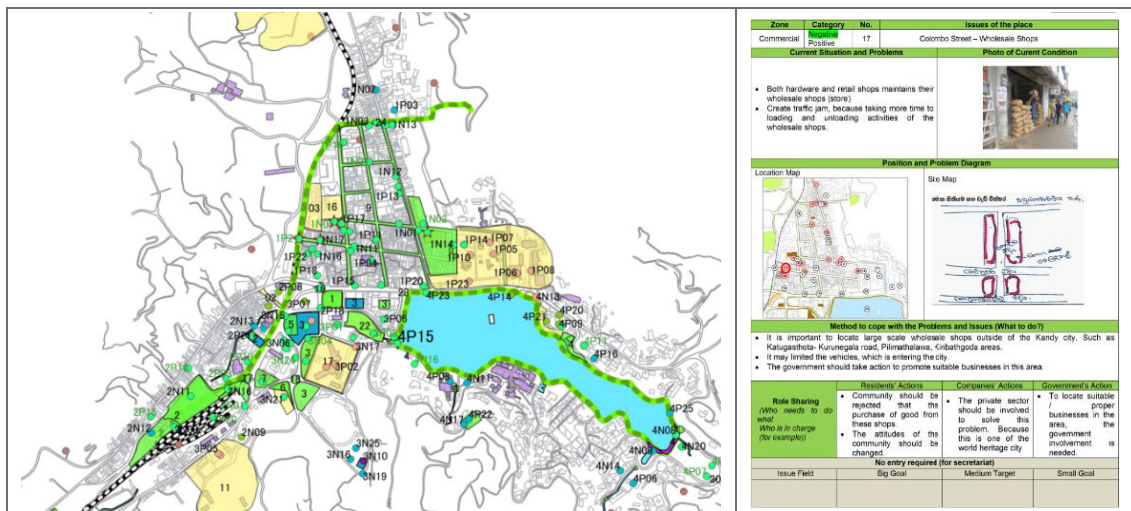
(1) Major Outputs of the PCM

At the beginning of the PCMs, most of the participants concerned presented the problem in the Heritage Area, such as degraded environment and landscape, transport congestion, lack of economic development potential, etc. By sharing issues and potentials among the participants, they gradually understood that these issues were closely linked each other, and some of the issues could be solved not only by the government, but also by the communities. Furthermore, they found that heritage preservation would contribute to economic and tourism promotion as well as inheritance of historical properties and passing on memories to the next generation.

Main outputs and proposals to be reflected in the Detail Plan of the Heritage Area as well as the Development Plan of KMC are as follows:

1) Identification of Local Resources to be Preserved and Improved (see Figure 11.4.9)

The local resources to be preserved and improved were identified and plotted on the map. The main issues were assessed with proposals on improvement and role-sharing and were compiled to the Karte. The map and the Karte are tools to understand the condition of the Heritage Area and elaborate and prioritise the necessary actions by the government and the communities.

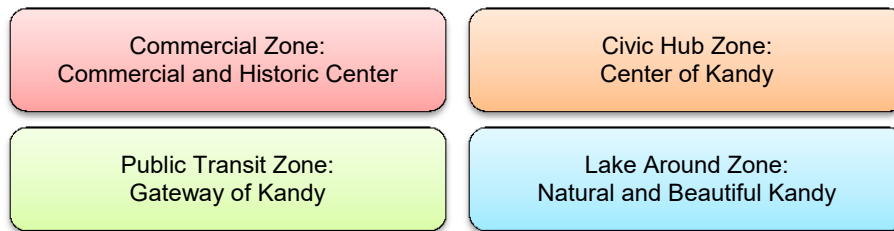


Source: The JICA Team based on PCM

Figure 11.4.9 Local Resource Map and Karte

2) Vision by Zone (see Figure 11.4.10)

Since issues and values of each zone are diversified, visions were proposed by each zone. These visions would contribute towards understanding the uniqueness of each zone and sharing the overall direction of the Heritage Area among government bodies and citizens.



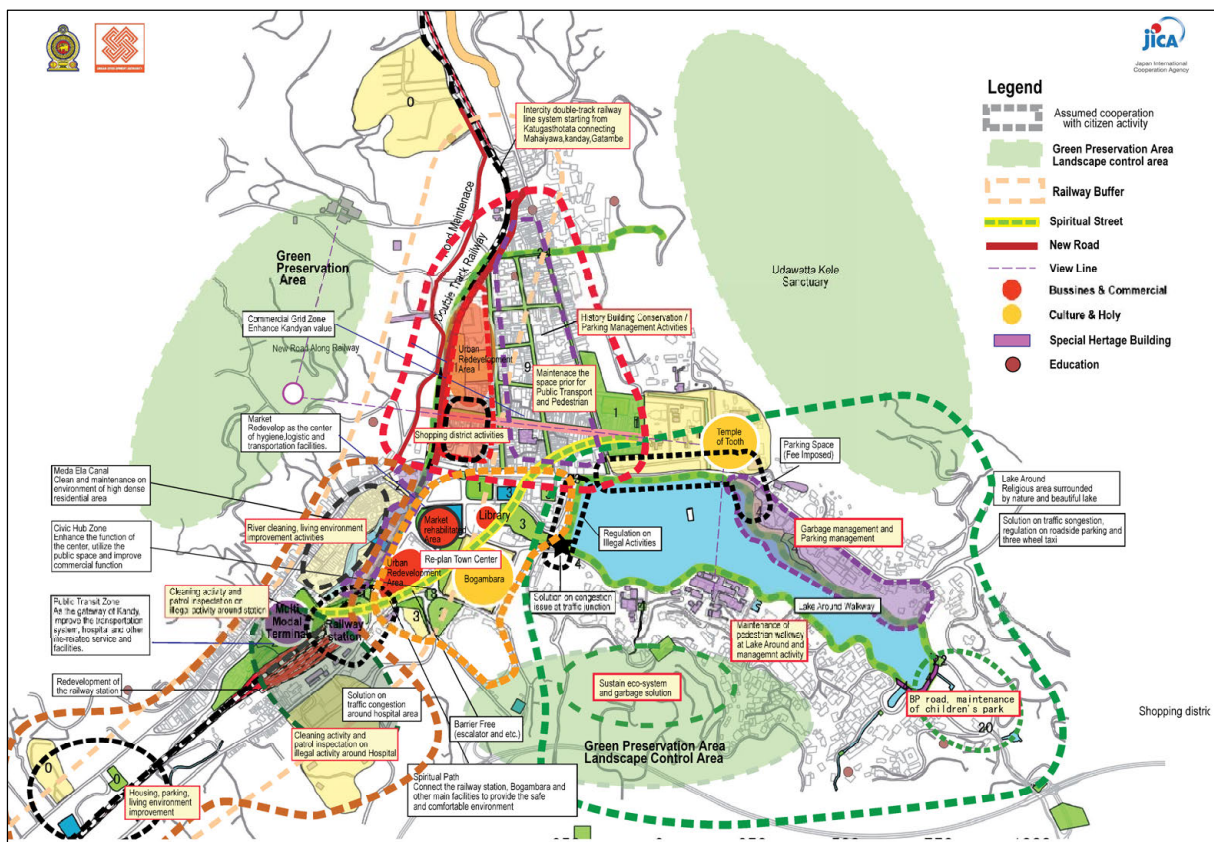
Source: The JICA Team based on PCM

Figure 11.4.10 Vision by Zone

3) Review and Proposal on Projects (see Figure 11.4.11)

The plans and projects by government organisations (UDA, KMC, RDA, SCDP) were plotted to the common map, and the ones that JICA proposed were overlaid. It was found that about 70% of the issues raised by PCM members were included in these plans and projects, while others were new ideas and proposals for government bodies. This was also a good exercise for government bodies to understand the plans and projects to be able to implement them effectively in an integrated manner.

It was found that local communities will be able to contribute and collaborate on some plans and projects, especially in the three (3) categories of (1) city beautification/cleaning activities, (2) greening/planting activities, and (3) awareness-raising through self and community efforts. On the contrary, large-scale projects such as transport improvement, ecological preservation, etc., would be initiated by government organisations through public efforts in line with the Development Plan.



Source: The JICA Team based on PCM

Figure 11.4.11 Overall Project Map of the Heritage Area

4) Proposals to be Reflected in the Plans

The PCM outcomes and proposals were reflected in the GKUP Plan (see Table 11.4.5). The GKUP Plan was proposed to various ministries and local governments which will be reflected in the Kandy Development Plan by UDA. Major proposals to be reflected in the plan are shown below:

Table 11.4.5 PCM Proposals Reflected in the Plans

PCM Proposals	Reflected in the Plans
Improvement of walking environment	<ul style="list-style-type: none"> • Pedestrian priority area in the Grid City and Civic Hub Zones • Parking control in the Grid City
Improvement of landscape and townscape	<ul style="list-style-type: none"> • Development regulation around the Kandy Lake • Monitoring of construction of buildings by citizens • Utilisation of heritage buildings for tourism • Improvement of monitoring system
Improvement of degraded residential area	<ul style="list-style-type: none"> • Special area plan for informal settlement improvement including infrastructure and disaster prevention measures

Source: The JICA Team based on PCM

11.5 Rationale of Public Consultation

The community is one of the main actors in urban planning and development since they live and work in the city and sustain the values for the next generation. To revitalise the values and attractiveness of Kandy as a World Heritage City with various historical and cultural properties as well as historical townscape, community participation is indispensable to identify the values and how these values will be preserved and revitalised. To implement the plan and realise the vision, role-sharing and collaboration among the citizen, government and private sector are required with transparent planning and implementation process.

While private sectors provide high-quality services with fees, the role of the government is to provide public services to ensure a minimum living standard for citizens. In between services by private and public, there are middle services to meet the demands of the citizens seeking to improve their living environment and livelihood. For this aspect, community-based activities are required to respond to such demands and needs of the citizens.

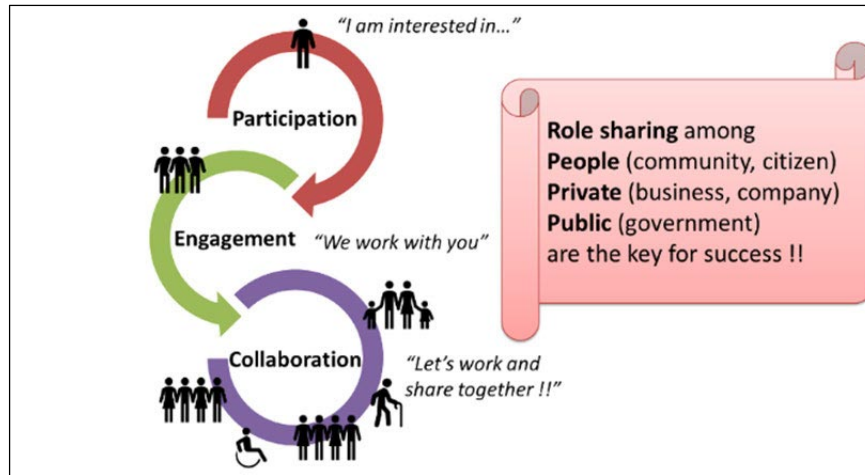
11.5.1 Sharing Information for Community Development

The public opinion on town planning is diversely voiced out individually. Somehow, this is due to lack of sharing practice among the community members. In addition, town planning information is adequate as the contents of the government projects are not delivered to the citizens. For this reason, it is necessary to have a mechanism to disseminate the plans of community-based organisations and government organisations that can consolidate the opinions of each community members individually into the opinions of an entire area.

Currently, various government projects are examined by government authorities and are often released after the implementation of the project has been decided. As a result, many issues are created when there are different opinions and objections to the plan. For this reason, smooth project implementation requires disclosure of project information to the community from the planning stage and formation of consultation organisations.

11.5.2 From Public Participation to Community Initiative

It is difficult to accommodate the opinions of all of the people and reflect them in the plan. In particular, most of the buildings in the Kandy Heritage Area which need to be preserved are private properties. If the regulation and preservation are implemented without taking this factor into consideration, it will cause resistance from the community. Some of the residents depend on the historic heritage to earn their livelihoods and some do not rely on tourism, which demonstrate the different directions of the people. The JICA Team collaborated with its UDA Kandy counterparts to encourage the community to participate, formulate detailed plans, and explain the plan to the community through workshops. At the same time, community members were given opportunities to share their ideas. The JICA Team and its counterparts were devoted to support and facilitate the meeting. The purpose was to promote community-led planning instead of community participation planning.



Source: The JICA Team

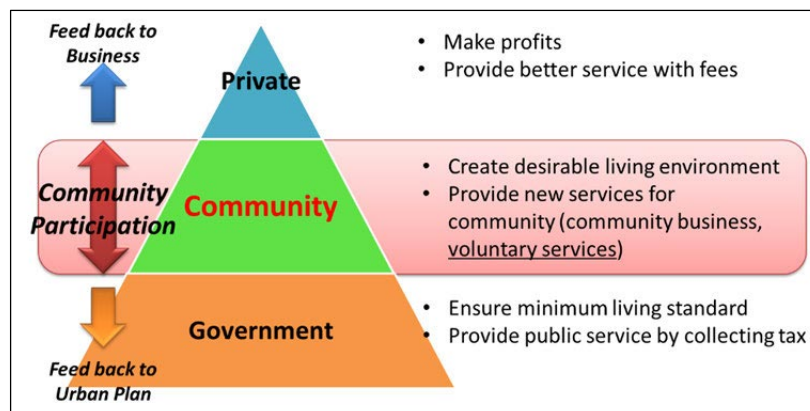
Figure 11.5.1 Steps from Participation to Collaboration

11.5.3 Role Sharing Among Community, Government and Private Sector

At present, public consultation is only meant to disclose plans and projects by governments and collect comments, in which communities are not fully involved in the planning process.

Community participation in urban planning and management should be applied from the beginning of the planning process, such as determine the issues and potential of the area. By sharing the needs of communities and the city, projects will be implemented effectively in coping with consensus building, land acquisition, finance, etc. These projects must be monitored and assessed by communities to ensure their sustainability and implementability. The roles of community, private sector and government are as follows:

- **Role of community:** the main actor in urban planning and management by sharing issues and potentials of the city among citizens and participating in activities and projects
- **Role of government:** the service provider for urban development and management including infrastructure development, provision of subsidy, application of policy and regulation, etc.
- **Role of private sector:** the service provider with fees for profit, or free of charge as Corporate Social Responsibility (CSR) and Creating Shared Value (CSV)



Source: The JICA Team

Figure 11.5.2 Role Sharing Among the Community, Government and Private Sector

11.5.4 Self-help, Community Help and Public Help:

For the improvement of living environment conditions, three types of “help” exists: citizens do what they can do by themselves (self-help); the community members help and support each other (community help); and the public sector ensures provision of good services and living environment for the citizens and the communities (public help).



Source: The JICA Team

Figure 11.5.3 Self-help, Community Help and Public Help

11.5.5 Step Forward

In order to collect the voices of stakeholders, the JICA Team conducted public consultation meetings (PCM), household and business owner interview survey, heritage building owners' meetings, interviews with heritage building owners, and tourist interview survey.

For urban development, as indicated above, almost all the participants of PCM expressed the traffic issue as the most serious and should be prioritised. Since they also lamented on the rampant illegal construction occurring in the Heritage Area, the establishment of enforcement and monitoring system was proposed as the essential condition for proper implantation of the urban plan. On the other hand, the monitoring system could be supported by the citizens' vigilant activity as observed in the PCM discussions.

In this way, the opinions of stakeholders have clarified the important matters and prioritised issues for the formulation of the detailed plan, which were reflected in the plans and programmes to make the plan and projects implementable and acceptable. The planning concepts in the Detail Plan were fully accepted by the participants of the PCM meetings. Since the proposed plans and programmes for the Heritage Area – some of which will take a long time – need citizens' support, it is expected that this kind of request are conducted on a continuous basis.

While the PCM process was found effective in addressing the issues common to all people, there were certain limitations in addressing the specific interests of certain groups, such as business persons at central market, wholesalers on main streets and heritage building owners. For these groups including heritage owners who are directly affected by the regulations of the Detail Plan, it is necessary to continue to deepen consultations and discussions with them to achieve consensus and to provide them with appropriate incentives and support mechanisms.

Also, the age group of participants mostly consisted of relatively elder people and a few youths. One of the reasons could be that not many youths are residents of the Heritage Areas, as they have moved out to other cities or overseas. It will be necessary in future activities to

identify younger resource persons in town through, for example, further utilisation of social media, and to get their ideas and their energy vibes for the city planning process.

It should be noted that in regard to the public consultations conducted in this project, this is the first time for Kandy citizens and local government officials to experience such kind of real participatory approach in the planning process. Through this activity, they have learned a lot about participatory approach. Although there are limitations in legal and institutional settings for public consultation related to urban planning, it is proposed that central and local governments apply public consultation to reflect the concerns and interests of the citizens for the proper formulation and implementation of plans and projects, and to enhance a reliable relationship between the government organisations and the citizens.

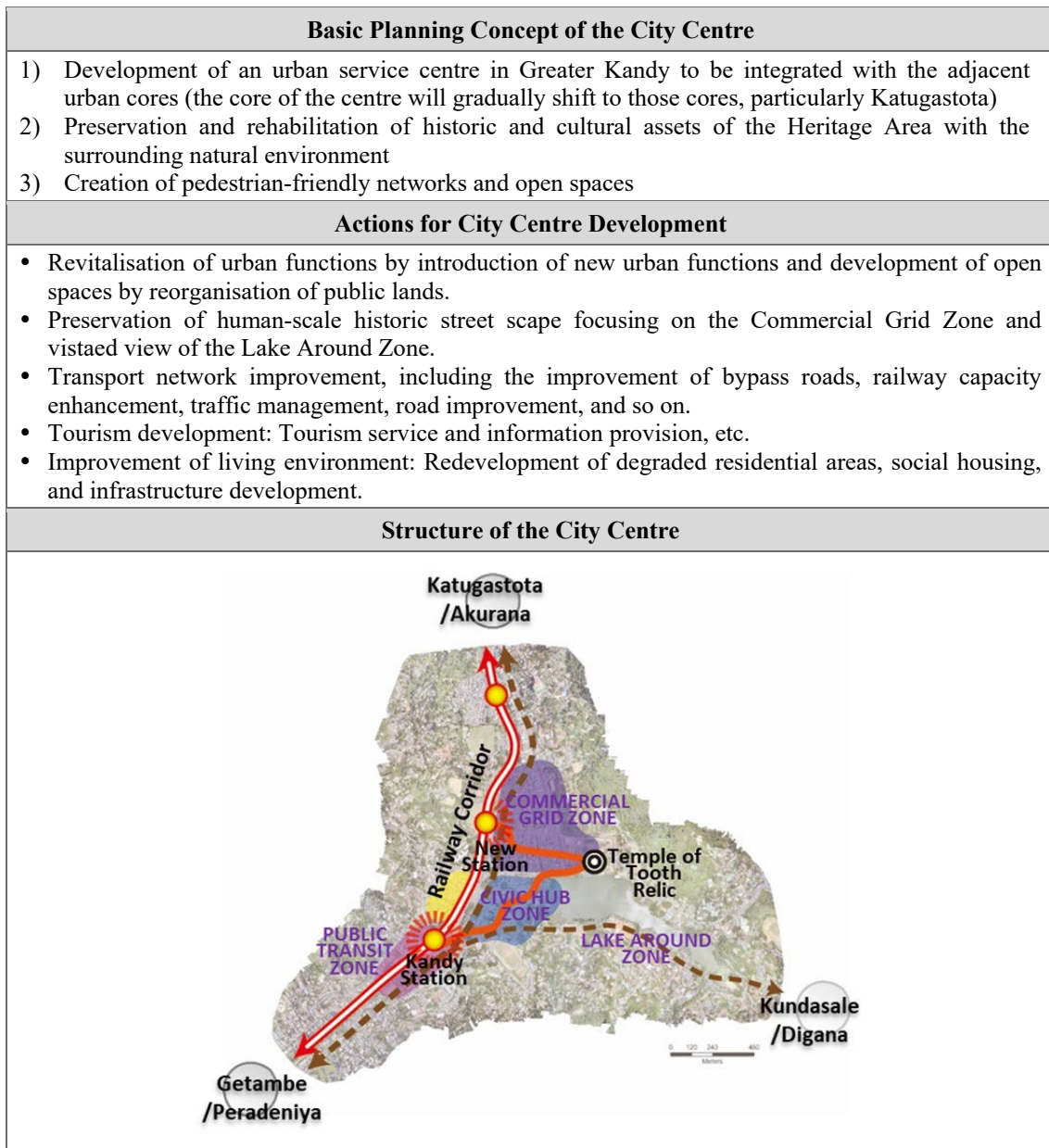
At the PCM, the participants pointed out the necessity to address the needs of socially and economically vulnerable people such as aged people, children, sick people, low-income families, etc., which are common in all ethnic and religious groups. Though these people were partly covered to ensure the diversity of the participants, more systematic measures are needed in future consultations to facilitate the direct representation of socially and economically vulnerable people as well.

CHAPTER 12 DETAIL PLAN FOR KANDY HERITAGE AREA

12.1 Approach for Formulating the Detail Plan

12.1.1 City Centre Development Orientation

As proposed in Chapter 8, to reduce congestion of the city centre for historic preservation and socio-economic development, the basic planning concept and five strategies of the City Centre are set as shown in Figure 12.1.1.



Source: The JICA Team

Figure 12.1.1 City Centre Development Orientation

12.1.2 Structure of the Detail Plan

To materialise the Vision of Greater Kandy and the planning concept of the Heritage Area, besides the urban plan (Detail Plan), comprehensive approaches – which include transportation plans and projects, heritage conservation programmes and investment promotion strategies – are needed.

In this chapter, the contents of the Detail Plan for GKUP are proposed, which will be reflected in the UDA Development Plan under the UDA Act. To realise the Detail Plan and/or promote heritage preservation and other urban improvement activities, a necessary institutional arrangement is proposed in Chapter 13 of this report.

Since the existing Development Plan by the UDA is utilised as the basis for urban planning and development, the framework of the Detail Plan is proposed in compliance with the present institutional mechanism of the UDA Development Plan. It is necessary to officially gazette the Heritage Building under the regulation of UDA Act with proper criteria and categorisation. In addition, several additional regulations and documents are proposed in the Detail Plan, which include regulations for architectures and signboards (hoardings), special action projects and urban design orientations to implement projects with regulating areas with special features.

The structure and outline of the Detail Plan are as follows (see Figure 12.1.2 and Table 12.1.1):

- (i) **Criteria and category of Heritage Building:** The selection criteria need to be clear and easy to understand. It is proposed to review the criteria and category of heritage buildings, and officially gazetted as a part of the regulation of the UDA Development Plan.
- (ii) **Zoning Regulation:** While zoning regulation is well formulated, it is proposed to strengthen and relax land use regulation for appropriate development control.
- (iii) **Other Regulations:** Other regulations including street wall, façade, height control, colour and signboards are proposed to be modified, as well as relaxing the existing regulations for the renovation of back addition to the heritage buildings.
- (iv) **Transport improvement:** In line with city centre development orientation to ease traffic congestion, transport strategies are proposed.
- (v) **Landscape management:** In line with city centre development orientation to preserve landscape and environment, environment management strategies are proposed.
- (vi) **Strategic Action Projects:** In line with city centre development orientation, there are strategic projects including public space enhancement for walkability improvement in the Grid Zone, urban redevelopment projects of public lands, and living environment improvement of substandard residential areas. To prioritise these projects with proper regulations, the Strategic Action Projects are proposed.
- (vii) **Urban Design Orientation:** To manage urban design with historic values and to improve walkability, urban design orientation to formulate the Spiritual Street in the Civic Hub Zone and Kandy Station Pedestrian Plaza are proposed.



Figure 12.1.2 Coverage Areas of Detail Plan

Table 12.1.1 Structure of the Detail Plan

Type	Objectives and Contents	Coverage	Corresponding Items of UDA Development Plan
(i) Criteria and Category of Heritage Building (see 0)	To relax criteria and category of Heritage Building	Whole Heritage Area	None (to be added)
(ii) Zoning Regulation (see 12.3)	To regulate construction activities (i.e. FAR, height, land use) for proper building volume	Whole Heritage Area	7.2.1 Zoning and Permitted Activities 7.2.6 Height Limits
(iii) Other Regulations (see 12.4)	To regulate architecture and signboards for proper townscape <ul style="list-style-type: none"> • Street wall • Façade • Height control • Colour • Signboard • Back addition to heritage buildings 	Mainly Commercial Grid Zone	7.2.5 Street Lines and Building Lines 7.2.7 Other Regulations
(iv) Transport Improvement (see 12.5)	To increase walkability in Heritage Area <ul style="list-style-type: none"> • Definition of street hierarchy • Parking management • Relocation of wholesale trucks 	Commercial Grid Zone	7.3.1 Transport Development Strategies
(v) Landscape Management (see 12.6)	To regulate building height centering the Temple of the Sacred Tooth Relic	Commercial Grid Zone Lake Around Zone	7.5 Environment Management Strategies (in Lake Around Zone)
(vi) Strategic Action Projects (see 12.7)	(1) Public Space Improvement Project	To guide proper public space improvement for walkability around the historic townscape	In South of Commercial Grid Zone
	(2) Urban Redevelopment Project	To guide proper urban redevelopment project for public purpose	Sinha Regiment in Commercial Grid Zone Public lands in Civic Hub Zone
	(3) Living Environment Improvement Project	To guide proper living environment improvement in unplanned settlements	Meda Ela Area in Public Transit Zone
(vii) Urban Design Orientations (see 12.8)	(a) Spiritual Street	To improve pedestrian space and promote urban redevelopment of public lands for safety and walkability	In Civic Hub Zone
	(b) Kandy Station Pedestrian Plaza	To ensure pedestrian space for gathering and evacuation in front of Kandy Railway Station	In Public Transit Zone

Source: The JICA Team

12.2 Criteria and Category of Heritage Building

12.2.1 Criteria

At present, the criteria and category of the Heritage Area are not officially gazetted in any laws and regulations, while the four organisations (UDA, KMC, DOA, and CCF) acted based on a tacit agreement. Regulations on heritage building conservation are too restrictive and can cause hardships for the owners to utilise their properties if such regulations are implemented.

Historic buildings usually require a time test. In order to be designated as any important historic monument by the authority, it should have survived a certain period of time. However, the current 100-year time test of Antiquities Ordinance in Sri Lanka may be too long. Most countries (including Japan) adopt 50 years as a benchmark. Considering the pace of urban transformation in Kandy, 50 years can be an appropriate time test.

Additionally, such buildings need to bear a certain value or reason to be designated. If there are multiple good reasons to designate the buildings and regulate the private properties, it could be more convincing to general public and owners of the buildings. Such criteria can be as follows:

- Architectural significance (e.g. rare example, works of famous architects)
- Association with important cultural and historic events (e.g. the residence of a famous writer, the birthplace of important people)
- Representation of the history of country, region and city

The cultural agencies need to establish the value based on a comprehensive survey and evaluation of the potential historic resources and write a “statement of significance” with regard to these criteria.

12.2.2 New Categories

It is proposed to re-sort the buildings into the following two (2) categories based on the re-selection (see Table 12.2.1 and Table 12.2.1) for a more realistic preservation and subsequent rehabilitation of such buildings. Based on those new categories, the human scale historic townscape of the Grid City could be conserved with appropriate regulations.

Table 12.2.1 Proposed New Categories for Reselection

Categories	Explanation	Examples
1: Individual Historic Buildings	<ul style="list-style-type: none"> • Buildings which have significance by themselves • Buildings whose history and significance are well proved by the cultural agencies such as DOA and CCF 	<ul style="list-style-type: none"> • “Special Buildings” (e.g. Temple of the Sacred Tooth Relic, Malwatta & Asgiriya Monasteries, Old Post Office)
	<ul style="list-style-type: none"> • Buildings that the general public can easily accept as worth preserving 	<ul style="list-style-type: none"> • Queens Hotel, Old Laksala Building (CCF Building), Lawyer’s Building
	<ul style="list-style-type: none"> • Large enough to be easily reused and can generate a decent income 	
2: Contributing Building to the Groups of Historic Buildings (Historic District)	<ul style="list-style-type: none"> • The building is not individually significant 	<ul style="list-style-type: none"> • Small shophouse buildings on Colombo Street and D.S. Senanayake Veediya
	<ul style="list-style-type: none"> • When collectively seen, this type represents a typical style which once thrived in the past and cannot be easily found today. • In order to create a historic district, a certain concentration of historic buildings with a reasonable quality is required. 	<ul style="list-style-type: none"> • Group of small residential buildings in the Grid City

Source: The JICA Team

12.2.3 Proposals for New Regulations

Current regulations on the listed conserved buildings need to be more flexible to respond to the fact that these buildings are mostly privately-owned and are still used by the owners to operate their business activities and as a place to live.

To allow economic activities to run smoothly within the heritage buildings, the use of the interiors shall not be too strictly regulated. In particular, although there has been no substantive research on the interiors of the buildings and they were not proved to be worthy of preservation, the current provisions still do not allow any changes on the interiors of some buildings.

Regulation of Exterior (for Category 1 and 2): It is proposed that the regulation only applies to the exterior so as not to prevent the owners from using their properties in principle. Preservation of the exterior shall not include the entire front façade of the buildings, but only the exterior walls and roofs. Although alterations to the interiors are allowed, the structures need to be preserved for the overall conservation of the buildings.

Regulation of Interior (for Category 1): If the interior of the buildings is proved to be worthy of preservation based on the academic survey by the cultural agencies, they may be protected and any alterations to such buildings need to be regulated. Otherwise, it is advised not to regulate the interiors, as this will be burdensome to the owners.

Table 12.2.2 Proposed Regulations on Listed Conserved Buildings

Target	Applicable Categories	Buildings
Exterior	Category 1	Individual Historic Buildings
	Category 2	Contributing Building to the Groups of Historic Buildings (Historic District)
Interior	Category 1	Individual Historic Buildings (require the proof of significance of interior and the owners' consent)

Source: The JICA Team

The reorganisation of the list is only intended to keep those which are in Category A and B categories. However, an in-depth survey by an expert is highly recommended. When selecting from the list, it is recommended to remove those which have been extremely altered or have lost their important architectural details.

12.2.4 Rehabilitation Guideline

The cultural resource agencies, such as CCF and DOA, need to conduct a detailed survey and documentation to define which of the buildings need to be preserved.

Restoration is the act or process that requires the reconstruction of the missing parts of the building. However, it should be done based on scientific and historic evidence such as in reference to the original drawings. Therefore, it is very unlikely for the authority to conduct such survey. Rehabilitation, on the other hand, is the act or process that enables a compatible use for a property through repair, alterations and additions.

12.3 Zoning Regulation

The existing “Development Plan for Urban Development Area of Kandy (Kandy Municipal Council Area)” is utilised for the proposed Detail Plan. The reason for this is based on the result of the JICA Team’s review, which showed that the existing plan was formulated as a controlling tool for urban development in Kandy – which includes the regulations for height-restriction and floor area ratio (FAR) – even though the plan has not been fully complied with. In particular, since the height-restriction is regarded as one of the most important regulations to protect the human scale historic townscape created around the Temple of the Sacred Tooth Relic in the Heritage Area, the existing height regulations are proposed to be kept.

Table 12.3.1 Proposed Planning Criteria for the Heritage Area

	Commercial Grid Zone	Civic Hub Zone	Public Transit Zone	Lake Around Zone
FAR	Keep existing regulations	Keep existing regulations	Keep existing regulations	Keep existing regulations
	1:0.5 - 1:2.5*			
Height-restriction	Keep existing regulations	Keep existing regulations	Keep existing regulations	Keep existing regulations
	12 m**	7.5 m-20 m***		
Land Use	Add prohibited urban functions (distribution and wholesale functions)	Introduce new urban functions (business and commercial functions)	Introduce new urban functions (business and commercial functions)	Add prohibited urban functions (hotel in environmentally - sensitive areas)

*: 1:2.5 in case the slope of angle is at is 0° - 20° , 1:1.5 in case of 21° - 30° , 1:0.5 in case of 31° - 45° .

*: FAR shall be compatible with the maximum permissible height and plot coverage.

** : The maximum height may be relaxed in relation to the distance from the Temple of the Sacred Tooth Relic.

***: The maximum height is regulated depending on lot size, slope range, and abutting street width.

Source: The JICA Team

To materialise the proposed planning concept, however, the land use regulations for some zones are altered. As indicated in the proposed planning criteria above for the Civic Hub Zone and the Public Transit Zone, new urban functions are to be introduced in the medium- or long-term plan after improving the traffic condition. On the other hand, for the Commercial Grid Zone and Lake Around Zone, some prohibited urban functions are to be added in consideration of the present urban development situation and human scale streetscape in the future.

12.4 Other Regulations

12.4.1 Outline

The guidelines for architectures and advertisements are the additional descriptive regulations to the existing development plan. In the Commercial Grid Zone, the regulations to keep the historical human scale urban design are proposed, which are not included in the existing development plan but regarded as important design factors. The additional regulations are also proposed in the Lake Around Zone.

This guideline only applies to the buildings within the Commercial Grid Zone area which are not considered as “heritage” or “monument” by DOA or UDA.

This guideline applies to applicants who wish to demolish the existing structure and build a new building, or to significantly alter the existing façade or parts of the buildings.

This guideline shows the basic idea or principle of how to create a contextual streetscape within the Commercial Grid Zone where the concentration of historic buildings is mostly recognised in the entire Heritage Area. The city should not be frozen in a certain time or certain style, but can be changed in a harmonious manner with historic resources that define the character of the Commercial Grid Zone and the new development can add some new favourable changes as a layer of the history, as long as the new is subordinate to the old development pattern.

The applicants and their respective architects should understand the historic development pattern and characters of the Commercial Grid Zone as discussed earlier in this report.

This guideline is not meant to show what the applicants have to make so as not to deny the creativity of present-day architects. By understanding the guidelines, the applicants and architects need to explain how their new designs fit into the historic context. If they fail to do so, the authorities should provide the necessary constructive advice or alternatives. A good streetscape cannot be achieved through rigid rules, but from the commutation among stakeholders.

<Principles>

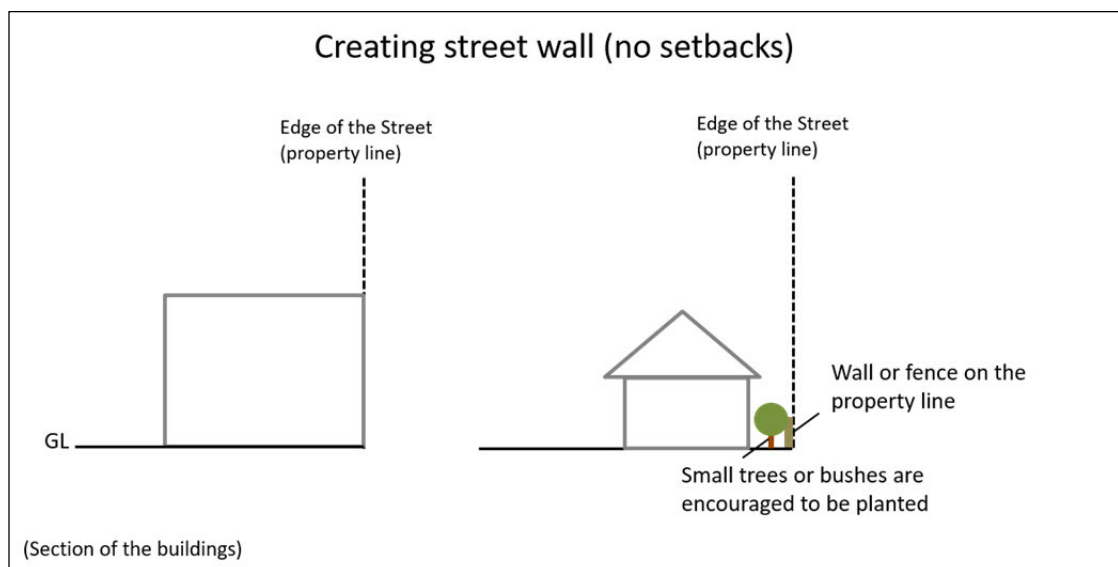
- A new building should be harmonious with and contextual to the historic development pattern in the Commercial Grid Zone.
- A new building should be subordinate to the historic buildings and should not stand out by itself in terms of massing, colour, material and height.
- Design of the new building should not directly copy the design (e.g. overall façade design, particular ornamental features) of the “heritage” building. New buildings shall be recognised as new and thus, shall be differentiated based on the International Conservation and Restoration of Monuments and Sites (The Venice Charter 1964) of ICOMOS.
- As a prestigious stage used for Perahera procession, the new building in the Commercial Grid Zone shall aim to achieve the highest quality.

Reference: Venice Chapter

The Venice Charter for the Conservation and Restoration of Monuments and Sites was adopted by ICOMOS (International Council on Monuments and Sites) and has been the international framework for the conservation and restoration of historic buildings. In order to appreciate the diversity of the historic and cultural properties or new types of historic buildings (modern heritage of the 20th century) in the world, there are several subsequent charters such as the Charter for the Conservation of Historic Towns and Urban Areas (1987), Nara Document of Authenticity (1994) and the Burra Charter (first adopted in 1979, 2013 with the current version), the Venice Charter has remained as the basic standard of conservation and restoration practices. In the Article 9 of Restoration, it is written: “It must stop at the point where conjecture begins, and in this case moreover any extra work which is indispensable must be distinct from the architectural composition and must bear a contemporary stamp”. In the field of historic preservation, particularly in Europe and the United States, this has been also applied as to how the new buildings within the historic districts should be and often interpreted as a way to not just copy the old architectural decoration or style.

12.4.2 Street Wall

- The construction of new buildings in the Commercial Grid Zone shall observe the existing street wall by closely following the major façade line mainly defined by the existing façade line.
- Its façade facing the street should rise at the edge of the property line that differentiates the streets from the private plots along them (see Figure 12.4.1).
- If a new building is used as a non-commercial building (e.g. residential, religious and institutional), it is allowed to have a certain setback to accommodate the small entrance space. However, in this case, it shall have some visually non-obtrusive structure (e.g. low fence, hedges, metal grill fence) to contribute to the continuous street wall.
- In the case where a new building shall have a parking structure, although an applicant is encouraged to waive it by purchasing parking rights on an off-shore site or a parking lot, the façade line of the upper floor shall not set back. Otherwise, such buildings with front parking should have some fence or plants to create the continuity.



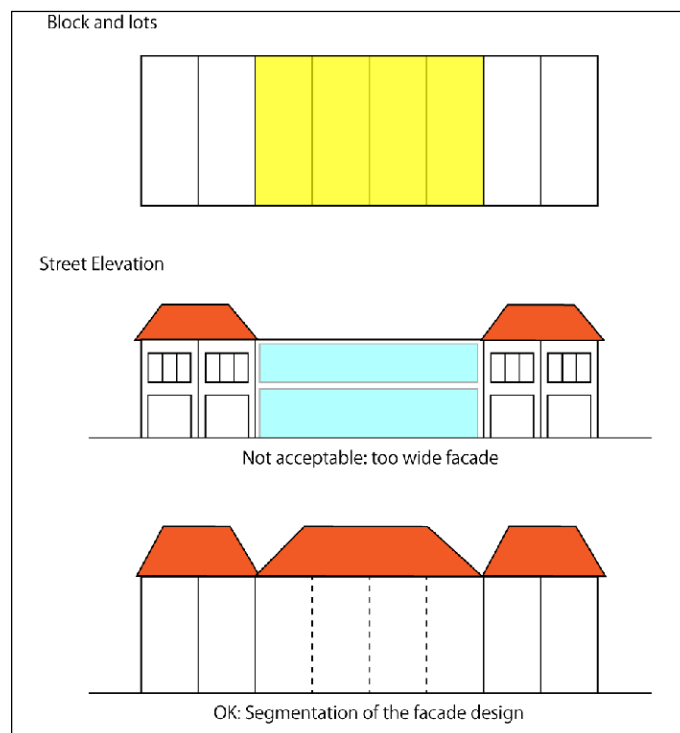
Source: The JICA Team

Figure 12.4.1 Relationship between the New Buildings and the Edge of the Street

12.4.3 Façade

(1) Segmentation of the Façade Design

- In case the several plots are to be merged and the existing buildings to be replaced by one building, the façade design of such building shall avoid the big flat façade to reflect the existing development pattern of this zone (see Figure 12.4.2).
- This does not indicate that the building is structurally divided into several parts.
- By looking at the adjacent buildings on the same street, the basic unit size needs to be examined and incorporated into the design by using vertical elements, or break down the mass of the building by recessing and projecting elements to avoid flat, monotonous façades.
- However, the design or decoration of the adjacent conserved buildings shall not be directly copied.
- In filing the application, the applicant shall provide photos of the adjacent buildings on the street and present the design concept to show how he or she relates the new buildings to the character of the street.

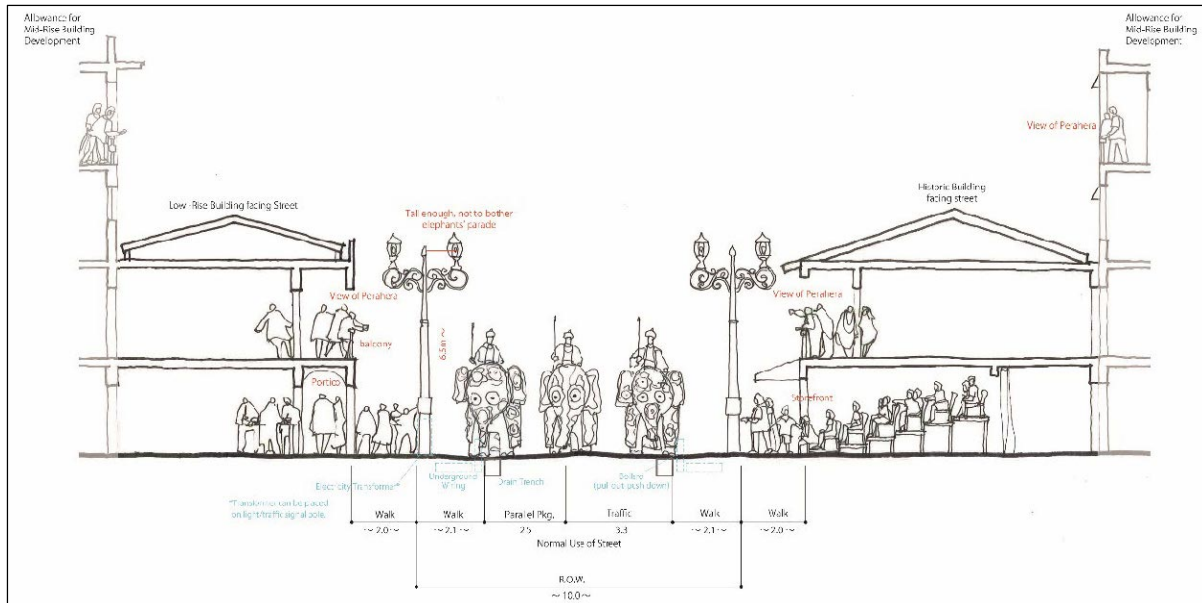


Source: The JICA Team

Figure 12.4.2 Diagram Showing the Not Acceptable and Acceptable Façade Designs

(2) Opening on the Front Façade

Based on observation of the historic building type as well as some newly constructed buildings, the buildings in the Commercial Grid Zone tend to have operable windows, veranda or porches so that the people can enjoy the Perahera procession. Instead of the flat, glass façade, the new building in the Commercial Grid Zone shall incorporate such spaces on the upper floors (see Figure 12.4.3). At the time of the Perahera procession, such space can be converted into a rental view space for the tourists in order to generate income, just as the shop owners along the street may set up temporary view stands within the shop buildings.



Source: The JICA Team

Figure 12.4.3 Section of the Buildings Along the Streets in Perahera

Below are the suggested texts for this guideline.

- The upper floor on the new building in the Commercial Grid Zone shall incorporate operable windows, veranda or porch space to create the relationship between buildings along the streets and the Perahera procession, which is a major festival in Sri Lanka.
- The veranda on the second floor or above shall not stand out too much by using solid materials like concrete, or by projecting out too much to the street level. Use of a grill is encouraged for the front portion of the veranda it does not stand out from the building design (see Figure 12.4.4).



Source: Website of Eagle Cards, <http://eaglescards.net/iron-railing-design-for-balcony/mU4r-25397/w>

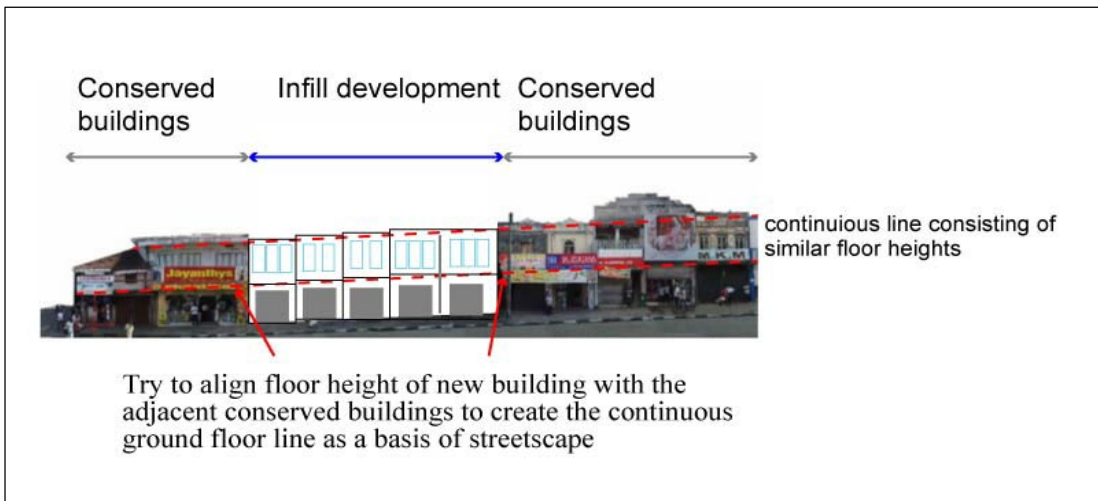
Figure 12.4.4 Example of Grills on the Veranda

(3) Alignment of the Floor Height on Exterior

Due to the grade of the Commercial Grid Zone, the floor height of the old buildings is not exactly aligned. However, historic streetscape shows a similar floor height, which creates horizontal continuity. This tendency is recognised particularly on the ground floor opening.

If the concentration of historic buildings are recognised in the block where a plot for the new buildings is located, it is recommended to look at the floor height of the adjacent buildings

and align the height of the new buildings with them (Figure 12.4.5). The new buildings do not have to exactly match the floor height of the historic buildings in the same block, but the design intention to create relationship with the context is required.



Source: The JICA Team

Figure 12.4.5 Diagram Illustrating how to Relate the Floor Height of the New Buildings to the Continuous Line Consisting of Historic Buildings

12.4.4 Height Control

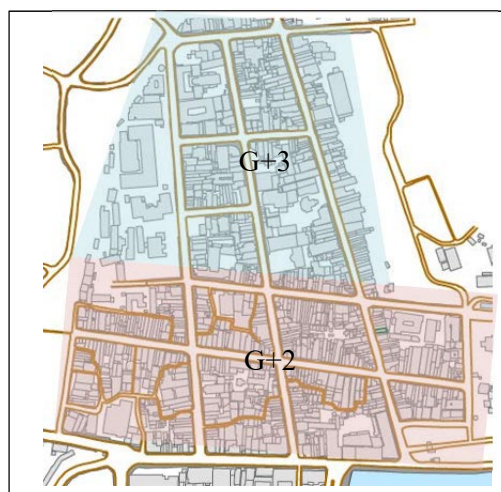
Based on the development pattern, it is suggested to relax the existing standards for height control in the current regulations by considering the following:

- This height control applies to the building height from the ground level to the highest point of the building including the roof (see Figure 12.4.6).
- The height of a new building shall be 12m or lower at the highest point within a designated Special Commercial Grid Zone Overlay Zone (tentative). By definition, 12 m is equivalent to the ground floor plus two floors (G+2) with pitched roof. Within the other zone of the Commercial Grid Zone, the height of a new building can exceed 12 m, but shall be 15 m or lower (see Figure 12.4.7). By definition, 15 m is equivalent to the ground floor plus three floors (G+3) with pitched roof. Pitched roof is not mandatory for the new construction except for the following occasions.
- However, if the building unit is part of the old buildings which are not listed conserved buildings, the owner is advised that the property maintains the same height as the adjacent units. Additionally, if the adjacent buildings retain the original pitched roofs, it is recommended to install pitched roofs on the new building to make the buildings look identical.
- If the unit is part of the listed conserved building, the height shall be kept the same.



Source: The JICA Team

Figure 12.4.6 Analysis of Existing Building Height



*: To decide the above zone boundary, further discussion is needed.

Source: The JICA Team

Figure 12.4.7 Suggested Height Restriction Per Zone

12.4.5 Colour

The colours of the exterior walls and roofs, which define the impression of the overall buildings, need to be regulated to improve the streetscape where historic buildings are concentrated. According to CCF, no paint study has been conducted to identify the original colours of the listed conserved buildings. However, CCF and UDA indicated that the allowable colours for such buildings are dim and cream type colours. The large-scale historic buildings such as Queens Hotel, Post Office Building and Bank of Ceylon Building (on the corner of Dalada Veediya and Kotugodella Veediya), white is also a frequently used colour. Therefore, based on the current trend of such buildings, we propose that white and warm colours are allowed and within a certain range of colours, the owners have freedom to select the colours while pursuing harmony to some extent.

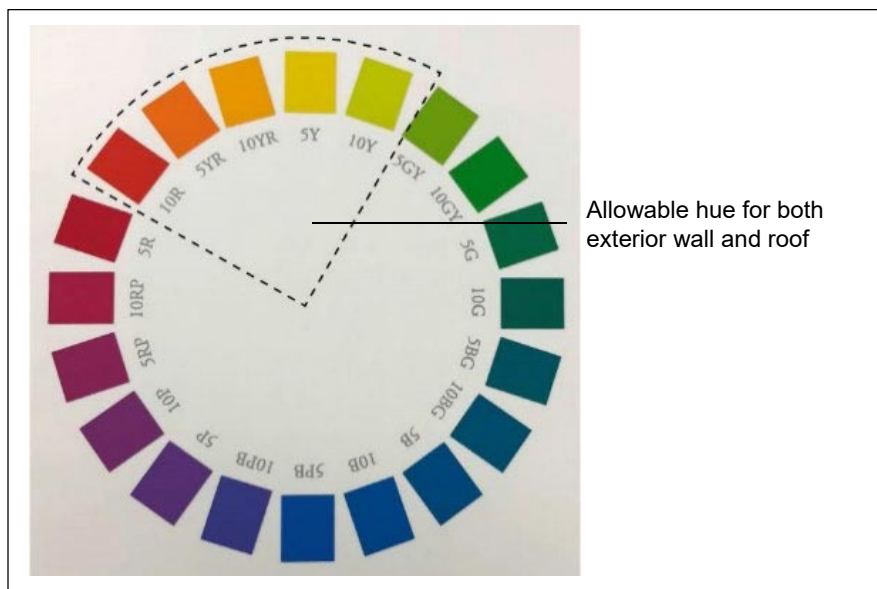
This rule on colours does only apply to the new buildings and non-conserved existing buildings, but also to the listed conserved buildings.

Allowable colours are to be controlled based on the Munsell colour theory. The Munsell colour theory was invented by Albert Munsell, who came up with a way to quantify and

describe how the human beings perceive colour by using three elements: hue, chroma (colour purity) and value (lightness). It is internationally recognised and often adopted by paint manufacturers.

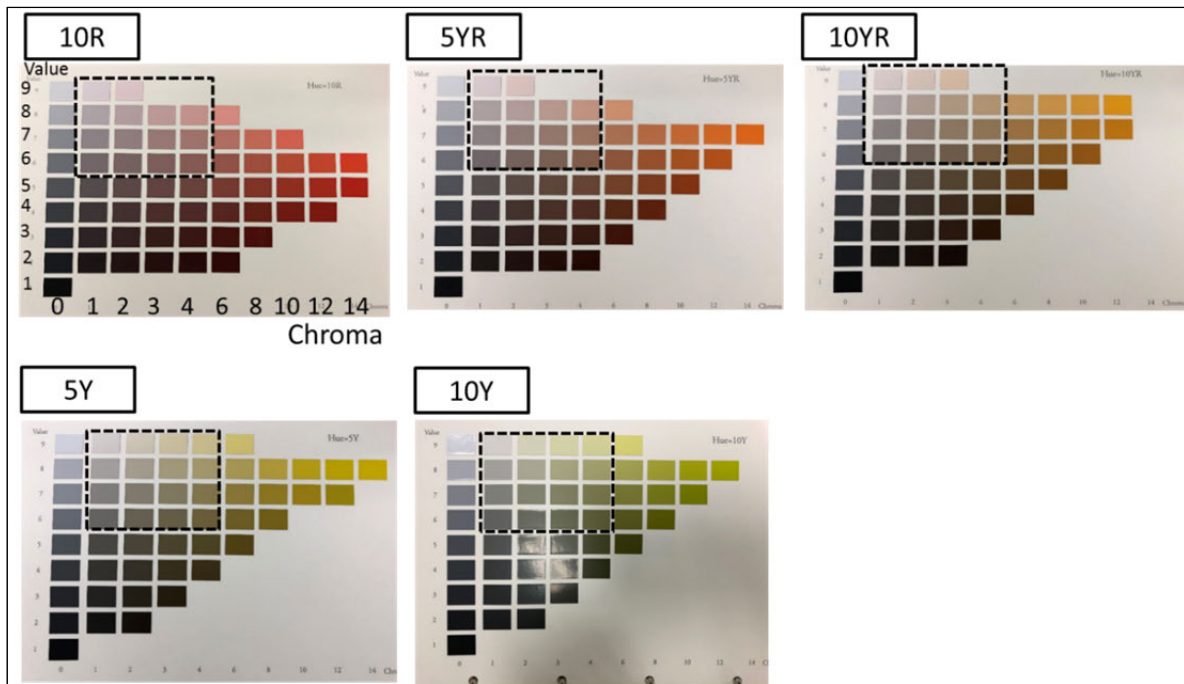
Below are the suggested texts for this colour rule:

- For the new buildings, the control of colours is applicable to exterior walls, accent items (e.g. doors and window sills) and roofing materials (e.g. clay tile).
- Historically, the colours of the listed conserved buildings tend to be white or warm colours. Hence, the new buildings within the zone shall follow the same colour scheme to create a harmonious relationship.
- In the same manner, the roofs of historic buildings are usually red or orange clay tiles, and therefore the same colour scheme should apply to keep them in harmonious to the existing context.
- As stated previously, applicable colour is controlled by three elements: hue, chroma and value based on the the Munsell Colour System. This range of hues is applicable to exterior walls and accent items.
 - Hue: 10R, 5YR, 10YR, 5Y, 10Y (see Figure 12.4.8)
- The chroma and value of the exterior wall which mostly contributes to the overall impression of the building shall be as follows (see Figure 12.4.9):
 - Chroma: 1-4
 - Value: 6 and higher
- The accent items shall be selected within the designated five hues, but they shall be kept within the same hues.
- The chroma and value of the roofing materials shall be as follows (Figure 12.4.10):
 - Hue: 5YR
 - Chroma: 8-12
 - Value: 5 and 6



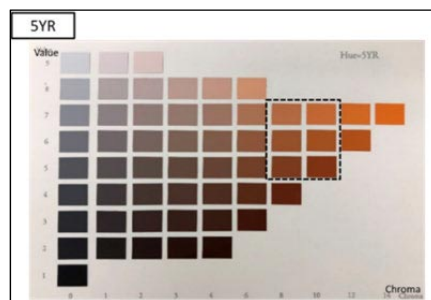
Source: The JICA Team

Figure 12.4.8 Allowable Hues in Munsell Colour System



Source: The JICA Team

Figure 12.4.9 Allowable Chroma and Value for Exterior Walls in Each Hue



Source: The JICA Team

Figure 12.4.10 Allowable Colour for Roofing Materials

12.4.6 Signboard

Signboard guideline is mandatory for all the buildings within the Commercial Grid Zone but can be used as a guide for the buildings in the other zones (conformity to this guideline is not necessarily mandatory).

(1) Purpose of the Signboard Guideline

Below are the purposes of regulating the signboard which needs to be shared by the merchants to encourage understanding and cooperation. Its overall goal is not to regulate their activities, but rather to bring benefits to their business.

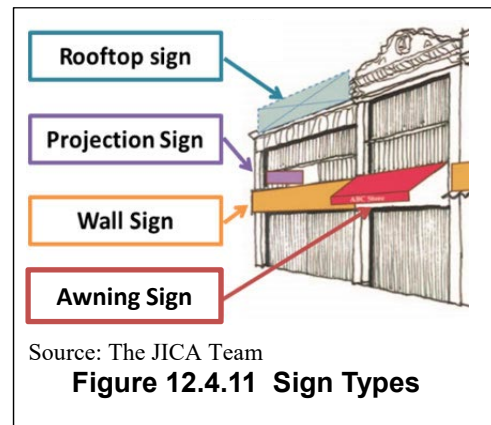
- Signboards which are placed randomly create a situation where people have difficulty finding the information they need due to visual obstruction. This also makes the onlookers reluctant to view the signboards.
- Therefore, this guideline will help the merchants provide the necessary information effectively to the onlookers. This will not only benefit the merchants' businesses but also contribute to the improvement of the streetscape.

- The purpose of this signboard guideline is NOT to regulate the merchants' activities.
- Below are the three basic goals of the outdoor signboards within the central business district like Commercial Grid Zone.
 - i. To provide the pedestrians with the information of the shop at once
 - ii. To capture the eyes of the onlookers and passers-by and bring entertainment
 - iii. To contribute to a good streetscape
- Signboards are part of the streetscape which reflects the culture and tradition of Kandy. In order to create a good streetscape, the signboards should be subordinate to the buildings and their designs should be in harmonious relationship with the buildings.
- In Kandy, the signboards need to be harmonious with the historic buildings. This does not mean that every building has a uniformed signboard.
- A good streetscape encourages people to walk outside, which will eventually increase the sales of the stores along the streets. It can also attract the people from outside of the town and be a tourism asset.

(2) Definition of Terms (see Figure 12.4.11)

Self-advertising: Advertisement for one's own business

- Generic signboard: A signboard which is placed by the sponsor of the products the merchants carry
- Directory sign: A sign system for multiple tenants
- Wall signs: Signs which are directly attached to the wall
- Projecting sign: Signboards that are projecting from the façade
- Window sign: Sign which is mounted on backside of the show window
- Awning sign: Sign which is written on the awning



(3) Signboard Guidelines

To create a harmonious relationship with the historic streetscapes, the number, location and area of signs are controlled by the guidelines with illustrative plans.

The regulations are slightly altered from the existing regulation to harmonise with the historic street scape for the following three types:

- (a) small-scale historic buildings which have smaller openings (usually 3-6 m in width) such as buildings along Colombo Street
- (b) large-scale historic buildings (one tenant or multiple tenants), in terms of the width and height of the buildings (ex. the Royal Bar and Hotel on Raja Veediya, Cargills Building and Bank of Ceylon Building on Dalada Veediya)
- (c) non-historic buildings

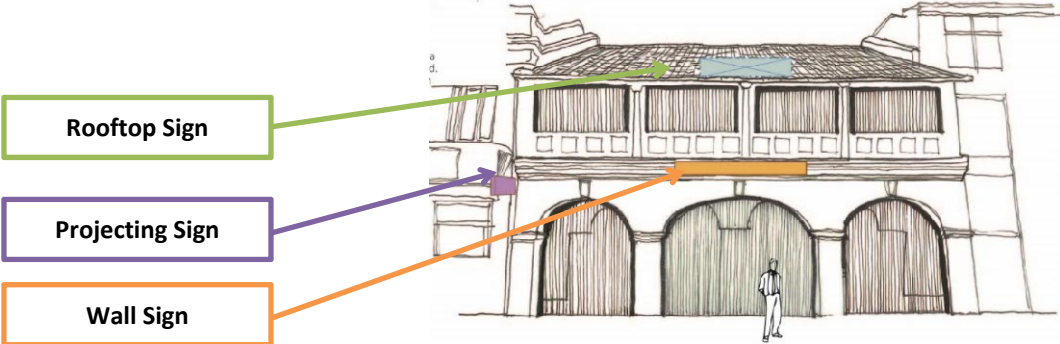

Wall sign ¹⁾	<ul style="list-style-type: none"> • One wall sign (primary sign) for each storefront or building façade is permitted. • The design of the primary sign shall respect overall design of the façade and streetscape. • The location of primary sign shall be centered above the storefront and below the second floor windows. Wall sign shall not cover the historic character (decorative features such as columns, pediment, balustrades and medallions) of the building. • One wall sign shall not exceed five square as. The height of a wall sign shall not exceed one metre. • Total area of wall sign(s) per building shall not exceed <u>25%</u> of the façade area. • No generic sign such as a product name is permitted. • When necessary, use exterior lighting fixtures for a wall sign. A box type lighting fixture is not permitted. Individually mounted letters that contain lamp in each character is permitted.
Rooftop sign	<ul style="list-style-type: none"> • No rooftop sign or wall sign on the third or higher floor is permitted.
Projecting sign	<ul style="list-style-type: none"> • One projecting sign for one storefront business is permitted. • One projecting sign shall be no larger than 90 cm width, 60 cm height and 10 cm thickness. • The bottom of projecting signs shall be located at least 2.5 m above the sidewalk and rigidly supported. • Creative signs that show high level of craftsmanship and symbolise the business are encouraged for this type.
Awning Sign	<ul style="list-style-type: none"> • One sign per one awning is permitted. • The Conditions for wall sign are applied.



1) The existing Development Plan stipulates that the size of the signboard shall not exceed an area of 1/8 (12.5%) of the front façade, or 4 m², whichever is less. Since many signboards of small-scale historic buildings in the Commercial Grid Zone are larger than the area of this regulation (most of them are 5 m² and more than 20% of the front façade), less than 25%, or 5 m², is stipulated as the applicable size regulation.

Source: The JICA Team

Figure 12.4.12 Signboard Guidelines for Small-Scale Historic Buildings

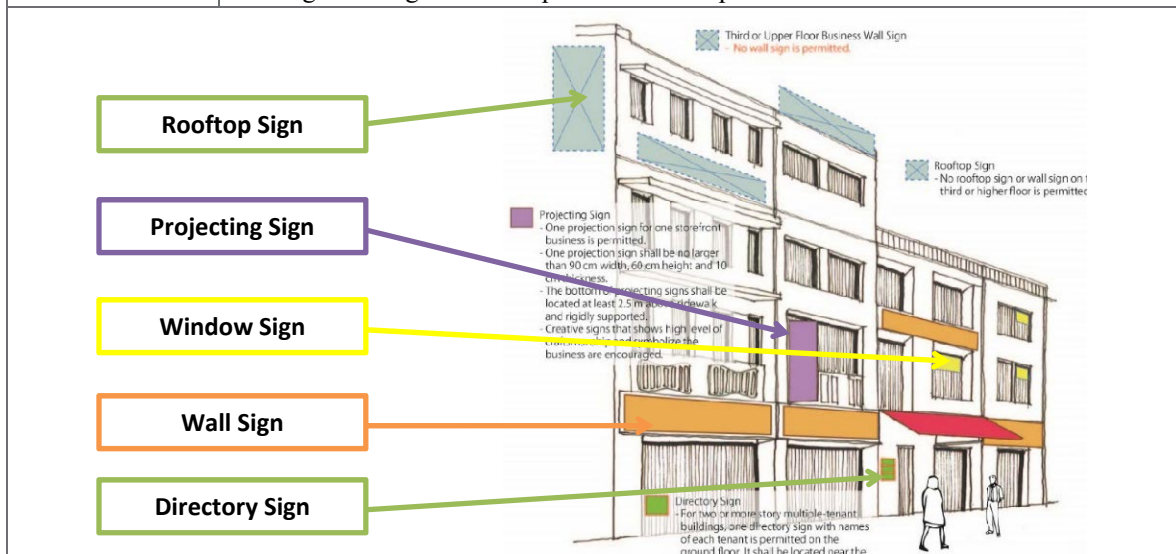
<p>Wall sign¹⁾</p>	<ul style="list-style-type: none"> • One wall sign (primary sign) for each storefront or building façade is permitted. • The design of the primary sign shall respect the overall design of the façade and streetscape. • The location of primary sign shall be centred above the storefront and below the second floor windows. Wall sign shall not cover the historic character of the building. • One wall sign shall not exceed five (5) square metres. The height of a wall sign shall not exceed one (1) metre. • Total area of wall sign(s) per building shall not exceed 10% of the façade area. • The width of a wall sign shall not exceed the width of the wall opening or portico. • No generic sign such as a product name is permitted. • When necessary, use an exterior lighting fixture for a wall sign. A box type lighting fixture is not permitted. Individually mounted letters that contain a lamp in each character is permitted.
<p>Rooftop sign</p>	<ul style="list-style-type: none"> • No rooftop sign or wall sign on the third or higher floor is permitted.
<p>Projecting sign</p>	<ul style="list-style-type: none"> • One projecting sign for one storefront business is permitted. • One projecting sign shall not be larger than 90 cm width, 60 cm height and 10 cm thickness. • The bottom of projecting signs shall be located at least 2.5 m above the sidewalk and rigidly supported. • Creative signs that show high level of craftsmanship and symbolise the business are encouraged for this type.
	
<p>In case of multiple tenants per building, each of the directory sign to be placed within the arch openings should not exceed the width of the arch. It is advised to avoid signs on the first floor or above in cases where tenants conduct their business on the upper floors. Therefore, the “wall sign”, “rooftop sign” and “projecting sign” rules also apply.</p>	

1) The existing Development Plan stipulates that the size of the signboard should not exceed an area of 1/8 (12.5%) of the front façade or 4 m², whichever is less. Since many signboards of small-scale historic buildings in the Commercial Grid Zone are larger than the area of this regulation (most of them are 5 m² and more than 20% of the front façade), less than 25%, or 5 m² is stipulated as the applicable size regulation.

Source: The JICA Team

Figure 12.4.13 Signboard Guidelines for Large-Scale Historic Buildings

Wall sign ¹⁾	<ul style="list-style-type: none"> • Wall sign on the ground (first) and second floor • One wall sign (primary sign) for each storefront or business is permitted. • The design of the primary sign shall respect the overall design of the façade and streetscape. • The location of primary sign shall be centred above the storefront and below the upper floor windows and shall not cover the windows, openings or balconies. • One wall sign shall not exceed five square metres. The height of a wall sign shall not exceed one metre. • Total area of wall sign(s) per building shall not exceed 10% of the façade area. • No generic sign such as a product name is permitted. • It is encouraged to use an exterior lighting fixture for a wall sign. Individually mounted letters that can be lighted internally or from behind is permitted.
Rooftop sign	<ul style="list-style-type: none"> • No rooftop sign or wall sign on the third or higher floor is permitted.
Projecting sign	<ul style="list-style-type: none"> • One projection sign for one storefront business is permitted. • One projection sign shall be no larger than 90 cm in width, 60 cm in height and 10 cm in thickness. • The bottom of projecting signs shall be located at least 2.5 m above the sidewalk and rigidly supported. • Creative signs that show high level of craftsmanship and symbolise the business are encouraged.
Window Sign	<ul style="list-style-type: none"> • One window sign per one window pane or framed window is permitted. • Window sign shall not cover more than 25% of the window area.
Awning Sign	<ul style="list-style-type: none"> • One sign per one awning is permitted. • The design of the awning sign shall complement the overall design of the façade and the streetscape. • No generic sign such as a product name is permitted.



Source: The JICA Team

Figure 12.4.14 Signboard Guidelines for Non-Historic (Modern) Buildings

(4) Sign Text & Colour

- Signage design should be creative; consider using images and graphics to promote the business, merchandise or services provided.
- Sign messages should be short with simple typography that people can read easily.
- Minimise wording and the use of symbols to achieve a clear message.
- Sign colours should be simple (for instance, within a range of three colours) and appropriate with the building colour scheme and the neighbouring buildings. Too many colours may be visually unattractive.
- Sign legibility is enhanced by contrast between letters and background and the amount of open space around the text.

The Figure 12.4.15 illustrates a simulation photo in which the number, size and location of the signboards are altered based on the proposed regulation.



Source: The JICA Team

Figure 12.4.15 A Simulation Photo Following the Proposed Regulations (Colombo Street)

12.4.7 Back Addition to the Listed Conserved Building

Due to the high land value in the Commercial Grid Zone, several listed conserved buildings, which are usually small in scale, have been either completely demolished or significantly altered to construct a new building which is much bigger and taller. One of the basic principles of urban conservation is not to demolish the buildings which are protected by law. On the other hand, under such circumstances in which no other major commercial core area has been created in Kandy and it will take some time to develop such zone in the future outside of the Commercial Grid Zone, it is proposed that some additions be allowed to respect the owners' need to expand the buildings. This proposal was mentioned frequently during interviews with the building owners and was also discussed in two owners' meetings, with mention of including some regulations. The additions to the listed conserved buildings will not give the owners the maximum floor areas in order to protect the minimum integrity of the historic buildings. This option shall only be allowed if the front portion is to be rehabilitated. Therefore, a conservation plan shall be developed and approved by the authority.

Additionally, each unit in the Commercial Grid Zone tends to be small (with usual width of the unit at 3-5 m) and these units are often part of large buildings. Therefore, to maintain the integrity of the entire buildings, such back part addition shall be conducted as an entire building. The JICA Team has also identified that these conserved buildings are usually subdivided and several ownerships exist in one building (even in one unit of the building), which prevent owners from rehabilitating the buildings. Since each owner has rehabilitated only his or her own part, the integrity of the buildings tend to be lost, which is another streetscape issue where one building cannot be viewed as one. For instance, Buildings along Colombo Street (see Figure 12.4.16) consist of three different units and owned by three different owners, and each owner only rehabilitate his or her own part. Under this situation, it is difficult for the different owners to coordinate on building the back addition together, which was often mentioned during interviews with the building owners and occupants. Therefore, the authorities need to provide assistance to several different owners in one building by acting as an advisor to coordinate on the rehabilitation of the front part and the back addition.



Source: The JICA Team

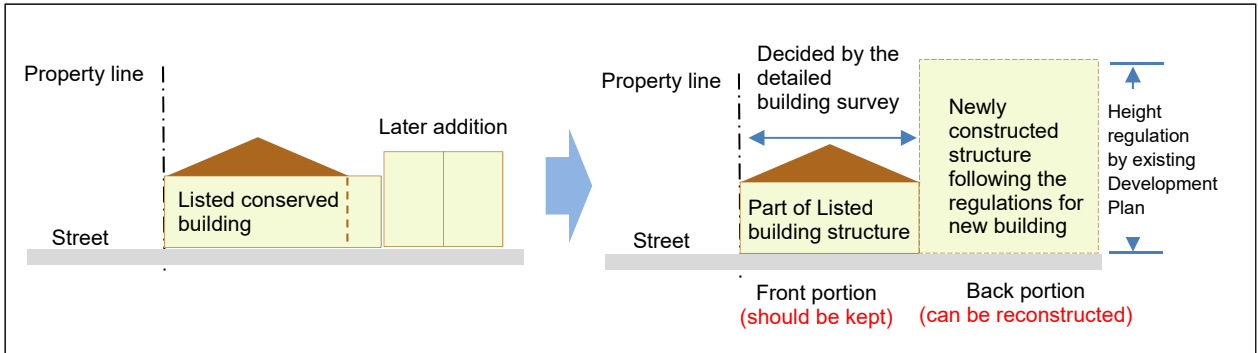
Figure 12.4.16 93, 95 and 97 Colombo Street

In the Commercial Grid Zone, there are many shophouse buildings with small openings on the street, and the depth of the buildings are long (see Figure 12.4.17). Based on on-site observation and the building footprints that can be recognised in the GIS maps that JICA Team has produced, the buildings consists of several smaller buildings. Based on interviews with the owners and occupants of the conserved buildings, these back portions were usually added later or the back part of the plot was significantly altered. In order to preserve a decent portion of the building while allowing some additions, the front portion of the building should be preserved and the rest may be replaced by the additions (see Figure 12.4.18).



Source: The JICA Team

Figure 12.4.17 A Typical Shophouse and its Side View

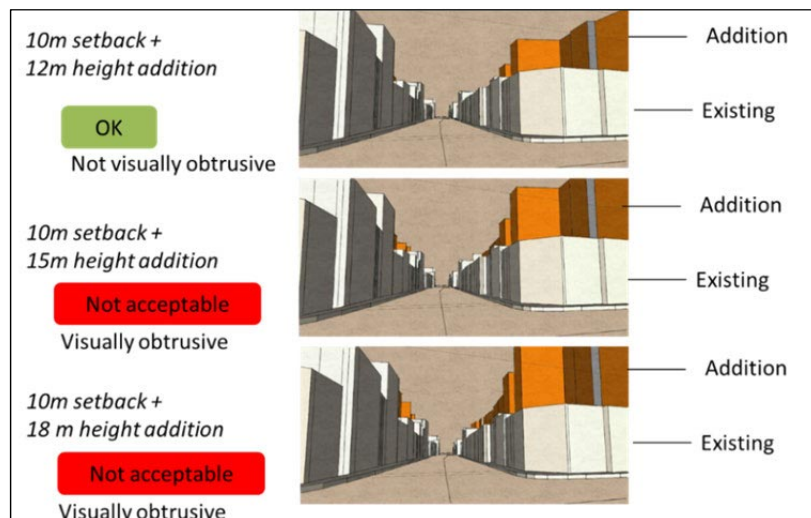


Source: The JICA Team

Figure 12.4.18 Image of Back Addition to the Listed Conserved Building

Currently, due to lack of research on each building (including the plan that shows which part is the original and which is a later addition or alteration which is not necessarily worthy of preservation), it is strongly encouraged that the cultural resource agencies such as DOA and CCF conduct a detailed historic building research to determine what exactly needs to be preserved.

The JICA team has conducted some simulation of the volume and massing of the proposed addition by generating the image (see Figure 12.4.19).



Source: The JICA Team

Figure 12.4.19 Simulation of the Height of the Addition

The team has estimated that the first street portion of the shophouse is approximately 10 m and simulated the height of the addition in the back of the three cases shown above to determine the acceptable volume with regard to the view from the streets. If the addition is not too visually obtrusive from the street level, such a situation should be acceptable. The simulation is done on Colombo Street between D.S. Senanayake Veediya and Kotogudella Veediya at human eye level. The view point is set at the corner of the Kotogudella Veediya and Colombo Street. Simulation is done at three different heights of addition: 9 m, 12 m and 15 m. Since most of the listed buildings on Colombo Street are two-storey buildings (G+1), a 12 m addition (equivalent to G+2) is not visually too obtrusive, while the cases of 15 m and 18 m are visually obtrusive even with the 10 m setback.

In conclusion, it is recommended that the addition to the listed conserved buildings should have a minimum of 10 m setback (depending on the shape of the conserved buildings) with a maximum of 12 m height.

Due to the narrowness of each unit of the conserved buildings, it is strongly encouraged that the owners of the units in one building should work together to have decent sized additions.

This solution will alleviate the owners' deadlock situation where they cannot add any floors, although it would not maximise their profits due to the necessity of historic preservation which is a public good.

Below are the suggested guidelines:

- If some listed conserved buildings are to be collectively rehabilitated by the special permit of UDA or DOA (in case such buildings are DOA gazetted, a permit from DOA is required), as long as a decent portion of the listed conserved buildings under a separate regulation is conserved and rehabilitated, applicants may demolish the existing back part of such buildings to construct new additional buildings.
- The portion of the listed conserved buildings to be maintained shall be approved by CCF and DOA. CCF and DOA shall check such application together.
- Design of such addition shall be subordinate to the listed conserved buildings in front to show respect and shall not directly copy the design of the front buildings.
- Conservation plans of the listed conserved buildings shall be submitted and approved by UDA or DOA and that conservation work shall be carried out along with the construction of the addition.

12.5 Transport Improvement

12.5.1 Outline

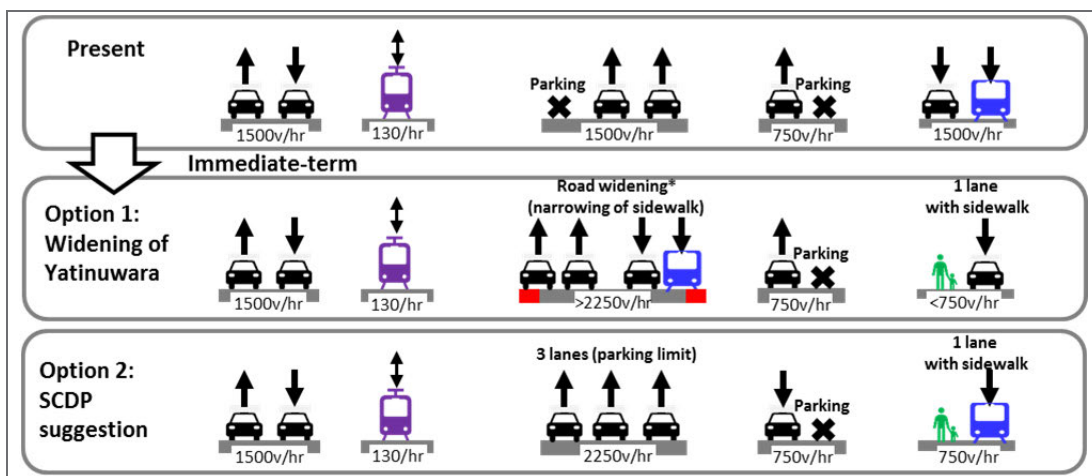
One of the most important requirements for realising the proposed basic planning concept is to transform the Heritage Area into a pedestrian priority area through comprehensive transportation policies. The comprehensive transportation policies which are considered essential are indicated below.

- i. Public transportation services will be improved based on the TOD (transit-oriented development) concept, which includes double tracking of the railway (Katugastota-Kandy-Peradeniya), enhancing the efficiency of bus operations, development of a park & ride (P&R) system, development of multi-modal terminal and station plazas, promoting a school bus system, and so on.
- ii. The car traffic will be reduced and the road capacity will increase with the development of bypass roads to reduce the inflow traffic and improve intersection. Other plans include, securing bus stop spaces, providing a 3-wheeler priority lane, road realignment and upgrading, traffic management (e.g. strict speed control), and so on.
- iii. Some areas in the Heritage Area in the Commercial Grid Zone and Civic Hub Zone will be designated as pedestrian priority areas to improve the walking environment.

In terms of the Detail Plan of Heritage Area, transport improvement strategies should focus on increasing walkability in the Commercial Grid Zone in compliance with the Development Orientation of the whole city centre.

12.5.2 Redefining the Street Hierarchy

It is proposed that the zone be people-oriented. However, considering the current amount of traffic flowing into the city and the timing of the proposed double tracking development – including the development of the outer urban core such as Katugastota – it is not plausible to propose that the entire Commercial Grid Zone be reserved for pedestrian-use only, or even become pedestrian-oriented for a short- to mid-term time period. Therefore, before the execution of the development projects that will contribute to reduce the traffic volume in the Commercial Grid Zone and provide an alternative public transportation system, the team suggests that the city should keep some of the arterial roads within the Commercial Grid Zone while changing the characters of some streets into walkable streets.



Railway Yatinuwara Veediya. Kotugdella Veediya. D.S. Senanayake Veediya.
Source: The JICA Team

Figure 12.5.1 Options to Formulate a Pedestrian Priority Area in Commercial Grid Zone

As a short-term action to make the Commercial Grid Zone into a pedestrian-oriented area, there are two options as illustrated in Figure 12.5.1. The first option proposed by the JICA team is to widen Yatinuwara Veediya's existing two lanes with a parking space into four lanes that can accommodate all through traffic including bus services, which will drastically reduce the car traffic in the eastern part of the Commercial Grid Zone (the area close to the Temple of the Sacred Tooth Relic). This also means that some parts of the pedestrian spaces in Yatinuwara Veediya need to be reduced. The second option – which is almost the same idea suggested by the SCDP – is to concentrate the flow of the main through traffic on both Yatinuwara and D.S. Senanayake Veediyas. In the second option, although the through traffic still remains in the eastern part of the zone, the bus stop could be located near the Temple of the Sacred Tooth Relic. The subsequent portion of the chapter describes the provisions based on the first option (Option 1).

Figure 12.5.2 shows the hierarchy of the streets in the Commercial Grid Zone, which is rearranged as a short-term action based on the aforesaid first option. By designating the outer streets of the Commercial Grid Zone as the main artery roads such as parts of the D.S. Senanayake Veediya, Kande Veediya, Cross Street, Yatinuwara Veediya, and part of Dalada Veediya, the area bounded by Cross Street, Yatinuwara Veediya, Colombo Street and D.S. Senanayake is to be freed up to become a pedestrian-friendly zone. Due to this change, the central part of the Commercial Grid Zone such as Colombo Street and D.S. Senanayake Veediya will be turned into pedestrian-oriented streets where people can enjoy strolling while looking at the heritage buildings on the way to the Temple of the Sacred Tooth Relic. Alleys are designated to be pedestrian streets as part of the new pedestrian network system within the zone.



Source: The JICA Team

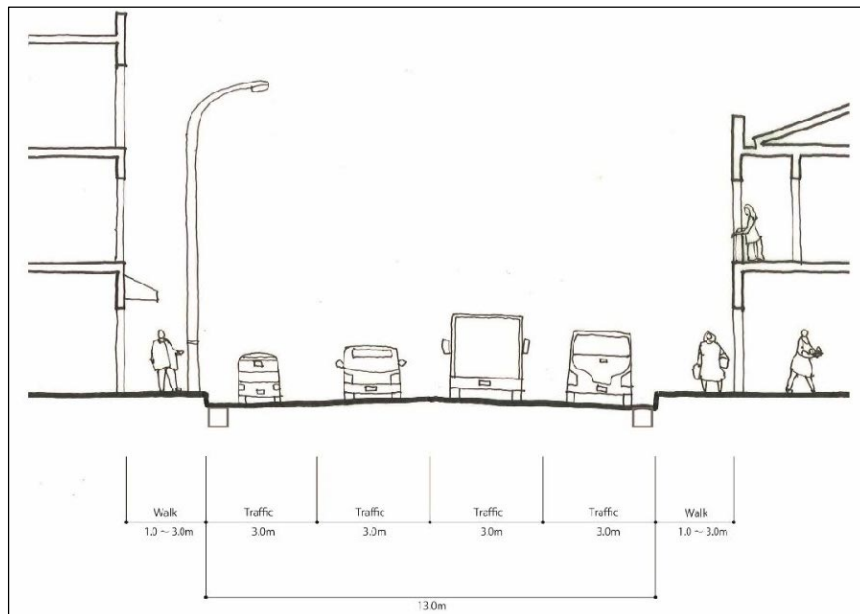
Figure 12.5.2 Hierarchy of the Streets in the Commercial Grid Zone (Option 1)¹

According to the new road hierarchy, each street needs to be reconfigured as per the designated street type.

¹ The maximum speed limit of the roads in the Commercial Grid Zone is currently 15 km/hour, while the proposed maximum speed limit of those roads are 25 km/hour for main arteries and 10 km/hour for walkable streets.

(1) Main Artery Streets (Yatinuwara Veediya, Cross Street, Parts of Dalada Veediya & D.S. Senanayake Veediya)

Figure 12.5.3 illustrates the typical street section of the main artery streets such as Yatinuwara Veediya, Cross Street, part of D.S. Senanayake Veediya and Dalada Veediya. To free up the central area of the Commercial Grid Zone to become a pedestrian-oriented space, these artery streets will be turned into more car-oriented streets which can accommodate two travel lanes on each side (or a total of four travel lanes). To achieve the smooth travelling of cars, on-street parking shall be prohibited on such streets and frequent monitoring and policing by the authority will be highly encouraged for enforcement. To compensate for the loss of an on-street parking space, the off-street parking structure is proposed nearby, which is discussed later in this chapter. The travel lanes can be increased by reducing the existing width of travel lanes and sidewalks. As discussed in a separate section of this chapter, the existing street width and the façade line should be preserved as an important feature that defines the historic streetscape of the Commercial Grid Zone. Hence, no street widening is necessary for adding one more travel lane.

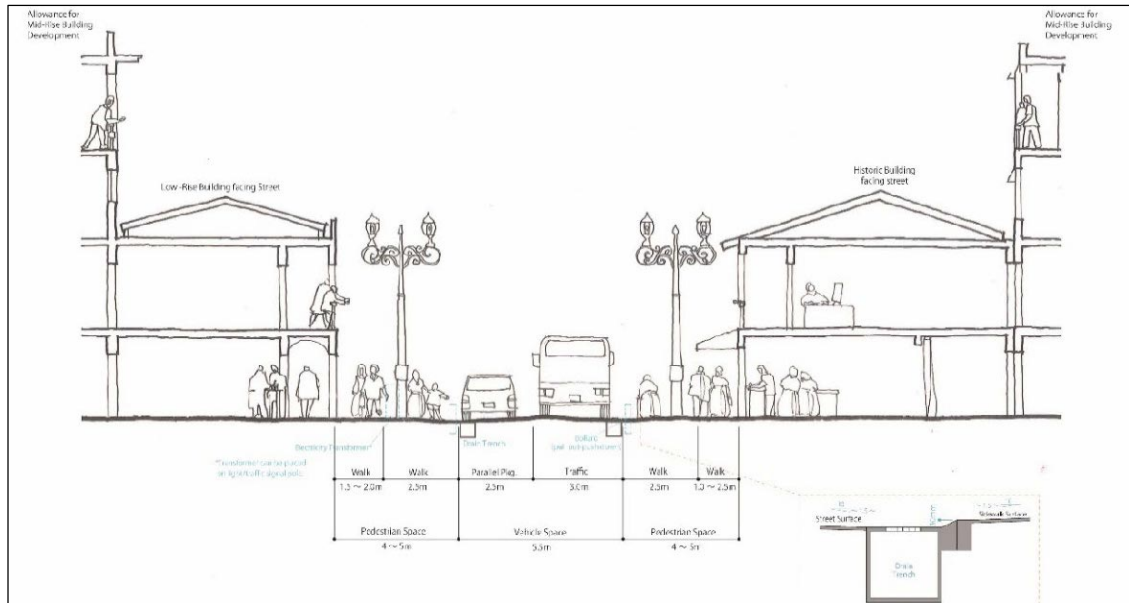


Source: The JICA Team

Figure 12.5.3 Illustrative Section of the Main Artery (Yatinuwara Veediya) (Option 1)

(2) Street Type 2: Walkable Street (Colombo Street, King Street, etc.)

Figure 12.5.4 illustrates a typical street section of a “Walkable Street” such as Colombo Street, King Street and lower part of the D.S. Senanayake Street. A Walkable Street will be reconfigured to significantly increase the sidewalks on both sides of the street by reducing the width of the travel lane and on-street parking space. On-street parking space will be reduced by changing the way to park a car from angle parking to parallel parking which will be discussed later in this chapter. Paving materials and pattern of the sidewalk are encouraged to be elaborate so that people can enjoy walking.



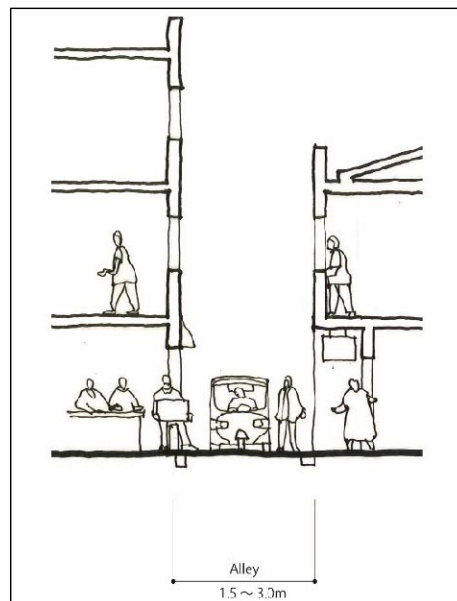
Source: The JICA Team

Figure 12.5.4 Illustrative Section of a Walkable Street (Colombo Street)

(3) Street Type 3: District Alley

Figure 12.5.5 illustrates a section of the District Alley. No major changes will be made in terms of the character of the street and it will be mainly used for pedestrians. Only a three-wheeler can be allowed on the District Alley. In order to enhance street comfort and visual integrity, the paving of the District Alleys should be improved.

To turn the current alleyways into one of the dedicated roads leading to the Temple of the Sacred Tooth Relic, the District Alley needs to be repaved in elaborate designs to upgrade its status. The paving should contribute to enhance the pedestrians' walking experience. Also, to decrease the speed of the three-wheelers, speed humps could be installed at the entrances of the alleys.



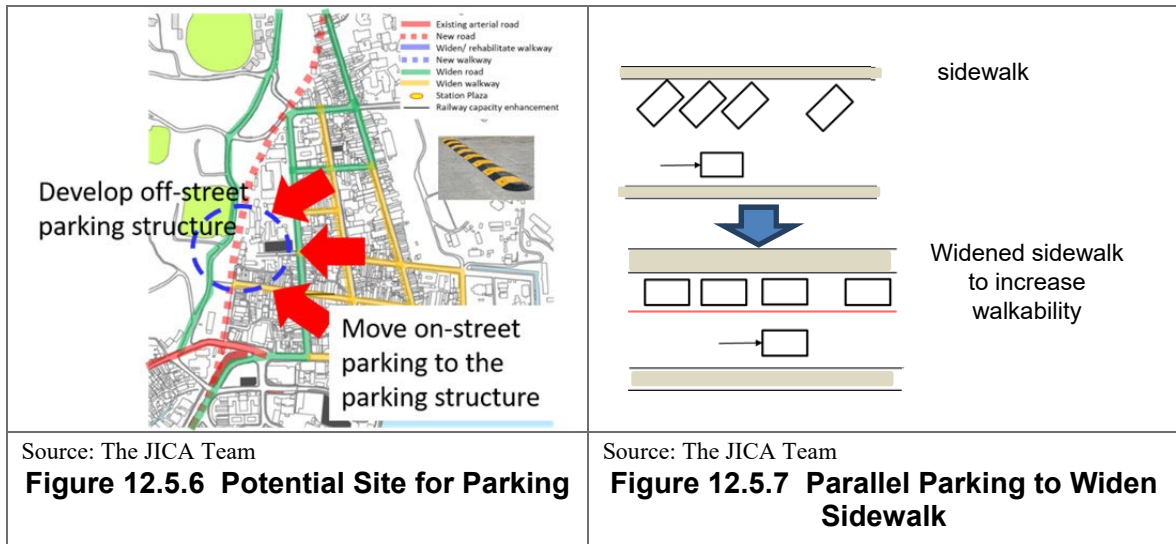
Source: The JICA Team

Figure 12.5.5 Illustrative Section of the District Alley (Castle Lane)

12.5.3 Construction of the Off-street Parking Structure

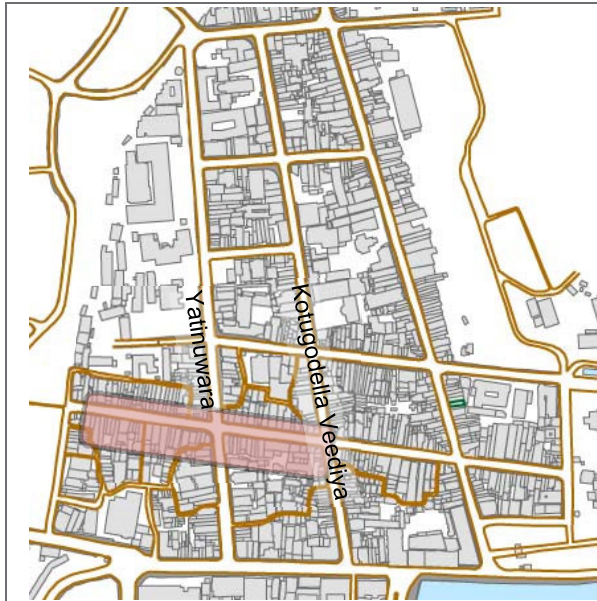
In order to reduce the on-street parking in the Commercial Grid Zone, the development of the off-street parking structure nearby is strongly suggested. For this purpose, the open space at the Sinha Regiment site (see Figure 12.5.6) located on the western edge of the Commercial Grid Zone is preferable. The suggested functions of the new parking structure is to provide parking spaces for regular-size vehicles and tour buses, and act as a small logistics centre that allows the unloading of packages from the bigger trucks to the smaller communal vehicles in order to reduce traffic caused by logistics operations. As the Commercial Grid Zone is a heavily commercialised neighbourhood, the entry of trucks into the zone is encouraged to be regulated to make the area more pedestrian-friendly. However, the delivery of the goods is also necessary for the merchants along the streets. In order to balance these two necessities, a place for reshipment from the bigger trucks to the smaller delivery vehicles needs to be redeveloped.

Even after the construction of the off-street car parking structure, on-street parking on the Walkable Street is still allowed. After reducing the on-street parking, in order to widen the sidewalk while keeping the original width of the street, the way to park cars on the streets needs to be changed. Currently, most of the cars are angle-parked, which takes up so much space in the street, and the cars need to be parallel-parked (Figure 12.5.7).



12.5.4 Relocation of Wholesale Trucks

In order to reduce the overall car traffic in the Commercial Grid Zone, the wholesale trucks which occupy a significant space on Colombo Street between Kotugodella Veediya and Wadugodapitiya are to be relocated (see Figure 12.5.8 and Figure 12.5.9) as soon as the authority and business owners collectively reach an agreement. If this market function is to be moved to other locations such as Katugastota which has a good connection to the major arterial road and has more space, the section of the Colombo Street will be freed up to provide more space for the pedestrian zone. To facilitate this relocation, the authority needs to provide an alternative marketplace for those who have been using this space for a long time. This relocation plan should be developed carefully with the current business owners by taking into consideration their concerns regarding the relocation (e.g. fear of losing current customer and supplier base) and other needs, in addition to understanding the nature of their business (i.e. their value chain and their necessity to be located near the city centre).



Source: The JICA Team

Figure 12.5.8 Location of the Current Wholesale Market



Source: The JICA Team

Figure 12.5.9 Rows of Trucks Parked on Colombo Street

12.6 Landscape Management

12.6.1 Landscape Management in the Commercial Grid Zone

Height restrictions need to be taken into account in the landscape of the heritage area in consideration of the height of the Temple of the Sacred Tooth Relic, which is the centrepiece of the district. Figure 12.6.1 shows the height of main points in the heritage district (in metres above sea level). The height of the roof of the octagonal-shaped hall – which is the symbol of the Temple of the Sacred Tooth Relic – is 533 m, and there is a height difference of about 20 to 30 m from the ground level of the Commercial Grid Zone (503 m to 511 m). Since the height of the structures in the Commercial Grid Zone under the existing Development Plan is restricted to 12 m or less, according to this regulation, the height of buildings in the Commercial Grid Zone that extends out in front of the Temple of the Sacred Tooth Relic is 10 m or less than the height of the octagonal-shaped hall (symbolising the Temple of the Sacred Tooth Relic) even from the highest ground level point. Consequently, it is possible to maintain an orderly landscape centred on the Temple of the Sacred Tooth Relic if there is compliance with the existing plans.

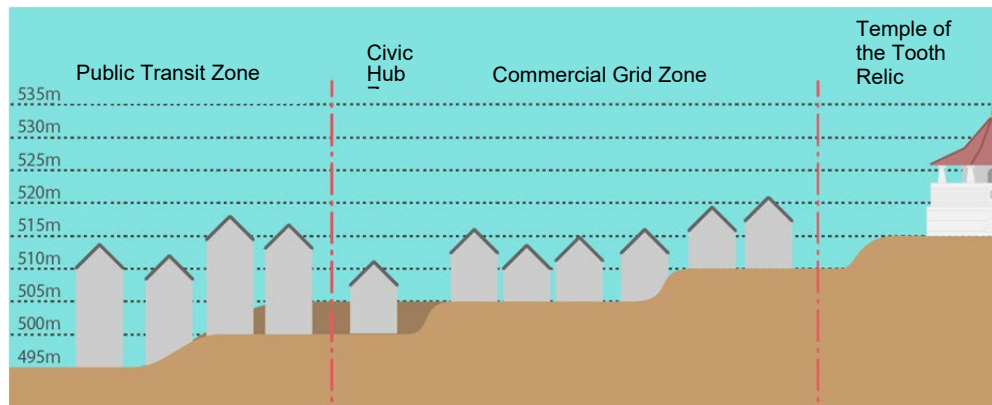
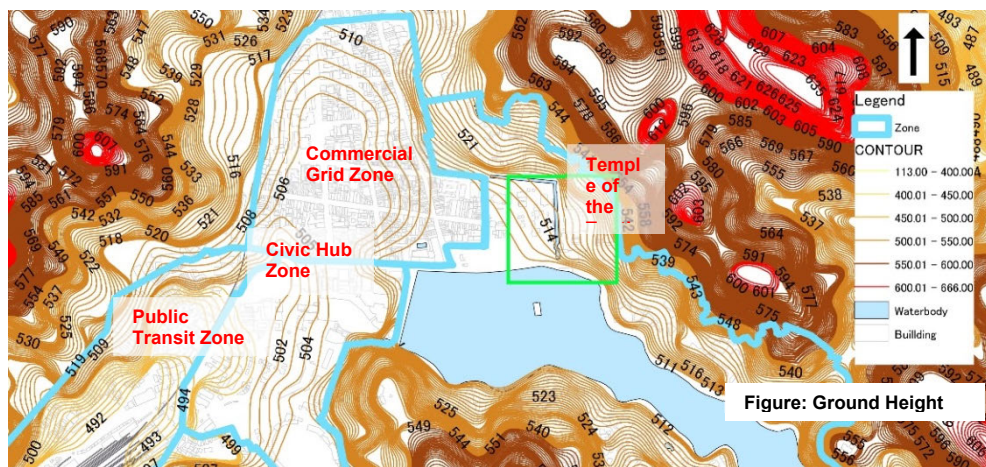
12.6.2 Landscape Management in the Civic Hub and Public Transit Zones

The Temple of the Sacred Tooth Relic is located at a ground level of 514 to 520 m above sea level. The base of the Civic Hub Zone is 494 to 504 m. In a comparison with the ground level of the Temple of the Sacred Tooth Relic, the base of the Civic Hub Zone is 10 to 25 m lower. When compared to the height of the octagonal-shaped hall (533 m) of the Temple of the Sacred Tooth Relic, the base of the Civic Hub Zone is about 30 to 40 m lower. The ground elevation of the Public Transit Zone is 490 to 495 m when excluding the sloped area on the northern side away from the Temple of the Sacred Tooth Relic and is about 20 to 30 m lower than the ground level of the Temple of the Sacred Tooth Relic.

As described above, the ground level of the Civic Hub and Public Transit Zones is no higher than 15 m when compared to the ground level of the Temple of the Sacred Tooth Relic and no higher than 30 m when compared to the height of the octagonal-shaped hall. Therefore, it would be possible to maintain an orderly landscape centred around the Temple of the Sacred Tooth Relic if there is compliance with the height restrictions in the existing Development Plan (7.5 to 20 m).



The height of the Octagonal Pavilion roof is 533 m (ASL), and that of the Golden Roof is 538 m (ASL).



Source: The JICA Team

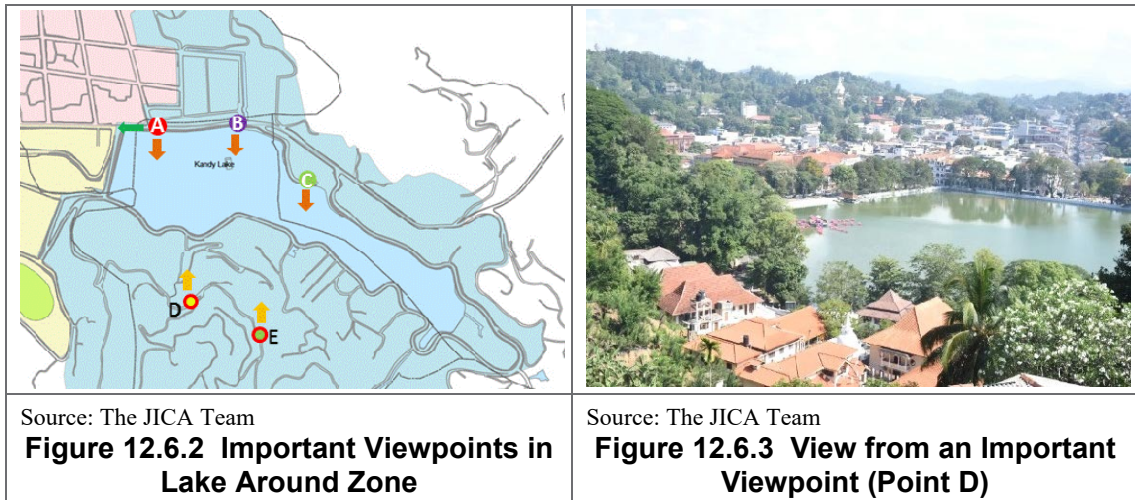
Figure 12.6.1 Height of the Heritage Area Ground and Temple of the Sacred Tooth Relic

12.6.3 Landscape Management in Lake Around Zone

(1) Height Control

Figure 12.6.2 shows five scenic points that are considered valuable in the Lake Around Zone. Points D and E shown in the figure are scenic points that command a view of the urban area in the zone, which is a hilly area (Point D, or Arthur's Seat, has been a well-known scenic point since the British colonial era (see Figure 12.6.3). From these view points, the urban areas of the Commercial Grid and Civic Hub Zones can be seen, but the two important

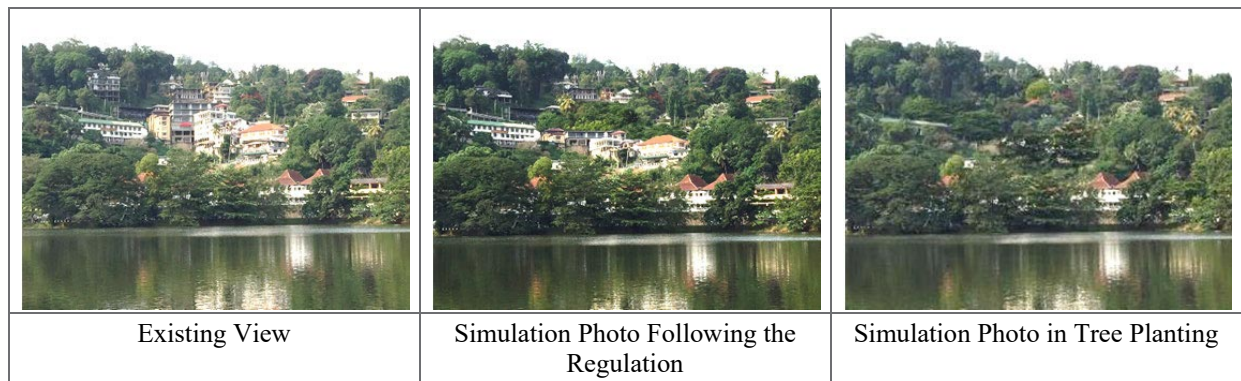
factors for the scenic landscape to maintain an orderly landscape centred around the Temple of the Sacred Tooth Relic are the height of the buildings and the colour of the rooftops. As stated above, strict height regulations have been established for both zones in the existing Development Plan (12 m or less in the Commercial Grid Zone and 7.5 to 20 m or less in the Civic Hub Zone, which has a ground level of about 10 m lower than the Commercial Grid Zone). It may be possible to maintain an orderly landscape around the Temple of the Sacred Tooth Relic with these height restrictions. According to a proposal on guidelines related to the colour of the walls and rooftops to be described later, the colour of the rooftops may be standardised into a uniform brown shade, which is the colour of many existing rooftops (as shown in photos in Figure 12.6.3) to maintain a favourable scenic landscape.



In contrast, the scenic landscape viewed upwards from the promenade of the lakeside near the Temple of the Sacred Tooth Relic to the hilly area in this zone is also important, with the areas near the Queen's Hotel (Point A) close to the octagonal-shaped hall of the Temple of the Sacred Tooth Relic (Point B). The vicinity of Queen's Bath (back entrance of the Temple of the Sacred Tooth Relic, Point C) is also considered to be a notable viewpoint where both pilgrims and visitors gather at the Temple of the Sacred Tooth Relic, as shown in Figure 12.6.5.

The top row of photos in Figure 12.6.4 and Figure 12.6.5 is the current landscape as viewed from points B and C. Unfavourable landscapes appear because medium- and large- sized buildings encroach on lush green hilly areas. Most of these buildings are illegal structures that are not in compliance with height restrictions in the existing Development Plan. As stated above, height restrictions in this zone are stipulated based on the scale of the site, the angle of inclination of the slopes, and the width of access roads. Therefore, when considering the sites where buildings in both figures are located are steeply sloping land and that frontal roads are narrow, the original height restrictions should not be more than 9 m high and the landscape would be as shown in the simulation photo in the middle of both figures if structures are in compliance with the regulations. Consequently, it can be said that the problem lies not with the content of the regulations (Development Plan), but on improving the effectiveness of the regulations by cracking down on illegal buildings and strengthening monitoring systems.

As a short-term response to buildings that have already been constructed, it is proposed to plant trees in front of buildings and green walls. The bottom photos are simulation photos where trees have been planted in front of buildings that can be seen from points B and C.



Source: The JICA Team

Figure 12.6.4 Simulation Photos from an Important Viewpoint (Point B)



Source: The JICA Team

Figure 12.6.5 Simulation Photos from an Important Viewpoint (Point C)

(2) Façade Green Coverage Regulation to Reduce Visual Blight

To enhance the image of the zone as a public space, it is necessary to create a network of parks and open spaces that include protected natural lands, lake side, grounds, and other green areas. The environmental balance of the hill slopes can be restored by enhancing the regulations and more importantly, their implementation, in which at least 75% of all new and old buildings' façades should be covered by tree foliage and canopy. To achieve this coverage, the following two strategies can be adopted for the present buildings:

1) Tree Plantation

An extensive plantation programme shall be undertaken by the community, with the onus of concealing the built form of the properties in the façade structures and identifying the sites adjacent to the existing development for plantation exercise. Figure 12.6.7 shows the tentative locations where the plantation exercise by the community could be undertaken, while Figure 12.6.6 shows the simulated impact of the strategy where the green cover would take precedence over the built form. In fact, the built form would be complemented by the greenery, as was the case in previous years.

2) Wall Greening by Creeper Plants

As evaluated by the concerned authorities, the buildings which do not have the necessary dimensions shall be using creeper plants at various levels of their premises to achieve green façades. For example, the Ozo Hotel building does not seem to have an adequate space for new plantations to conceal it.

(3) Interventions Around the Lake Around

- Tree plantation: Line up the path of Lake Around with trees with high foliage, wherever there is a gap, to reduce the visibility of the structures from the pedestrian path around the Lake.
- Pocket parks: These parks are miniature urban spaces. Small parks on public lands can be created to provide the tourists and residents intermediary breathing spaces. These parks can vary from as small as 10 square metres to 40 square metres.
- Viewing Platforms: To create opportunities for the visitors and the patrons of Kandy City to view and relish the different iconic views, a certain number of viewing platforms / decks shall be provided. The locations are shown in Figure 12.6.9.



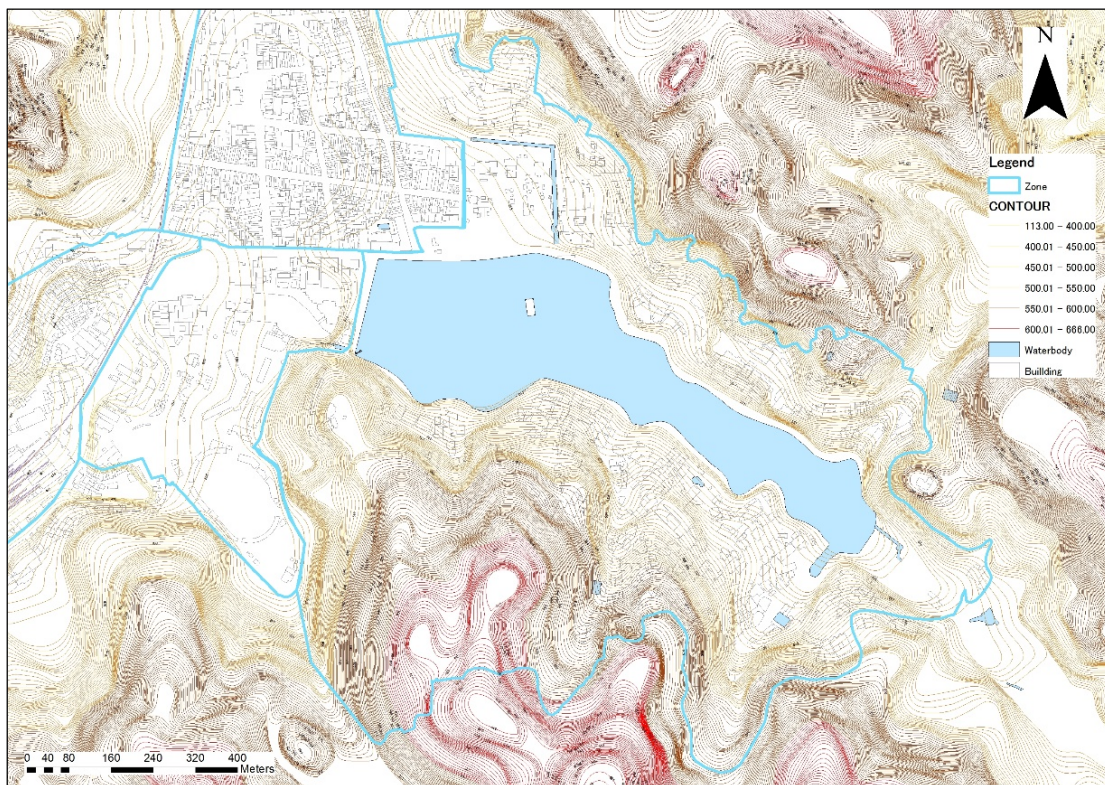
Source: The JICA Team

Figure 12.6.6 The Simulated Effect of Increased Foliage and Tree Cover Restoring the Ecological Balance



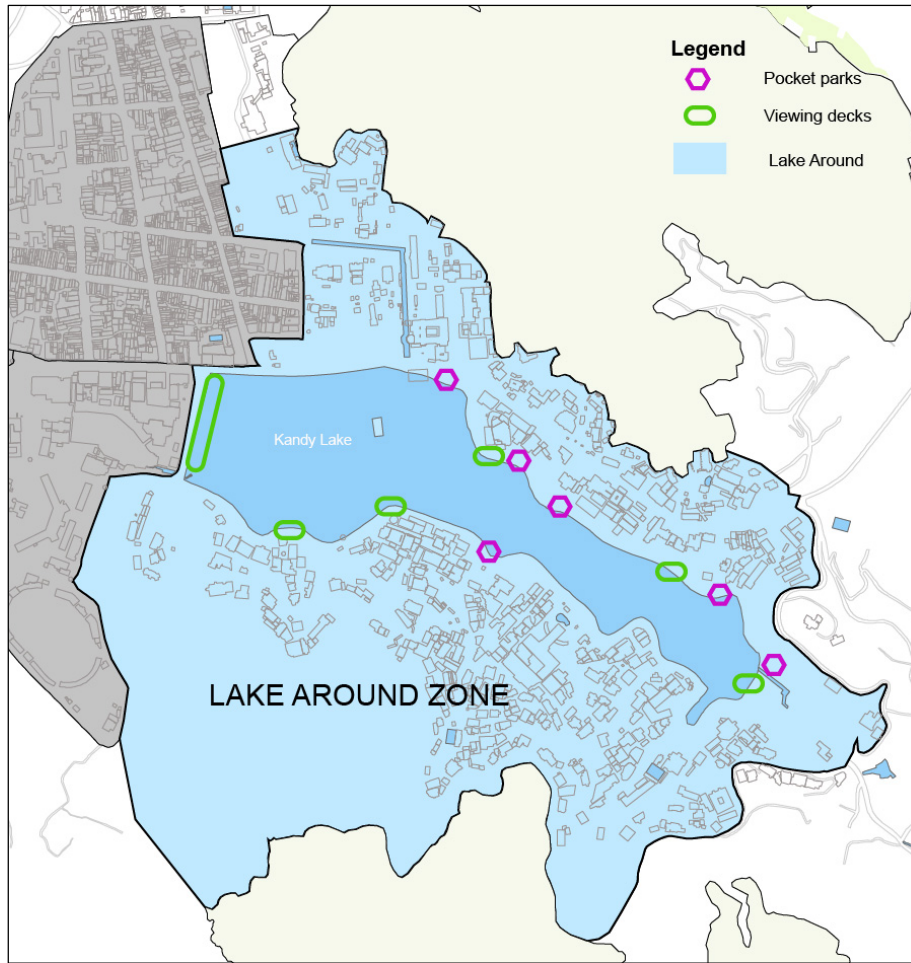
Source: The JICA Team

Figure 12.6.7 Proposed Probable Plantation Spots (in Pink)



Source: The JICA Team

Figure 12.6.8 Contour Lines Greater than 600 m (in Red) Where No New Development Shall be Allowed



Source: The JICA Team

Figure 12.6.9 Suggested Locations for Pocket Parks and Viewing Decks

(4) Proposed Guidelines and Regulations

To come up with proposed guidelines and regulations, the Development Plan for Urban Development Area of Kandy 2002-2016 (Kandy Municipal Council Area) Volume 1 (Situation Report) and 2 (Planning & Building Regulations) have been reviewed. In addition, the revised regulations which are under consideration have been evaluated. To enhance an already strong base of regulations, the following regulations are proposed to be included as part of the existing regulations:

1) Limit Additional Development

Existing Development:

- To arrest the form of ad-hoc development on the hill slopes in the Lake Around and similar other hills around Kandy City, an immediate future development should be kept to a minimum, subjected to the revision of building regulations.

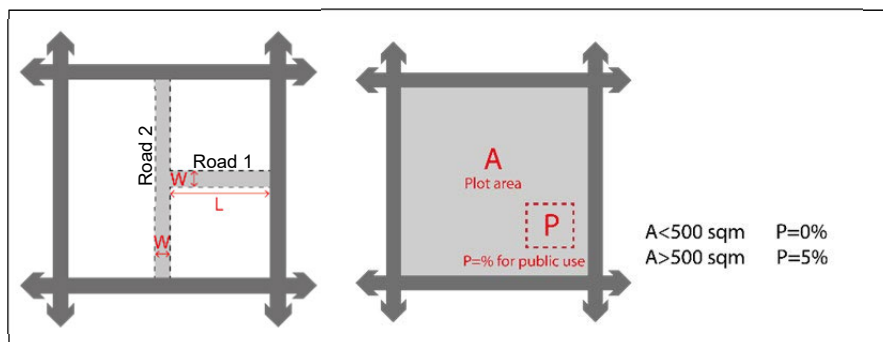
Development above 600 m from the sea level:

- All new developments above 600 m² on the southern hill slopes of Hantana Range shall be prohibited as shown in Figure 12.6.8.

² The regulation of 600m is set considering the current encroachment situation by building construction and location of natural forest.

2) Building and Plot Regulations

- a) **Permissible land development for subdivision of plots:** To keep control over the development on the hilly slopes around the Lake and to maintain the minimum living standards within the district, no subdivision of land shall be granted with the exception of the following situations:
- i. The site of such plot has a minimum size of at least 100 m².
 - ii. A detailed layout plan of the area proposed to be subdivided is submitted before the authority, duly integrating the said layout plan with the general use of land in the adjoining areas, the existing street pattern and other physical infrastructure facilities.
 - iii. At least 5% of the land has been allotted for public use, such as green and open spaces, for all such developments above 500 m².
 - iv. No road or lane in a subdivided plot shall fall below 3 m in width. For any subdivision of land, the minimum R.O.W in front for each road (Road 1 and 2 indicated in Figure 12.6.10) should be maintained as per Table 12.6.1.



Source: The JICA Team

Figure 12.6.10 Internal Roads and Allotted Public Use Area for Subdivided Plots

Table 12.6.1 Length and R.O.W of Internal Road

Length of internal road	R.O.W. to be maintained
Up to 25 m	3.0 m
25 - 50 m	4.5 m
50- 75 m	6.0 m
75 - 100 m	7.5 m
Above 100 m	10.0 m

Source: The JICA Team

- b) **Ground Coverage:** The ground coverage on the plots to be defined as per building type (e.g. 50-80%) is allowed depending on the height of the building. Higher ground coverage of the site results in less percolation of rainwater into the ground and more runoff due to reduction of soft/open areas. Due to higher ground coverage and greater depth of the buildings, there is inadequate space to allow sunlight and ventilation to pass through. This results in higher energy consumption to maintain the comfort conditions of the buildings.
- c) **Plot size and height of building:** At present, the building height is regulated depending on the slope degree of the lot (e.g. 8 m for buildings with slopes of between 31-45 degrees). This should be altered by the plot size as well, such as plot size of less than 50 square metres; 50-100 m²; 100-150 m²; and greater than

150 m². This is because the addition of storeys, coupled with high FAR and coverage, will limit light, air and ventilation – which is possible in the case of a large-scale plot size – and may lead to environmental chaos and affect human health.

- d) **Setback regulations:** To ensure proper daylight and ventilation in buildings, the setback regulations should be enforced as an open area around buildings, which shall also be regulated for landscaping purposes.
- e) **Cutting of Slope:** Provisions should be detailed to allow and disallow the cutting of slope, especially for slopes greater than 30 degrees.

3) Safety Regulations - Consideration for Natural Hazards such as Landslides

- a) Structural design for earthquake and landslide protection measures for hazardous zone specified by the authority as shown in the existing Development Plan.
- b) Provision for continuous housing
- c) On the hill slopes where the buildings are scattered, there has been a recent trend of providing mid-rise structures very close to each other. This is facilitated by the cutting of slope. Therefore, provision for allowing a fire break after every five buildings shall be included in the regulations.
- d) Maintenance and provision of adequate open spaces for the increasing population on the hill slopes to function as recreational spaces as well as refuge areas in the event of disasters.

4) Regulations Related to Environmental Quality, Accessibility and Aesthetics

- a) Regulations related to solar passive design and energy conservation to minimise energy consumption in maintaining comfort conditions in public, government and semi government buildings which shall be based on the slope of the hill.
- b) Regulations related to the preservation of existing trees, and plantation of new trees (e.g. one tree for every 100 m² of plot (all uses) area or one tree per family).
- c) Regulations related to the maintenance of upstream drainage pattern, and site drainage for maintaining a drainage pattern.

5) Aesthetics and View Preservation Regulations

Regulations for the enforcement of regulations related to the prohibition of construction of more than one storey (in some cases, up to 1.5 m from road height) on the downhill side of major roads without considering the extent and quality of view available. Façades and roofs of the buildings should be part of the considerations, as they are part of the visual experience.

6) Advertisement Control Regulations

The hoardings and billboards are prohibited to be put in the Lake Around area. The façade of the residential buildings should also be not allowed to be used for advertising in this Zone. Provisions for controlling the colour and size of signs and displays for commercial use shall adhere to the Commercial Zone regulations.

12.7 Special Action Projects

12.7.1 Outline

The regulations for the area with special features are proposed, which include Urban Redevelopment Area, Heritage Project Priority Promotion Area, and Informal Settlement Improvement Area. Figure 12.1.2 illustrates the location of those special areas, and the proposed guidelines and regulations are indicated in the subsequent part of this chapter.

The Urban Redevelopment Area proposed in the Commercial Grid Zone refers to the existing army land which is expected to be redeveloped as a public transportation hub with newly developed railway station and public parking spaces. The redevelopment area in the Civic Hub Zone is the area where the group of public facilities are located and proposed to be reorganised as pedestrian priority spaces open to the public.

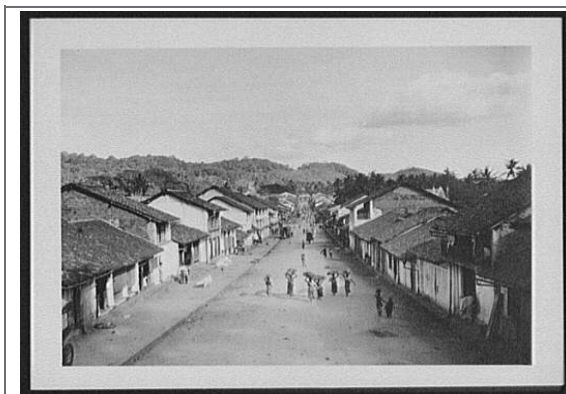
The Heritage Project Priority Promotion Area is the area where the projects and guidelines indicated in the subsequent sections are to be initially implemented. The initial implementation of the projects and regulations is to show a sample future image which promotes the continuous implementation of such projects and regulations in the other areas of the Commercial Grid Zone.

The Informal Settlement Improvement Area is the area where unplanned settlements are developed in the northern part of Kandy Station in Public Transit Zone. The guidelines and regulations to improve the living environment of the area are proposed.

12.7.2 Public Space Improvement Area in the Commercial Grid Zone

(1) Redevelopment Orientation: People-centric Neighbourhood

The Commercial Grid Zone was developed when there were no cars yet and the neighbourhood structure defined by the street width, building height and alignment created the comfortable, human-scale neighbourhood.



Source: US Library of Congress, <https://www.loc.gov/>

Figure 12.7.1 Historic Streetscape (1895)



Source: The JICA Team

Figure 12.7.2 Present Streetscape (2017)

(2) Principles

The principles for the development of people-centric neighbourhood are as follows:

- The characters of this zone are the accumulation of historic and cultural resources in the area, particularly the small shop-house buildings, and its strategic location near the Temple of the Sacred Tooth Relic, which is the most venerated religious and cultural place in Kandy

- The principal idea of the Zone is based on pro-preservation approach to respect the existing urban fabric which, although not maintained well, creates a harmonious relationship with the above-mentioned characters of the area.
- A new development is allowed, but it has to be subordinate to the existing characters of the zone.
- By taking advantage of the existing human-scale town structure, the entire zone is proposed to become a people-oriented neighbourhood.

(3) Character-Defining Features of the Commercial Grid Zone

Suggested Detail Plan for the Commercial Grid Zone area is to preserve and enhance the characters of the area shown below, which contribute to the sense of place of the Commercial Grid Zone. The character-defining features of the Grid are not just coming from the heritage buildings, but also from the urban form and even the people who live and work there.

- i. Proximity to Temple of the Sacred Tooth Relic (subordinate to the Temple)
- ii. View to the Surrounding Mountain
- iii. Grid Street Pattern
- iv. Network of Alleys
- v. Concentration of Small Scale Development
- vi. Street Wall
- vii. Repetition of Small Openings
- viii. Relationship between the Buildings along the Streets and Perahera Procession
- ix. Vibrant Commercial Activities
- x. Urban Living Tradition

(4) Suggested Plans and Guidelines for the Commercial Grid Zone

Principles:

- Original human scale town structure needs to be enhanced by increasing walkability.
- Respect for the concentration of historic buildings
- Enhancing the quality of space which is suitable for Perahera procession
- No density should be increased, but some growth in the area should be allowed in response to the owners'/tenants' necessity.

The Walkable Street will be reconfigured to significantly increase the sidewalks on both sides of the street (Figure 12.7.3) by reducing the width of travel lane and the on-street parking space. The on-street parking space will be reduced by changing the way to park a car from angle parking to parallel parking to be discussed later in this chapter. Paving materials and pattern of the sidewalk is encouraged to be elaborate so that people can enjoy walking.



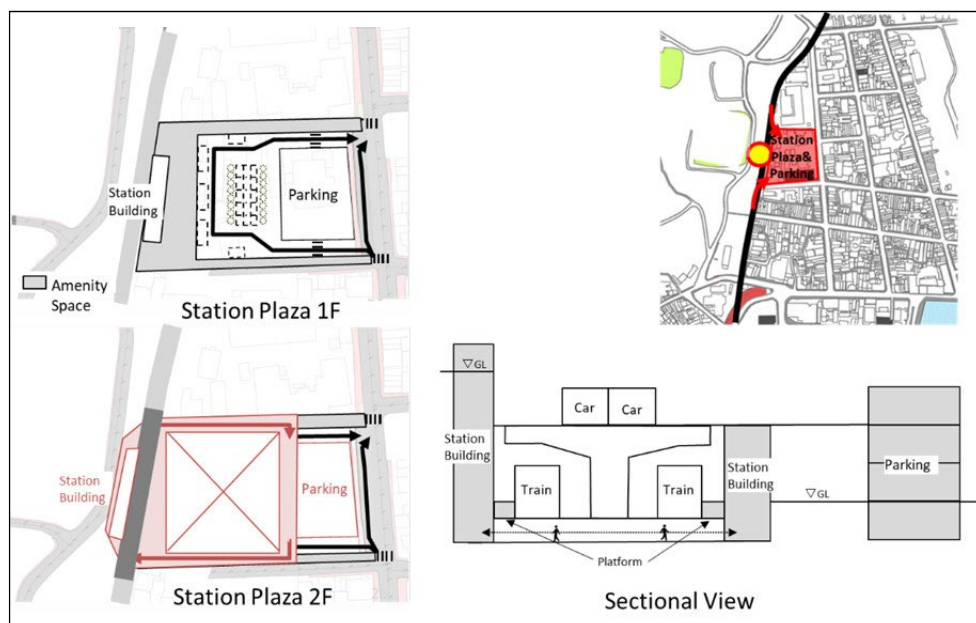
Source: The JICA Team

Figure 12.7.3 Image of the Pedestrian Priority Street (Colombo Street)

12.7.3 Urban Redevelopment Area

The Urban Redevelopment Area proposed in the Commercial Grid Zone refers to the existing army land which is expected to be redeveloped as a public transportation hub with a newly developed railway station and public parking spaces as a station plaza (see Figure 12.7.4).

The redevelopment area in the Civic Hub Zone is the area where a group of public facilities are located and proposed to be reorganised as pedestrian priority spaces open to the public.



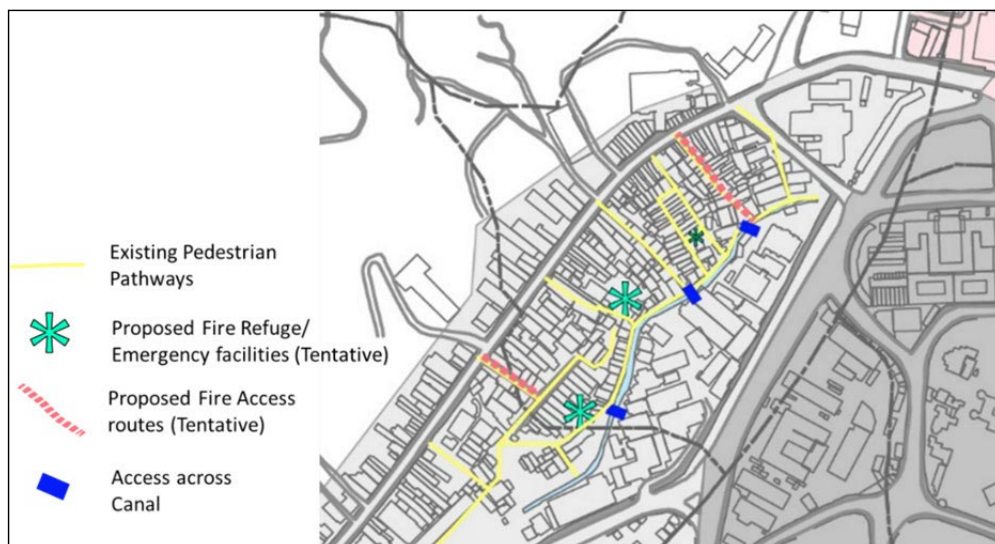
Source: The JICA Team

Figure 12.7.4 New Station and Station Plaza at Sinha Regiment

12.7.4 Living Environment Improvement Area

For the unplanned settlement to be designated as a Special Action Project within the Public Transit Zone, the following development guidelines are expected to be prepared:

- i. Spatial planning and zoning should be undertaken in a coordinated manner based on updated cadastral information to allow for legalisation and discourage further informal development
- i. There needs to be a mechanism to legalise all types of property where the current residents have long-standing tenure of the land.
- ii. Redefining Road structure - Coverage of access and circulation roads and drainage should be increased
- iii. Bylaws should be developed to enforce development control and policy for construction permitting and regulation.
- iv. Planning and all other environmental and safety controls and improvements should follow property registration. In natural hazard-prone areas, controls to prevent large-scale damage to ecosystems and property are necessary
- v. Identification and designation of green spaces to act as recreational cum evacuation areas



Source: The JICA Team

Figure 12.7.5 Access Route Improvement at Meda Ela in the Public Transit Zone

For disaster prevention, the following measures are proposed:

- Provision of small fire tenders for dense built environment
- Provision of fire refuge/emergency facilities at regular intervals within the area.
- Various identified access points across the Canal to be used as evacuation routes, as suggested in Figure 12.7.5.
- Canal embankment for safety of the inhabitants.
- Creation of fire breaks to avoid quick spread of fire.

12.8 Urban Design Orientation

12.8.1 Outline

The orientations of urban design for several important places in the Heritage Area are proposed. These places include the Spiritual Street in the Civic Hub Zone, and Kandy Station Pedestrian Plaza in the Public Transit Zone.

12.8.2 Spiritual Street

(1) Concept

- To improve and develop open and green space networks connecting to the Temple of the Sacred Tooth Relic by utilising the public properties within this zone and making them more accessible
- To introduce an appropriate volume for the new urban functions

(2) Strategies

The public facilities within the Civic Hub Zone to be rehabilitated resulting to:

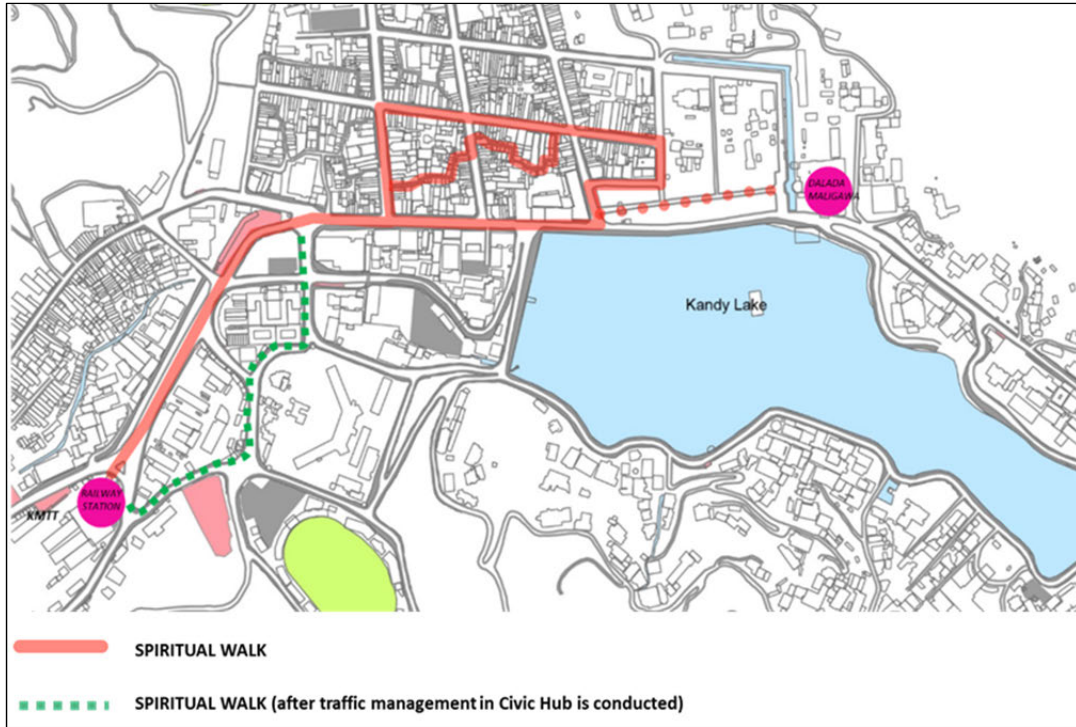
- Transformation of road alignment (shape of the block);
- Inclusion of new urban functions; and
- Open and green spaces for the development of the pedestrian priority zone. This would involve the following steps:
 - Identification of open spaces and their typologies – i.e. parks, open spaces and playgrounds
 - Establishing a sense of place and facilitating social contact and communication
 - Integration of spaces - Articulating, dividing and linking areas of the urban fabric

(3) Proposed Guidelines and Regulations

To realise the objectives of the zones, a three-step process is initiated which are split into two terms: short-term measures and mid- and long-term measures.

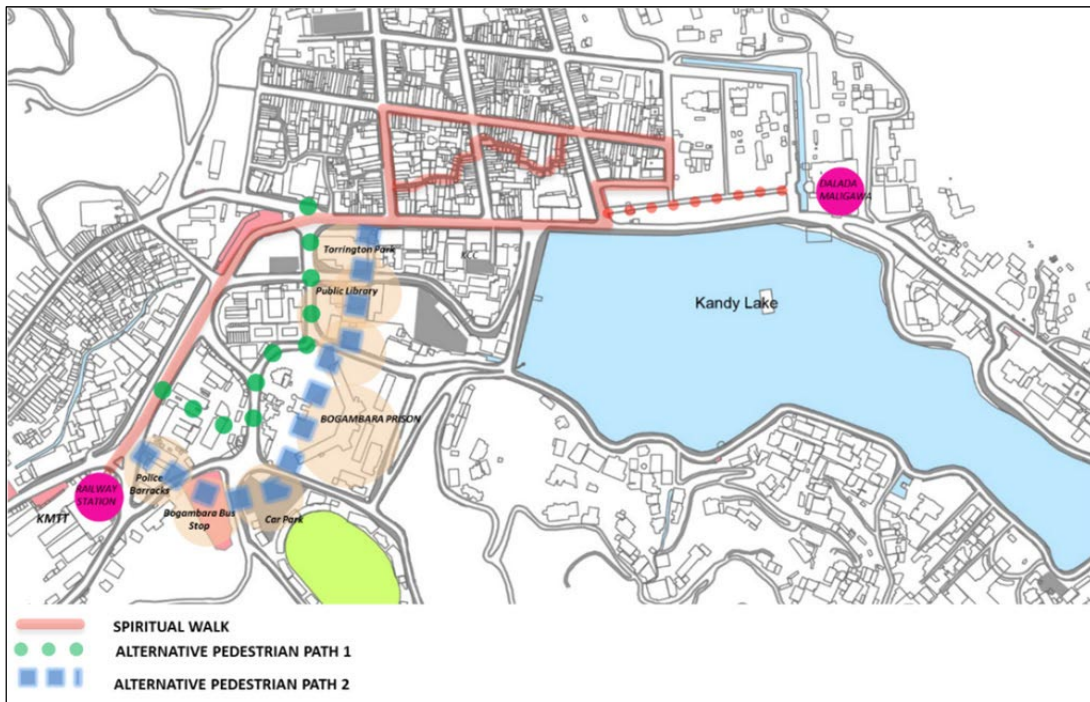
1) Short-Term

As shown in Figure 12.8.1, the Spiritual Street would link the station plaza to the heritage area and culminate into the heritage walk towards the Temple of the Sacred Tooth Relic (path shown in red colour). The dotted green line in the same Figure shows how the creation of an alternative Spiritual Street can be encouraged on the existing road network after the traffic management in Civic Hub is conducted.



Source: The JICA Team

Figure 12.8.1 Short-Term Measures for Creating Spiritual Street in the Civic Hub Zone



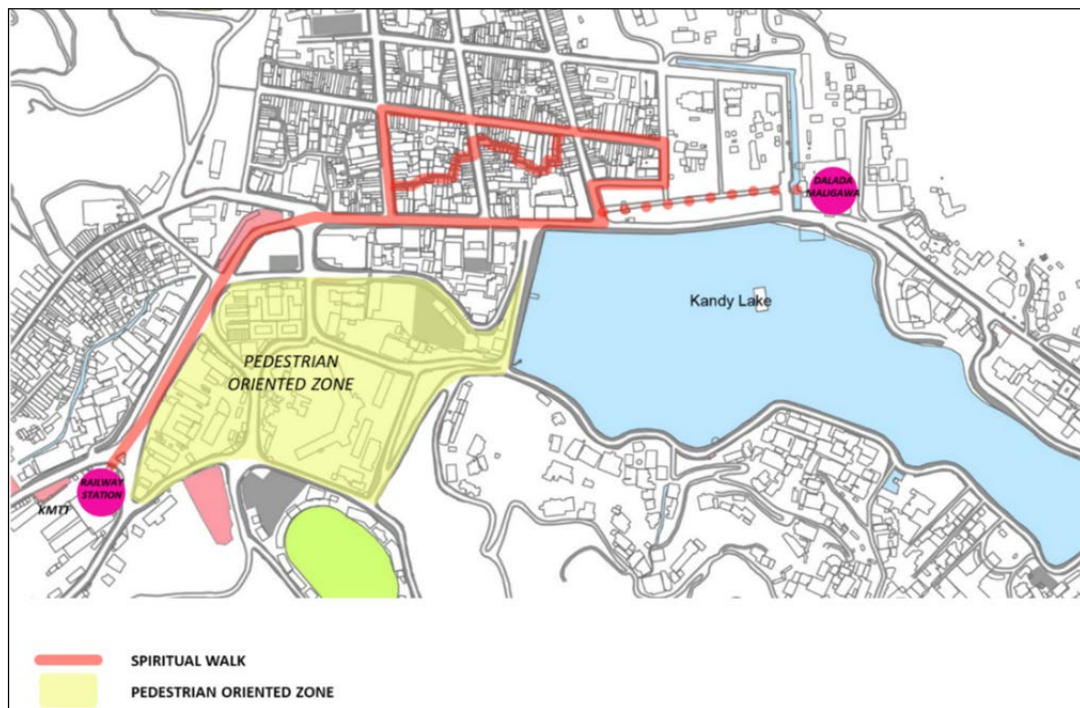
Source: The JICA Team

Figure 12.8.2 Mid- and Long-Term Measures for Creating the Spiritual Street in the Civic Hub Zone (Integration of Public Facilities)

2) Mid- and Long-Term

As the zone's urban functions are reconsidered, there would be reconstitution of both built and unbuilt public facilities. The realignment of the traffic routes would facilitate this and enhance the block efficiency. Figure 12.8.2 shows how the creation of two more Alternative Pedestrian Paths (shown in green and blue dotted lines) can be encouraged through the integration of Public facilities.

In the long term, most of the Civic Hub can be developed into a "Pedestrian-Oriented Zone (Transit Zone)" where the automobile traffic would be limited to give priority to the pedestrian movement as shown in Figure 12.8.3. This would require the designation of the pedestrian-oriented area as a Special Area Zone in the Development Plan and help achieve the objective of enhancing the accessibility of public facilities to the public.

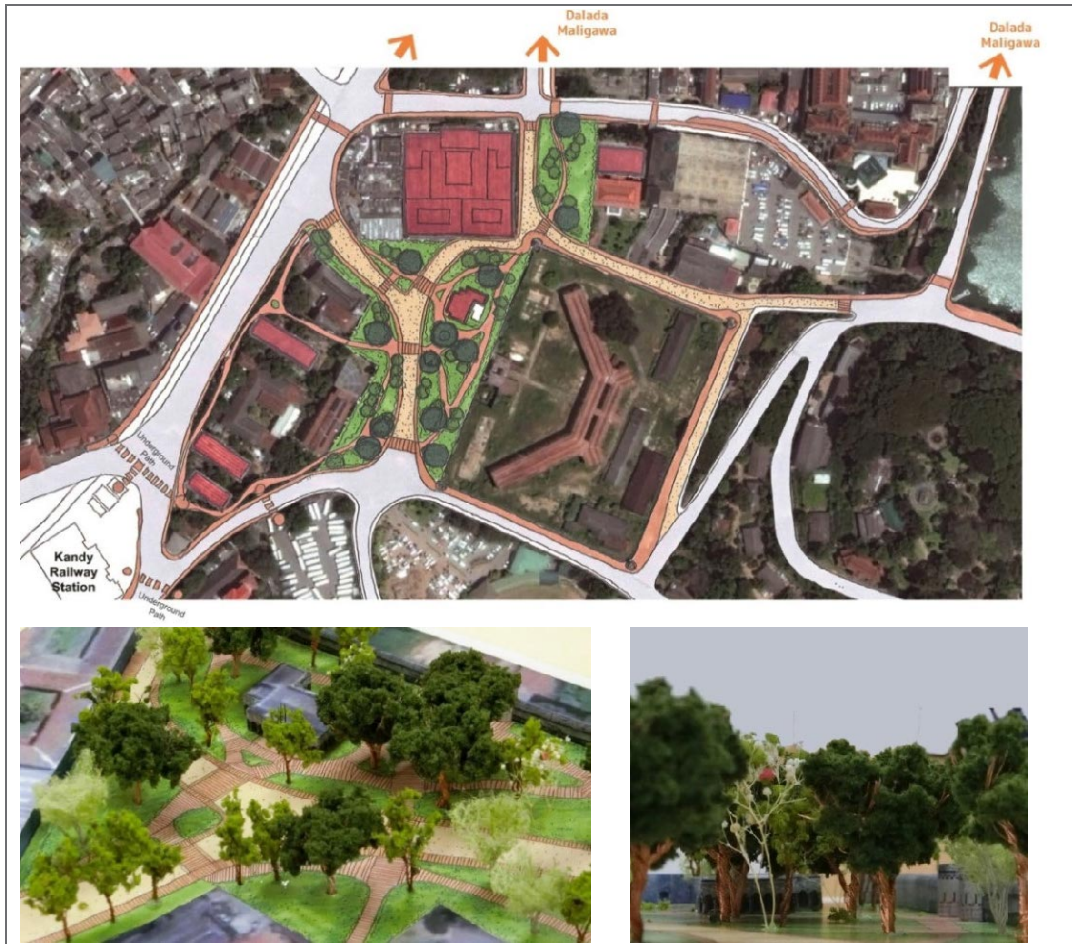


Source: The JICA Team

**Figure 12.8.3 Mid- and Long-Term Measures in the Civic Hub
(Pedestrian Oriented Zone / Transit Zone)**

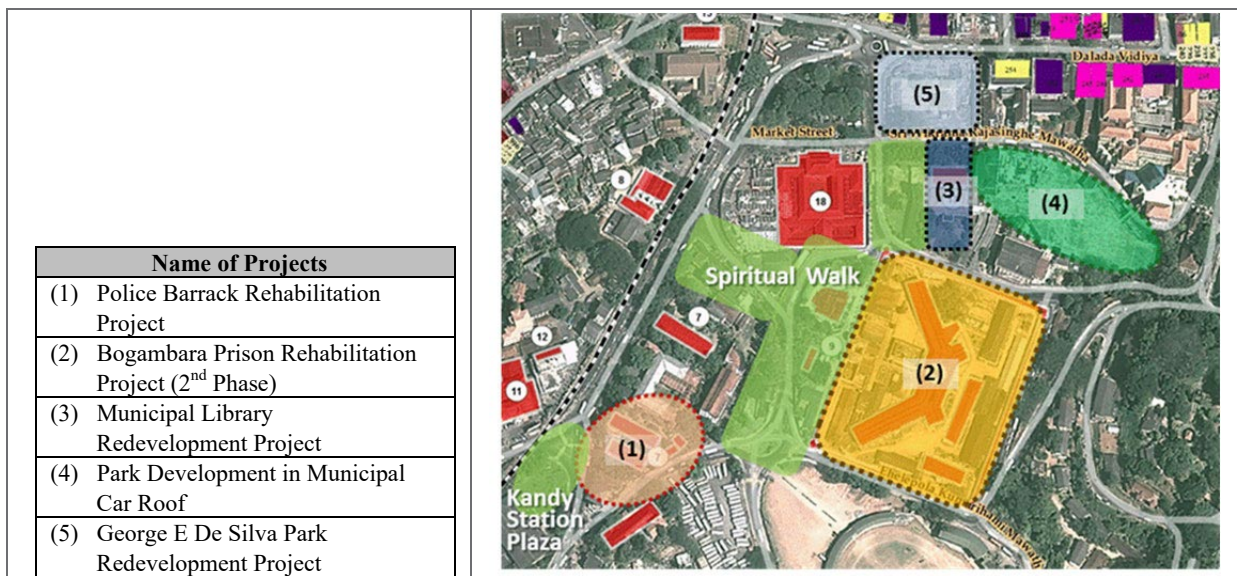
Figure 12.8.4 illustrates the urban design orientation of the area surrounding the proposed pedestrian networks connecting between Kandy Station and the Temple of Tooth in the Civic Hub Zone. As described above, since the car traffic will be strictly controlled in this area, the public open spaces, including roads, are expected to be comfortable amenity spaces for pedestrians with abundant greenery.

Figure 12.8.5 indicates the public facility redevelopment or rehabilitation projects which are currently being evaluated or implemented by the relevant authorities and institutions. In order to enhance the attractiveness of the proposed Spiritual Street, the creation of continuous open and green spaces within the premises of these projects is expected.



Source: The JICA Team

Figure 12.8.4 Urban Design Orientation of the Area Surrounding Spiritual Street



Source: The JICA Team

Figure 12.8.5 Public Facility Redevelopment / Rehabilitation Projects which could be Integrated with Spiritual Street

12.8.3 Kandy Station Pedestrian Area

(1) Concept

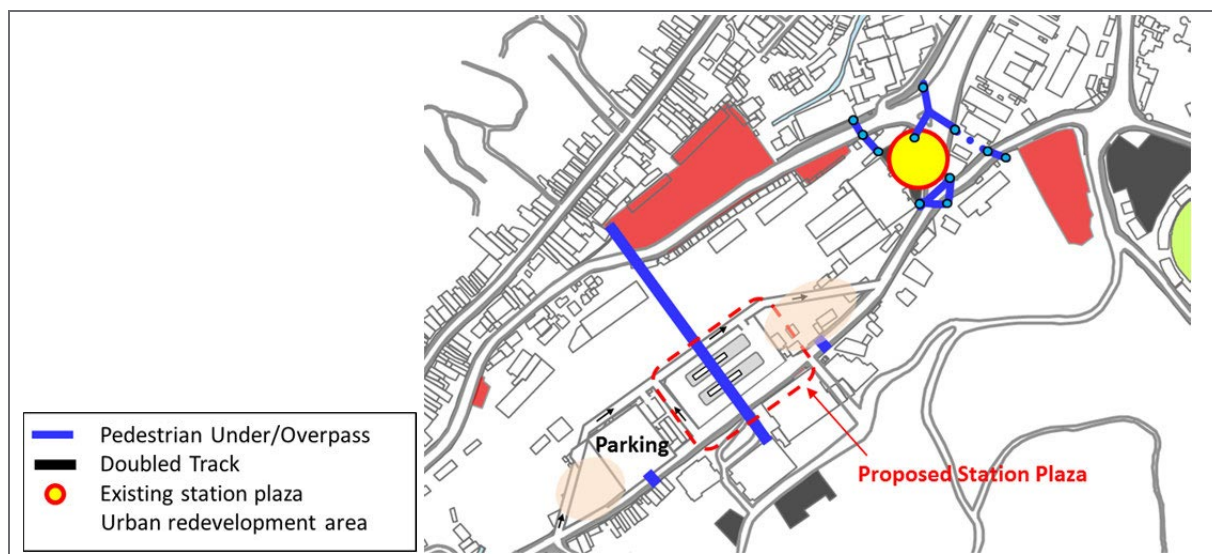
- To develop a transit core for the integration of public transportation
- To develop a pedestrian-oriented space and networks with the Station Area as the initial focal point
- To improve the living environment of the unplanned settlement area

(2) Strategy

- To develop the transit core for the integration of public transportation
- To develop the station area with the following strategies:
 - a) Additional station plaza will be developed in the southern part of the station as indicated below;
 - b) Existing station plaza will be transformed into a pedestrian plaza; and
 - c) The southern part of the station could be used for urban redevelopment.
- To create pedestrian-oriented spaces and networks serving as the initial point of all pedestrian paths leading to the Temple of the Sacred Tooth Relic, the Lake Around and the Heritage Area in the Commercial Grid Zone.

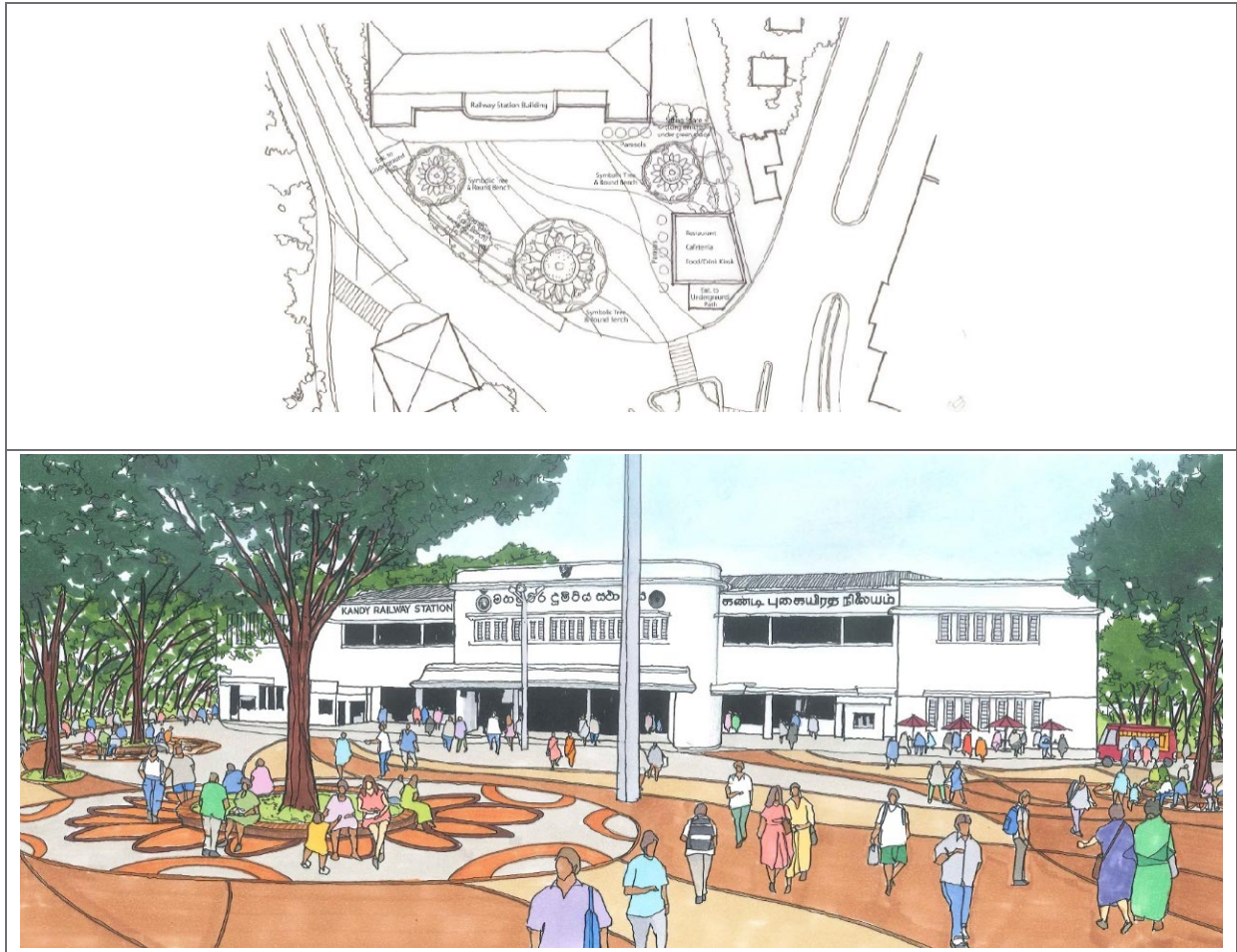
(3) Proposed Planning and Design Orientation for the Station Area

As illustrated in Figure 12.8.6 below, the new station plazas are proposed in both the northern side (in KMTT) and the southern side of the station. Therefore, the team proposes the existing station plaza to be converted into a pedestrian-only space as shown in Figure 12.8.7. The location of the existing station plaza will be the starting point of the proposed “Spiritual Street”.



Source: The JICA Team

Figure 12.8.6 Locations of the Proposed Station Plaza and the Existing Station Plaza



Source: The JICA Team

Figure 12.8.7 Urban Design Image of Kandy Station Pedestrian Plaza