

04

MAJOR ISSUES, KEY FINDINGS AND DEVELOPMENT PROPOSALS FOR KUALA SELANGOR DISTRICT LOCAL PLAN

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ABSTRACT

The preparation of a District Local Plan is in accordance with the Local Plan manual as stated in the Plan Malaysia 2020 Edition. This paper highlights findings, issues, proposals, and design of the Kuala Selangor District Local Plan. The main objective of this project is to prepare a draft local plan for the Kuala Selangor district to uplift the social, economic, infrastructure and environment components of the district. Some of the major findings of this project were lack of housing supply, lack of infrastructure and public facilities for growing population, severe traffic congestion at and near the major town center and greater potential for tourism development. The proposals in this paper depicts the development concept, strategies, high-impact projects, implementation plan, and cost estimation of each major projects. This paper includes 5 development thrusts, 16 strategies, and 12 high impact projects.

Keywords: Local plan, Development plan, Development concept, High impact project * Corresponding author: azeez@iium.edu.my

INTRODUCTION

Local Plan document is a map with a written declaration and explanation of the suggestions proposed to the local authority for the development of land and land use planning, in line with the policies and strategies of the Selangor Structure Plan 2035. The implementation guidelines specified in Paragraph 12 (3) of Town and Country Planning Act 172 supports the preparation of a local plan. It explains the general land development and policies, suggestions, strategic policy in detail, and practical physical forms in the Structure Plan. This paper aims to highlight the key findings, issues, development proposals, and designs of a district local plan for the Kuala Selangor district. These development plan proposals apply to this selected district between the years 2021 and 2035. The study area covers the entire Kuala Selangor District, which is located on the West Coast of Peninsular Malaysia with a total area of 119,452 hectares. Kuala Selangor district covers nine (9) mukims/planning blocks, namely Kuala Selangor, Api-Api, Tanjong Karang, Hujong Permatang, Bestari Jaya, Ijok, Jeram, Pasangan and Hulu Tinggi. (Maps 1 & 2).



Map 1&2: Location Plan of Kuala Selangor District

METHODOLOGY

Figure 1 shows the preparation process of the Kuala Selangor District Local Plan 2035. For academic purposes, only Stage 2 prepared the District Local Plan of Kuala Selangor 2035. The students were required to prepare three (3) reports, i.e., Study Approach Report, Analysis Report, and Draft Local Plan Report. These reports were completed within 14 weeks of the planning studio.

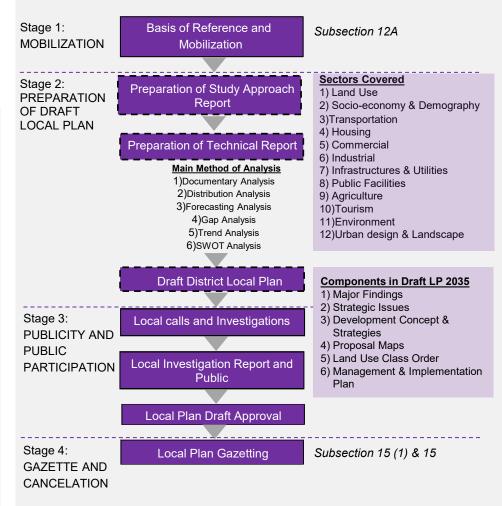
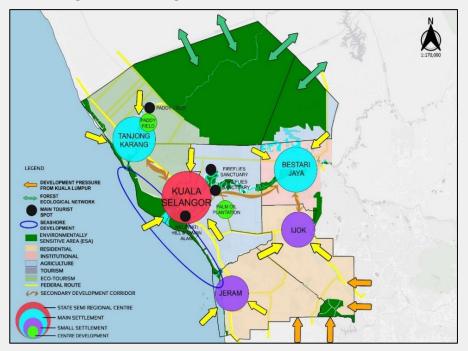
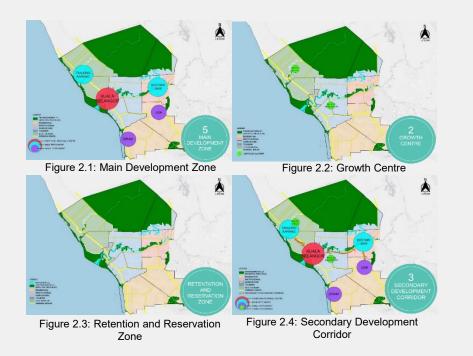


Figure 1: Preparation Process of District Local Plan of Kuala Selangor 2035



DEVELOPMENT CONCEPT

Figure 2: Development Concept of District Local Plan of Kuala Selangor 2035



'Multi Focus Spatial Development'

The concept of RT MDKS 2035 is focusing on holistic development that covers economic resilience, livable society, heritage values, sustainable environment, and adequate infrastructure through centralized development. This development will give priority to five main development zones and growth centers.

Main features:

- 1. Main development zones
- 2. Growth centres
- 3. Secondary development corridors.
- 4. Retention and preservation zone
- 5. Settlement hierarchy

Agricultural

- Main economy generator for Kuala Selangor.
- Paddy and palm oil are the main agricultural produce
- Introducing smart farming technology.

Commercial

Introducing high impact development for some planning blocks

<u>Tourism</u>

• Kuala Selangor has heritage area and a good visual image as part of attraction.

Industrial

- Many small industries at Kuala Selangor
- The industries mostly are food and beverage-based industries.
- Focusing on improving the small industries to generate the income of the local people

Institutional Based Development

- UNISEL identified as a growth catalyst.
- Enhance the development in Bestari Jaya by widening the job opportunities and increasing the immigration rate.

DEVELOPMENT THRUST



DESIGN IDEALS

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MAJOR FINDINGS

LAND USE

The highest land use cover in Kuala Selangor is Agriculture (47.69%) and forest (34.09%) is the second-largest land use in Kuala Selangor. The lowest land use cover is commercial (0.10%).

SOCIO-ECONOMY

The total population of Kuala Selangor district was 205257 in 2010. The average annual population growth of Kuala Selangor district was 2.42% between 2000 and 2010.

TRANSPORTATION

The difference in road dimension along the federal road 5 causes traffic congestion at certain stretches, especially during peak hours.

HOUSING

There will be a total of 16,948.42 ha of committed development for housing in Kuala Selangor district which heavily focuses on Ijok (4,309.98 ha) and Bestari Jaya (11,786.03 ha) and also a shortage of 14,666 units of houses by the year 2035.

PUBLIC FACILITIES

Insufficient health facilities are provided in Api-Api and Hujong Permatang. Insufficient safety facilities provided in Pasangan and Ijok.

STRATEGIC ISSUES

LAND USE

The plantation of palm oil area in Kuala Selangor decreased throughout the year from 48917.06 hectares to 45210.38 hectares because of the future development that requires the land to be developed.

SOCIO-ECONOMY

The increase in unemployment and decrease in the labour force may affect Kuala Selangor economic growth. In addition, a decrease in Birth Rate and an increase in Death Rate at Kuala Selangor may affect the future population.

TRANSPORTATION

The current modal split was in 2015, which was 25% for public transport usage and 75% for private transport usage. In Kuala Selangor, the highest peak hour traffic volume in 2015 is at Route 5 (Klang-Kuala Selangor), 3,670 PCU/hour.

HOUSING

According to MDKS 2021, it stated there are 3,346 units of houses that were abandoned, including 11 housing projects. The common reason for this problem is the poor development management by the developers and constructors.

COMMERCIAL

The highest number of commercial distribution is at Jeram with the total number of the commercial unit is 398 units and the percentage is 23.60 % while the lowest is at planning block Hulu Tinggi where no commercial unit as Hulu Tinggi was covered with forestry.

INDUSTRIAL

The highest distribution is on PB ljok which consist of producing a food-based product with 71.62 ha and while the lowest is on Pasangan with 9 ha.

INFRASTRUCTURE

Electricity demand in 2009 is 206 MW. In 2035, the maximum demand of electrical demand is 328 MV which is 332 MV less than the electrical supply.

AGRICULTURE

The highest distribution is on PB ljok which consist of producing a food-based product with 71.62 Ha and while the lowest is on Pasangan with 9 Ha.

TOURISM

Tourism products in Kuala Selangor are divided into 5 types which are eco-tourism, agrotourism, cultural and heritage tourism, shopping tourism, and gastronomy tourism.

ENVIRONMENT

The environmentally sensitive areas in Kuala Selangor consist of 226,762 Ha.

URBAN DESIGN

The major district in Kuala Selangor town is the Heritage district and it needs extra care to preserve, and conserve it. Many heritage buildings that have historical value are located in Kuala Selangor Town that can attract tourists and generate income.

LANDSCAPE

There is still a lack of softscape elements mostly in commercial areas which makes the area hot and uncomfortable for people to walk around.

COMMERCIAL

There are many hawkers alongside the road in Kuala Selangor. Unfortunately, the condition of the buildings is poor, and there is some abandoned terrace shop lot.

PUBLIC FACILITIES

No safety facilities are provided within the range of Pasangan and Hujong Permatang, which can lead to an unsafe environment for the residents in the area.

INDUSTRIAL

Kuala Selangor District has resources and an industrial base that has not been fully developed. Distribution of scattered industrial activities outside the designated (unplanned) industrial zone.

INFRASTRUCTURE

Electricity demand in 2009 is 206 MW. In 2035, the maximum demand of electrical demand is 328 MV which is 332 MV less than the electrical supply.

AGRICULTURE

Rapid development in neighbouring districts causing the productivity of agricultural land to decrease, thus affect the income of the agricultural sector of the study area.

TOURISM

Some tourism facilities are lacking for tourists in Kuala Selangor. There is no public transportation, especially buses, for tourists to access from one destination to another in Kuala Selangor.

ENVIRONMENT

The flood-prone area along Sungai Selangor, Sungai Sireh, and Sungai Buloh may threaten the population and land use activity in Kuala Selangor.

URBAN DESIGN

Lack of emphasis on urban design and the preservation of heritage buildings and commercial buildings in the Heritage District at Kuala Selangor. There is lacking of signage system in Kuala Selangor, Bestari Jaya, Simpang Tiga Ijok, and Sg. Buloh.

LANDSCAPE

There is still lack of softscape elements in the commercial areas which makes the area hot and uncomfortable for people to walk around.

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MAJOR PROJECTS

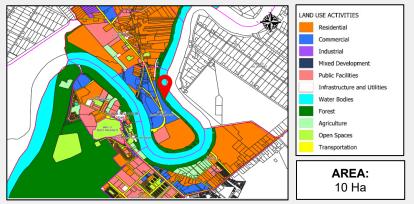
PROJECT 1: KUALA SELANGOR RETAIL PARK

Kuala Selangor Retail Park is a centre for commercial activities to ease the community of Kuala Selangor to get and purchase daily things and essentials stuff.

ISSUES

The scattered distribution of land use 1) 2) Increase in unemployment and decrease in the labor force

3) Unstrategic location of commercial area.



Map 3: Location of Kuala Selangor Retail Park

PROJECT COMPONENT

- Designing a gateway with welcoming and enjoyable vibes with the mixture of bricks and greenery of trees as the first view.
- Greenery landscaping is an environmentally friendly concept to preserve the environment to stay healthy, thus giving her surroundings to the community.
- Premier retail display with a fresh design and a combination of modern and eco-friendly concepts.
- Provide adequate parking so that the neighborhood does not have to worry about Figure 3.1: Greenery landscaping parking difficulties, which are common in business areas due to a lack of parking places.

IMPLEMENTATION AGENCY

- Selangor State Council
- Kuala Selangor District Council
- Private sector

IMPLEMENTATION PHASE





Figure 3: Welcoming gateway







COSTING **RM 300M**

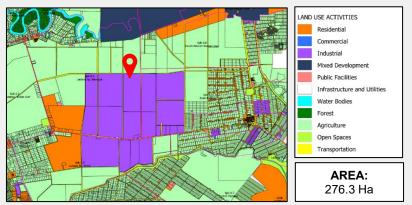
PROJECT 2: KUALA SELANGOR BUSINESS PARK

This proposal has the potential to increase the quality of industrial production and tourist admissions. The Kuala Selangor Business Park will be in the heart of the Kuala Selangor area, putting it within easy reach to each Planning Blocks that stretch out to all corners of Kuala Selangor.



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- 1) The scattered distribution of land use 2) Increase in unemployment and decrease in the labor force
- 3) Unstrategic location of commercial area.



Map 4: Location of Kuala Selangor Business Park

PROJECT COMPONENT

- Green Industry: Comprehensive range of eco-friendly features. These elements not only assist businesses in conserving energy and resources but also in lowering their total carbon impact.
 - 1- Ample green pockets or lungs
 - 2- Extensive use of LED streetlamps
 - 3- Rainwater harvesting systems
 - 4- Heat-reducing aluminum louvers

Superior Security Features with the various uses of security features that endure peace of mind for units' owners while optimizing business efficiency.

IMPLEMENTATION AGENCY

- Selangor State Council
- Kuala Selangor District Council
- Private Agency

IMPLEMENTATION PHASE





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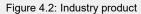




Figure 4.3: Business Park COSTING **RM 10M**





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PROJECT 3: T2 STORE

The development consists of two-story and three-story shop lots at two different focus locations. The locations were strategic within the residential radius catchment. The target customers are people from the surrounding areas to come to buy. The shop will ease the community living in the surrounding areas to get and buy household items and stuff within walking distance of the radius catchment.



Map 5: Location of T2 Store

PROJECT COMPONENT

• Two-story and three-story shop lot

Revolution of development. The two different types of shop-lots new designs will help the buyers rent or buy the shops within their budget appropriate for their commercial activities.

- Parking spaces
 Providing sufficient parking spaces is needed
 for commercial development.
- Landscaping

Having a good and healthy environment will save the environment and give the buyers a good vibe, indirectly attracting buyers to come.

IMPLEMENTATION AGENCY

- · Selangor State Council
- Kuala Selangor District Council
- Private sector

IMPLEMENTATION PHASE











Figure 5.3: T2 Store

COSTING RM 200M

PROJECT 4: SMEs TRAINING CENTRE

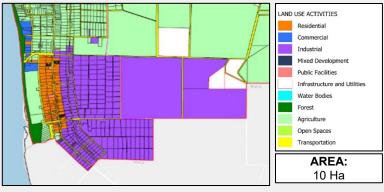
This proposal aims to train entrepreneurs to have special skills or knowledge on particular jobs or products. SMEs are highly accessed by instructional designers to extract intelligence when developing courseware and learning programs.



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- Difficulties for buyers to receive services
 Increase in unemployment and decrease in the labor force
- 3) The unlicensed industry consists of the smallsized workshop.



Map 6: Location of SMEs Training Centre

PROJECT COMPONENT

Medium Industry Adaptation, which the SME Training Centre will locate in the medium industry zone, and the entrepreneurs can adapt to the medium-heavy industrial working style. The experts will test the products or services towards the end of the project/program using and evaluating them for accuracy and usability, thus providing feedback to the entrepreneurs.

Specific Training Sectors provides the knowledge and expertise in a specific subject, business area, or technical area for entrepreneurs to follow and adapt. Mode of training should be flexible, interactive, and effective learning solutions, including online classes, Instructor-Led Training, assessments, books, videos, and more.

IMPLEMENTATION AGENCY

- Selangor State Council
- Kuala Selangor District Council
- SME Corporation Malaysia
 Private Agency

IMPLEMENTATION PHASE





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Figure 6.3: SMEs Training Programme



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PROJECT 5: DRIP IRRIGATION SYSTEM

the labor force

Drip irrigation is the most effective way to supply water and nutrients to crops. It provides water and nutrients straight to the plant's root zone in precise amounts and at the correct times. ensuring that each plant receives the amount it needs for maximum growth.



PROJECT 6: LESTARY VERTICAL FARM

The innovators have been self-employed and engage in other productive economic activities thanks to multi-storey farming. The business has also provided job possibilities for the youth in the area. Over time, entrepreneurs have progressed from just providing lowcost gardens that maximizes available land by ten folding output to seeing innovation as a means of launching new enterprises for the youth and all farmers.





1. Increase in unemployment and decrease in the labor force 2. The scattered distribution of land use

Shortage of young people involvement 3.



Map 8: Location of Lestary Verical Farm

PROJECT COMPONENT

ISSUES

1st Level: Closed Coop System

Equipped with a temperature and humidity control system to help speed up the growth of chickens.

• 2nd Level: Covered Pond Using Biofloc Farming System

Innovative and cost-effective technology in which toxic materials to the fish and shellfish can be converted to useful product.

• 3rd Level: Greenhouse

Aquaponics is a system of soil-less growing that can be recycled continuously throughout the growing system.

• 4th Level: Mini Market

Sell the goods produced by the multi-storey farming system.

IMPLEMENTATION AGENCY

•Federal Agricultural Marketing Authority •Department of Agriculture, Kuala Selangor •Ministry of Agriculture and Food Industries

IMPLEMENTATION PHASE





Figure 8: Closed Coop System IOFLOC FISH FAR





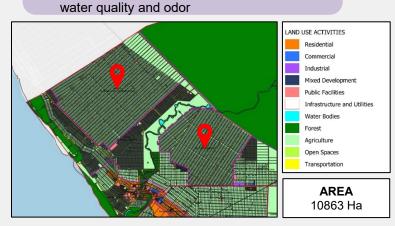




1.

3.

ISSUES



Increase in unemployment and decrease in

Pollution of drainage system effect to the

2. Shortage of young people involvement

Map 7: Location of Drip Irrigation System

PROJECT COMPONENT

Water Delivery System

Constructed of PVC pipe for subterranean delivery or polyethylene tubing for aboveground delivery makes up most drip irrigation systems.

System Controller

System controller controls the amount of time the water is delivered to the fields through the delivery lines.

Chemical Injectors

Chemical Injectors eased how fertilizers and pesticides are delivered to the plants and anticlogging agents to the drip nozzles.

IMPLEMENTATION AGENCY

- Federal Agricultural Marketing Authority (FAMA)
- Integrated Agricultural Development Area (IADA), Northwest Selangor

IMPLEMENTATION PHASE





Figure 7: Water Delivery System



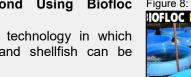
Figure 7.1: System Controller



Figure 7.2: Chemical Injectors



COSTING **RM 44M**





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PROJECT 7: LESTARY FLOATING FARM

Lestary Floating Farms is a commercially viable offshore farming opportunity to provide raw, organic goods to families. The semiautomated, sustainable network will ride communities towards healthier diets, as the concept does not include the production of red meats or poultry and reduce environmental destruction and aid in food security and resilience.

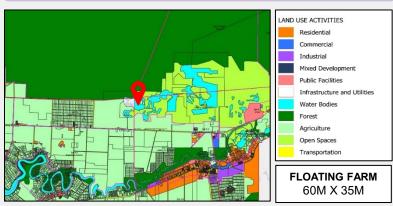




Increase in unemployment and decrease in the labor force
 The scattered distribution of land use

3) Shortage of young people involvement

ISSUES



Map 9: Location of Lestary Floating Farm

PROJECT COMPONENT

• 1st Level: Fish Farming

This offers a more environmentally friendly alternative of building on the sea surface, compared to the traditional land reclamation method, as they do not damage the eco-system.

• 2nd Level: Greenhouse Hydroponics

Lestary Floating Farm uses vertically stacked hydroponic systems with market existing "A" frame hydroponic structures and standing aeroponic walls, which hold vegetables at different levels.

• 3rd Level: Solar Power

The whole rooftop is plastered with solar panels to satisfy the energy requirements of the various fans, misters, microclimate controls, and irrigation tools of the "farm".

IMPLEMENTATION AGENCY

Federal Agricultural Marketing Authority (FAMA)
Department of Agriculture, Kuala Selangor
Ministry of Agriculture and Food Industries

IMPLEMENTATION PHASE





Figure 9: Fish Farming



Figure 9.1: Greenhouse





COSTING RM 65.9M

PROJECT 8: D'TANJUNG LESTARI

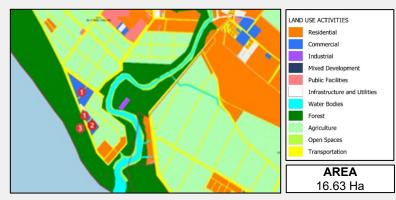
There are not many resorts in Kuala Selangor to attract tourists; therefore, a new resort near Pantai Sungai Kajang Baru is proposed. As a complement to the potentials of the coastal area in Tanjong Karang, the resort is complete with accommodation, street furniture, a food court, a commercial area, and a promenade by the beach. Thus, tourists can enjoy water sports as well as the beautiful beach scenery.





Increase in unemployment and decrease in the labor force
 The scattered distribution of land use
 Illegal hawkers

ISSUES



Map 10: Location of D'Tanjung Lestari

PROJECT COMPONENT

- Provision of resort components such as cabin, public toilet
- Water sport activity
- Commercial area souvenirs shops, water sport shop
- Street and beach furniture benches, promenade streetlight.



Figure 10.3: D'Tanjung Lestari

IMPLEMENTATION AGENCY

•Kuala Selangor District Council (MDKS) •Tourism Selangor

IMPLEMENTATION PHASE





Figure 10: Commercial Area



Figure 10.1: Street and



Figure 10.2: Water sport activity



gure 10.4: D Tanjung Lestari

COSTING RM 6M

PROJECT 9: BALE PARK

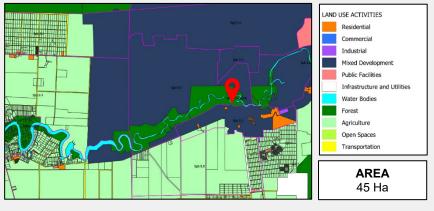
Due to the high production of rice straws, farmers can sell them to make bales to prevent open burning. The collective creations will be displayed at "Bale Park". This proposal will improve and sustain the environment. The location of this proposal is at SPB 5.5 Ladang St Andrew.





1) The increment of rice straw open burning

- 2) The increment of air pollution in Kuala Selangor
- 3) Causing forest fires



Map 11: Location of Bale Park

PROJECT COMPONENT

- Farmers, talented local artists and related agencies are collaborating to create a park to display local creative artworks made from a bale of rice straws.
- Farmers can benefit by selling unused bale of rice straws, and local artists can share their talent by showcasing their artwork in this park and therefore benefitting the bigger cause - to reduce greenhouse gasses emitted from open burning of rice straws.
- Softscapes and hardscapes will be included to . enhance the visual image of the area to attract locals and tourists.

IMPLEMENTATION AGENCY

- Kuala Selangor District Council
- Federal Agricultural Marketing Authority (FAMA)
- The Malaysia Palm Oil Board (MPOB)

IMPLEMENTATION PHASE





Figure 11: Example of hay sculpture



Figure 11.1: Example of hay sculpture



Figure 11.2: Hay Sculpture in park

COSTING

RM 200M

PROJECT 10: SUNGAI BULOH FOR RIVER OF LIFE PROGRAMME

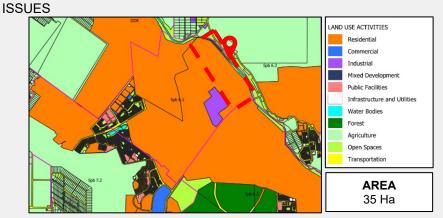
The River of Life Initiative is to improve the river's current condition intensively and improve the visual image of the river. This project intensifies and cleans Sungai Buloh River, turning SPB 6.2 and 6.3 into a marvellous new breath full of luxurious landscapes.





1) Sungai Buloh is the most polluted river in Kuala Selangor The river is in poor condition

3) Locals keep throwing waste into the river



Map 12: Location of Sungai Buloh For River of Life Programme

PROJECT COMPONENT

- Phase 1: Various cleaning activities like gotong royong and intensive cleaning involving the above-mentioned groups will be conducted not only in the river but also 100 meters extending out of the river.
- Phase 2: The beautification phase involves setting up fountains, landscapes, lights and other cosmetics to enhance the image. It will be followed by regular maintenance and regulations to ensure the cleanliness is preserved.

IMPLEMENTATION AGENCY

Kuala Selangor District Council

Department of Irrigation and Drainage Malaysia **ROL-POP**

IMPLEMENTATION PHASE





Figure 12: River cleaning activities



Figure 12.1: River cleaning activities



Figure 12.2: Illustration of how Sungai Buloh would look like



DESIGN IDEALS

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PROJECT 11: PROVISION OF NEW SANITARY LANDFILL

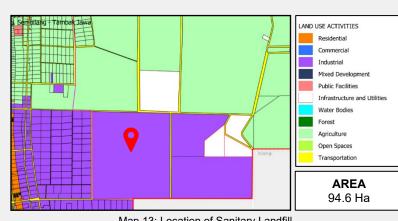
Landfills are very important because they are not only for land use in Kuala Selangor but also Petaling, Gombak and Klang. Therefore, it is a necessity to accommodate the population in this area. The proposed area is at SPB 7.3 Bukit Kucing - Simpang Tiga Jeram.



ISSUES

- Insufficient disposal area (sanitary landfill) 1)
- 2) No centralize landfill for solid waste 3)

Replacing Kubang Badak Sanitary Landfill which has been closed



Map 13: Location of Sanitary Landfill

PROJECT COMPONENT

- 1ST Layer (Liner System) It is the lowest layer and the first to lay the basis of sanitary waste disposal.
- 2nd Layer (Drainage System) The drainage system is responsible for the fluid created by decomposing certain waste products.
- 3rd Layer (Gas Collection System) Methane is a highly volatile and poisonous gas hydrocarbon that contributes to climate warming and can damage the overall health of the environment when released into the environment.
- 4th Layer (Contain Waste Itself) It's the largest layer whereas different waste collecting companies generate waste and discard it periodically from diverse sources.

IMPLEMENTATION AGENCY

KDEB Waste Management Sdn. Bhd. Kuala Selangor District Council

IMPLEMENTATION PHASE





in Jeram Kuala Selangor



Figure 13.1: Sanitary landfill



Figure 13.2: Sanitary Landfill

COSTING **RM 122M**

PROJECT 12: FLOOD MITIGATION SYSTEM

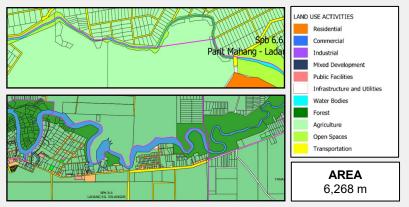
Kuala Selangor has areas at risk for floods, where most of the areas are near Sungai Selangor and Sungai Buloh. Two areas identified for flood mitigation projects, are SPB 6.7 Parit Mahang (Sungai Buloh) and SPB 8.6 Ladang Sungai Selangor (Sungai Selangor).



6 CLEAN WATER

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1) The residential area always having floods annually 2) Causing damage to agriculture products 3) Causing damage to public facilities



Map 14: Location of Flood Mitigation System at Sungai Buloh and Sungai Selangor

PROJECT COMPONENT

- 1st Component (River Embarkment) When reclaiming rivers in areas that have been identified, the river can hold more water when floods occur. At the same time, areas that have been identified as flooded areas can also reduce floods or have less risk of flooding.
- Component (Deepen The Riverbed) 2nd Deepening the riverbed is also one way to prevent floods from happening. Deepening will enable the river to accommodate a large amount of water.

3rd Component (Clear The Main Drainage Monthly Program) Programs to clean up major drainage systems in areas that have been identified as flood risk areas are a proactive matter. Instead of building a new drainage system, cleaning an existing drainage system can also have a very positive effect.

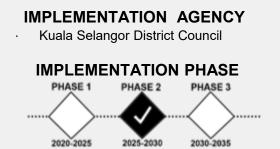




Figure 14: River embarking



Figure 14.1: Main drainage



Figure 14.2: River embarking



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CONCLUSIONS

In conclusion, the new Draft Local Plan of Kuala Selangor 2035 was prepared with the help of the latest data acquired for analysis. Kuala Selangor has many vivid potentials for development to become economically competitive with other states such as Johor and Kuala Lumpur by 2035. The main economic sectors such as agriculture, tourism, commercial and industrial are related to the Food Valley Corridor and Tourism Corridor, which are highly expected to translate the future development of Kuala Selangor in pursuit of the goal set in 2035.

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REFERENCES

Biofloc Culture. (2016). Biofloc. https://vikaspedia.in/agriculture/fisheries/fish-production/culture-fisheries/types-of-aquaculture/biofloc

B., K. (2020, December 18). EcoWorld Malaysia to unveil SWNK Houze @ BBCC and other new projects in 2021. NST Online. https://www.nst.com.my/property/2020/12/650356/ecoworld-malaysia-unveil-swnk-houze-bbcc-and-other-new-projects-2021

CECCARELLI, A. (2011). SMALL AND MEDIUM SIZED ENTERPRISES. BANKPEDIA REVIEW, 1(2), 55–58. https://doi.org/10.14612/ceccarelli_2_2011

Commercial. (2020, April 18). SA Architects Malaysia.

http://www.saa.com.my/projects/commercial/?sortby=year Fauziah, S. H., & Agamuthu, P. (2012). Trends in sustainable landfilling in Malaysia, a developing country. Waste Management & Research: The Journal for a Sustainable Circular Economy, 30(7), 656–663. https://doi.org/10.1177/0734242x12437564

Increase Rice Yield Using Drip Irrigation | Netafim. (2021). Drip Irrigation System. https://www.netafim.com/en/crop-knowledge/rice/

Küller, P., Vogt, M., Hertweck, D., & Grabowski, M. (2012). IT Service Management for Small and Medium-Sized Enterprises: A Domain Specific Approach. Journal of Innovation Management in Small and Medium Enterprises, 1–17. https://doi.org/10.5171/2012.476533

Majlis Daerah Kuala Selangor. (2013). Draf Rancangan Tempatan Majlis Daerah Kuala Selangor 2025- Jilid 1. Muhamad Azuwan Abdul Rahman.

Majlis Daerah Kuala Selangor. (2013). Draf Rancangan Tempatan Majlis Daerah Kuala Selangor 2025- Jilid 2. Muhamad Azuwan Abdul Rahman.

Majlis Daerah Kuala Selangor. (2013). Draf Rancangan Tempatan Majlis Daerah Kuala Selangor 2025- Jilid 3. Muhamad Azuwan Abdul Rahman.

Othman, A. R., & Abdul Majid, N. H. (2018). KL River of Life and its Heritage Value. Asian Journal of Behavioural Studies, 3(13), 105. https://doi.org/10.21834/ajbes.v3i13.148

PLAN Malaysia. (2020). Local Plan Manual.

Rosmiza, M. (2014). Farmers' Participation in Rice Straw-Utilisation in the MADA Region of Kedah, Malaysia. Mediterranean Journal of Social Sciences. Published. https://doi.org/10.5901/mjss.2014.v5n23p229

This futuristic floating farm may take a bite out of global hunger — or totally sink. (2015, October 12). Business Insider. https://www.businessinsider.com/smart-floating-farms-sustainable-forward-thinking-architecture-global-hunger-2015-9?international=true&r=US&IR=T

Upgrading tourism in Egypt. (1987). Tourism Management, 8(4), 372. https://doi.org/10.1016/0261-5177(87)90106-3