

**Ministry of Megapolis and Western Development
Urban Development Authority
Government of the Democratic Socialist Republic of Sri Lanka**

**PROJECT FOR
FORMULATION OF GREATER KANDY
URBAN PLAN (GKUP)**

Final Report

Volume 1: Summary

September 2018

Japan International Cooperation Agency (JICA)

Oriental Consultants Global Co., Ltd.

NIKKEN SEKKEI Research Institute

ALMEC Corporation

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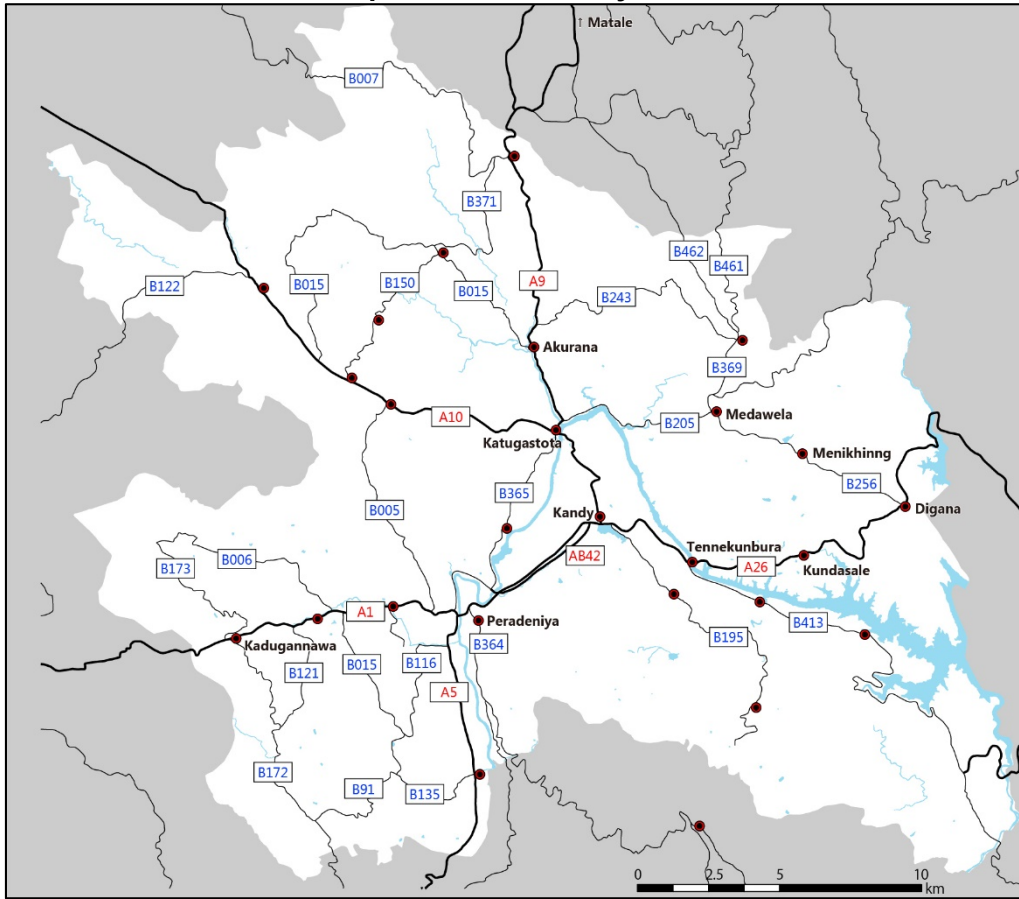
Currency Exchange Rate
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LKR 1 : 0.69 Yen

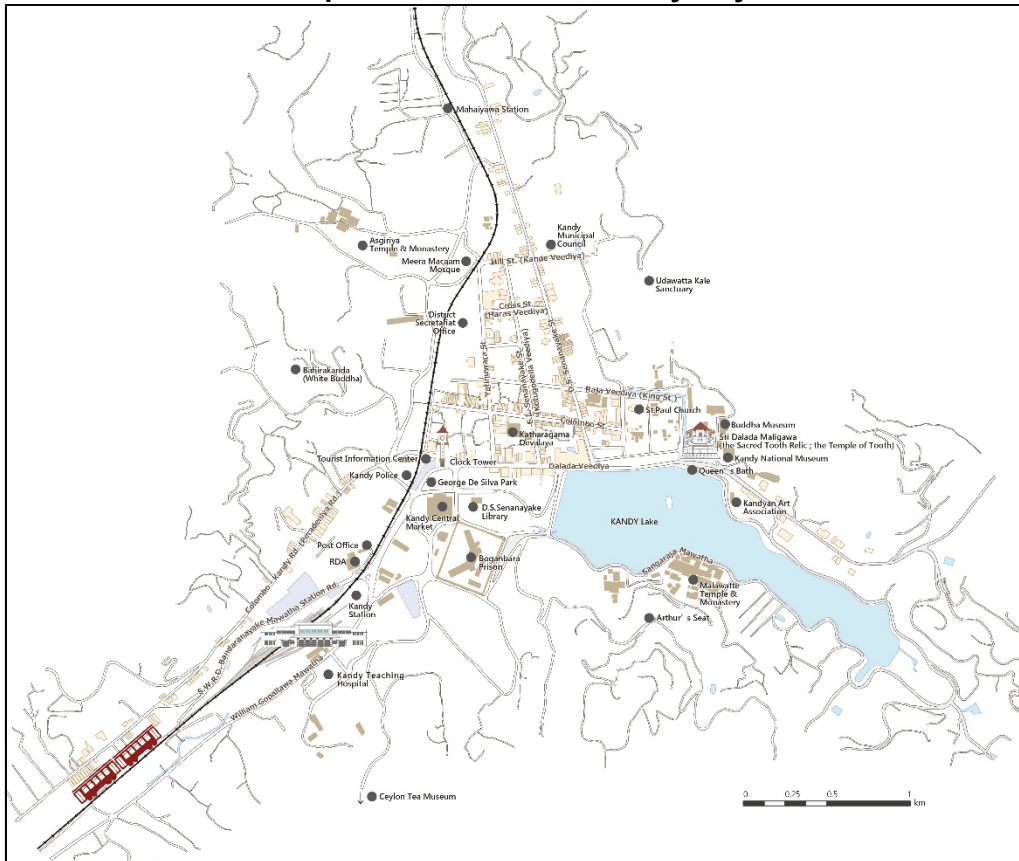
USD 1 : 111.40 Yen

USD 1 : 160.83 LKR

Map of Greater Kandy Area



Map of Centre Area of Kandy City



**THE PROJECT FOR FORMULATION OF GREATER KANDY URBAN PLAN
(GKUP)**

Final Report

Volume 1: Summary

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List of Abbreviations

BOI	Board of Investment
BPM	Business Processing Management
CBD	Central Business District
CCF	Central Cultural Fund
CEA	Central Environmental Authority
CTP	Cultural Triangle Project
DIA	Disaster Impact Assessment
DMC	Disaster Management Centre
DMO	Destination Management Organization
DOA	Department of Archaeology
DOWC	Department of Wildlife Conservation
DRR	Disaster Risk Reduction
DS	Divisional Secretary
DSD	Divisionary Secretariat District
EIA	Environmental Impact Assessment
GKUP	Project for Formulation of Greater Kandy Urban Plan
GRDP	Gross Regional Domestic Product
GIS	Geographic Information System
GN	Grama Niladhari
GND	Grama Niladhari Division
GOJ	Government of Japan
GOS	Government of Sri Lanka
ICOMOS	International Council of Monuments and Sites
IT	Information and Technology
JICA	Japan International Cooperation Agency
KCTS	Kandy City Transport Study
KMC	Kandy Municipal Council
KMTT	Kandy Multimodal Transport Terminal
LA	Local Authority
MC	Municipal Council
MMWD	Ministry of Megapolis and Western Development
MOE	Ministry of Environment
MOT	Ministry of Transport and Civil Aviation
NBRO	National Building Research Organization
NEA	National Environmental Act

NGOs	Non-Governmental Organizations
NPP	National Physical Planning
NPPD	National Physical Planning Department
NPPP	National Physical Planning Policy
NWSDB	National Water Supply and Drainage Board
PCM	Public Consultation Meeting
P&R	Park and Ride
PS	Pradeshiya Sabha
RDA	Road Development Authority
SC	Steering Committee
SCDP	Strategic Cities Development Project
SDGs	Sustainable Development Goals
SEA	Strategic Environmental Assessment
SLR	Sri Lanka Railway
SME	Small and Medium Enterprise
TOD	Transit Oriented Development
TWG	Technical Working Group
UC	Urban Council
UDA	Urban Development Authority
UNESCO	United Nations Educational, Scientific and Cultural Organization
WB	World Bank

CHAPTER 1 INTRODUCTION

1.1 Background

Kandy is the capital of the Central Province and is the second largest city in Sri Lanka. Kandy was also the last capital of ancient kings' era of Sri Lanka, and is recognised as a sacred place of worship in the Buddhist world because of The Temple of Tooth Relic. Kandy has a lot of potential in economic, social, and cultural development. However, recent not-well-planned development has caused overcrowded conditions in the historical heritage area such as heavy traffic congestion, and urbanization encroaching into land-disaster vulnerable areas. In addition, the townscape of the historical heritage area has not been conserved or restored in a proper manner, and this deteriorates its value and attractiveness, which prevents the area from realizing its full economic potential.

Under this context, the Government of Sri Lanka (GOS) requested the Government of Japan (GOJ) to implement the Project for Formulation of Greater Kandy Urban Plan (GKUP) which consists of (i) revision of urban development vision in Kandy Metropolitan Area, and (ii) a detail plan for the Heritage Area.

1.2 Objective and Outputs of the Project

1.2.1 Objective

The objective of the Project for Formulation of Greater Kandy Urban Plan is to contribute to the enhancement of the value and attractiveness of Kandy as a historical and tourist city through the restoration of the historic townscape.

1.2.2 Outputs

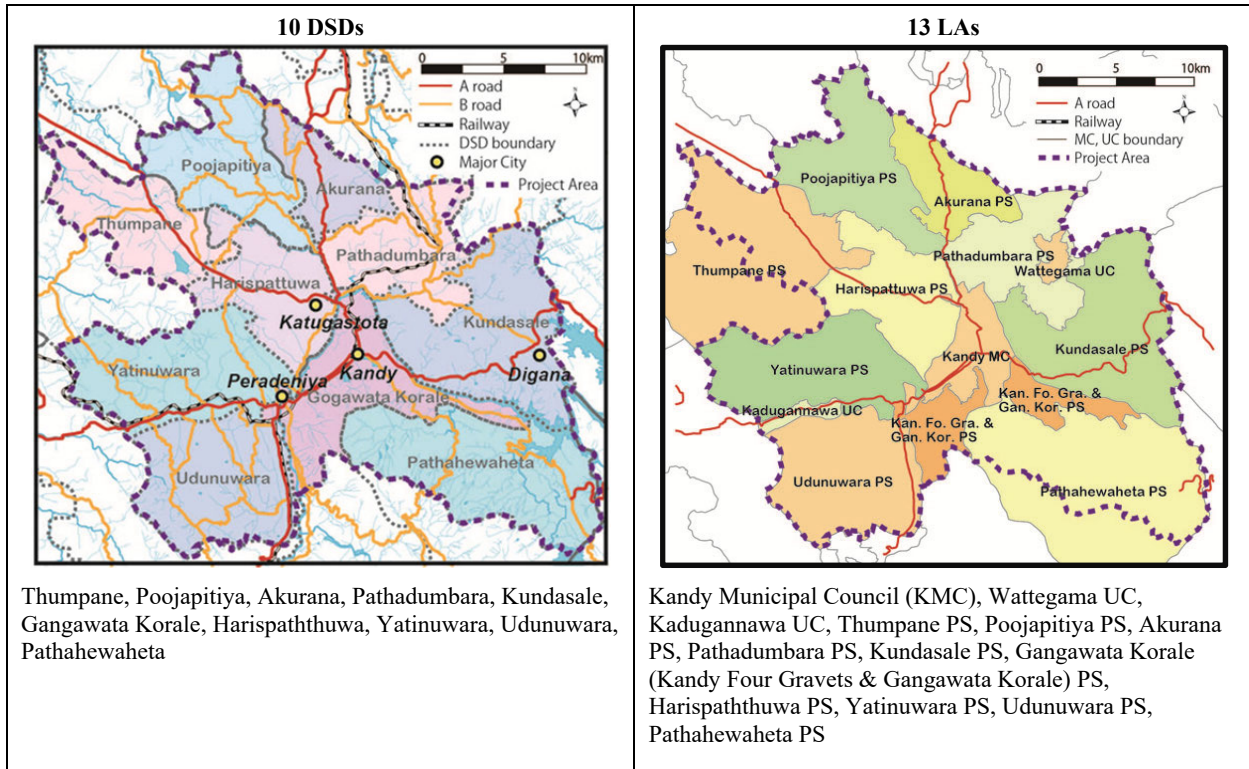
Outputs of the Project are summarised as follows:

- 1) To revise the urban development vision of the Greater Kandy Urban Plan;
- 2) To formulate the detail plan for the heritage area of Kandy; and
- 3) To recommend the implementation including a strategic investment proposal for the Greater Kandy Urban Plan.

1.3 Project Area

1.3.1 Project Area for the Revision of Urban Development Vision

The project area is as shown in Figure 1.1, including 10 Divisionary Secretariat Districts (DSDs) with a population of 897 thousand in 2012 and an area of 608 km², which is composed of the 13 local authorities (LAs) including 1 Municipal Council (MC), 2 Urban Councils (UC), 11 Pradeshiya Sabhas (PS).

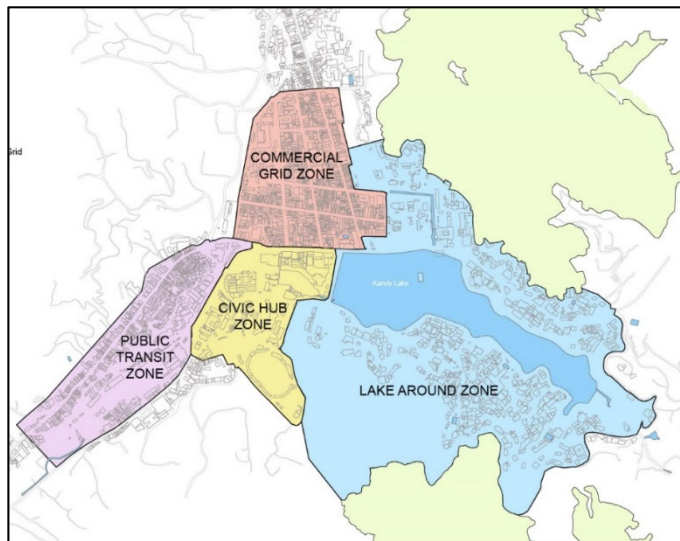


Source: Department of Census and Statistics, Census of Population of Housing 2012

Figure 1.1 Area for Urban Plan (Greater Kandy)

1.3.2 Area for Detail Plan

The “Heritage Area” for the Detail Plan was set as shown in Figure 1.2 with four (4) zones, including Commercial Zone, Lake Around Zone, Public Transit Zone and Civic Hub Zone.

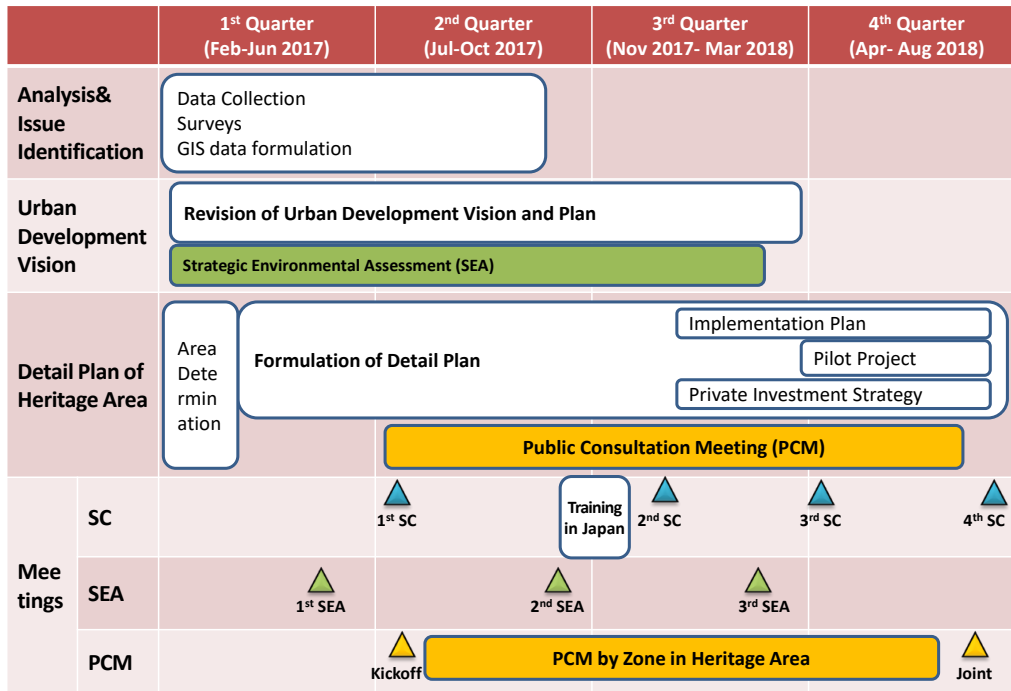


Source: The JICA Team

Figure 1.2 Project Area for Detail Plan

1.4 Overall schedule of the Project

This project was engaged from February 2017 to August 2018, conducting the work items shown in the figure below. Main work components are (i) analysis and issues identification, (ii) urban development vision, and (iii) detailed plan of heritage area. In the process of completing these tasks, many meetings were held, including those of the Steering Committee (SC), the Technical Working Group (TWG), the Strategic Environmental Assessment (SEA), and Public Consultation Meetings (PCMs).



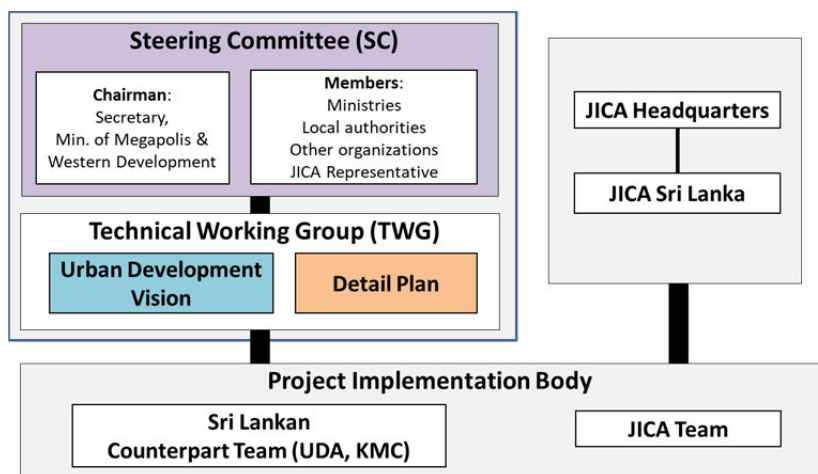
Source: The JICA Team

Figure 1.3 GKUP Workflow

1.5 Implementation Organization Structure

Two organisations were created in order to implement the Project effectively and to enable it to materialise (see Figure 1.4). The SC is composed of relevant organisations, most of which are central government organisations. Two TWGs, composed of relevant organisations such as specialised agencies, local governments, and local authorities, were organised for “Urban Development Vision” and “Detail Plan.” This project was conducted with the UDA and KMC as the main counterparts.

In the course of the project, the following advisors gave valuable and appropriate advice: Mr. J. Charitha Ratwatte (Senior Advisor to the Hon. Prime Minister), Dr. Srikantha Herath (Senior Advisor of Ministry of Megapolis and Western Development) and Eng. Nihal Rupasinghe (SC Chairman, Secretary of Ministry of Megapolis and Western Development (MMWD)) from the Sri Lankan side; and Prof. Shiro WAKUI (Distinguished Professor, Tokyo City University), Prof. Monte CASSIM (President of Shizenkan University), and Prof. Takashi ONISHI (President of Toyohashi University of Technology) from the Japanese side.



Source: The JICA Team

Figure 1.4 Implementation Organisation Structure

CHAPTER 2 REVIEW OF EXISTING PLANS AND PROJECTS

2.1 Review of Related Plans

In the current statutory planning framework, there are national physical plan at the national level, structure plan for the province, and development plan for local authorities; however, there is no statutory plan for regional level between the province and local authority. As discussed later, plans for regional level in Greater Kandy were prepared by UDA and the Ministry of Megapolis and Western Development (MMWD); nevertheless, they are neither legally authorised nor gazetted. This project's output will be used for UDA to prepare a development plan for Greater Kandy and a Detail Plan in the Heritage Area and have them approved and gazetted after the GKUP has been concluded.

2.1.1 National Physical Plan

The National Physical Plan (NPP) is authorised and gazetted as per the Town and Country Planning (Amendment) Act (No. 49 of 2000). The NPP provides a broad framework to promote and regulate the integrated planning of economic, social, physical and environmental aspects of land in Sri Lanka. The National Physical Plan (NPP) 2030 provides a broad framework to secure Sri Lanka's place in the global economy by promoting economic growth. The NPP 2030 clearly states environmental aspects in the Central Region where Greater Kandy Area is located, as follows: "The Central Fragile Region" has been included in the Protected Area Network to establish its importance in conserving the water resources of the country. In this area, selected towns will continue to exist but their development and expansion will be controlled and restricted. In the GKUP, the Greater Kandy Area is planned by taking account of the development policy of the NPP.

The NPP's target year has been revised from 2030 to 2050; and the new NPP is still under the process of revision. A draft development plan proposes four urban corridors, namely: Northern Corridor, Cross Country Urban Corridor, Eastern Urban Corridor, and Southern Urban Corridor. The Greater Kandy Area is not directly included in the corridors, but is close to the Cross Country Urban Corridor which runs through Colombo to Trincomalee on the eastern coast via Kurunegala, which is accessible from Kandy by National Road A10 through Galagedara and Katugastota.

2.1.2 Existing Plans for Greater Kandy Area

There are three existing plans for the Greater Kandy Area, which are (1) Greater Kandy Development Plan 2020 which was formulated by the UDA Central Provincial Office (2008); (2) Kandy City Region Strategic Development Plan 2030 by the Strategic Cities Development Project (SCDP) under the Ministry of Megapolis and Western Development (2015) which was supported by the World Bank; and (3) Greater Kandy Master Plan by UDA (2015). These plans were formulated by taking into account that the urban problems of Kandy City such as traffic congestion, which can be solved only by formulating the plan at the regional level such as Greater Kandy to include the surrounding areas, and not just a plan for Kandy City. In order to decongest the city centre area, these plans proposed the relocation of urban functions (urban facilities), development of satellite cities, and development of cluster cities such as Katugastota, Peradeniya, and Kundasale-Digana along the major development corridors. None of them are officially authorised. Under such situation, this GKUP was formulated by taking account of the development orientations of these existing plans.

2.1.3 Urban and Transport Plans and Projects in the Greater Kandy

At present, SCDP mainly focuses on implementation of priority projects in KMC, especially in the Heritage Area, including: (a) Traffic Improvements (Public Transport Improvements), (b) Traffic and Parking Management and Roads Rehabilitation), (c) Water Supply Augmentation, (d) Drainage Rehabilitation, and (e) Urban Upgrading and Capacity Building.

As for public transport improvement, one of the major projects is the Kandy Multimodal Transport Terminal (KMTT) at Good Shed (present bus terminal). As of August 2018, satellite bus terminal projects have not been materialised. The construction of KMTT will be started in 2019 and completed in 2022. Bus route rerouting and abolishment and consolidation of bus terminals are also planned for the opening of KMTT.

The Road Development Authority (RDA) implements road projects based on the National Road Master Plan. In existing plans and projects, to avoid concentrating socio-economic activities and thus traffic to the centre of Kandy city, it is proposed to transfer the city functions to satellite cities and connect the satellite cities with a ring road to avoid concentration of traffic to the city of Kandy, including (1) Multimodal Transport Hub, (2) Improvement of Rail Service, (3) Improvement of Public Parking Facilities, (4) Road Improvement, (5) Junction Improvement, (6) Pedestrian Underpass, and (7) Overhead Pedestrian Bridges.

In addition, the Kandy City Wastewater Management Project and the Landslide Disaster Protection Project on the National Road Network, which are funded by JICA loan, are ongoing. There are two water supply project plans: the Kandy North Pathadumbara Integrated Water Supply Project supported by India, and the Kunsadale-Haragama Water Supply Project supported by China.

2.1.4 Central Expressway Project by Road Development Authority

The Central Expressway Project has been commenced by RDA. The status of each section is as follows:

- Section 1: Gampaha – Mirigama (under construction)
- Section 2: Mirigama – Kurunegala (planned)
- Section 3: Kurunegala – Galagedara (planned, not toll road)

If the Central Expressway is connected to Galagedara, which is located north-west of Greater Kandy Area, travel time from Colombo to Kandy city centre using the Expressway passing through Katugastota from north will be shorter than that using A1 passing through Peradeniya from south-west.

2.1.5 Double Track Railway Project by Sri Lanka Railways and Ministry of Transport & Civil Aviation

To connect the cluster cities of Peradeniya, Kandy, and Katugastota by rail efficiently, the following studies will be commenced by the Ministry of Transport and Civil Aviation (MOT). Among them, Sri Lanka Railways (SLR) has started implementing the double tracking between Peradeniya to Kandy.

- Double tracking from Kadugannawa to Katugastota
- Rehabilitate the section from Katugastota to Matale
- Rehabilitate and/ or double track the section from Peradeniya Junction to Gampola
- Prefeasibility study to explore the possibility of increasing traffic capacity in the gradient section from Rambukkana to Kadugannawa

2.1.6 South Bypass Feasibility Study

In June 2016, RDA prepared the “Feasibility Study on Kandy Tunnel Construction in Sri Lanka” conducted by a Korean company on a 5.5 km road with tunnels connecting between Gatambe and Tennekumbura. In this study traffic demand forecast, geotechnical investigation and analysis, engineering study, review of environment impact, project cost estimate, economic analysis and necessary items to project implementation were proposed. This FS Report has not yet been officially approved by the Sri Lanka Government.

2.1.7 Urban Upgrading Project

SCDP has conducted the Urban Upgrading Interventions in the city centre. The following projects are the ongoing fast track projects (1) Improvement of Municipal Car Park Roof Top, (2) Rehabilitation of George E. De Silva Park, (3) Kandy Lakeside Walkability Improvements, (4) Tomlin Park - Pilgrim Drop off & Reception Centre, and (5) Grid City Improvements

2.1.8 Status of Formulation of Development Plans by UDA

A “Development Plan” is a planning document for a local authority that was prepared by UDA. UDA declares specific local authorities where development plans should be prepared based on their urbanising situations. Those local authorities are called an “UDA declared area”. Within Greater Kandy Area, 12 out of 13 local authorities, except for Poojapitiya PS, are UDA declared local authorities.

As of August 2018, Kandy MC Development Plan (2002-2016) which was gazetted and become effective from 2002 is being revised as the Development Plan (2018-2025) and has been drafted, which is still yet to be approval by KMC. Development Plans which have already started preparation for drafting and approval are Wattedagama UC (Urban council) Development Plan (2009-2020), Kundasale PS Development Plan (2008-2020), Kadugannawa UC Development Plan, Gangawata Korale PS Development Plan (2010-2030), Yatimuwara PS Development Plan (2009-2020). Akurana PS Development Plan is just at preliminary drafting status. For Pathadumbara PS, Harispattuwa PS, Thumpane PS, Udunuwara PS, and Pathahewaheta PS, nothing has been prepared yet.

2.2 Existing Conditions and Issues

2.2.1 The Greater Kandy Area

(1) General

Kandy – the capital of the Central Province – is located 116 km from Colombo, or a distance of about a 3- to 4-hour car ride. Kandy lies at an elevation of around 500 metres above sea level, surrounded by mountains and hills, and its climate is mild. Kandy, where the Temple of the Tooth Relic is located, is inscribed as UNESCO’s World Site as the “Sacred City of Kandy”. Situated at the north of Kandy is Sri Lanka’s Cultural Triangle, which is located in the centre of the island and covers an area which includes the World Heritage cultural sites of the Sacred City of Anuradhapura, the Ancient City of Polonnaruwa, the Ancient City of Sigiriya, the Ancient City of Dambulla and the Sacred City of Kandy. In the highland to the south of Kandy, Nuwara Eliya – which is famous for tea – is situated. As such, Kandy attracts many worshippers and tourists from home and abroad.

(2) Population

The population of the Greater Kandy Area increased gradually from 823,524 in 2001 to 896,606 in 2012, with an average growth rate of approximately 0.78% between 2001 and 2012. This is slightly higher than the other DSDs outside the Greater Kandy Area within Kandy District. The highest growth rate among the ten DSDs in the Greater Kandy was seen in Kundasale with 1.56% growth per annum, followed by Akurana (1.18%), Harispattuwa (1.02%) and Udunuwara (1.02%).

Table 2.1 Population by DSD in Greater Kandy Area (2001 & 2012)

DSD	Population			Average Annual Population Growth Rate	
	1981	2001	2012	1981-2001	2001-2012
Akurana	-	55,744	63,397	-	1.18%
Harispattuwa	-	78,880	88,177	-	1.02%
Gangawata Korale	-	160,630	158,561	-	-0.12%
Kundasale	-	107,180	127,070	-	1.56%
Pathadumbara	-	80,558	88,725	-	0.88%
Pathahewaheta	-	53,843	58,188	-	0.71%
Poojapitiya	-	54,172	57,914	-	0.61%
Thumpane	-	35,447	37,642	-	0.55%
Udunuwara	-	99,235	110,905	-	1.02%
Yatinuwara	-	97,835	106,027	-	0.73%
Greater Kandy	-	823,524	896,606	-	0.78%
Outside Greater Kandy	-	455,504	478,776	-	0.45%
Kandy District	1,048,317	1,279,028	1,375,382	1.00%	0.66%

Source: Department of Census and Statistics, Census of Population and Housing 2001 and 2012

The dominant ethnic group in the Greater Kandy Area is Sinhalese with approximately 75% of its population, followed by Moors. The Greater Kandy Area has a larger share of Moors with approximately 18% of its population, which is twice the share compared with the national level where Tamils have a larger share than Moors. Especially in Akurana DSD, over 65% of its population is Moors. Other DSDs with relatively large share of Moors are Udunuwara DSD (25%), Pathadumbara DSD (22.5%) and Pathahewaheta DSD (22.5%).

The largest religious group in the Greater Kandy Area is Buddhist (76.0%), followed by Islam (17.2%), Hindu (4.9%) and Christian (1.8%). The shares of Buddhist and Islam in the Greater Kandy Area are higher than that of Sri Lanka as a whole.

(3) Regional Economic Conditions

The Central Province's GRDP was approximately 1,152 billion Rs. – which accounted for 10.3% of the national GDP – at current prices in 2015, according to the Central Bank of Sri Lanka. The Central Province's GRDP is in the fourth place following the Western Province at 41.2%, North Western Province at 10.9% and Southern Province at 10.4%. Growth rate between 2011 and 2015 was 15.6% for the Central Province, which is the fifth growth rate of all the provinces. Particularly, the service sector recorded a higher rate at 18.6% compared to other sectors.

(4) Land Use and Urbanisation

The urbanisation pattern of the Greater Kandy Area is characterised by the topography, which restricts urban growth. Most of the urbanised areas are concentrated in the central part of KMC. Recently, urbanisation has been expanding towards the hilly areas surrounding the centre. Buildings such as houses and hotels are scattered on the hills.

The sprawl pattern generally grew with a long and narrow shape along the main roads together with around suburban city centres. Urban sprawl and ribbon development along main road corridors are causing a range of urban issues.

(5) Transportation

Transport, specifically traffic congestion, is one of the major urban issues in Kandy. There are many factors that aggravate traffic congestion, including (1) the concentration of public

facilities in the city centre which generates much traffic, (2) a limited road network in the mountainous area, (3) traffic congestion in the town centre mixed with through-traffic on the trunk roads to Kandy and daily traffic inside the city, (4) traffic bottlenecks at bridges and intersections, (5) limited areas designated for parking in the city, and (6) inappropriate traffic management.

Trunk roads connecting Kandy are limited to three roads, namely: the road to the north in the direction of Katugastota, the one to the southwest in the direction of Peradeniya, and the one to the east in the direction of Kundasale-Digana. The main road to connect Kandy to Colombo is A1 road which runs through Peradeniya. Roads linking town centres around Kandy are not sufficiently developed yet. As such, it is desirable to develop roads to divert traffic through the Kandy city centre. At the same time, relocating public facilities which attract traffic to the city centre should be considered. As already mentioned, once the Central Expressway is opened and connected to Galagedara and the travel time between Colombo and Kandy is considerably shortened, access to Colombo from Kandy will be more through Katugastota than through Peradeniya.

Based on the Kandy City Transport Study conducted by SCDP in 2011 and the household interview survey conducted by the JICA Team in the Heritage Area, traffic is concentrated in Kandy's Central Business District (CBD). In the Heritage Area, major travel modes are public transport (bus and three-wheelers) and private modes (car and motorbike), while railway occupies only 1~2%. According to KCTS, as for bus operation in the Heritage Area of Kandy, 80% of a total number of scheduled departures from Kandy's CBD is intra-provincial bus, while the other 20% is inter-provincial bus.

To ease traffic congestion in the city centre, it is required to promote the relocation of the public facilities in the city centre, promote modal shift from private mode to public transport, especially the railway, and to reduce intra-provincial bus traffic. In addition, it is required to remove traffic bottlenecks at bridges and intersections through traffic management such as parking control and parking space development.

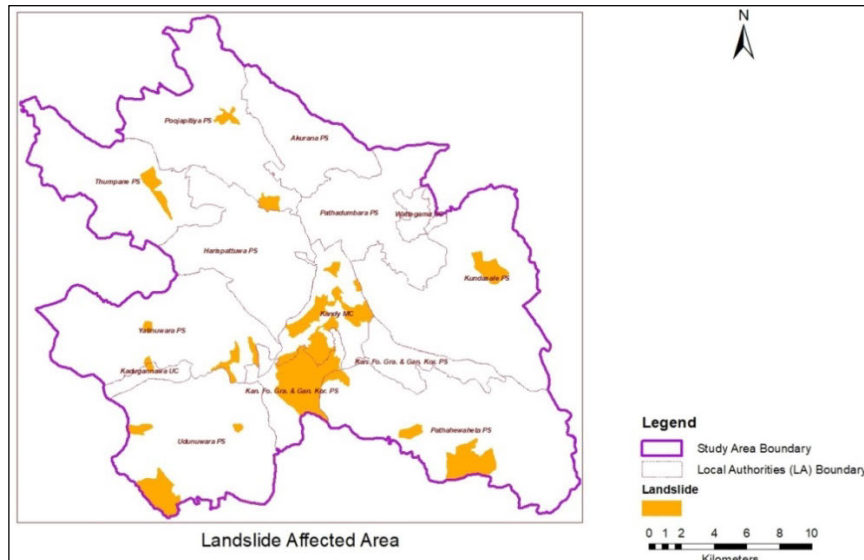
(6) Natural Environment

Greater Kandy is designated as Central Fragile Area by NPP; and three protected areas are designated to protect the valuable environment in Greater Kandy. One sanctuary, designated by the Department of Wildlife Conservation (DOWC), is a part of Victoria Randenigala Rantembe Sanctuary located along the Mahaweli River. The main area is situated between the Knuckles Mountain Range and the Central Mountains of Kandy. The other sanctuary, a reserved forest designated by the Department of Forest (DOF), is Udawatta Kele Forest (Sanctuary) behind the Temple of the Tooth Relic. It is famous as a historic forest reserve on a hill-ridge in the city of Kandy and for its extensive avifauna and a great variety of plant species. There is another protected area designated by the CEA, named Hanthana Mountain Range lying south-west of Kandy City and East of Peradeniya. This was declared protected in 2010 for purposes of sustainable development in this area. There is remaining forest as well as traditional tea plantations being operated. However, recent land encroachment for housing development has taken place and this aggravated the natural conditions in the area.

Environmental management issues to be addressed are encroachment to river watershed, forest reserves, agricultural land and mountains and degradation of natural resources (forest, etc.). Mitigation of these adverse impacts on environment is required.

(7) Disaster Prevention

Major disasters in the Greater Kandy Area are landslide and floods. Landslides in Greater Kandy Area occurred in slope areas, especially during heavy rainfall (see Figure 2.1). To reduce the risk of landslide, the following measures are required: Site level assessment of landslide risk, proper monitoring, introduction of land use control in landslide risky area, application of building permission based on landslide disaster risk assessment, and implementation of landslide control physical measures in high-risk sites.



Source: Disaster Management Centre (DMC)

Figure 2.1 Landslide Affected Area

The National Disaster Management Plan (2013-2017) stipulates the mainstreaming of Disaster Risk Reduction (DRR). This principle should be applied in land use planning and development control. The National Building Research Organisation (NBRO) has prepared a landslide hazard map at the scale of 1:50,000 for the entire area of Kandy district, and those at the scale of 1:10,000 for Kandy City.

In the Greater Kandy Area, according to the Disaster Management Centre (DMC) Kandy, floods have occurred in Kotabogoda GND in Yatinuwara DS, Kahawatte South GND and Mullegama GND in Pujapitiya DSD and Akurana DSD; Akurana lies in a flood-prone area along the Pinga Oya River. Countermeasures for floods include promotion of flood management by drainage system, proper construction and restriction along rivers and flood-prone areas, and expansion of run-off capacity of the river in flood-prone areas.

(8) Regional Economic Development

As for the economic activities of Greater Kandy, the major industry is tertiary industry including the commercial sector in terms of GRDP and employment. The following summarises the characteristics and countermeasures.

1) Agricultural Sector

In agriculture, the extent of the agricultural land for coconuts, tea and paddy occupy a large tract of land in Greater Kandy. However, the Greater Kandy Area has no more room to produce more crops by increasing the land due to limitation of land for cultivation. However, it could increase its value added in order to provide agricultural products to the visitors in Kandy.

2) Industrial Sector

The dominant industries in Greater Kandy are textile, wearing apparel and leather, food and beverage, tobacco, and wood production and furniture in terms of the number of manufacturing establishments. This is particularly true for Kundasale DSD – where Kandy Industrial Park and Palkelele Industrial Estate are located – and Uduwara DSD.

In the industrial sector, it is necessary to increase value added for food production by improving the manufacturing process or branding to show the value of Kandy. Moreover, as Greater Kandy is located in the interior area, the hilly and mountainous terrain limits the expansion of road capacity. Accordingly, the industries which do not generate much cargo volumes are desirable. Taking advantage of potentials of R&D and human resources in Peradeniya, eco-friendly industries with high value added such as robotics, medical devices

and healthcare/wellness products should targeted attracting investment by overcoming the abovementioned constraints.

3) Service Sector

Retail shops, restaurant and canteen, textile and footwear, and meat, fish and vegetables account for more than 50% of commercial places in the Greater Kandy Area in 2015. Around one-third of places are located in Gangawata Korale DSD to which Kandy City belongs. Logistic facilities, which support these service industries, are one of the causes for traffic congestion; hence, the improvement of logistics system is required.

Healthcare and IT/BPM (business processing management) industries also have potential opportunities to utilise the rich resources in Kandy. Enhancement of trade function is also important due to the strategic location of Kandy in the middle of Sri Lanka.

4) Tourism

As a World Heritage City with the Temple of the Tooth Relic, Kandy is one of the popular tourism destinations in Sri Lanka, and many tourists visit the area. The major current issues faced by the tourism sector include the following: most of tourists are day-trippers or spend only a short stay; traffic congestion and insufficient public transportation hinder the tourists' smooth travel in Greater Kandy; and although many tourism resources exist in Greater Kandy, they are not recognised sufficiently due to lack of information. As such, a tourism promotion policy should be formulated to take advantage of various tourism resources.

5) Medical and Healthcare

There are many medical and health facilities located in Peradeniya; and also in Kandy, there are some large hospitals and other medical facilities. At present, Asiri Hospital, the largest private hospital chain in Sri Lanka, is being under construction. Moreover, the natural and spiritual environment in the Greater Kandy Area may attract aged people, or people coming from other areas who are seeking physical and mental wellness. It is necessary to consider countermeasures to promote regional development by utilising these modern and traditional medical and health facilities including Ayurveda.

6) Handicrafts

There are some traditional handicraft villages in the Greater Kandy Area. Some of the major traditional handicrafts include drums, wood carvings, weaving, brass, flags and clay pots. This industry at this moment is small in scale as is not tied in closely with the tourism consumption market.

7) Micro, Small and Medium-sized Enterprises

In Kandy District, non-agricultural establishments categorised as Micro account for more than 90% in number. At a workshop held by the JICA Team, Micro and Small and Medium-sized Enterprises (SMEs) operating horticulture, food production, trade, commerce and services, handicrafts, and production, pointed out the issues and expectation to the government for Micro and SME businesses; the issues include procurement, labour, finance, production & delivery, and marketing. As Micro and SMEs face problems in procuring materials and hence, have been selling products ineffectively, in order to reduce procurement cost and maximise profit by having a direct access to the consumers, establishment of markets or logistic centres is recommended.

2.2.2 The City Centre and the Heritage Area

(1) Urban Function

Due the concentration of urban functions in the city centre, more than 300,000 people are coming in everyday for commuting to work and schools and other purposes while KMC's population is around 120,000, according Kandy City Transport Study (2011). In particular, many urban facilities such as public administration, commercial, educational and medical

facilities are located in the Heritage Area and can cause traffic congestion. The land in the Civic Hub Zone is publicly owned where large public facilities are located, but only a few of these facilities are open for public use.

(2) Socio-economic Activities

Religious harmony is found in Kandy. In the premise of the Temple of the Tooth Relic, there stands a Hindu temple and a Christian church. In the Grid City, there are Islamic mosques, Hindu temples, and churches. Although many tourists visit Kandy, large tourism facilities, accommodation facilities and restaurants for foreigners are limited. Commerce in the Grid City is mainly composed of retail shops and service for the local people. Along the railway and Meda Ela, sub-standard residential areas can be found.

(3) Transportation

Although railway is used mostly for inter-city travel such as that between Colombo and Kandy, or for going to schools, the use of railway is limited due to low frequency of railway operation. As for other public transports, people tend to use buses to travel between Kandy and the places outside of Kandy, and three-wheelers are used for short distance trips and for accessing the hilly areas. The concentration of these buses and three-wheelers and on-road parking cause traffic congestion in the city centre. Although the grid patterned roads in the Grid City have not been changed, new roads and bridges have been developed around the city centre, and some roads have also been improved by widening. However, roads from the other cities to Kandy are limited, and chronic traffic congestion is found.

(4) Heritage Buildings

The Grid City (Commercial Grid Zone) in the Heritage Area has been fulfilling its function as a centre of commercial activities, business and administration of the Greater Kandy Area. In the Grid City, many private-owned, small-scale historic buildings remain, which form the human-scale historic townscape. These historic buildings were mainly built during the British Colonial Period, although the grid street pattern was constructed before the Kandyan Kingdom period.

Besides the Grid City, there are also many historic buildings in the other areas of the Heritage Area, which are mainly public facilities such as a prison, post office, and so on. A total of 488 buildings are listed as conserved buildings in Kandy City. However, since the Temple of the Tooth Relic and a group of Royal Palace Monuments are designated as World Heritage by UNESCO, the relationship between these 488 designated buildings and the World Heritage is not clear.

CHAPTER 3 GREATER KANDY URBAN PLAN

3.1 Vision

3.1.1 Potential and Issues

Greater Kandy has various assets such as the World Heritage, historic properties, rich and beautiful natural environment, stable population distribution, planned transport network, etc. On the other hand, the city centre of Kandy is suffering from concentration of socio-economic activities, traffic congestion, degrading natural environment, degraded landscape and historic townscape, increased disaster risk due to development in disaster-prone areas, worsening living environment, etc. To ease the traffic congestion in the city centre of Kandy and to develop the whole Greater Kandy's socio-economy, it is required that the urban structure of Greater Kandy be restructured from medium- and long-term regional development perspectives through the development of regional core areas (i.e. satellite and cluster cities) as well as regional transportation network (i.e. trunk and bypass roads and railway).

Problem structure, issues, and SWOT (strength, weakness, opportunity, and threats) concerning Greater Kandy were identified based on the analysis of the current situation, identified problems and issues, existing plans, and results of various stakeholders' meetings such as Steering Committee meetings, Urban Development Vision Technical Working Group (TWG) meetings, SEA stakeholders' meetings, among others. It is necessary to fully make use of the potentials and address issues of both Greater Kandy and the city centre in a comprehensive and integrated manner.

- **Major Potentials:** Various assets such as the World Heritage, historic properties, and rich and beautiful natural environment; Renowned as peaceful tourism area; Stable population distribution; potential for industrial and tourism development; and Planned transport network
- **Major Issues:** Concentration of socio-economic activities and traffic in the city centre; Degrading natural environment; Stagnation of rural economy; Degraded landscape and historic townscape; Increased disaster risk; and worsening living environment

3.1.2 Values of Kandy

While various assets have been identified, many stakeholders put emphasis on the importance and significance of inherited values of Kandy. These are the four main layers of Kandy's religious, historical, natural, and cultural values which are closely related and integrated in people's daily lives. These values distinguish Kandy from other heritage cities in the world.

3.1.3 Vision

With regard to the vision of Greater Kandy, the following vision statement has been reached through discussions with the stakeholders, including the members of the Steering Committee, Technical Working Group (TWG) for Urban Development Vision, and Strategic Environment Assessment (SEA).

Vision:

“Greater Kandy shall be Sri Lanka’s repository of historic, natural, cultural and religious heritage.”

Kandy is the foundation of faith and spiritualism in the centre of Sri Lanka. To attain the vision, the values of Kandy must be preserved and promoted not only by the public sector, but

also by the local communities and citizens (public and citizen’s partnership) in a sustainable manner to ensure growth in the future through conservation and innovation.

3.1.4 Development Goals

The values of Kandy – or its historical, natural, cultural and religious heritage – which are set out in the vision need to be conserved into the future. To ensure the financial source for heritage conservation, regional economic promotion is necessary. Traffic congestion, which is one of the most eminent urban problems of Greater Kandy, degrades these values and therefore, should be eased accordingly. In addition, historical, natural, cultural, and religious heritage values are easily damaged by natural disasters; thus, it is pivotal to increase disaster prevention capacity. To attain the future vision of Greater Kandy, the following five goals are set.

- Conservation of the abundant nature of the whole Greater Kandy
- Bequeathing of the intangible values of historical, cultural, religious, and spiritual to the future
- Promotion of socio-economic activities for proper conservation and infrastructure development so that citizens and visitors can enjoy the values of heritage
- Improvement of transportation, which is recognised as one of the most important infrastructure to attain stable socio-economic activities
- Management of urban growth to construct a sustainable Greater Kandy where the heritage value is respected by providing adequate infrastructure and strengthening disaster prevention capacity; and the development of a peaceful and safe living environment through community participation for heritage conservation and living environment improvement.

Table 3.1 Development Goals

Environmental conservation	To preserve and conserve rich natural resources of greenery and water in the Central Highland by development control towards sustainable growth
Conservation/preservation of historic and cultural heritage	To conserve historic and cultural heritages including that of the Kandyan style, intangible values such as diversity, tolerance, religious faith, with the World Heritage City of Kandy as a centre, and bequeath them to the future generations
Vitalization of socio-economic activities	To vitalize the regional economy by promoting the urban economy and rural local economy through enhancement of the industrial potential based on local-resources
Transportation improvement	To establish an efficient transport system which strengthens the regional linkages, thereby foster economic activities in each local area in the Greater Kandy; and to alleviate traffic congestion by formation of clusters and removal of bottlenecks.
Improvement of living environment and urban growth management	To create excellent, livable urban space and living environment by proper location of urban functions, land use zoning, redevelopment/ development of infrastructure, disaster prevention, etc. and formation of a compact city; and planning and implementation shall be through public participation mechanism.

Source: The JICA Team

3.1.5 Objectives

(1) Objectives for Goal 1: Environmental conservation and management

Greater Kandy is endowed with rich biodiversity with three designated protected areas, and abundant greenery and water. As Greater Kandy is designated as the Central Fragile Area by the National Physical Plan 2030, development activities should be strictly controlled. However, the Area is suffering from disorderly development, encroachment into the rich and precious environmental resources, and environmental pollution. For this, the following objectives are set.

Objective 1-1: Proper conservation and utilisation of the rich natural environment

Objective 1-2: Proper control of development

Objective 1-3: Alleviation of environmental pollution

(2) Objectives for Goal 2: Conservation/preservation of historic and cultural heritage

Greater Kandy is endowed with rich tangible and intangible historic, cultural, and religious heritage, and Kandy is designated as a World Heritage. However, these are not well preserved, and heritage buildings and landscape are also degraded and are underutilised to benefit socio-economic activities. For this, the following objectives are set.

Objective 2-1: Rediscover and utilisation of the valuable heritage in Greater Kandy

Objective 2-2: Enhancement of attractiveness as a World Heritage

Objective 2-3: Conservation of landscape, townscape, and historic buildings

(3) Objectives for Goal 3: Vitalisation of socio-economic activities

The socio-economic activities are concentrated in the city centre of Kandy and cause urban problems such as traffic congestion and environmental pollution. On the other hand, rural areas are suffering from stagnant economies as their resources are not being tapped properly to maximise economic potentials. Under such a situation, it is required to relocate some urban functions in the city centre to the cluster cities of Katugastota, Peradeniya, Kundasale-Digana, and decentralise the urban functions so as to decongest the city centre and to promote economic activities there. Moreover, to promote rural economy, it is important to vitalise the socio-economic activities in Greater Kandy by tying up the local industries with the tourism industry and potential new industry which create value added. For this, the following objectives are set.

Objective 3-1: Promotion of rural and local products

Objective 3-2: Promotion of high-value added and advanced industries and services

Objective 3-3: Promotion of tourism related industries

Objective 3-4: Promotion of socio-economic activities of the cluster cities

(4) Objectives for Goal 4: Transportation improvement

Traffic congestion in the city centre is a fundamental issue to be addressed. To alleviate the worsening situation, public transport should be promoted to reduce the traffic of private cars as well as the development of regional transport network to divert traffic through the city centre with bypass roads, and mobility management to reduce the traffic volume in the city centre. For this, the following objectives are set.

Objective 4-1: Promotion of public transportation

Objective 4-2: Development of a transportation network with wide area coverage

Objective 4-3: Securing smooth mobility within urban areas

(5) Objectives for Goal 5: Improvement of living environment and urban growth management

Beautiful townscape, attractive urban service facilities, industries utilising local resources, and a safe and comfortable urban space not only attract tourists, but also contribute to the citizens' safe and prosperous lives. In order to create the repository of values stated in the vision where people can live comfortably, peacefully, and safely, urban problems in the city centre should be solved by improvement of living environment and management of urban growth with community participation.

The concentration of public facilities in the city centre causes congestion, and it is required to relocate and rehabilitate some of the public facilities to the cluster cities to ease traffic congestion and to create attractive urban facilities and public spaces. The development of infrastructure and a stable living environment would not only create a better living environment but also improve the townscape. Disaster prevention measures in slope areas are indispensable for maintaining safe living conditions and urban functions, and also contribute to landscape and environmental protection. Public space, which is created by relocating or rehabilitating public facilities in the city centre, can be used for various purposes such as recreation and relaxation, events for citizens and tourists, and evacuation in the event of disaster. For this, the following objectives are set.

Objective 5-1: Restructuring of urban functions and urban development and redevelopment

Objective 5-2: Improvement of living environment

Objective 5-3: Proper disaster prevention based on disaster risk reduction principles

Objective 5-4: Creation of amenity urban space in the city centre

3.2 Development Orientation

3.2.1 Overall Development Scenario

The values of Kandy such as history, culture, nature, worship are diversified, and these are closely linked and integrated. Without consideration and respects of these values, it is difficult to solve present issues and to set a proper vision and strategies for future.

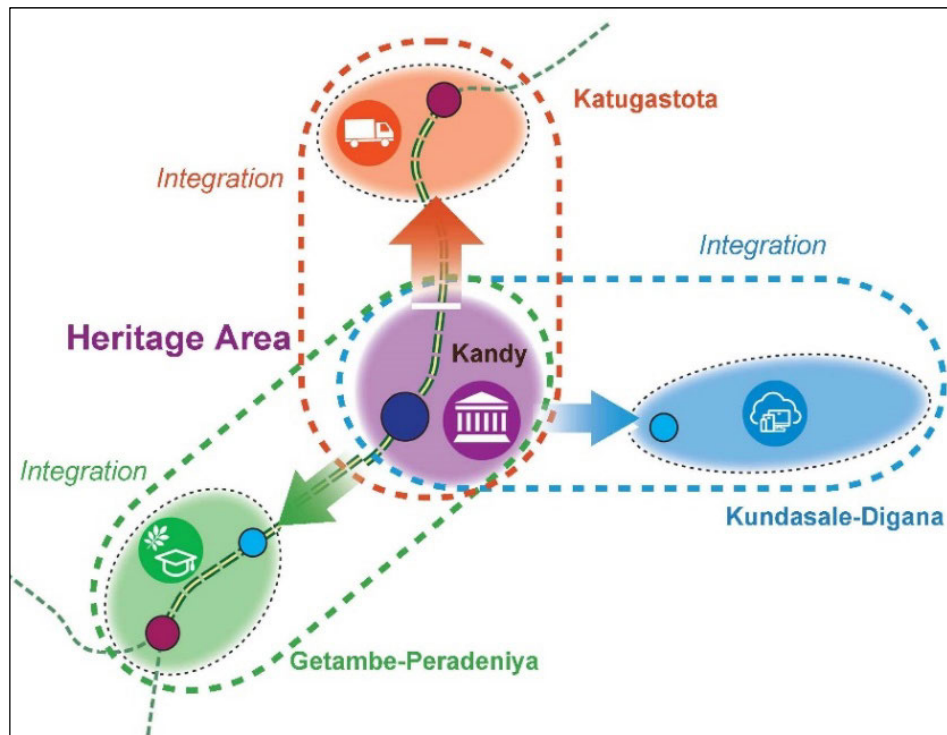
Generally, urban plan is formulated by overlaying spatial and physical conditions such as land use, transport, environment, etc. In this project, values are identified as a basis of planning. In addition to special and physical planning, public consultation was conducted to collect various stakeholders' opinion and willingness for identification of future potentials as well as current issue.

The GKUP proposed regional solutions to enhance economic value of the region by utilising the values of Kandy. To reduce traffic congestion and concentration of people and urban functions and to preserve historic townscape and natural landscape in the city centre, urban functions such as wholesale, public administration in the Heritage Area, which need not necessarily to be located in the Heritage Area, are proposed to be relocated to clusters of Katugastota, Peradeniya, and Kundasale – Digana; and comfortable spaces will be revitalised in the vacated area in the Heritage Area for communities, priests and tourists to enjoy economic benefits.

To realise this, the following steps are proposed for appropriate development and management:

- (i) At Cluster Cities: To relocate urban function (public facilities) in city centre to cluster cities and promote commercial and new industrial development

- (ii) At City Centre: To promote tourism and cultural related industries, preserving historical townscape and buildings, to enhance socio-economic growth and resilience. To shift to public transport to alleviate traffic congestion.
- (iii) For Greater Kandy: To promote regional socio-economic development with preserving vulnerable natural environment and enhancing values of Kandy. To enhance the resilience by increasing redundancy of the urban function distribution in the region.



Source: The JICA Team

Figure 3.1 Overall Development Scenario

3.2.2 Population

The population of Greater Kandy is 897,000 in 2012 and is assumed to be 1,059,000 in 2035. Despite the out migration to Colombo and other countries from Greater Kandy, Greater Kandy is expected to continue to be a migration destination for people from the surrounding rural areas. It is projected that population of some urban centres such as Kundasale will be slightly increased while population living in the centre of Kandy and rural areas will be decreased.

3.2.3 Orientation of Land Use

Land use zoning is proposed by considering the following three aspects: (i) results of the environmental zoning (which identifies moderate constraint zones for development such as environment fragile area and high slope and/or elevation areas with high disaster risks, and crucial constraint zones such as nature protected areas), (ii) proposed urban structure, and (iii) population framework.

Specifically, urbanised areas are examined based on the result of the environmental zoning, and about 1 million future population will be settled inside these urbanised areas mainly in urban clusters and corridors based on the proposed urban structure. For this, the compact urban structure will be realised by integrating environmental preservation, land use, and population distribution. In addition, it is considered to sustain home garden, which is the

characteristical land use of low-dense residential areas accounting for approximately 60% of the total lands of Greater Kandy.

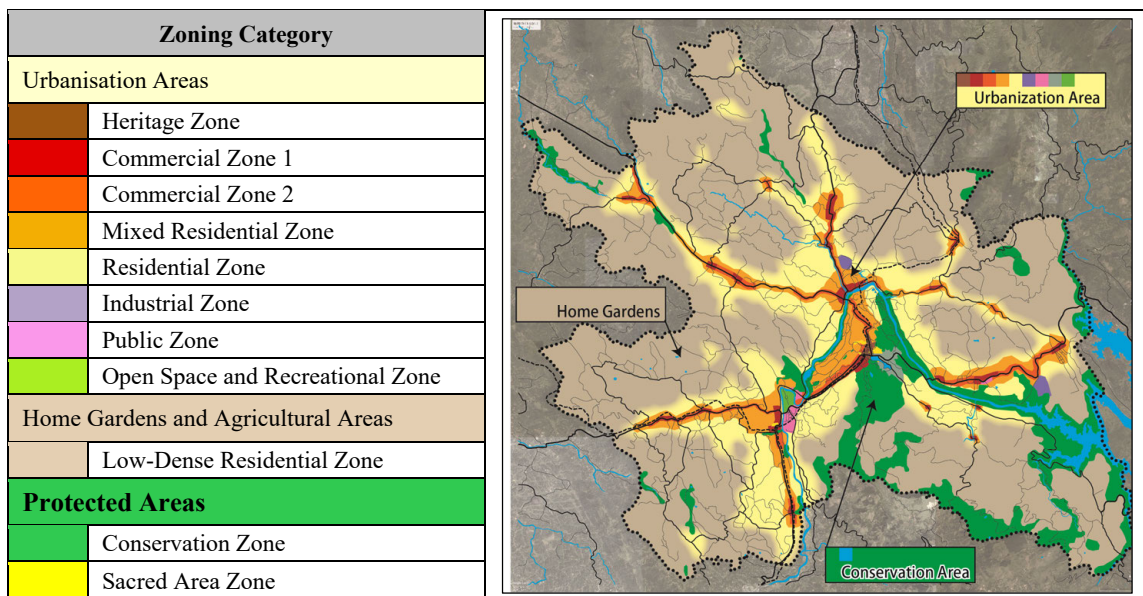
As the result, the principle of orientations is to divide Greater Kandy Area into three types of areas; namely: “Urbanised Areas”, “Home Gardens”, and “Protected Areas.”

“**Urbanised areas**” where urbanisations are promoted depending on the characteristics of existing urban activities and natural conditions. The main urbanised areas are designated in and around the centre of Kandy and the cluster cities, and along the major roads.

“**Home gardens**” is preserved as a dominant land use in the most parts of the rural areas to uphold the traditional lifestyle and to preserve the greenery. Specifically, infrastructure and urban services are provided to existing home garden areas, and single housing construction is approved in terms of preservation of low-density living environment. On the contrary, new development and expansion out of single housing is not allowed in terms of a compact urban structure.

“**Protected areas**” is the environmentally sensitive zones where are designated as non-urbanised areas. For such areas, no construction is allowed unless the relevant authorities give permission as a special case.

Zoning categories of the draft development plans for local authorities within the Greater Kandy Area are not same. A unified category is proposed in order to deal the Greater Kandy Area as one agglomeration, realise the proposed urban structure, and preserve the traditional landscape (see Figure 3.2).



Source: The JICA Team

Figure 3.2 Land Use Zoning and Land Use Concept Map

3.2.4 Orientation of Transport

The Greater Kandy Area is surrounded by mountains which restricts road development. In such situation, socio-economic activities tend to cause traffic congestions in the City Centre. Hence, it is necessary to improve traffic flow and support the socio-economic activities that enhance tourism and industrial development for regional economic vitalisation without inducing traffic congestion.

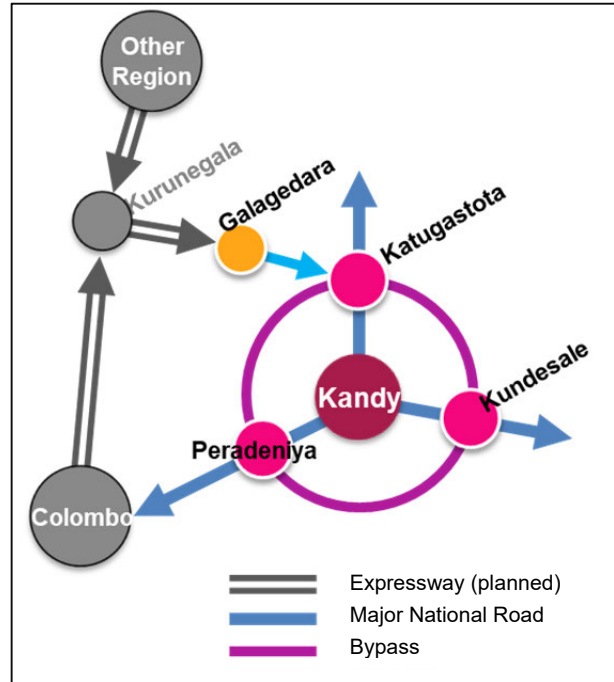
To achieve this, transport development strategies for the entire Greater Kandy lay the first priority in traffic calming by decongesting urban functions to the cluster cities and traffic management in the city centre of Kandy to avoid traffic congestion, as well as securing a safe and efficient transportation. This can be attained by maximising the existing road network through establishing a transportation system specialised in public transportation. The second priority is to put on the development of a wide area transportation network to facilitate economic growth by strengthening the connection with other cities; and the third priority is to secure a smooth mobility within each city as necessary.

- Promotion of public transport: comprehensive transport policies, enhancement of railway capacity, Promotion of P&R (Park and Ride), development of a multimodal bus terminal
- Formulation of transport network: backbone of railway with effective public transport system, regional road network to enhance the potentials of Greater Kandy, bypass (ring roads and railways) to strengthen linkages between suburban cities
- Smooth mobility: comprehensive traffic management such as parking management, P&R, environment friendly transport, walking environment improvement

3.2.5 Orientation of Economic Development

Regional industrial development is one of the most important factors under the Greater Kandy Urban Plan. Regional industry development enables people to earn enough income to improve quality of life and contribute to sustainable development of the Greater Kandy Area. On the other hand, according to the previous discussion, the Greater Kandy Area shall promote industries with one or more of the following characteristics.

- Produce eco-friendly and/or non-polluting products/services (Investment promotion for eco-friendly industries, etc.)
- Provide high value added and/or knowledge-intensive products/services (Collaboration with universities, promotion of E-commerce, access to international supply chain, etc.)
- Perpetuate the tradition and/or preserve the history (Improvement of tourism, development of craft-village, etc.)
- Promote health and/or well-being (Traditional medical care including Ayurveda, healing industry, development of medical facilities, etc.)



Source: The JICA Team

Figure 3.3 Orientation of Major Transportation Network for Greater Kandy

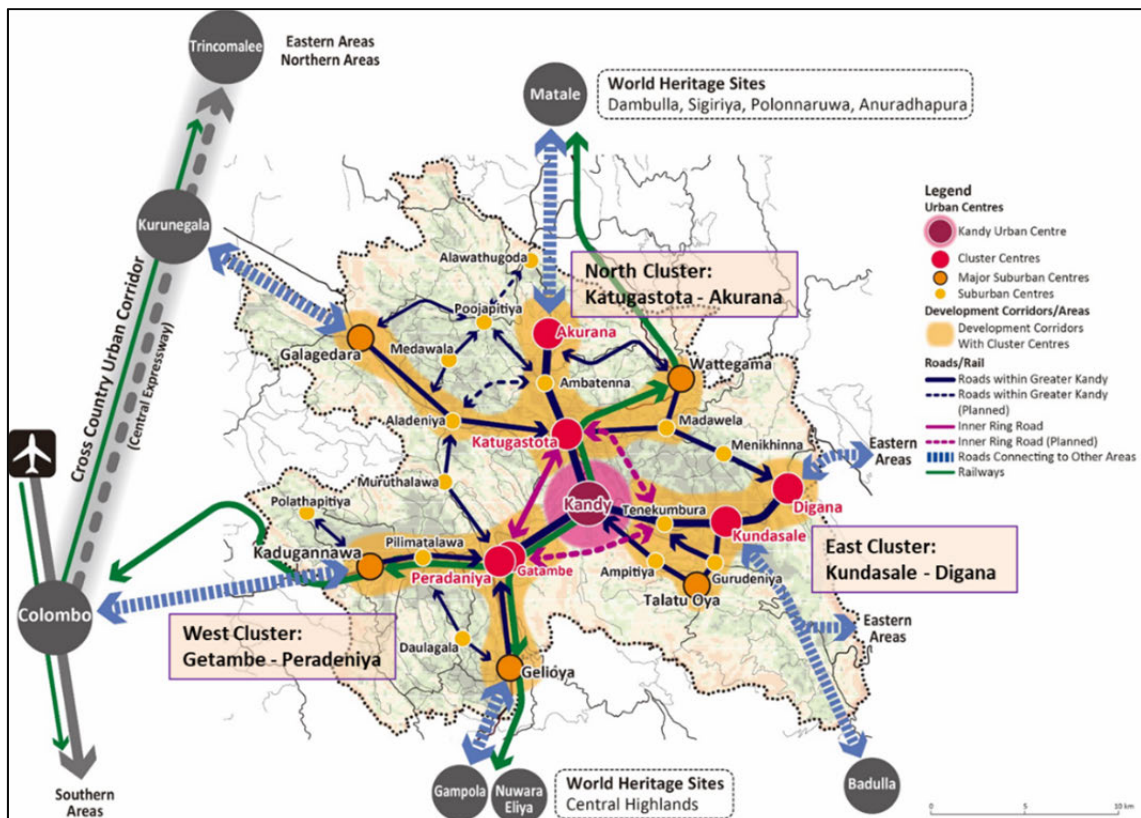
- Located in the right area where each industrial sector may not affect traffic flow
- Related to tourism which is one of the most important industries in Greater Kandy (Establishment of Destination Management Organization (DMO), collaboration with other related organizations, etc.)

3.3 Urban Structure

3.3.1 Orientation of Greater Kandy

In the past plans, various urban structures such as “Satellite Town Development” (proposed in “Greater Kandy Development Plan 2020” by UDA Central Provincial Office in 2008), “Corridor Dominated Development” (proposed in “Kandy City Region Strategic Development Plan 2030” by SCDP in 2015), and “Clustered Urban Development Structure” (proposed in “Greater Kandy Master Plan” by UDA in 2015) are proposed. On the other hand, in reality, urban areas of Kandy have been expanded to form the clusters of Peradeniya, Katugastota and Kundasale/Digana. Corridor-based structure causes traffic congestion on trunk roads as well as the centre of Kandy. Furthermore, rural centres and villages remote from corridors are isolated from urban services.

By considering the past plans and existing conditions, the major concept for the formulation of an urban structure is a “Multi-Clusters and Transport Corridors”, as a combination of “clusters/urban and rural centres” and “corridors”. The new urban structure is characterised by hierarchical multi-clusters (Kandy city centre – three cluster cities – urban centres – townships and villages), connected by transport corridors of major road network and railways.



Source: The JICA Team

Figure 3.4 Urban Structure of Greater Kandy

Table 3.2 Hierarchical Urban Centre Development of Greater Kandy

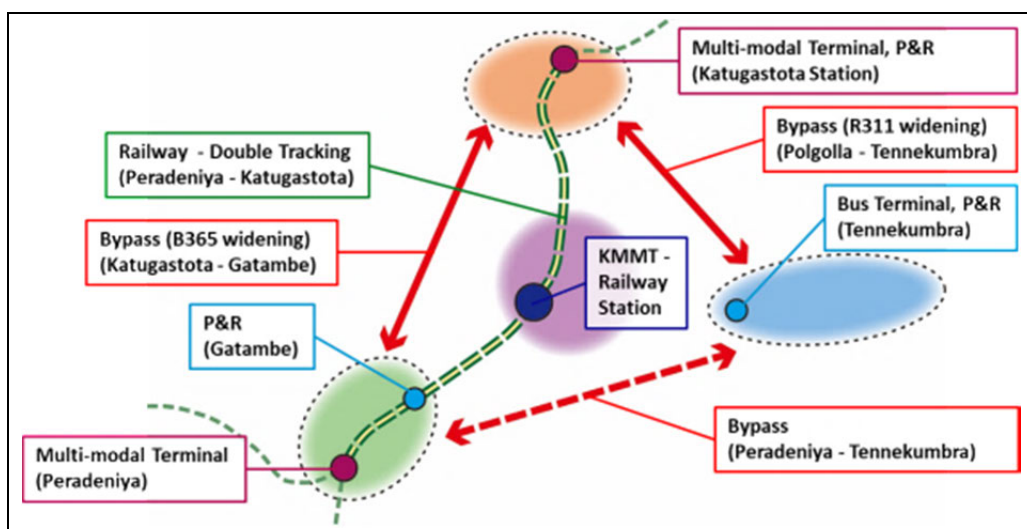
Cluster/ City		Functions
Urban Centre: Kandy Centre		Urban Service Centre harmonised with historic values by relocating admin (central and provincial levels) and wholesale functions to cluster cities and providing various functions of commercial, business, educational and medical services
Cluster Centres	Gatambe-Peradeniya	Higher Education and Medical Centre by developing the station area with new residential facilities, medical facilities, railway and transport facilities (P&R).
	Kundasale-Digana	Advanced Industrial Centre by promoting advanced industries such as IT, R&D (Research and Development), etc., and bypass development with administrative services and new town
	Katugastota-Akurana	Commercial Service Centre to provide services for residents and tourists
Major Suburban Centres	Akurana, Galagedara, Kadugannawa, Geliyoia, Thalathu Oya, Wategama	Independent Suburban Centres with a bus terminal, local industrial centre/ market. Improvement of traffic bottlenecks (junctions, bridges, etc.) and infrastructure are conducted.
Suburban Centres: Townships/ Villages		Rural Community Centre providing services to rural areas

Source: The JICA Team

3.3.2 Orientation of Cluster Development

To ease traffic concentration to the city centre, administrative facilities of central and provincial levels and wholesale facilities will be relocated from the city centre to cluster cities, and transport functions will be strengthened such as multi-modal terminal development including P&R and station area development. Among the three clusters, Katugastota shall be developed as a priority to accommodate increasing traffic and urbanisation pressure in short-term, and to be a gateway of the Central Expressway in the mid-term.

To promote modal shift to public transport and economic development of cluster cities, station area development will be promoted such as a multimodal terminal (shown in purple in the figure below) which includes a railway station, a bus terminal and a P&R facility (shown in light blue in the figure below), and a commercial and residential complex. Furthermore, bypass development (in red in the figure below), railway capacity enhancement and double truck railway (shown in green in the figure below) will contribute to restrict through-traffic of the city centre.



Source: The JICA Team

Figure 3.5 Transport Development of Clusters

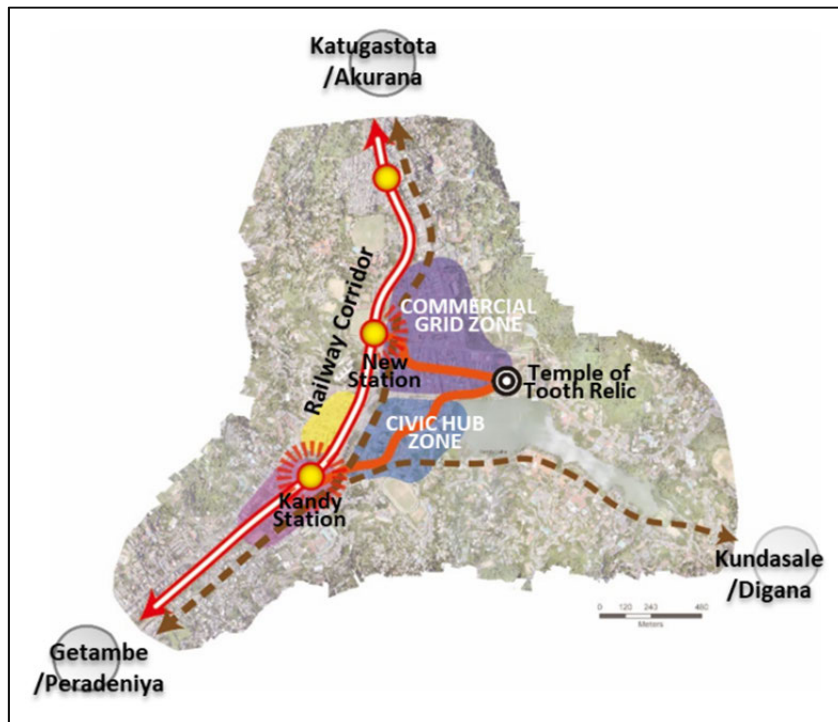
Development orientations of each cluster are as follows;

- **Katugastota:** To formulate a new commercial centre in conjunction with Kandy City centre, as well as a gateway to Colombo and Digana. Priority actions are enhancement of road and rail capacity, development of a ring road bypass, bridges, multimodal terminal, station area development with commercial functions, etc.
- **Peradeniya:** To formulate an educational and medical centre by utilising the potentials of Peradeniya University and Hospital, Botanical Garden, etc. Priority action is to promote station area development in agricultural lands in front of the station.
- **Kundasale – Digana:** To formulate an advanced industry and admin service centre by utilising clusters of provincial facilities in Palkelele, Kandy Industrial Park (KIP). Since railway is not operated in this area, priority actions are to enhance bus services and to develop a bus terminal with P&R at Tennekumbura.

3.3.3 Orientation of City Centre

The city centre will be revitalised as a centre of the central province of Sri Lanka, where historical and cultural values and socio-economic activities are harmonised. Since it is facing many urban issues such as traffic congestion, worsening environment degradation, inappropriate construction and development activities, etc., the following strategies are proposed:

- Development of an urban service centre of Greater Kandy to be integrated with adjacent urban cores, particularly Katugastota
- Management of traffic demand and revitalization of public spaces by relocating public services and wholesale functions to cluster cities
- Preservation and rehabilitation of historic and cultural assets of the Heritage Area with the surrounding natural environment
- Creation of pedestrian friendly networks and open spaces



Source: The JICA Team

Figure 3.6 Urban Structure of City Centre

To formulate a pedestrian-oriented district, various transport measures are required such as public transport service improvement; reduction of traffic volume and enhancement of road capacity; designation of pedestrian priority area; restriction of car entry; and parking management. Particularly, Kandy Multimodal Terminal will be a new destination of inter-city buses. To avoid the concentration of vehicles in the city centre, it is necessary to improve transport facilities and traffic management as well as to promote transfer from private vehicle to public transport at cluster cities, in addition to bus rerouting which SCDP will commence.

The criteria for relocation are: (a) functions and facilities which generate much traffic (cf. distribution, wholesale), and (b) administrative functions and facilities (military related facilities, government offices at the district level, etc.).

The criteria for rehabilitation are: (a) facilities to be preserved as heritage, (b) functions to serve all the citizens to improve their daily lives as well as to provide tourist attractions, and (c) facilities to integrate with public facilities to diversify multiple functions. (Bogambara Prison, Stadium, Central Market, Library, etc.)

It is noted that clusters of educational and medical facilities are among the advantages of the Kandy City Centre and add to its attractiveness to sustain its role as an urban core of Greater Kandy. Since these facilities generate traffic, schools, hospitals and clinics shall not be newly developed in the Heritage Area, while existing facilities will remain with appropriate traffic management measures. School branches, medical complex, and channelling centres will be developed in clusters to distribute students and patients from the City Centre.

CHAPTER 4 DETAIL PLAN IN THE HERITAGE AREA

4.1 Organisation and Legal Basis

4.1.1 Organisation and Role Sharing for Urban Development and Heritage Conservation

The main authorities responsible for urban development in the Heritage Area are the Urban Development Authority (UDA) and Kandy Municipal Council (KMC). The role of UDA is to formulate, implement, invest in, and regulate the development programmes and projects in the Urban Development Area. KMC is a locally elected body, and the powers and functions of KMC include regulatory and administrative functions, promoting public health and sanitation, environmental sanitation, and improving public thoroughfares and public utility services.

In addition to the aforesaid the UDA Central Provincial Office, there are three other administrative agencies involved in historical building conservation in Kandy: Department of Archaeology (DOA), Central Cultural Fund (CCF) and KMC. Table 4.1 shows the responsibilities of those authorities.

Table 4.1 Authorities Responsible for Heritage Conservation in Kandy

Agency	Urban Development Authority (UDA)	Kandy Municipal Council (KMC)	Department of Archaeology (DOA)	Central Cultural Fund (CCF)
Competent Ministry	Ministry of Megapolis & Western Development	Ministry of Provincial Councils & Local Government	Ministry of Education	Ministry of Education
Resource related to conservation	Nothing special	Nothing special	Admission fee from temples managed by DOA	Admission fee from historic monuments managed by CCF
Role for conservation	Providing development and building permit	×	Designation, management and rehabilitation of cultural assets	Rehabilitation, management of and research on cultural assets
Authority for designation of conserved buildings	○	×	○	×
Legal basis	UDA Law	N/A	Antiquities Ordinance	N/A
Authority for providing permit for rehabilitation of listed buildings and monuments	○	×	○	×
Authority for controlling and punishment	○	×	○	×
Research on historic buildings and monuments	×	×	○	○
Management of historic buildings and monuments	×	×	○	△
Rehabilitation of historic buildings and monuments	△	×	○	○
Providing incentive for conservation	×	×	×	×

Note: ○: Mainly responsible, △: partly responsible, x: Not responsible

Source: The JICA Team

4.1.2 Legal Basis of Urban Development and Heritage Conservation

The main legal basis for urban development and heritage conservation is shown below.

- 1) Antiquities Ordinance No. 9 of 1940 & Ordinance's Amendment No. 24 of 1998: The Antiquities Ordinance is the principal regulatory tool to protect historic and cultural resources in Sri Lanka and covers not only buildings, but also architectural artefacts and ruins. When it was enacted in 1940, it was mainly intended to protect archaeological ruins and artefacts. The criteria for the designation of heritage are a) resources owned by public and private could be "listed" if they demonstrate historical and architectural value, and b) over 100 years of age.
- 2) Urban Development Authority (UDA) Law & Development Plan (2000): The UDA Law is a comprehensive planning law and defines the role of the UDA as a regulatory authority and developer. It allows the UDA to create its own rules as long as it follows the UDA Law by using a gazette, which include the regulation on listed building. Since DOA's Antiquities Ordinance is only able to protect the buildings which are 100 years or older, the UDA Law was employed as a tool to give special recognition and protection to many buildings constructed during the Colonial Period by gazetting.
- 3) Central Cultural Fund Act: The CCF was established in 1980 to implement the Cultural Triangle Project (CTP) based on the Central Cultural Fund Act. The act enabled the establishment of the fund and allows the Sri Lankan government to provide fund for the CCF to engage in its activities. The law also allows the CCF to receive donations from foreign governments or donors. In the CTP project, the CCF received funding of total US\$2 million, 60% of which was provided by the UNESCO.

In addition, the four category classification (A to D) and the regulation for each category are stipulated for the listed buildings in Kandy. However, these category and regulations are considered to be internal rules, not having legal grounds, for relevant organisations.

4.1.3 Issues for Organisation and Legal Basis for Urban Development

Several issues on the organisation and legal basis for urban development are identified, which include:

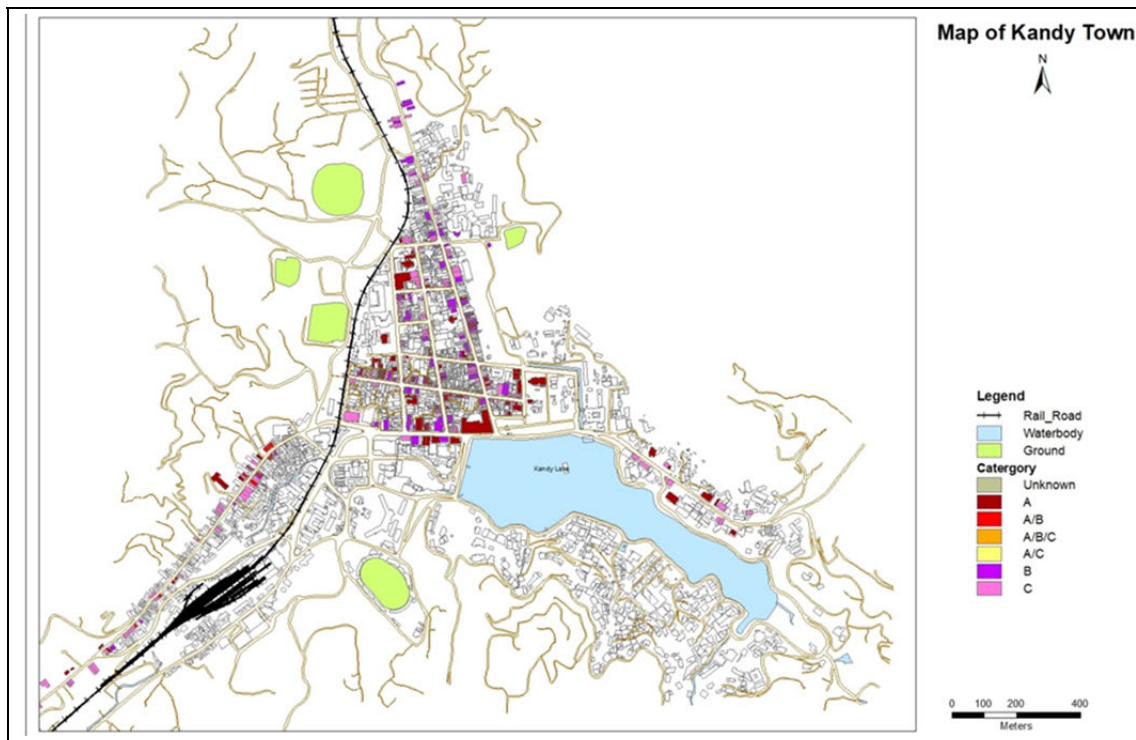
- The procedure for obtaining a building permit has not always been properly enforced due to the insufficient number of officers of the competent agencies and political intervention.
- Since the punitive clauses in the relevant regulations are not severe enough, there have been many cases that the owners or developers intentionally violate them.
- Some of the criteria of regulations are not clear or too strict, which make it difficult to conduct a subjective and proper enforcement of the procedure.
- Signboards are taxed by the KMC according to their size. However, since the permission process of installation of signboard is not clearly regulated, most of the installed signboards are illegal in terms of size, position and number which are stipulated in the Development Plan.

4.2 Present Condition of the Heritage Area

4.2.1 Heritage Conservation

(1) The List of Conserved Buildings Gazetted by UDA and DOA

There are 488 buildings in the UDA's list of conserved buildings while a separate list, "Special Buildings within the City of Kandy", contains 23 buildings. Both the lists were gazetted by the UDA. The major difference between the former and latter lists is in building ownership. The former list mostly contains privately-owned buildings, while the later list includes those owned by public institutions (Figure 4.1). In the both lists, the conserved buildings are categorised as A, B, C and D. There are also confusing categories, A/C, A/B and A/B/C, as indicated in this figure. On the other hand, the DOA also listed about 160 conserved buildings, all of which are included in the UDA list.



Source: UDA

Figure 4.1 Conserved Buildings in the City of Kandy

In the aforesaid lists, there are many errors and lack of detailed information that could justify conservation, which is the most important reason why a building is designated as "heritage." 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. In addition to lack of proper description and analysis of the buildings in those lists, the grades of the buildings do not quite seem to be consistent and reasonable. For instance, some buildings classified as grade A seem to have identical features with those classified as grade C.

(2) Issues on Heritage Conservation in Kandy

Besides the above issues of the lists of conserved buildings, there are so many issues that have made preservation of listed buildings by the UDA Central Provincial Office and DOA improbable as summarised below.

1) Issues on Regulations and Implementation Mechanisms

- The regulations are stipulated for rehabilitating conserved buildings according to the designated category (A to D). However, the regulations are quite severe for owners of

buildings. For example, the exterior and interior of buildings designated as category A cannot be renovated, and the rehabilitation should be done using the same materials as the original one. There is also no public support for such the rehabilitation.

- No obvious relationship between the World Heritage inscription in 1988 and listing of 488 buildings by UDA in 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.
- 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. Also, carpenters who can deal with the old buildings are also declining, and the access to traditional building materials is difficult. Currently, there is no system to support owners to provide such the information by the authorities.

2) Institutional Issues

- Since there are no staff members dedicated exclusively to the historic building conservation activity in the UDA Central Provincial Office and KMC, it is difficult for them to conduct sufficient conservation activities. In particular, the UDA Central Provincial Office has taken over the main authority from the KMC to issue building permits since February 2017, which makes it difficult for the staff of the UDA Central Provincial Office to contribute to such conservation activity.
- In contrast, DOA and CCF have a group of staff who conduct historic building conservation activities, including conservation experts such as conservation officers and archaeological research officers. These experts are very useful personnel to promote historic building conservation in Kandy. However, most of the projects currently being implemented by DOA and CCF are mainly rehabilitation activities for temple architectures, although majority of the listed conservation buildings in Kandy are private-owned shophouses. This derives from the difficulties to select target buildings from many listed buildings and inject public funds into private owned assets.
- 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.
- Most of the heritage-related documents are being managed using the manual paper-based systems by the aforesaid four organisations; hence, there are difficulties in organising them well. For the efficient management of information, it is highly recommended to improve the capacity of authorities and help them communicate better with the citizens by giving easy access to the most up-to-date planning information.

3) Issues on Implementation

- In general, heritage conservation is a bottom-up process, particularly when it comes to the vernacular buildings like shophouse buildings. In Kandy, on the other hand, the 488 listed buildings have become “heritage” through the intervention of authorities without a proper consultation process.
- When applications are submitted to restore buildings designated for preservation, the location of responsibility is not clear, and issues are shifted around the abovementioned agencies, exposing it to a long and unclear licensing process.
- Trying to protect nearly 500 historic buildings within a busy urban area is too ambitious and improbable. After a comprehensive research on historic buildings, the lists should be scaled down based on a more stringent evaluation and owners’ consent to make conservation plan of actions realistic and manageable.

- The 488 buildings in UDA's list were classified without clear and strong reasons supported by thorough academic research. Without such scientific survey, it is quite difficult to convince the owners of conserved buildings to cooperate.
- Unfortunately, there is no strong public constituency to protect them as the people, in general, do not see the buildings built during the Colonial Period as part of their heritage.

4.2.2 Landscape and Urban Design

(1) Commercial Grid Zone

In Commercial Grid Zone, a grid street pattern laid out before the British colonisation still remains. Several streets, such as Colombo Street, retain the relative concentration of conserved buildings, which show the characteristics of historic townscape: continuity of walls, narrow frontages, low eaves height, alleys that exists from the beginning of the 20th century. On the other hand, the situations which change the historic context of the zone is beginning to stand out, which include contemporary building façades, illegal height buildings, historic buildings covered completely by advertising materials, and illegal demolition and renovation of conserved buildings. In addition, the roads are being overflowed with cars and motorcycles, and the comfort and safety of the zone are hindered.



Source: The JICA Team

Figure 4.2 Current Situation of Commercial Grid Zone

(2) Civic Hub Zone

In Civic Hub Zone, many public facilities, such as Bogambara Prison, Central Market, the athletic field, public library, educational facilities, are located, as well as commercial facilities, including Kandy City Centre (commercial and shopping complex), are concentrated. However, many public facilities, including Bogambara Prison, are not open to the public. Also, the roads in the zone are always crowded, and there is no space for pedestrians such as sidewalks and pedestrian crossings. Despite the fact that this zone is an important route for pilgrims and tourists heading from Kandy Station to the Temple of the Tooth Relic, a route for pedestrians to walk safely and comfortably is not secured.



Source: The JICA Team

Figure 4.3 Current Situation of Civic Hub Zone

(3) Public Transit Zone

In Public Transit Zone, there are many transportation facilities, such as the railway station and bus terminals for outbound and city buses, which make the zone a traffic node for citizens and visitors to Kandy. However, these facilities have created inconvenient and unsafe situations for uses by their dispersed location, insufficient capacity, and not securing safe pedestrian routes for moving between them. In the north side of steep slope area, informal settlements have been formed with the problems in disaster prevention such as fire spread, landslide and flood.

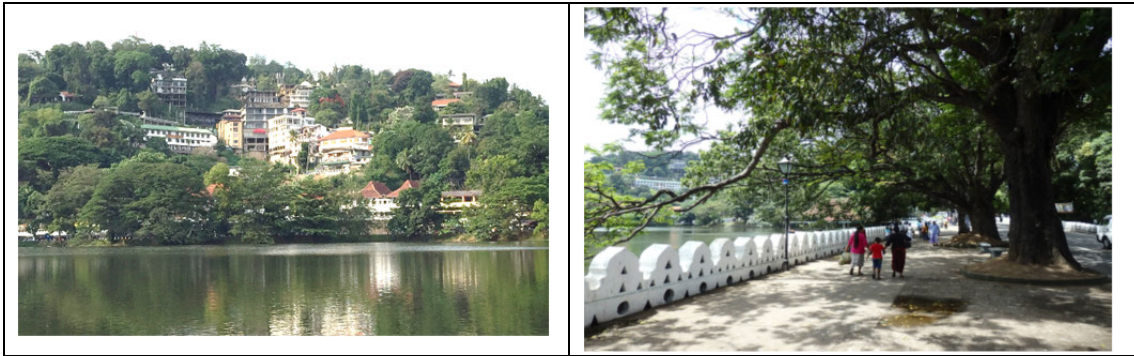


Source: The JICA Team

Figure 4.4 Current Situation of Public Transit Zone

(4) Lake Around Zone

Lake Around Zone consists of Kandy Lake, which is a symbol of Kandy, a lush hilly area surrounded by the natural conservation areas, and a sacred area where the Temple of the Tooth Relic and the facilities related to the royal palace are located. In the hilly area, many illegal buildings are being built which have not been following the development regulations such as building height and floor area ratio (FAR), and have spoiled the natural landscape with abundant green. In addition, development pressures are approaching to the natural conservation areas and the areas close to them, which have deteriorated the environmental situation due to illegal wastewater discharge. Also, the regulations for ensuring the building safety built in hilly areas are not sufficiently introduced.



Source: The JICA Team

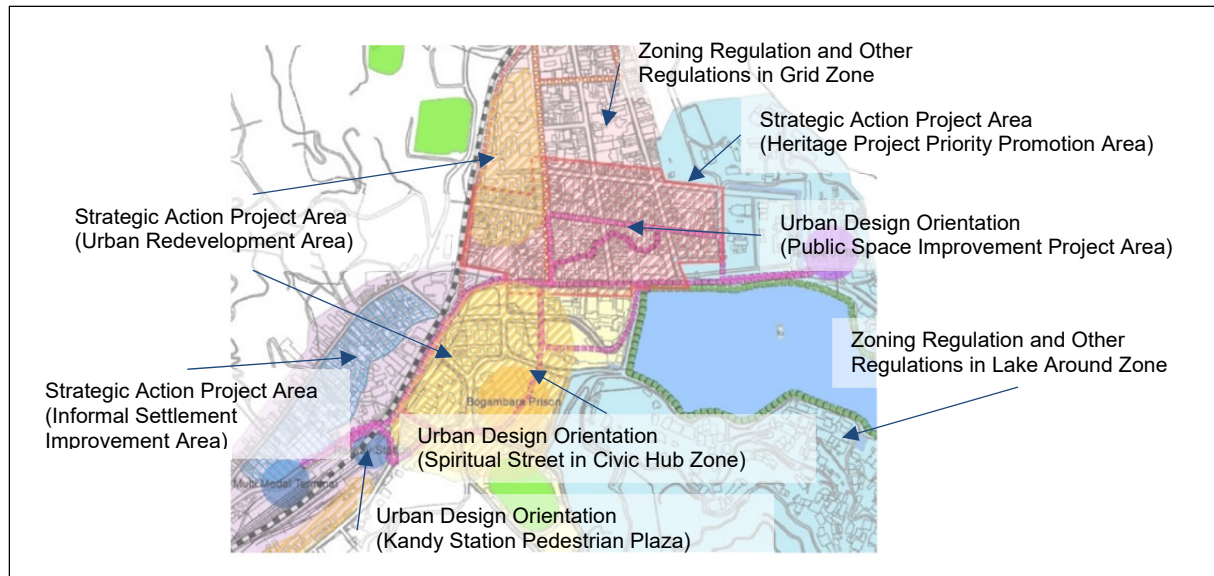
Figure 4.5 Current Situation of Lake Around Zone

4.3 Detail Plan of the Heritage Area

4.3.1 Structure of the Detail Plan

The structure and outline of the Detail Plan are as follows (see Figure 4.6 and Table 4.2):

- 1) **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 regulation of the UDA Development Plan (which is similar to “District Planning System” in Japan).
- 2) **Zoning Regulation:** While zoning regulation is well formulated, it is proposed to strengthen and relax land use regulation for appropriate development control.
- 3) **Other Regulations:** Other regulations including street wall, façade, height control, colour, signboards are proposed to be modified, as well as relaxing the existing regulations for the renovation of back addition to the heritage buildings.
- 4) **Transport improvement:** In line with city centre development orientation to ease traffic congestion, transport strategies are proposed.
- 5) **Landscape management:** In line with city centre development orientation to preserve landscape and environment, environment management strategies are proposed.
- 6) **Strategic Action Projects:** In line with city centre development orientation, the Strategic Action Projects are proposed, which include public space improvement for walkability improvement in Commercial Grid Zone, urban redevelopment projects of public lands, and living environment improvement of substandard residential areas.
- 7) **Urban Design Orientation:** To manage urban design with historic values and to improve walkability, urban design orientation to formulate the Spiritual Street in Civic Hub Zone and Kandy Station Pedestrian Plaza are proposed.



Source: The JICA Team

Figure 4.6 Coverage Areas of Detail Plan

Table 4.2 Structure of the Detail Plan

Type		Objectives and Contents	Coverage	Corresponding Items of UDA Development Plan
(i) Criteria and Category of Heritage Building		To relax criteria and category of Heritage Building	Whole Heritage Area	None (to be added)
(ii) Zoning Regulation		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		To regulate architecture and signboards for proper townscape (Street wall, Façade, Colour, Signboard, and 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		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		To regulate building height centering the Temple of the Tooth Relic	Commercial Grid Zone Lake Around Zone	7.5 Environment Management Strategies (in Lake Around Zone)
(vi) Strategic Action Projects	(1) Public space improvement Project	To guide proper public space improvement for walkability around the historic townscape	In South of Commercial Grid Zone	7.7.1 Strategic Action Projects 7.7.2 Development Guide Plans for Selected Areas
	(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	(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

4.3.2 Criteria and Category of the Conserved Building

The proposed detailed plan can basically be formulated by utilising the framework of the Development Plan that has been devised based on the existing UDA Act. Plans for the preservation of historical buildings can also be developed using two existing systems (i.e. the Antiquities Ordinance and the UDA Act). However, rumblings of dissatisfaction have been heard from building owners who have indicated that the categories and standards for preservation are difficult to understand, complicated, and too strict. Since these regulations have no legal status in the first place, the JICA study proposes to simplify and deregulate the following categories and to position these regulations in the Development Plan based on the UDA Act.

It is proposed to resort the buildings into the following two (2) categories based on the re-selection (see Table 4.3) for 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 4.3 Proposed New Categories for Reselection

Categories	Explanation	Examples
1: Individual Historic Buildings	<ul style="list-style-type: none"> Buildings which have significance in itself 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. Dalada Maligawa, Malwatta & Asgiriya Monastery, Old Post Office)
	<ul style="list-style-type: none"> Buildings that general public easily believe that they are worth preserving 	<ul style="list-style-type: none"> Queens Hotel, Old Laksala Building (CCF Building),
	<ul style="list-style-type: none"> Large enough to be easily reused and generate decent income 	<ul style="list-style-type: none"> Lawyer’s Building, Bogambara Prison
2: Contributing building to the Groups of Historic Buildings (Historic District)	<ul style="list-style-type: none"> The building is not individually significant. But when collectively seen, this type represents the 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 reasonable quality is required. 	<ul style="list-style-type: none"> Small shophouse buildings on Colombo Street and D.S. Senanayake Street Group of small residential buildings in Grid City

Source: The JICA Team

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 still used as the owner’s businesses activities and as a place to live.

Regulation of Exterior (for Category 1 and 2): it is proposed the regulation only applies to the exterior so as not to prevent the uses of the owners in principle. Preservation of the exterior does not mean that of the front façade of the buildings, but preservation of the exterior walls and roofs. Although alteration to the interior is allowed, the structure needs 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 alterations to such buildings need to be regulated. Otherwise, it is advised not to regulate the interior, as it is burdensome to the owners.

Table 4.4 Proposed Regulation 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 (which require the proof of significance of interior and owners' consent)

Source: The JICA Team

4.3.3 Zoning Regulation

In general, the existing “Development Plan for Urban Development Area of Kandy (Kandy Municipal Council Area)” is utilised for the proposed Detail Plan. In particular, since the height-restriction is regarded as one of the most important regulations to protect the human-scale historic townscape in the Heritage Area which are created around the Temple of the Tooth Relic, the height regulation is proposed to be kept as the existing one.

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 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.

Table 4.5 Proposed Planning Criteria for the Heritage Area

	Commercial Grid Zone	Civic Hub Zone	Public Transit Zone	Lake Around Zone
FAR (Floor Area Ratio)	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
	12m**	7.5m-20m***		
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 angle is at 0⁰-20⁰, 1:1.5 in case of 21⁰-30⁰, 1:0.5 in case of 31⁰-45⁰.

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

** : The maximum height may be relaxed in case that the distance of the Temple of the Tooth Relic.

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

Source: The JICA Team

4.3.4 Other Regulations

One of the most important proposals in the detailed plan is guidelines on architecture in the Commercial Grid Zone. The majority of buildings designated for preservation are located in the Commercial Grid Zone, forming a human-scale, historical townscape. However, commercial and business functions are concentrated in the centre of this area, raising land prices to the same level as that of the central areas in Colombo. This has increased the

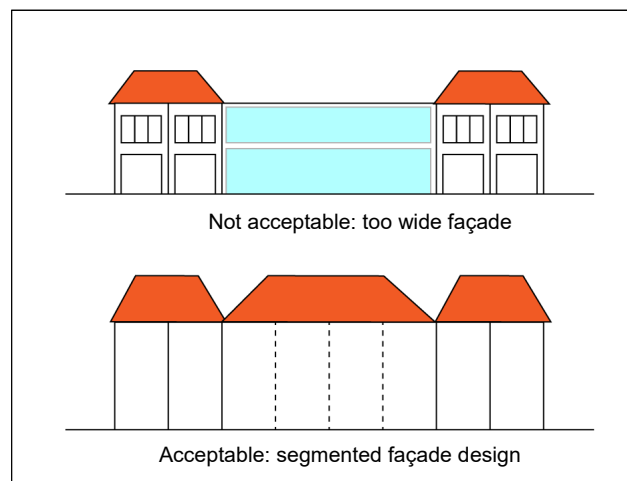
frequency of illegal renovations and demolitions of historically designated buildings on a daily basis and also destroyed the order of the existing human-scale townscape. For this reason, the following architectural regulations are proposed to protect the order of the current historical townscape as formed by the existing design elements of buildings.

(1) Street Wall

One of the features of the cityscape formed by historical buildings is that building façades are constructed at the boundary lines of public and private property (not a setback). As a result, a human-scale streetscape has been formed in the Commercial Grid Zone by the consecutive façades. To maintain this order, a proposal recommends that building lines be set at the boundaries of public and private property as a guideline for newly-constructed buildings. When it is unavoidable that façades be setback, city developers are encouraged to maintain a continuous landscape by planting and constructing small fences, such as that seen with existing religious buildings and other structures.

(2) Façade

Similarly, one of the features of the cityscape formed by historical buildings is the formation of a subtle-scale streetscape through continuous architectural facades with small frontages. In the Commercial Grid Zone where real estate value and pressure for development is extremely high, it is anticipated that multiple small-scale lots will be integrated and redeveloped in the future as medium- and large-scale lots. In this case, it is recommended that guidance be provided on segmenting the design of the façades as shown in Figure 4.7 to prevent the formation of long, monotonous façade designs that differ from the current streetscape.

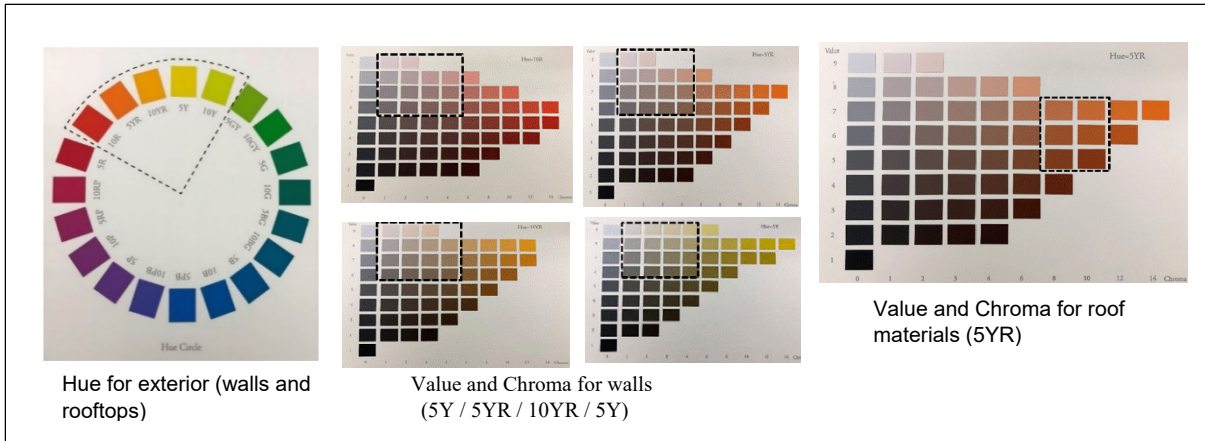


Source: The JICA Team

Figure 4.7 Diagram of the Not Acceptable and Acceptable Façade Design

(3) Colours

Although an important element in the formation of an orderly historical streetscape, the colours of building exteriors (walls and rooftops) can be identified as a matter where there is no provision in the existing Development Plan. In this survey, warm colours, which characterise historical buildings (Munsell Value - Hue, Value, Chroma) shown in Figure 4.8 are recommended to be prescribed for the colours of wall surfaces and roof materials. As mentioned above, it is desirable to provide guidance on colours for roofing materials not only in the Commercial Grid Zone, but also throughout the entire heritage area since the colour of roof materials is an important element of the scenic landscape.

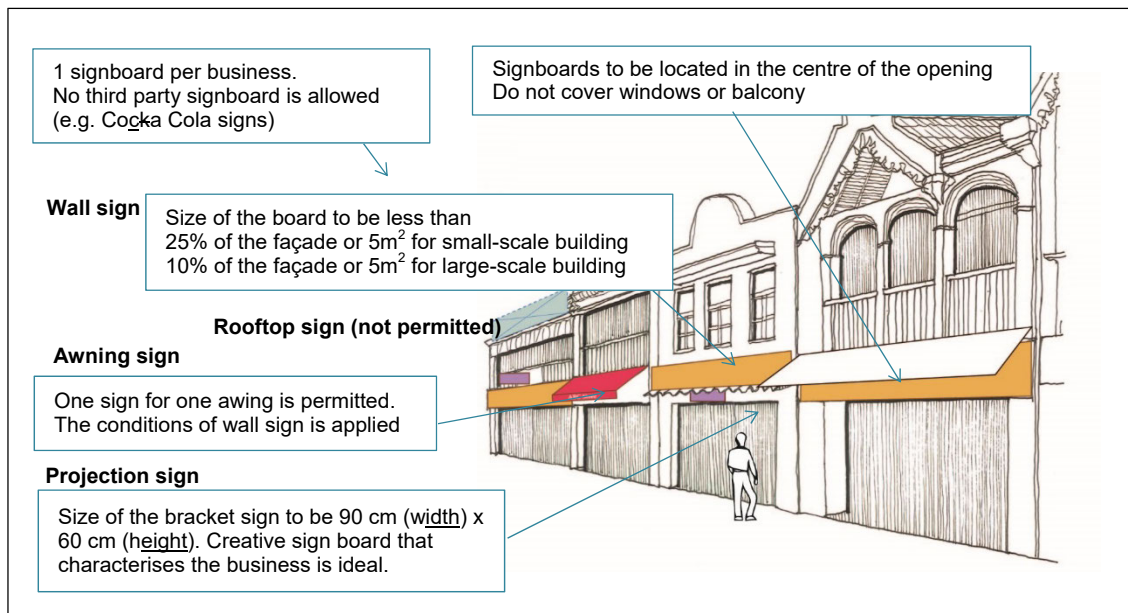


Source: The JICA Team

Figure 4.8 Allowable Colour Based on Munsell Colour System

(4) Signboard

Signboards are part of the streetscape which reflects the culture and tradition of Kandy. In order to create good streetscape, they shall be subordinate to the buildings and their design need to have harmonious relationship with the buildings.



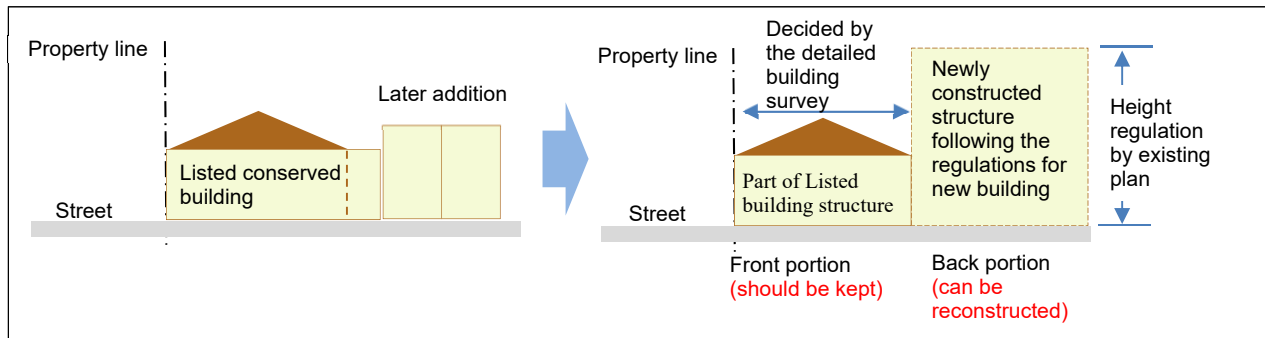
Source: The JICA Team

Figure 4.9 Main Contents of Signboard Guideline

(5) Back Addition to the Listed Conserved Building

Under the existing preservation restrictions, the entire structure of buildings designated for preservation must be preserved. However, these strict regulations have resulted in the illegal expansion and demolition of buildings daily in the Commercial Grid Zone where pressure to develop is high. Consequently, GKUP proposes that alteration of the interior and renovations to rear structures of buildings designated for preservation be permitted as a policy under preservation restrictions to mitigate such illegal activity. However, renovations must follow various criteria, such as height and volume regulations as stipulated in the existing Development Plan and conditions must be set where the identification of frontal and rear

structures are decided by public institutions such as DOA and CFF through the conduct of detailed architectural surveys.



Source: The JICA Team

Figure 4.10 Image of Back Addition to the Listed Conserved Building

4.3.5 Transport Improvement

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.

- 1) The car traffic will be reduced and the road capacity will increase by development of bypass roads to reduce the inflow traffic/ intersection improvement, securing bus stop spaces, 3-wheeler priority lane, road realignment and upgrading, traffic management, and so on.
- 2) Public transportation services will be improved based on the TOD (transit-oriented development) concept, which include double tracking of the railway (Katugastota-Kandy-Peradeniya), enhancing the efficiency of bus operation, development of a P&R system, development of multi-modal terminal and station plazas, promoting a school bus system, and so on.
- 3) Some areas of 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 the Commercial Grid Zone, transport improvement strategies should focus on increasing walkability by redefining the street hierarchy, construction of the off-street parking structure and relocation of the wholesale trucks.

4.3.6 Landscape Management

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 Tooth Relic, which is the centrepiece of the district.

As illustrated in Figure 4.11, the ground levels of the Commercial Grid, Civic Hub and Public Transit Zones are lower than 5-20 metres when compared to the ground level of the Temple of the Tooth Relic, and lower than 23-38 metres 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 Tooth Relic if there is compliance with the height restrictions in the existing Development Plan (7.5 to 20 metres).

From these viewpoints shown in Figure 4.11, the urban areas of the Commercial Grid and Civic Hub Zones can be seen, but what is important for the scenic landscape to maintain an orderly landscape centred around the Temple of the Tooth Relic is the height of the buildings and the colour of the rooftops. As stated above, strict height regulations have been established

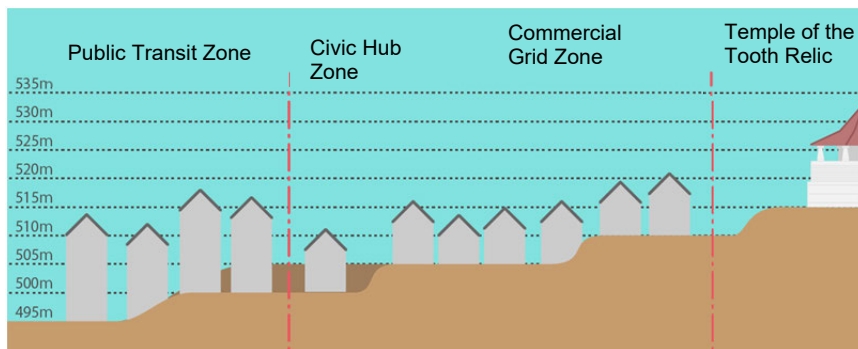
for both zones in the existing Development Plan. In addition, according to a proposal on guidelines related to the colour of the walls and rooftops to be described later, the colour of the rooftops may be standardised into a uniform brown shade, which is the colour of many existing rooftops to maintain a favourable scenic landscape.

In contrast, the scenic landscape as viewed upwards from the promenade of the lakeside near the Temple of the 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 Tooth Relic (Point B), and in the vicinity of Queen’s Bath (back entrance of the Temple of the Tooth Relic, Point C) considered to be a notable view point where both pilgrims and visitors gather at the Temple of the Tooth Relic (see Figure 4.12). From these viewpoints, it can be seen that medium- and large-scale buildings erode the lush hilly landscape, and undesirable landscapes appear (see Figure 4.13).

It can be said that the problem lies not with the content of the regulations (Development Plan), but in improving the effectiveness of regulations cracking down on illegal buildings and strengthening of the monitoring systems. As a short-term response to buildings that have already been constructed, a proposal would be to plant trees in front of buildings and green walls (see Figure 4.14).

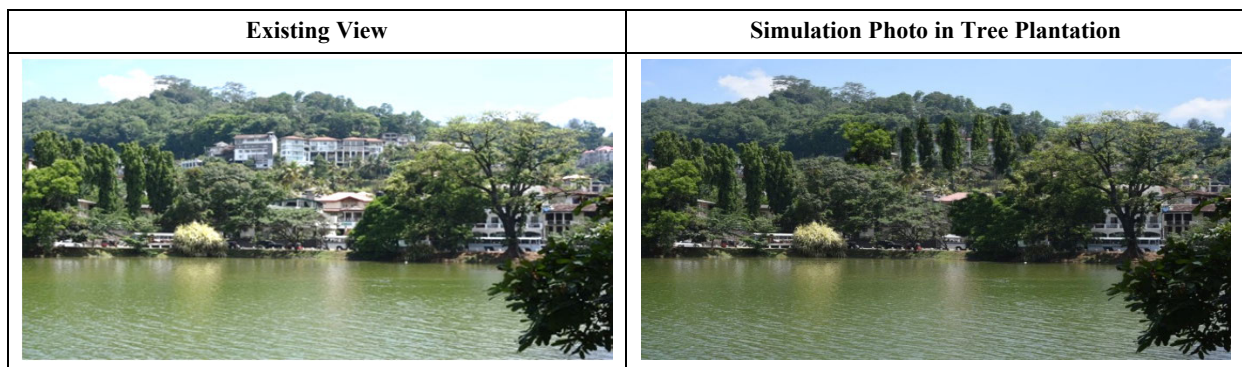
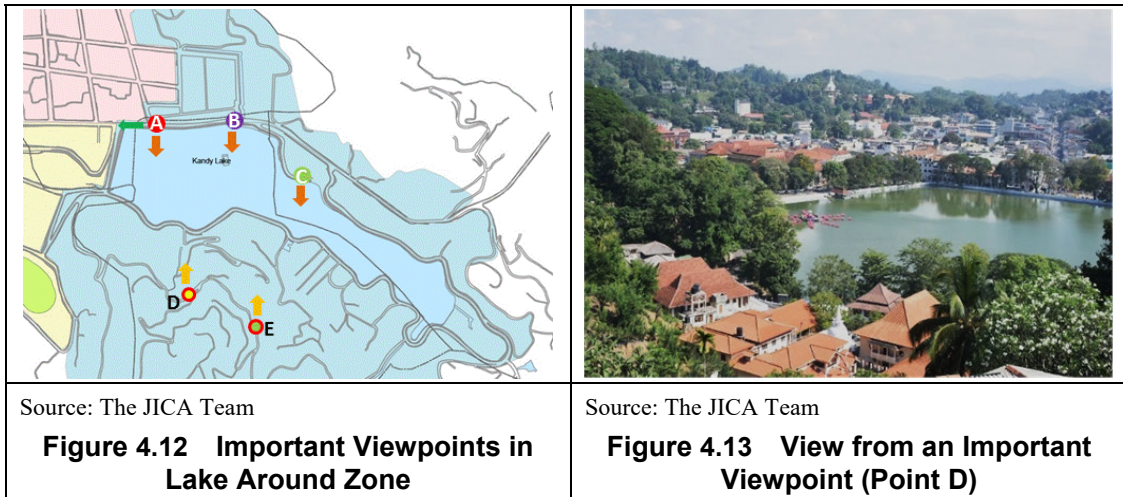


The height of the roof of the octagonal-shaped hall is 533m (ASL), and that of the golden roof is 538m (ASL).



Source: The JICA Team

Figure 4.11 Height of the Heritage Area Ground and Temple of the Tooth Relic



Source: The JICA Team

Figure 4.14 The Simulated Effect of the Increased Foliage and Tree Cover Restoring the Ecological Balance

4.3.7 Strategic Action Projects

(1) Public Space Improvement Project

In the Commercial Grid Zone, the projects to keep human-scale pedestrian priority streets are proposed, which is a characteristic of historical townscapes. Figure 4.15 shows the structure of the pedestrian sidewalk for the project (Colombo Street is shown as an example). The proposal suggests extending the width of pedestrian sidewalks to double that of the current width (3.5 to 5.0 metres), while also narrowing the width of roads, including parking spaces, from the current 10 to 11.5 metres to 5.5 metres. The proposal also includes raising the height of pedestrian sidewalks and vehicle roads to the same level so that elephants can be paraded side-by-side at the Perahera festival, and the creation of a structure that allows bollards installed at the boundaries to be detached or submerged.



Source: The JICA Team

Figure 4.15 Image of the Pedestrian Priority Street (Colombo Street)

(2) Urban Redevelopment Project

For the Urban Redevelopment Project in the Commercial Grid Zone, the project to redevelop the existing army land into the public transportation hub having the newly developed railway station with a station plaza and public parking spaces is proposed. In the Civic Hub Zone, the project to reorganise the area with a group of public facilities into the pedestrian priority spaces open to the public is proposed.

(3) Living Environment Improvement Project

For the unplanned settlement to be designated as Special Planning Area within the Public Transit Zone, the following development guidelines are proposed:

- To undertake spatial planning and zoning in a coordinated manner, based on updated cadastral information, to allow for legalisation, and discourage further informal development.
- To establish a mechanism to legalise all types of property where the current residents have long-standing tenure of the land.
- To redefine road structure and to increase coverage of access and circulation roads and drainage.
- To develop regulations to enforce development control and policy for construction permitting and regulation.
- To plan environmental and safety control measures to prevent large-scale damage to ecosystems and property.
- To identify and designate green spaces to act as recreational cum refuge areas.

For the disaster prevention, the following measures are proposed:

- To provide fire refuge/emergency facilities at regular interval within the area and to create “fire breaks” to avoid quick spread of fire.
- To identify several access points across the canal to be used as evacuation routes.
- To construct canal embankment for safety of the inhabitants.

4.3.8 Urban Design Orientation

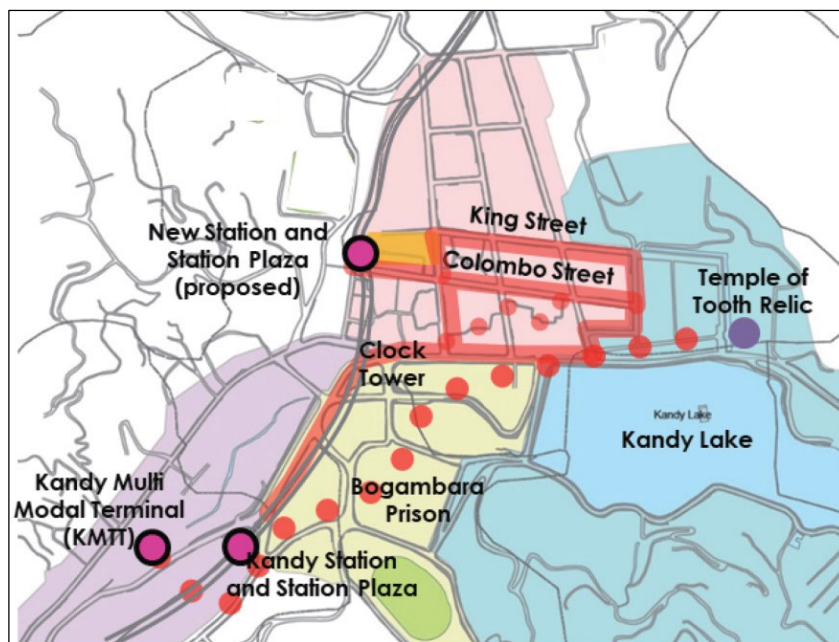
The orientations of urban design for several important places in the Heritage Area are proposed, which includes Spiritual Street in the Civic Hub Zone, and Kandy Station Pedestrian Plaza in the Public Transit Zone.

(1) Spiritual Street

The Spiritual Street is proposed to improve and develop open and green space networks linking between Kandy Station and the Temple of the Tooth Relic by utilising the public properties.

In short-term, the Spiritual Street would link the existing pedestrian routes and alleys leading towards the Temple of the Tooth Relic (the path shown in red colour in Figure 4.16). The dotted line in the same figure shows the alternative Spiritual Street that can be encouraged on the existing road network after the traffic management in the Civic Hub Zone is conducted. In the long term, since most of the Civic Hub Zone can be transformed into a “Pedestrian-Oriented Zone” where the automobile traffic would be limited with priority to the pedestrian movement, this zone will be a main route of the Spiritual Street.

The urban design orientation of the Spiritual Street is to connect pedestrian networks between Kandy Station, new station of the Grid Zone and the Temple of Tooth and to designate the pedestrian oriented areas which will enhance the accessibility to the public spaces and create comfortable amenity public spaces.



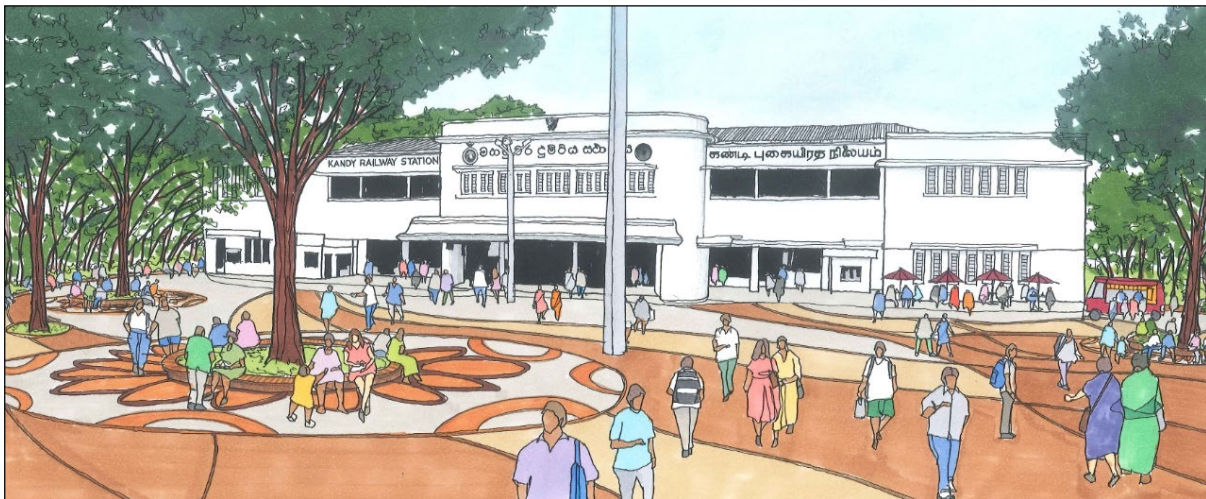
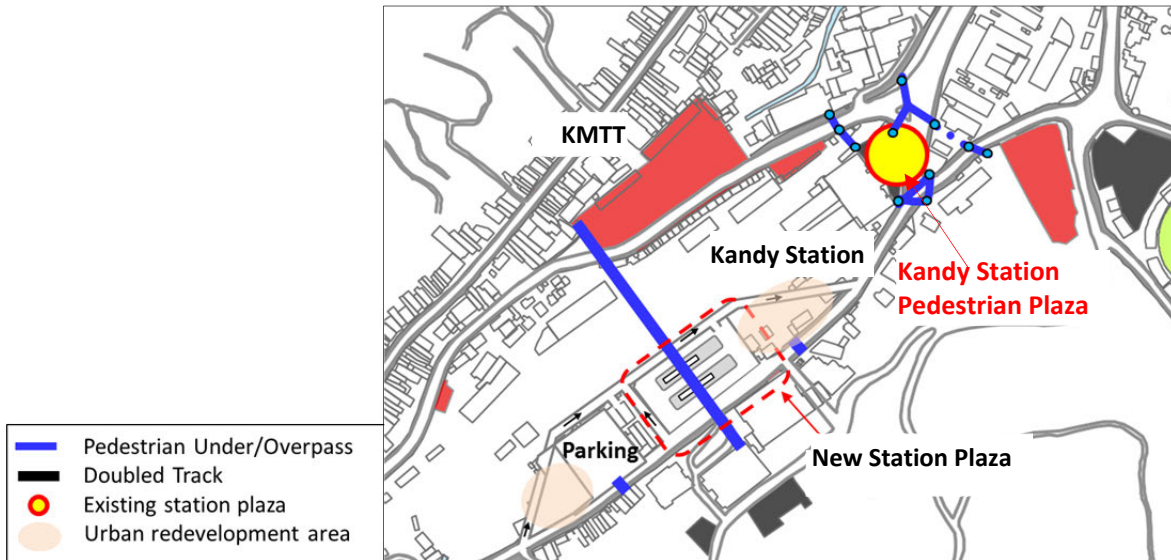
Source: The JICA Team

Figure 4.16 Spiritual Street in Pedestrian Oriented Zone

(2) Kandy Station Pedestrian Area

To develop the transit core for the integration of public transportation, following steps are proposed: (i) additional station plaza will be developed in the southern part of the station, (ii) existing station plaza will be transformed into a pedestrian plaza, and (iii) the southern part of the station could be used for urban redevelopment

The new station plazas are proposed in both the northern side (in KMTT) and the southern side of the station. Therefore, the JICA Team proposes that the existing station plaza is to be a pedestrian only space (see Figure 4.17). The location of the existing station plaza will be the starting point of the proposed “Spiritual Street.”



Source: The JICA Team

Figure 4.17 Image of Kandy Station Pedestrian Plaza

4.4 Institutional Arrangement for Urban Development and Heritage Preservation

4.4.1 Organizational Arrangement

(1) Required Roles and Functions

Four agencies, the Central Provincial Office of the Urban Development Authority (UDA), Kandy Municipal Council (KMC), Central Provincial Department of Archaeology (DOA), and the Central Provincial Office of the Central Cultural Fund (CCF), are responsible for the management of urban development and preservation of historical buildings in Kandy. However, they face a wide range of serious issues. In order to implement the Detail Plan proposed in the GKUP, related organizations and systems must be urgently improved.

The following four items (Management, Research & Advocacy, Financing, Revitalisation) have been set out as the functions required to promote the conservation of heritage buildings in the future. These four items will also be useful for strengthening the enforcement and monitoring of urban development policies in the Heritage Area. The roles and functions required for each of the administrative bodies promoting these four items are summarised in Table 4.6.

To centralise these diversified roles and functions, a **one-stop-service** system has to be created as described below. Although the system could be established by utilising the existing administrative bodies (UDA Central Provincial Office, KMC, DOA Central Provincial Office and Central Provincial Office of CCF) as a short-term action plan, an independent organisation with its own staff members has to be created as a long-term action plan by considering how it can raise and manage its own financing resources.

Table 4.6 Necessary Functions of the Proposed Organisation

Function	Description
Management	<ul style="list-style-type: none"> • Enforcement of urban plans and regulations with provision of clear guidance • Monitoring and correcting illegal construction or demolition of heritage buildings • Revision / relaxation of categories and regulations for heritage conservation • Better consideration with the users of the buildings to prevent demolition • Recommendations of skilled workers, appropriate designers, builders, etc.
Research and Advocacy	<ul style="list-style-type: none"> • Detailed research on heritage buildings • Continuous survey of unknown historic resources and investigating on it based on the social history of conserved buildings (interview, literature research, archive research, etc.) • Implementation of educational programmes for the citizens and tourists and provision of awards for the owners of heritage buildings • Joint research with universities and sister-city affiliation with overseas cities • Support for citizens' conservation activities
Financing	<ul style="list-style-type: none"> • Raising and management of a wide range of funds for heritage conservation, including subsidy from government, grant from international institutions, finance loan or equity finance, donation or mécénat, crowdfunding, development returns allocation
Revitalisation	<ul style="list-style-type: none"> • Preservation and use of historical buildings (promotion of lease, purchase and sell, etc.) • Promotion of traditional crafts, arts and specialty goods in Kandy and organisation of events by utilising historic buildings • Provision of materials for rehabilitation of heritage buildings

Source: The JICA Team

(2) Financial Resources

In Japan, generous subsidies from the government (both national and regional) are offered for the restoration of publicly designated historical buildings. However, since the financial resources of the Sri Lankan government are limited, it will be necessary to secure financial resources from various sources (see Table 4.7). In order to secure, properly manage and operate a diverse source of financial resources, it will be necessary to set up an independent public organization, such as the Galle Heritage Foundation¹ in the Galle Fort district, which has also been designated as a World Heritage site in Sri Lanka. Consequently, it would be desirable for a “one-stop service” system with the various functions described above to be an organization capable of being able to function integrally with independent administrative agencies that manage and operated such funds.

¹ Established by the Galle Heritage Foundation Act in 1994 as an independent agency under the umbrella of the Ministry of Southern Development. The foundation is engaged in fundraising for the preservation of historical buildings and restoration activities.

Table 4.7 Various Financing Methods to Support Urban Development and Preservation

Method	Overview
Subsidy, Grant	<ul style="list-style-type: none"> Subsidy from government (central and local) Grant from international authority such as UNESCO
Finance Loan, Equity Finance	<ul style="list-style-type: none"> Investment from bank, investors, etc.
Crowdfunding, etc.	<ul style="list-style-type: none"> Voluntary investment through internet towards revitalization of Kandy
Donation, Mécénat	<ul style="list-style-type: none"> Donation from volunteers, corporations, etc.
Other methods	<ul style="list-style-type: none"> A part of return allocation from large scale development (to be initiated by UDA)

Source: The JICA Team

By contrast, the only incentive for owners of buildings that have been designated for preservation at present is the exemption from the obligation of maintaining a parking lot. Therefore, it is necessary to introduce additional incentives in the future. Although it may be possible to apply various tax exemptions that are widely practiced in Europe and the U.S., the result of discussions with related organizations indicated that measures such as exemptions are difficult, since taxes, such as assessment taxes that are a target at the present time, are kept intentionally low by political intent. It will be necessary to consider introducing incentives, such as other tax exemptions, that may be targets in the future.

(3) Monitoring Mechanism

Illegal acts, such as the construction, expansion, and unauthorized demolition of buildings in the Heritage Area are rampant and improving capacity to monitor licensing and crack downs on illegal construction and advertisements are particularly urgent issues. Since monitoring and crack downs cover a wide range of subjects, such as buildings designated for preservation and advertisements, in addition to ordinary construction projects, it is desirable to support this under a mechanism for a one-stop service, jointly created by the four proposed organizations.

In addition, when an administrative agency gives permission for advertisements in the Commercial Grid Zone where the majority of advertisements are currently illegal, residents will be able to check the legal status on a daily basis if it is obligatory to disclose the contents of permits to the public, such as size and design, with a permit number and to list the permit number on the advertisements. Similarly, if there is an obligation to post approved construction drawings and plans at construction sites, residents can check for illegal construction on a daily basis to crack down on illegal buildings. In this way, it is possible to strengthen the capability to monitor illegal buildings and advertisements.

(4) Private Investment Strategies for Urban Development and Preservation of Historical Buildings in the Heritage Area

In order to promote private investment in projects on urban development and the preservation of historical buildings, first, organizations and systems should be improved by raising the transparency of the licensing process and encouraging prompt responses to eliminate the sense of unfairness and discontent with the government, both strong feelings harboured by a large number of private investors. It will also be necessary for the government to introduce a diverse set of support policies for the renovation of historical buildings designated for preservation, which generally do not exist at the present time. In addition, it will be necessary to review and ease preservation provisions and categories that are unclear and too strict, as felt by the majority of owners of historical buildings.

In order to attract private investment, it will be necessary to develop systems to promote public-private cooperation and identify candidate projects after clarifying items that can be considered to be minimum conditions, as seen above. The following five strategies are required to attract private investment.

- Transparency of licensing criteria and processes and creation of One-Stop Service for prompt reply to applicants
- Diversification of support measures by the government (e.g. providing subsidies, technical advices, and materials)
- Introduction of mitigation measures for redevelopment (e.g. relaxation of height restriction and conservation regulation)
- Establishment of a wide range of financing methods (grant, subsidy, finance loan, equity finance, crowdfunding, donation, mécénat, etc.)
- Promotion of public-private collaboration for urban development and historic building conservation

4.5 Public Consultation in the Heritage Area

4.5.1 Purpose of Public Consultation

The Detail Plan of the Heritage Area 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. To consult with various stakeholders, three (3) approaches were taken: (i) interview survey of households and business owners to grasp their attributes and concerns as well as information on their buildings, (ii) meetings with the heritage owners where they feel easier to speak out on the difficulties and constraints of heritage preservation, and (iii) Public Consultation Meetings (PCM) with the local communities to discuss various issues including heritage preservation with community initiatives.

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.

- **Purpose of the PCM:** to provide a forum for the community to participate in the planning of the detail plan of the Heritage Area.
- **Expected outcomes:** Draft detail plan with guideline with consensus of local communities and proposal of preservation mechanism

4.5.2 Approach of PCM

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 following stepwise approach was applied.

Kick-off meeting was held in July 2017 with 200 participants from the whole Heritage Area; and after that, workshops for the four (4) zones were held five times to discuss issues and potentials of the Heritage Area and to give feedback on the process of the Detail Plan formulation. In each zone, those who were interested in the improvement of urban environment and heritage conservation were nominated by seven Grama Niladhari (GN) in the Heritage Area.

- 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.

4.5.3 PCM Proposals Reflected in the Plans

The PCM outcomes and proposals were reflected in the GKUP (see Table 4.8). The GKUP was proposed to various ministries and local governments which will be reflected in the Kandy Development Plan by UDA.

Table 4.8 PCM Proposals Reflected in the Plans

PCM Proposals	Reflected in the GKUP
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

4.6 Pilot Project as Event for Public Awareness Raising

The programme, consisted of an exhibition (“Info Place”) and architectural guided tour (“Archi Tour”) was held from 14th of June to 17th of June 2018. The exhibition was held at the temporarily set-up information centre; while the open house events were conducted by the four counterpart agencies: UDA, KMC, DOA, and CCF.

The information centre has been named as “Info Place” since it is for communication and education purposes. Education can be achieved through the exhibition and distribution of relevant brochures and walking maps. During the four-day period, approximately 800 people visited the Info Place.

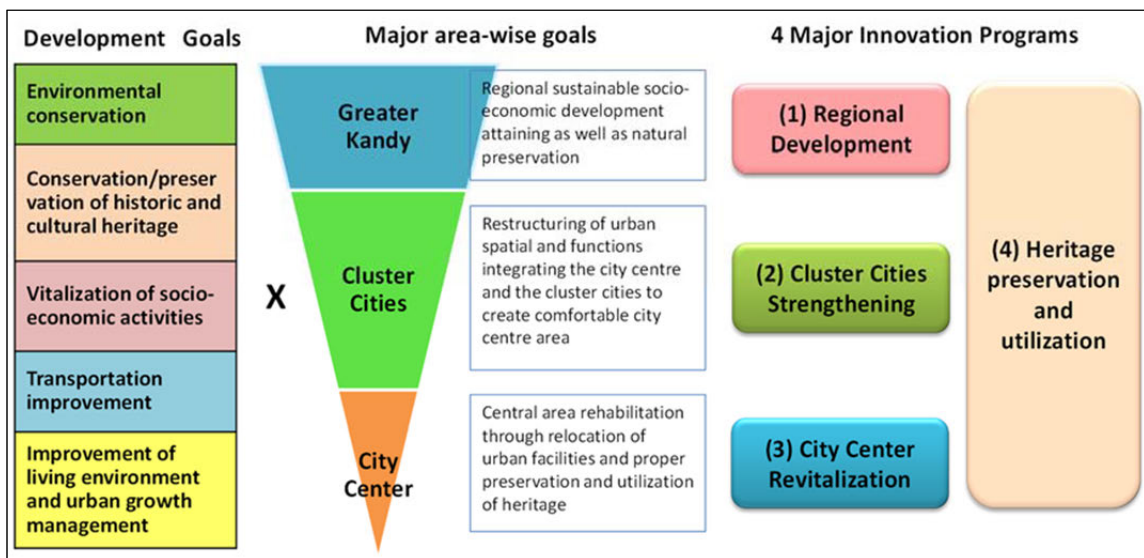
At the same time, the “Archi Tour” was conducted to make some landmark Colonial Buildings open to public to give chance to the residents and local and foreign tourists to understand and experience such historic buildings. Bogambara Prison, Remand Prison (by UDA Central Provincial Office), Kandy City Hall (by KMC), Queen's Bath (by DOA), and Meda Wasala (by CCF) were opened to public and these organizations guided and explained its history, values and renovation plans for participants.

CHAPTER 5 URBAN DEVELOPMENT PROGRAMMES

5.1 Objective and Framework

In order to realize the development scenario, development programmes are elaborated based on the five development goals and the three spatial (area) levels, namely (1) Greater Kandy Area, (2) Cluster Areas, and (3) Kandy City Centre Area, and heritage preservation. Correspondingly, programmes have been designed, namely: (i) Regional Development Programme, (ii) Cluster Cities Strengthening Programme, (iii) City Centre Revitalisation Programme, and (iv) Heritage Preservation and Utilisation Programme.

The programme has been designed in three phases: (I) short-term (within 5 years utilising existing infrastructure), (II) mid-term (within 10 years with new infrastructure), and (III) long-term (10 to 20 years with large-scale infrastructure and development).



Source: The JICA Team

Figure 5.1 Framework for the Formulation of Development Programmes

Table 5.1 Development Goals, Objectives, and Coverage of Urban Development Programmes

Development Goals	Objectives	Areas	Greater Kandy	Cluster Cities	Kandy City Centre	Heritage Preservation and Utilisation	
Environmental conservation and management	Proper conservation and utilisation of the rich natural environment		○	-	-	-	
	Proper control of development		○	-	-	-	
Conservation/ Preservation of historic and cultural heritage	Alleviation of environmental pollution		○	-	-	-	
	Rediscovery and utilisation of the valuable heritage and cultural heritage		○	-	-	-	
	Enhancement of attractiveness as a World Heritage		-	-	○	○	
	Heritage property preservation		-	-	-	○	
	Conservation of landscape, townscape, & historic buildings		-	-	-	○	
Vitalisation of socio-economic activities	Institutional arrangement		-	-	-	○	
	Promotion of community activities for heritage conservation		-	-	-	○	
	Promotion of rural and local industries		○	-	○	-	
	Promotion of high-value added and advanced industries and services		○	-	-	-	
	Promotion of tourism-related industries		○	-	○	-	
Transport improvement	Promotion of socio-economic activities of the cluster cities		-	○	-	-	
	Promotion of public transportation	Railway (double tracking)	○	○	○	-	
		Railway station & station plaza	-	○	○	-	
		Multimodal terminal, Park & Ride (P&R), bus terminal	-	○	○	-	
	Development of a transportation network with a wide area coverage	Trunk and bypass road	○	○	○	△	
		Area access road improvement	○	○	-	-	
		Bridge development	○	○	-	-	
	Securing smooth mobility within urban area	Traffic management		-	-	○	-
		Improvement of walking environment		-	-	○	-
		Logistics facilities		-	○	-	-
		Restructuring of urban functions and urban redevelopment and redevelopment		-	-	○	-
	Improvement of living environment and urban growth management	Station area development		-	○	○	-
Improvement of substandard residential area			-	-	○	-	
Housing development			-	○	-	-	
Infrastructure development			○	-	○	-	
Proper disaster prevention based on disaster risk reduction principles	Proper disaster prevention based on disaster risk reduction principles		○	-	○	-	
	Creation of amenity urban space in the city centre		-	-	○	-	

Source: The JICA Team

Each of the Urban Development Programmes consists of the following components, which correspond to the development goals as shown in Table 5.2. Projects of the programmes are listed in Appendices.

Table 5.2 Urban Development Programmes

Programme/Objective	Programme Components	Corresponding Development Goals
1. Regional Development		
Objective: To promote sustainable development of the whole Greater Kandy Area, to link the areas with an efficient transportation system to facilitate regional socio-economic development as well as protect and preserve the natural environment of the environmentally vulnerable Greater Kandy Area and strengthen the resilience in the event of disaster.	(1) Transportation improvement	Transportation improvement
	(2) Economic promotion	Vitalisation of socio-economic activities
		Conservation/preservation of historic and cultural heritage
(3) Environmental and disaster management	Environmental conservation and management Improvement of living environment & urban growth management	
2. Cluster Cities Strengthening		
Objective: To develop each cluster city by promoting public transport utilization to ease traffic congestion both in Kandy city centre and cluster cities, to enhance station area development and to reduce negative environmental impacts. In addition, by developing the cluster cities, redundancy of the urban functions, or back-ups for the urban functions are secured for the whole Greater Kandy Area.	(1) Transportation improvement	Transportation improvement
	(2) Economic promotion	Vitalization of socio-economic activities
	(3) Urban development	Improvement of living environment & urban growth management
3. City Centre Revitalisation		
Objective: To revitalise the central urban area of Kandy by restructuring the urban functions and improving the transportation system as well as urban development. Further, restructuring the city centre area could make it easier for disaster prevention, facilitating disaster response activities, with more space especially for evacuation activities.	(1) Transportation improvement	Transportation improvement
	(2) Economic promotion	Vitalisation of socio-economic activities
	(3) Urban development	Improvement of living environment & urban growth management
4. Heritage Preservation and Utilisation		
Objective: To preserve Kandy's historical and cultural heritage buildings and townscape. It should be emphasised that preserving heritage buildings and townscape will attract more tourists and contribute further to economic benefits through tourism and retail activities.	(1) Heritage property preservation	Conservation/preservation of historic and cultural heritage
	(2) Institutional arrangement	
	(3) Promotion of community-based activities for preservation and town improvement	

Source: The JICA Team

(1) Phases of the Programme

The programme has been designed in three phases:

- Short-term (within 5 years utilising existing infrastructure)
- Mid-term (within 10 years with new infrastructure)
- Long-term (10 to 20 years with large-scale infrastructure and development)

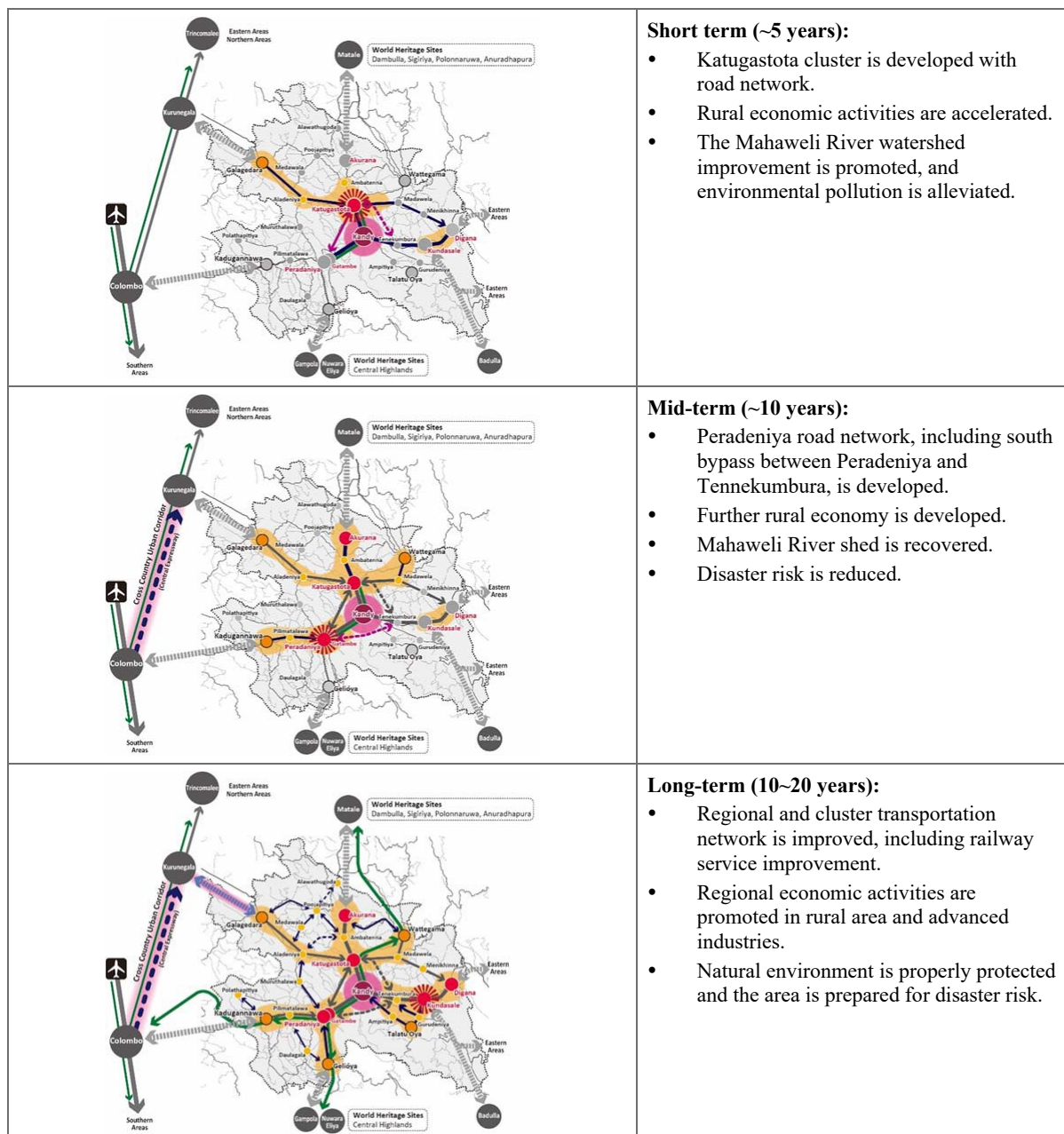
5.2 Regional Development Programmes

(1) Objective

This programme aims to promote sustainable development of the whole Greater Kandy Area, to link the areas with an efficient transportation system to facilitate regional socio-economic development as well as protect and preserve the natural environment of the environmentally vulnerable Greater Kandy Area and strengthen the resilience in the event of disaster.

(2) Programme Components

Major components of the programme to achieve the objective above are; (1) Transportation Improvement, (2) Economic promotion, and (3) Environmental and disaster management. Projects for the transportation improvement component of the Regional Development Programme are listed as follows.



Source: The JICA Team

Figure 5.2 Regional Development by Phases

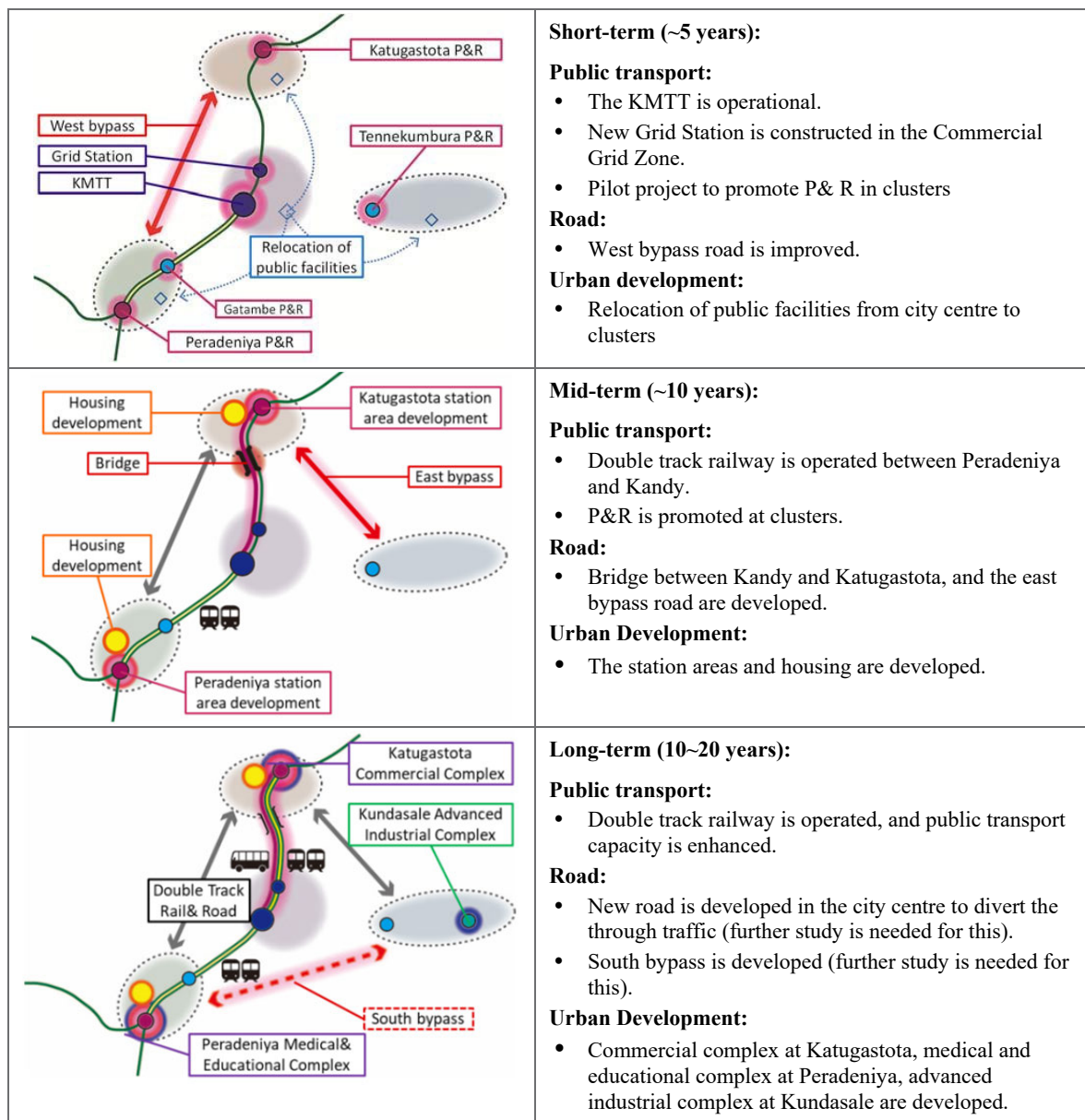
5.3 Cluster Cities Strengthening Programme

(1) Objective

This programme aims to revitalise the central urban area of Kandy by restructuring the urban functions and improving the transportation system as well as urban development. Further, restructuring the city centre area could make it easier for disaster prevention, facilitating disaster response activities, with more space especially for evacuation activities.. Toward the above concept, transport network, comprised of road and public transportation facilities, plays a pivotal role and will be developed.

(2) Programme Components

This programme consists of the components of (1) Transportation improvement, (2) Economic promotion, and (3) Urban development.



Source: The JICA Team

Figure 5.3 Development of the Cluster Cities and Kandy by Phases

5.4 City Centre Revitalisation Programme

(1) Objective

This programme aims to revitalise the central urban area of Kandy by restructuring the urban functions and improving the transportation system as well as urban development. Further, restructuring the city centre area could make it easier for disaster prevention, facilitating disaster response activities, with more space especially for evacuation activities.

(2) Programme Components

This programme is composed of components of (1) Transportation Improvement, (2) Economic Promotion, and (3) Urban Development.

	<p>Short-term (~5 years)</p> <ul style="list-style-type: none"> • Traffic management and relocation of public facilities are conducted in the Grid City and the Civic Hub Zones. • Land along the railway is acquired. • Living environment improvement along Meda Ela area is initiated.
	<p>Mid-term (~10 years)</p> <ul style="list-style-type: none"> • A new station and station plaza is developed in the Grid City. • Spiritual Street is ensured with a local industrial centre and a walkable open space in the Civic Hub.
	<p>Long-term (10~20 years)</p> <ul style="list-style-type: none"> • Pedestrian-Oriented District is ensured in the city centre with double-track railway and new road in the Grid City. • Kandy's station area development is promoted.

Source: The JICA Team

Figure 5.4 Development of the City Centre Area by Phases

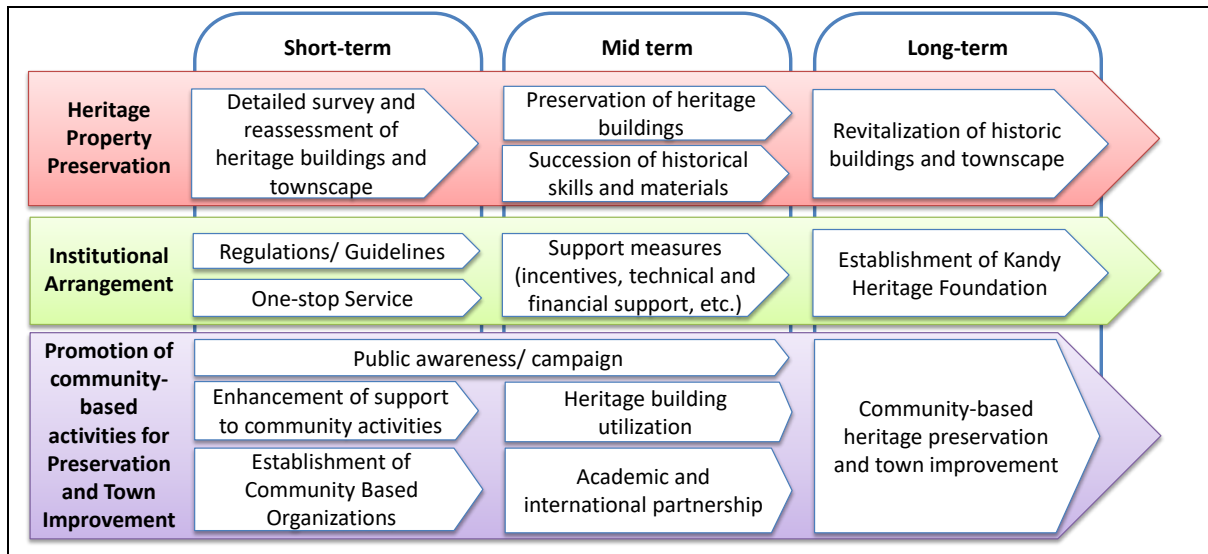
5.5 Heritage Preservation and Utilisation Programme

(1) Objective

This programme aims to preserve Kandy’s historical and cultural heritage buildings and townscape. It should be emphasised that preserving heritage buildings and townscape will attract more tourists and contribute further to economic benefits through tourism and retail activities.

(2) Programme Components

Programme components and targets are shown in Figure 5.5. Programme is composed of Heritage three components: (1) Heritage property preservation, (2) Institutional arrangement, and (3) Promotion of community-based activities for preservation and town improvement.

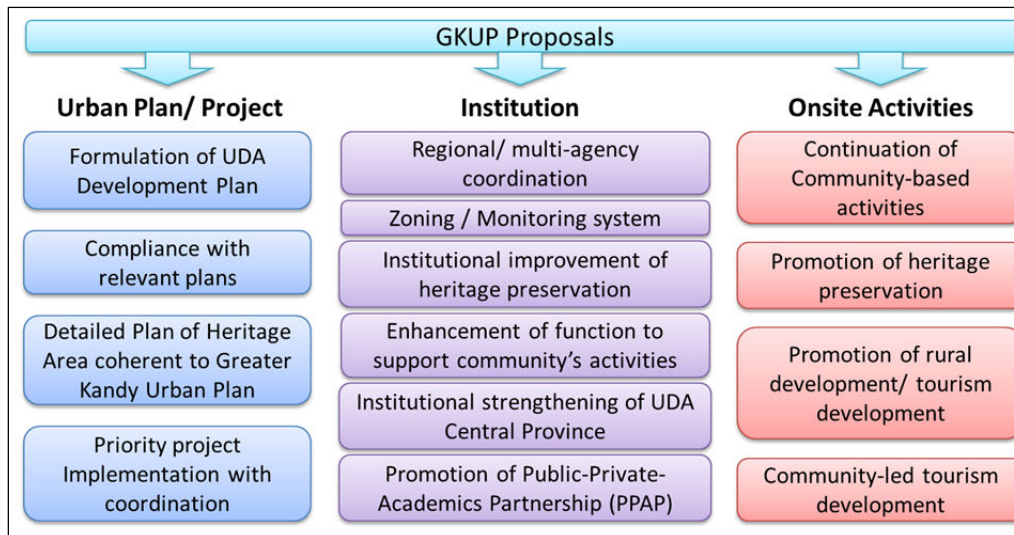


Source: The JICA Team

Figure 5.5 Programme Components of Heritage Preservation and Utilisation Programme by Phases

5.6 Necessary Actions for Implementation of the GKUP Programmes

The GKUP proposals are not only limited to urban plan formulation, but also institutions, and promotion of onsite activities especially community involvement. For this, institutional arrangement is indispensable for effective implementation of the plan. Hence, necessary actions should be taken for the realisation of the GKUP proposals as shown in Figure 5.6. It is recommended that the necessary actions shall be taken by relevant organisations within their statutory responsibility and authority.



Source: The JICA Team

Figure 5.6 Necessary Actions to Materialise Greater Kandy Urban Plan

(1) Urban Plan Approval and Project Implementation

At present, UDA has formulated and amended Development Plans including that for KMC in compliance with the UDA Law. It is expected that GKUP proposals will be reflected in these plans. It is indispensable for UDA to make this plan consistent with the National Physical Plan and other sector plans.

The Detailed Plan for the Heritage Area has proposed urban spatial restructuring and improvement, the guidelines, institutional system and fund for heritage building preservation. Improvement of the urban spaces in the central area requires treating not only the Heritage Area but also the adjacent Cluster cities as a coherent planning unit whose linkages should be strengthened.

In regional level, cluster development especially Katugastota is prioritised to promote shifting urban function of the city centre, and to reduce traffic congestion. Cluster development with public transport development, including P&R, railway capacity improvement (double track railway), station area development, industrial development shall be catalysts to preserve the Heritage Area as well as regional development. Some of the plans and projects, particularly the transport projects, need coordination with relevant organisations such as MOT and RDA.

For large transportation projects, a comprehensive transportation survey and future demand analysis shall be conducted.

It is recommendable to conduct a social experiment of these projects such as promotion of modal shift to public transport, school traffic management, P&R, parking management, etc.

(2) Institutional Arrangement

At this moment, there is no statutory plan at regional level province and local authority such as Greater Kandy. Accordingly, it is preferable to coordinate with representatives of the relevant organisations at national, provincial, and local authority levels under the initiative of the UDA, which is an organisation that authorises the development plans for local authorities. A discussion on setting up of such an organisation should be started soon. A common zoning system needs to be discussed for the development plans that the UDA prepares for the LAs in Greater Kandy, in which zoning categories presently differ.

Since the main actors of the town comprised the local community, town planning and improvement activities shall be initiated by the community, supported by the government and private sectors. For this, it is proposed that relevant local governmental organisations

shall have functions/ human resources to support community activities. A good relationship of trust among public, private, and citizens is a key of success for urban plan and project implementation.

For regional economic promotion and heritage conservation, and community-based activities, it is recommended to promote partnership of the public sector, the private sector, and the academic sector to collaborate and coordinate.

For proper heritage conservation, the following are required: the regulation on historic building conservation; review of criteria of heritage buildings and reassessment of the listed conserved buildings; improvement of institutional systems for historic building conservation with clear demarcation and role sharing among organisations; and the establishment of technical and financial support system for historic building rehabilitation and conservation.

(3) Onsite Activities with Community Initiatives

It is necessary to continue community-based activities for town planning which have already been raised as community activities through the PCM.

Without appropriate understanding of the significance of heritage preservation, it is difficult to expect law-abiding spirits and behaviour of citizens. For this, advocacy and education events such as exhibitions and architectural tours shall be conducted to raise public awareness and give the community participation opportunity for heritage preservation and town planning.

Since tourism is one of the main economic sectors of Kandy, it is preferable to link local economic activities to tourism so that local communities in rural and urban areas shall be able to participate in tourism promotion. Tourism promotion of the Heritage Area shall lead to socio-economic development of Greater Kandy.

CHAPTER 6 CONCLUSION

The vision for the plan is, “*Greater Kandy shall be Sri Lanka’s repository of historic, natural, cultural and religious values*”. To materialise GKUP, as previously mentioned, it is expected that various stakeholders –including public, private, academic, local communities and international organisations – shall continue to participate in urban planning and project implementation, institutional arrangement and onsite activities for heritage preservation and socio-economic development. It is expected that GKUP will contribute towards sharing a common understanding of the values of Kandy; promoting Greater Kandy’s potential for sustainable development; and preserving the Kandy Heritage Area.

The main concept of GKUP is “to review and respect the values of history, nature and culture of Kandy and to propose the future of Kandy for the next generation”. Kandy does not possess only these values, but also includes the people’s heart as its spiritual value. In this plan, these values of history, nature, culture and people’s heart as well as the present issues are overlaid to reflect the time dimension and the spatial aspect of the plan toward achieving the vision.

In order to restore what Kandy – regarded² as “one of the most beautiful cities in the most beautiful region in the world” – had in the past, GKUP has proposed solutions to enhance the economic value of the region by utilising the values of Kandy. In particular, urban functions such as wholesale and public administration are located in the Heritage Area; however some of them do not need to be located in the Heritage Area. Thus it is proposed to relocate them to clusters of Katugastota, Peradeniya, and Kundasale-Digana; and comfortable spaces will be revitalised in the vacated area in the Heritage Area for the communities, and tourists to enjoy its socio-economic values, in which the area is planned to form a pedestrian-oriented space as “Spiritual Street”.

Ise City, located in Japan’s Mie Prefecture, is a historic town in which the Ise Shrine (Ise Jingū)³ is located. The characteristics of the city are similar to Kandy with the Temple of the Tooth Relic. In Ise – thanks to the efforts and collaboration between the citizens and local government – the historic townscape has been rehabilitated, and the number of visitors to Ise has increased more than nine times. In many historic towns in Japan, local communities and governments enjoy economic benefits by recovering the historic townscape to visually express an ideal situation in which the civilisation, culture, nature and human society are harmonised.

Nowadays, cities throughout the world are required to diversify from production and consumption to environmental preservation and sustainable livelihood of the community. Kandy can be a model of a sustainable city as prescribed in the 17 SDGs (Sustainable Development Goals) of the United Nations.

In this time of city transformations, cities which are harmonised with the economy and environment as well as people’s inner peace are required. In the process of formulating this GKUP, local communities participated in a series of meetings continuously, and their proposals were carefully studied and reflected in the GKUP. For this, partnerships between communities and governments are indispensable to revitalise the brand of Kandy and to promote the regional development of Greater Kandy.

² Davy, J, 1821, An account of the Interior of Ceylon and of its Inhabitants with Travels in that Island, London: Longman, Hurst, Rees, Orme and Brown

³ Ise Jingū, officially 'Jingu', includes 125 jinja(shinto shrine), centered around Kotajingu(Naiku), dedicated to Amaterasu-Omikami, and Toyo'uke-dajingu(Geku), dedicated to Toyo'uke-no-Omikami. More than 1,500 rituals are conducted yearly to pray for the prosperity of the Imperial family, the peace of the world, and the huge harvest.

APPENDICES

A: Projects of Regional Development Programme

B: Projects of Cluster Cities Strengthening Programme

C: Projects of City Centre Revitalization Programme

D: Heritage Conservation and Utilization Programme

A: Projects of Regional Development Programme

Table A.1 Projects of Transportation Improvement of Regional Development Programme

Project No.	Project	Phase	Implementing agencies	Status 1: ongoing 2: planned 3: new proposal
1. Promotion of Public Transportation				
(1) Railway service improvement				
R-T-1	Increase railway operation frequency	Short	SLR	1 (SLR)
(2) Bus service improvement				
R-T-2	Feeder bus service provision	Short	Bus operator ¹⁾	3
R-T-3	Introduction of a new ticket system	Short	Bus operator	3
R-T-4	Rerouting of bus routes and service coverage	Short	Bus operator ¹⁾	3
(3) Railway Double Tracking/Rehabilitation				
R-T-5	Feasibility Study of double tracking	Short	MOT	1 (MOT)
R-T-6	Double tracking between Kandy-Peradeniya	Short	SLR	2 (MOT)
R-T-7	Double tracking between Kandy-Katugastota	Mid	MOT, SLR	1 (SLR)
R-T-8	Double tracking between Peradeniya – Katugannawa	Mid to long	MOT, SLR	2 (MOT)
R-T-9	Double tracking /rehabilitation between Peradeniya – Gampola	Mid to long	MOT, LR	2 (MOT)
R-T-10	Rehabilitation between Katugastota – Matale	Mid to long	MOT,SLR	2 (MOT)
(4) New Railway Line				
R-T-11	Study of the new railway line between Katugasutota-Kundasale	Long	MOT, UDA	3
2. Transport Network Development				
(1) Development of road connecting Cluster cities				
R-T-12	Improvement of Katugastota-Galagedara road	Short to mid	RDA	2 (RDA)
R-T-13	Improvement of Katugastota-Digana road (on-going)	Short	RDA, SCDP	1 (SCDP)
R-T-14	Upgrading of Katugastota-Peradeniya road	Short	RDA	2 (RDA)
R-T-15	Upgrading/ development of Tennekumbura-Madawala road	Mid	RDA	2 (RDA)
R-T-16	Study on construction of southern bypass road	Short	RDA	1(RDA) 3
(2) Improvement of regional roads connecting town centres				
R-T-17	Improvement of Poojapitiya-Alawatugoda road	Mid to long	RDA	2 (RDA)
R-T-18	Improvement o Hedeniya - Poojapitiya Road	Mid to long	RDA	2 (RDA)
R-T-19	Improvement of Aladeniya -Peradeniya Road	Mid to long	RDA	2 (RDA)
R-T-20	Improvement of Ambathenna – Bokkawala-Arambakade road	Mid to long	RDA	2 (RDA)
R-T-21	Improvement of Ampitiya- Thhalathuoya road	Mid to long	RDA	1 (RDA, China fund)

1) Bus operators include NTC, RPTA as regulatory agencies, and SLTB and private bus companies as operators.

Source: The JICA Team

Table A.2 Projects for Economic Promotion of the Regional Development Programme

Project No.	Project	Phase	Implementing agencies	Status 1: ongoing 2: planned 3: new proposal
1. Promotion of rural and local industries				
R-Ec-1	Formulate regional investment and industry policy	Short	MRECO, MIC, MPI, MOA,KMC	3
R-Ec-2	Conduct roadshow to potential investors	Short to mid	MODSIT	3
R-Ec-3	Designate the special economic zone with special privileges	Mid	MODSIT, MIC	3
R-Ec-4	Enhancement of SMEs' support system	Short to id	MIC, MSDVT, KMC	3
2. Promotion of high value added and advanced industries and services				
R-Ec-5	Utilise University of Peradeniya and NIBM as the centre of excellence	Short	MOE, MYASD, UoP NIBM, MIC	3
R-Ec-6	Organise working group among selected industries, Government, and academic institutions	Short	MIC, UoP, REDA, KMC, CoC, Business Association	3
R-Ec-7	Collaborate with existing IT firm,	Short	MTDI, SLASSCOM	3
R-Ec-8	Set up the showroom and/or e-commerce site to reach the consumers directly	Mid	MODSIT, TDI, MIC, SLASSCOM	3
R-Ec-9	Access to the international supply chain	Mid	MODSIT	3
R-Ec-10	Promote start-ups	Mid	MIC, KMC	3
3. Promotion of Tourism and Tourism-related industries				
(1) Tourism promotion plans and packages				
R-Ec-11	Formulation of tourism promotion policy	Short	MTDCRA, REDA, DTCT	3

Project No.	Project	Phase	Implementing agencies	Status 1: ongoing 2: planned 3: new proposal
			KMC	
R-Ec-12	Promotion of tourism destinations	Short	MTDCRA, DTCT, REDA	3
R-Ec-13	Set up DMO for tourism promotion	Short	REDA, DTCT, MIC,	3
R-Ec-14	Promotion of historic and cultural tourism	Short to mid	DTCT, REDA, DOA, CCF	3
R-Ec-15	Promotion of eco-and rural tourism	Short to mid	REDA, DTCT, CEA	3
R-Ec-16	Promotion of handicraft industry	Short to Mid	REDA, DTCT, MIC	3
R-Ec-17	Development of tourism package	Short to mid	REDA, DTCT, KMC	3
R-Ec-18	Discover and utilise historical roads	Mid to Long	DTCT, REDA, RDA	3
(2) Promotion of health-related industries				
R-Ec-19	Attract more accommodations, hospitals, and spas	Short	MSDT, MTDCRA, MHNIM	3
R-Ec-20	Set up DMO for health-related industry promotion	Short	REDA, DTCT, MHNIM	3
R-Ec-21	Set up of special tourist area for health-related industry	Mid	UDA, REDA, DTCT, MIM	3
R-Ec-22	Set up Ayurveda Research Centre	Mid	REDA	3
(3) Enhancement of tourism transportation				
R-Ec-23	Improvement of tourism bus services	Mid	UDA, RDA, Bus Operators	3
R-Ec-24	Development of roadside stations	Mid	REDA, UDA, RDA, D Agri	3

Note) MRECO: Ministry of Rural Economy, MPI: Ministry of Primary Industry, MOA: Ministry of Agriculture (Department of Export Agriculture), MODSIT: Ministry of Development Strategies and International Trade, MSDVT: Ministry of Skills Development and Vocational Training, MOE: Ministry of Education, MYASD: Ministry of Youth Affairs and Skills Development, MTDI: Ministry of Telecommunication and Digital Infrastructure, MTDCRA: Ministry of Tourism Development and Christian Religious Affairs, MIM: Ministry of Indigenous Medicine (Department of Ayurveda), SLASSCOM: Sri Lanka Association of Software and Service Companies

Source: The JICA Team

Table A.3 Projects for Environmental and Disaster Management of the Regional Development Programme

Project No.	Project	Phase	Implementing agencies	Status 1: ongoing 2: planned 3: new proposal
1. Proper conservation and utilisation of the rich natural environment				
R-Ev-1	Formulation of forest protection plan	Short	CEA	3
R-Ev-2	Reforestation and replanting (based on (R-Ev-1))	Long	CEA, MASL	3
R-Ev-3	Strengthening patrol for forest protection	Short to mid	CEA	1 (CEA)
R-Ev-4	Formulation of Mahaweli River Watershed Management Plan	Short to mid	CEA MASL	3
R-Ev-5	Construction of physical structure to protect the river shed of the Mahaweli River (based on the study (R-Ev-4))	Mid to long	CEA MASL	3
R-Ev-6	Formulation of guidelines to control the rivershed	Mid	CEA, MASL, LAs	1 (CEA)
R-Ev-7	Relocation of illegal users/occupants in the water shed	Mid to long	CEA, LAs, Police	3
R-Ev-8	Environmental awareness and education	Short	CEA	1 (CEA)
2. Proper control of development				
R-Ev-9	Establishment of proper land use zoning system	Short	UDA, CEA, NBRO	3
R-Ev-10	Proper and strict enforcement of land use and development control	Short to mid	UDA, LAs, CEA	3
3. Alleviation of environmental pollution				
(1) Reduction of water pollution				
R-Ev-11	Strengthening of enforcement of water quality standards	Short	CEA	2 (CEA)
R-Ev-12	Strengthening of water quality monitoring	Short	CEA	2 (CEA)
R-Ev-13	Strengthening inspection system on the industry sector	Short	CEA, LAs	1 (CEA)
R-Ev-14	Construction of sludge treatment plant	Mid	NWSDB, LA	3
R-Ev-15	Development of sewage system in major cities and towns	Mid to long	NWSDB, LA	3
R-Ev-16	Establishment of on-site treatment system (septic tank)	Short to mid	NWSDB, LA	3
R-Ev-17	Promote the use of lined septic tank	Mid	NWSDB, LA,	1 (NWSDB)

Project No.	Project	Phase	Implementing agencies	Status 1:ongoing 2:planned 3:new proposal
			UDA	
(2) Air pollution				
R-Ev-18	Strengthening of enforcement of air quality standards	Short	CEA	2 (CEA)
R-Ev-19	Strengthening of air quality monitoring	Short	CEA	2 (CEA)
R-Ev-20	Strengthening car inspection	Short	LA	1 (LA)
(4) Proper solid waste management				
R-Ev-21	Lifespan extension of existing disposal site	Short	LA, CEA	3
R-Ev-22	Improvement of the disposal site to become a sanitary landfill site	Short to mid	LA, CEA	3
R-Ev-23	Establishing recycle centre at the disposal site	Short to mid	LA, CEA	1 (LA)
R-Ev-24	Construction of regional disposal site	Short to mid	CEA, LAs	3
R-Ev-25	Construction of waste treatment facility for medical waste	Short to mid	CEA, LAs	3
R-Ev-26	Introduction of waste incineration plant	Mid	CEA, LAs	3
R-Ev-27	Community- based waste management for city beautification	Short	CEA, LAs	3
R-Ev-28	Promotion of source separation at household level	Short	CEA, LAs	1(KMC) 2(CEA)
R-Ev-29	Introduction and improvement of waste monitoring	Short	LA	3
R-Ev-30	Strengthening legal enforcement in solid waste management	Short	LA	3
R-Ev-31	Public awareness raising on solid waste management	Short	CEA, LA	1(CEA)
4. Proper Disaster Prevention based on disaster risk reduction principles				
(1) Land use regulation				
R-Ev-32	Establishment of proper zoning plan	Short to mid	UDA, NBRO, DOIr	3
(2) Reduction of Landslide Risk				
R-Ev-33	Establishment of regulation to prevent slope failure or debris flow caused by land development	Short to mid	NBRO, DMC, UDA, LA	3
R-Ev-34	Identification of landslide types	Short to Mid	NBRO, DMC, UDA	2
R-Ev-35	Introduction of countermeasures for slope stabilisation	Short to Mid	NBRO, RDA, UDA	3
R-Ev-36	Identification of landslide hazardous area based on site level assessment	Short	NBRO	3
(3) Reduction of flood risk				
R-Ev-37	Enhancement of canal /drainage capacity in Akurana	Mid to long	DOIr, LA	3
R-Ev-38	Enhancement of canal /drainage capacity in KMC	short	DOIr, LA, SCDP	1 (SCDP)
R-Ev-39	Strict control and prohibition of construction in the river and creek beds	Short	LA, UDA	3
R-Ev-40	Awareness raising campaign for clean drainage	Short	DOIr, LA	3
R-Ev-41	Relocation of houses in the disaster-prone or high-risk places to safer place	Mid	LA, DMC, UDA	2 (DMC)

Note: DOIr: Department of Irrigation

Source: The JICA Team

B: Projects of Cluster Cities Strengthening Programme

Table B.1 Projects of Transportation Improvement of the Cluster Cities Strengthening Programme

Project No.	Project	Phase	Implementing agencies	Status 1: ongoing 2: planned 3: new proposal
1. Promotion of Public transportation				
(1) Railway service improvement				
Cl-T-1	Increase in railway operation frequency	Short	SLR	1 (SLR)
Cl-T-2	Traffic management around stations		KMC, Police	3
(2) Bus network improvement				
Cl-T-3	Bus route rerouting and new routes	Short	Bus operators ¹⁾	3
(3) Double tracking of the railway				
Cl-T-4	Double tracking between Katugastota-kandy-Peradeniya	Short to mid	MOT, SLR	1 (SLR) 2 (MOT)
(4) Multimodal Terminal and P&R Development				
(a) Multimodal Terminal and P&R Development in Katugastota				
Cl-T-5	Formulation and authorisation of development plan of station plaza, multimodal and P&R facilities	Short	UDA, SLR	2 (UDA)
Cl-T-6	Land acquisition for multimodal terminal at Katugastota	Short to Mid	UDA	3
Cl-T-7	Development of multimodal terminal and P&R	Mid	UDA, Operator	2 (SCDP, UDA)
(b) Multimodal Terminal and P&R Development in Peradeniya				
Cl-T-8	Formulation and authorization of development plan of station plaza, multimodal and P&R facilities	Short	UDA, SLR	2 (UDA)
Cl-T-9	Land acquisition for multimodal terminal at Peradeniya	Short to mid	UDA	2 (UDA)
Cl-T-10	Development of multimodal terminal and P&R	Mid	UDA, Operator	2 (SCDP, UDA)
(c) P&R Development in Tennekumbura				
Cl-T-11	Formulation and authorisation of development plan of P&R facilities	Short	UDA	2 (UDA)
Cl-T-12	Land acquisition for multimodal terminal at Peradeniya	Short to mid	UDA	2 (UDA)
Cl-T-13	Development of multimodal terminal and P&R	Mid	UDA, Operator	2 (SCDP, UDA)
Cl-T-14	Social experiment for the promotion of P&R	Short	KMC, Police, UDA	3
2. Development of Transport Network				
(1) Road improvement in Cluster City areas				
Cl-T-15	Improvement of roads in Katugastota Cluster area	Mid	RDA	3
Cl-T-16	improvement of roads in Peradeniya Cluster area	Short to mid	RDA	3
Cl-T-17	Improvement of roads in Kundasale Cluster area	Mid	RDA	3
Cl-T-18	New road development	Mid	RDA	3
(2) Bridge development in Cluster City areas				
Cl-T-19	Development of road bridge connecting Kandy and Katugastota	Mid to long	RDA	3
Cl-T-20	Development of road bridge development connecting Kandy and Peradeniya	Mid to long	RDA, SLR	3
Cl-T-21	Development of road bridge connecting Kandy and Kundasale	Mid to long	RDA	3
(3) Enhancement of logistics traffic in Cluster City areas				
Cl-T-22	Development of logistics facilities in Katugastota	Short	UDA, KMC, RDA	3
Cl-T-23	Development of logistics facilities in Peradeniya	Mid to long	UDA, KMC, RDA	3
Cl-T-24	Development of logistics facilities in Kundasale	Mid to long	UDA, RDA	3

Source: The JICA Team

Table B.2 Projects for Economic Promotion of the Cluster Development Programme

Project No.	Project	Phase	Implementing agency	Status 1: ongoing 2: planned 3: new proposal
1. Development of Katugastota				
CI-Ec-1	Formulation and authorisation of Detailed Guide Plans of Katugastota	Short	UDA	2 (UDA)
CI-Ec-2	Development of commercial and distribution centre at Katugastota	Mid	UDA	3
2. Development of Peradeniya				
CI-Ec-3	Formulation and authorisation of Detailed Guide Plan for Peradeniya	Short	UDA	2 (UDA)
CI-Ec-4	Development of health and educational centre at Peradeniya	Mid to long	UDA	3
CI-Ec-5	Promotion of knowledge and technology of Peradeniya University	Mid	U of Peradeniya	3
3. Development of Kundasale-Digana				
CI-Ec-6	Formulation of Development Plan for Kundasale	Short	UDA	2 (UDA)
CI-Ec-7	Development of Kundasale-Digana as public administration and advanced service centre	Mid	UDA	3
CI-Ec-8	Promotion of Eco- and rural tourism	Short to Mid	REDA, DCTC	3
CI-Ec-9	Promotion of advanced industry (IT, R&D, health-related)	Mid to long	BOI, KIP	3

Source: The JICA Team

Table B.3 Projects for Urban Development of the Cluster Development Programme

Project No.	Project	Phase	Implementing agency	Status 1: ongoing 2: planned 3: new proposal
1. Relocation of urban functions from the city centre				
CI-U-1	Relocation of urban functions and facilities from the city centre to the cluster cities and development of urban centre in station area of cluster cities	Mid to long	UDA, Private	3
CI-U-2	Promotion of development of area service and commercial facilities	Mid to long	UDA, KMC, Private	3
2. Housing development in cluster cities				
CI-U-3	Housing development in Katugastota	Mid to long	UDA, Private	3
CI-U-4	Housing development in Peradeniya	Mid to long	UDA, Private	3
CI-U-5	Housing development in Kundasale-Digana	Mid to long	UDA, MASL, Private	3
CI-U-6	Social housing	Mid to long	UDA	3
3. Station Area Development				
(1) Station Area Development of Katugastota				
CI-U-7	Development of station buildings and multimodal facilities at Katugastota	Mid	UDA	3
CI-U-8	Development of urban centre at Katugastota	Mid to long	UDA, SLR, MOT, KMC, Private	3
(2) Station Area development at Peradeniya				
CI-U-9	Development of station buildings and multimodal facilities at Peradeniya	Mid	UDA	3
CI-U-10	Development of urban centre at Peradeniya	Mid to Long	UDA, SLR, MOT, KMC, Private	3

1) Bus operators include NTC, RPTA as regulatory agencies, and SLTB and private bus companies as operators.

Source: The JICA Team

C: Projects of City Centre Revitalization Programme

Table C.1 Projects for Transportation Improvement of the City Centre Revitalisation Programme

Project No.	Project	Phase	Implementing agency	Status 1: ongoing 2: planned 3: new proposal
1. Promotion of Public Transport				
(1) Promotion of Public Transportation services				
Ci-T-1	Development of KMTT	Short	SCDP	1 (SCDP)
Ci-T-2	Bus rerouting	Short	Bus operators ¹⁾	2 (SCDP)
(2) Improvement of railway transportation				
(a) Development of station and station plaza				
Ci-T-3	Development of Kandy Station and Station Plaza	Short	UDA, SLR, SCDP	3
Ci-T-4	Development of a new station and station plaza at Grid City	Short to mid	UDA, SLR	3
(b) Double tracking				
Same as CL-T-5	Double tracking of railway Phase 1 (Peradeniya- Kandy)	Short	SLR	1 (SLR)
Same as CL-T-6	Double tracking of railway Phase2 (Katugastota-Kandy)	Short to mid	MOT	2 (MOT)
2. Road development				
(1) Improvement of existing roads				
Ci-T-7	Improvement of Dharmasoka Mawatha	Short	RDA	1 (SCDP)
(2) New road development along the railway				
Ci-T-8	Development of a new road on the railway	Mid to Long	RDA, MOT	3
3. Traffic management and walking environment improvement				
(1) Traffic Management				
Ci-T-9	Improvement of intersections and introduction of traffic lights	Short to mid	RDA	2 (SCDP)
Ci-T-10	Parking management in the Grid city	Short	KMC	3
Ci-T-11	Introduction of E-circular vehicle in the Grid City	Mid	Bus operator	3
Ci-T-12	Introduction of Electric 3 wheeler	Mid	3 wheelers	3
Ci-T-13	Establishment of transport information management system	Mid to long	Bus operators	3
(2) Walking environment improvement				
Ci-T-14	Improvement of pedestrian walkway	Short to mid	KMC	3
Ci-T-15	Development of Spiritual Street	Mid to long	KMC	3
Ci-T-16	Control parking	Short	KMC	2 (KMC)
Ci-T-17	Vehicle control of trucks	Short	Traffic police	3
Ci-T-18	Vehicle control of school transportation	Short	Traffic police, Schools	3
Ci-T-19	Social experiment of traffic management (bus re-routing, one-way system, Park & Ride)	Short	Traffic police, Bus operators ¹⁾	3
Ci-T-20	Promotion of community-run school bus	Short	UDA	3
Ci-T-21	Promotion of walkability between the public transport and schools	Short to mid	UDA, MOT	3
Ci-T-22	Development of pedestrian-oriented station plaza at Kandy Station	Short	SLR, UDA	3
Ci-T-23	Development of station plaza at the new Grid City Station	Short, Mid	SLR	3

1) Bus operators include NTC, RPTA as regulatory agencies, and SLTB and private bus companies as operators.

Source: The JICA Team

Table C.2 Projects for Economic Promotion of the City Centre Revitalization Programme

Project No.	Project	Phase S: short M: mid L: long	Implementing agency	Status 1: ongoing 2: planned 3: new proposal
1. Tourism promotion				
Ci-E-1	Improvement of tourist information centre	Short	REDA, DTCT, KMC	3
Ci-E-2	Improvement of tourism promotion materials	Short	DTCT, KMC	3
Ci-E-3	Introduction of qualified tourist guides	Short	DTCT, KMC	3
Ci-E-4	Improve tourists bus management	Short	Tour operator, KMC	3
2. Adaptive reuse of heritage buildings				
Ci-E-5	Identification of cultural and historic assets	Short to mid	UDA, KMC, DOA, CCF	3
Ci-E-6	Promotion of adaptive reuse of heritage buildings (for various purposes)	Short to mid	UDA, CCF, KMC, Private	3

3. Cultural and local industrial promotion				
Ci-E-7	Local industrial promotion along Spiritual Street	Short to mid	UDA, KMC, REDA, Private	3
Ci-E-8	Development of Cultural area in Civic Hub	Mid to long	UDA, KMC, Public facilities, Private	3

Source: The JICA Team

Table C.3 Projects for Urban Development of the City Centre Revitalisation Programme

Project No.	Project	Phase	Implementing agency	Status 1: ongoing 2: planned 3: new proposal
1. Rehabilitation of public facilities and public lands				
Ci-U-1	Relocation of public facilities and redevelop public lands along Spiritual Street	Short to Long	UDA, RDA, KMC, police	3
Ci-U-2	Rehabilitation of public facilities along Spiritual Street in the Civic Hub	Short to mid	UDA, KMC	3
2. Living environment improvement				
Ci-U-3	Residential area improvement	Mid to long	UDA, Private	3
Ci-U-4	Improvement of parks and open space	Short to mid	KMC, UDA	1
Ci-U-5	Improvement of sanitation	Short	KMC	1 (JICA)
Ci-U-6	Improvement of firefighting capacity	Short to mid	KMC	2
Ci-U-7	Improvement of drainage (Meda Ela)	Short	NWSDB	1 (SCDP)
Ci-U-8	Improvement of sewage	Short	KMC, NWSDB	1 (JICA)
Ci-U-9	Reduction of Non-Revenue Water (NRW)	Mid to long	KMC, NWSDB	3
Ci-U-10	Improvement of water purification system	Mid	KMC	3
Ci-U-11	Promotion of 4Rs	Short	KMC	2 KMC)
3. Improvement of pedestrian environment				
Ci-U-11	Underground pass development	Short	RDA	1 (RDA)
Ci-U-12	Formulation of pedestrian priority area at Grid Zone	Mid to long	SCDP, KMC, RDA	2 (SCDP)
Ci-U-13	Development of Spiritual Street of the Heritage Area	Mid to Long	KMC, RDA, SCDP	3
4. Station area development				
Ci-U-14	Station area development at Kandy Station	Mid to long	UDA, SLR	3
Ci-U-16	Station Area development at the new Grid City station	Short to long	UDA, Private	3
Ci-U-17	Improvement of roads around the station	Short to mid	RDA	3
Ci-U-18	Traffic management of feeder transportation around the stations	Short to mid	Traffic police, KMC	3
Ci-U-16	Development of underground walkways	Short to mid	RDA, KMC, SCDP	1(RDA)

Source: The JICA Team

D: Heritage Conservation and Utilization Programme

Table D.1 Projects of the Heritage Property Preservation Components

Project No.	Project	Phase	Implementing agency	Status 1: ongoing 2: planned 3: new proposal
1. Detailed survey and reassessment of heritage buildings and townscape				
H-H-1	Conduct of detailed survey of heritage buildings	Short	DOA, CCF	3
H-H-2	Re-evaluation of Heritage buildings	Short	DOA, CCF	3
H-H-3	Relisting of the heritage buildings	Short	UDA	3
2. Preservation of heritage buildings				
H-H-4	Promotion of tiled roof of public facilities	Short	Public sector	3
3. Succession of historical skills and materials				
H-H-5	Establishment of skills maintenance system for skills and materials	Short to mid	CCF, DOA	3

Source: The JICA Team

Table D.2 Projects for Institutional Arrangement of the Heritage Preservation and Utilisation Programme

Project No	Project	Phase	Implementing agency	Status 1: ongoing 2: planned 3: new proposal
1. Regulation and guidelines				
H-I-1	Establishment of regulations for heritage building preservation	Short	UDA, DOA, CCF	3
H-I-2	Establishment of guideline: for living space improvement in informal settlement area	Short	UDA	3
H-I-3	Establishment of guideline: urban development in Lake Around Zone	Short	UDA	3
H-I-4	Enforcement and monitoring system for heritage preservation	Short	UDA, KMC	3
H-I-5	Establishment of public monitoring system for heritage building	Short	KMC, UDA, Citizens	3
H-I-6	Establishment of public monitoring system for the sign boards	Short	KMC, Citizens	3
2. Establishment of one-stop service operation and support measures				
(1) One-stop service				
H-I-7	Introduction of One-Stop service-rearrange the preservation functions among the relevant organisations	Short to mid	UDA, KMC, DOA, CCF	3
(2) Support measures				
H-I-8	Establishment of incentives	Short to mid	DOA, KMC, UDA	3
H-I-9	Strengthening of Financial support	Short to mid	DOA, CCF, KMC, UDA	3
H-I-10	Establishment of Special Fund for heritage building conservation	Mid to long	DOA, CCF, KMC, UDA	3
H-I-11	Establishment of a technical support system for heritage preservation	Short to mid	DOA, CCF	3

Source: The JICA Team

Table D.3 Projects for the Community-based preservation and town improvement of the Heritage Preservation and Utilisation Programme

Project No.	Project	Phase	Implementing agency	Status 1: ongoing 2: planned 3: new proposal
1. Public awareness raising/campaign				
H-Co-1	Formulation of awareness-raising programmes for heritage preservation	Short	UDA, KMC, DOA, CCF	3
H-Co-2	Implementation of information dissemination activities	Short	UDA, KMC, DOA, CCF	3
H-Co-3	Conduct of open house	Short	UDA, KMC, DOA, CCF	3
H-Co-4	Conduct of open lectures	Short	UDA, KMC, DOA, CCF	3
H-Co-5	Conduct of awareness raising through PR media	Short	UDA, KMC, DOA, CCF	3
H-Co-6	Conduct of interviews to heritage building owners	Short	One-stop service (UDA, KMC, DOA, CCF), Citizen	3
2. Enhancement of community activities for heritage preservation				
(1) Enhancement of support to community activities				
H-Co-7	Establishment of support to community activities	Short	KMC	3
(2) Establishment of community-based organisation				
H-Co-8	Establishment of community-based organisation	Short	Community	3
(3) Establishment of partnership with NGOs, the private sector, academe, and international organisations				
H-Co-9	Establishment of partnership among various organisations for community activities	Short to mid	Community KMC, UoP, NGOs	3
3. Heritage building utilisation				
H-Co-10	Lease of abandoned heritage buildings by the government	Short to Mid	UDA, KMC, DOA, CCF	3
H-Co-11	Improvement and management of specified conservation area	Short to long	UDA, Building owners, investors	3
H-Co-12	Renovation of Senkadagalapura	Short	KMC, SCDP	2 (SCDP)

Source: The JICA Team