ACHIEVING SUSTAINABLE DEVELOPMENT AGENDA: Malaysian Spatial Planning Initiative

Alias bin Rameli
Director, Research and Development Division, PLANMalaysia
MALAYSIAN DEVELOPMENT PLANNING FRAMEWORK
Planning Governance

**FEDERAL**
- MINISTRY OF FEDERAL TERRITORIES
  - PLANMalaysia
  - Federal Department and Agencies

**REGIONAL / STATE**
- STATE GOVERNMENT
  - PLANMalaysia@States -12 States in Peninsular Malaysia

**LOCAL**
- LOCAL AUTHORITIES
  - 100 Local Authorities in Peninsular Malaysia, including Federal Territories of Kuala Lumpur and Putrajaya

**LEVEL 1: NATIONAL PLANNING**
- 5-Year Malaysia Plan
- National Physical Plan
- Sectoral Policies/Strategies
  - National Urbanisation Policy
  - National Rural Planning Policy

**LEVEL 2: REGIONAL/STATE PLANNING**
- Regional Plan
- Structure Plan
- Sectoral Policies/Strategies

**LEVEL 3: LOCAL PLANNING**
- Local Plan
- Special Area Plan

**IMPLEMENTATION**
- Implementation
- Monitoring
- Review

**LEGAL PROVISION**
- Sec. 6B(2)(b)
  - National Urbanisation Policy (NUP)
- Sec. 6A(5)(b)
  - Central Forest Spine Action Plan
  - Sec. 7-11
  - Structure Plan
- Sec. 12-16A
  - Local Plan
  - Sec. 16B
  - Special Area Plan

- Every level must implement, monitor and review:
  - Flexibility
  - Effectiveness

- Town Planning - Concurrent List

- Sec. 6B(2)(b) - National Urbanisation Policy (NUP)
- Sec. 6A(5)(b) - National Rural Physical Planning Policy
- Sec. 7-11 - National Physical Plan for Coastal Zones
GOAL
Achieving a resilient and liveable nation

THRUST 1
Dynamic Urban And Rural Growth

THRUST 2
Spatial Sustainability And Resilience To Climate Change

THRUST 3
Building Inclusive And Liveable Communities

2040
Development Targets in NPP3 | for 2020-2040

**Population & Urbanisation**

- **Population Target**
  - 2020: 36.8 Million
  - 2040: 46.1 Million

- **Urbanisation Target**
  - 2020: 77%
  - 2040: 85%

- **Carbon Dioxide Emission Target**
  - Reduction of GHGs emission intensity from GDP in year 2020 as compared to year 2005 level.
  - Reduction of GHGs emission intensity from GDP in year 2030 as compared to year 2005 level.
  - Reduction of GHGs emission intensity from GDP in year 2040 as compared to year 2015 level.

- **Infrastructure Development Performance Achievement**
  - **Clean and Treated Water Coverage**
    - 2020: 99%
    - 2040: 100%

- **Public Transportation Target**
  - 2020: Not Exceeding
  - 2040: 85%

<table>
<thead>
<tr>
<th>Area</th>
<th>2020</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peninsular Malaysia</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>Kuala Lumpur</td>
<td>40%</td>
<td>70%</td>
</tr>
<tr>
<td>Putrajaya/Cyberjaya</td>
<td>30%</td>
<td>60%</td>
</tr>
<tr>
<td>Johor Bahru</td>
<td>30%</td>
<td>60%</td>
</tr>
<tr>
<td>George Town</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>Kuantan</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>Sabah &amp; Federal Territory of Labuan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kota Kinabalu</td>
<td>15%</td>
<td>40%</td>
</tr>
<tr>
<td>Labuan</td>
<td>15%</td>
<td>40%</td>
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</tbody>
</table>
National Urbanisation Policy | NUP2

2016-2025

VISION

“SUSTAINABLE CITIES FOR PEOPLE’S WELL-BEING”

PRINCIPLE 1
GOOD URBAN GOVERNANCE

PRINCIPLE 2
LIVABLE

PRINCIPLE 3
COMPETITIVE

PRINCIPLE 4
INCLUSIVE AND EQUITABLE

PRINCIPLE 5
GREEN DEVELOPMENT AND CLEAN ENVIRONMENT
### Planning Legislations & Capacity Building

- Town and Country Planning Act, 1976
- National Physical Planning Council (Chaired by PM)
- State Planning Committee (SPC)
- Planning Appeal Board

### PLANNING RESEARCH AND GUIDELINES

- 37 Planning Guidelines
- Youth City
- Smart City
- Safe City
- Affordable Housing etc.

### Regional & Territorial Planning

- 3 Regional Planning Committee
- Central Forest Spine

### National Development Plans

### Development Plans

- 12 State Structure Plan
- 71 Local Plan
- Special Area Plan

### PLANNING INFORMATION SYSTEM, DECISION SUPPORT SYSTEM TOWARDS BIG DATA

- MURNInets
- i-plan
- iSelamat.my
- Desa CHARMs
URBAN SUSTAINABILITY ASSESSMENT

Malaysian Urban Rural National Indicators Network for Sustainable Development

PORTAL MURNInets 2.0

http://www.townplani.gov.my
SPATIAL PLANNING INITIATIVE AND SUSTAINABLE DEVELOPMENT AGENDA
### (2) Mapping of MURNInets Indicators to SDGs

#### Example

**SDGs**

- Broadband Penetration Rate

**MURNInets INDICATORS**

- Number of Disaster Risk Management and Implementation Initiative
- Number of Environmental Management Initiative
- Percentage of Affordable Housing Provided/State Target
- Percentage of Residential Land Use Within 400m from Public Facilities
- Ratio of Public Nuisance Complaint Cases/10000 population
- Happiness Index
- Percentage of Reduction in Crime Index
- Percentage of Changes in Non-Built up Area
- Urbanization Rate
- Ratio of Public Open Space / 1000 population
- Rate of Application for Open Space Gazzetment
- Conservation of Forest Reserve and Public Park
- Number of Integrated Public Transport Terminal/Stations
Priority SDGs based on Existing Selection Criteria

1. No Poverty
2. Zero Hunger
3. Good Health and Well-being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation and Infrastructure
10. Reduced Inequalities
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Peace, Justice and Strong Institutions
15. Life on Land
16. Partnerships for the Goals

MURNInets | Malaysian Urban Rural National Indicators Network for Sustainable Development (39 indicators)

MURNInets | Malaysian Urban Rural National Indicators Network for Sustainable Development (39 indicators)

10 PRIORITIES
(3) Translating of NUA in Spatial Planning

1. Sustainable Urban Development for Social Inclusion and Ending Poverty
   - NPP3: 14 Implementation actions
   - NUP2: 14 Implementation actions
   - NRPP: 31 Implementation actions

2. Sustainable and Inclusive Urban Prosperity and Opportunities for All
   - NPP3: 8 Implementation actions
   - NUP2: 18 Implementation actions

3. Environmentally Sustainable and Resilient Urban Development
   - NPP3: 30 Implementation actions
   - NUP2: 35 Implementation actions
   - NRPP: 25 Implementation actions

4. Building The Urban Governance Structure: establishing a supportive framework
   - Planning Legislation and Regulation
     - Physical Planning in Fed. Constitution
     - Act 172, Act 267
     - MPFN, SPC, Appeal Board
     - Planning rules

5. Planning and Managing Urban Spatial Development
   - Formulation of Spatial Planning Documents
     - National Physical Plan 3 (NPP3)
     - National Urban Policy 2 (NUP2)
     - National Rural Physical Plan 2030 (NRPP)
   - NPP3: 49 Implementation actions
   - NUP2: 24 Implementation actions
   - NRPP: 35 Implementation actions

- Preparation of state and local development plans
  - Structure Plan (State)
  - Local Plan (Local Authority)
  - Special Area Plan

- Establishment of Regional Planning Committee and Regional Plans

- Planning Research and Guidelines

- Planning Information System And Decision Making System
  - i-Plan
  - MUO
  - MURNINETs
  - Various localised planning tools

- Training and capacity building for urban planners
PROMOTING AND IMPLEMENTING THE SDGs AGENDA
Integrating Climate Change Mitigation Measures in Local Plan

- **Low Carbon City Planning Guidelines**
  - City Layout and Design
  - Urban Services and Waste Management
  - Transport and utility
  - Governance
  - Environment and Green Technology

*NATIONAL* Low Carbon City Planning Guidelines

1. Affordable and clean energy
2. Sustainable cities and communities
3. Climate action
4. Life on land
Integrating Disaster Resilience Management in Local Plan

- Mapping Disaster Risk

1. Identify type of hazard
2. Identify level of hazard risk
3. Evaluate resilience of a city
4. Identify appropriate measures to reduce vulnerability and increase cities’ resiliency

Susceptibility Map + Vulnerability Map + Hazard Map = Disaster Risk Map
Benefits of Urban Growth Boundary:

i. To balance and sustain physical, environment, economy and social components for future development.

ii. Smart and efficient control of urban sprawl.

iii. Managing and planning development of cities.
Promote high connectivity, public transport friendly, pedestrian and cyclist centred on public transport – rail and buses.

- Promote mixed development with high intensity in walkable distance from station.
- Promote optimum and inclusive land use and spaces.
- Reduce carbon emission.
Reducing Crime

Government Transformation Programme

- Introduced in 2004.
- Consists of 3 strategies and 15 measures.
- Implemented by local authorities with budget allocation from Federal Government.
SAFE CITY IMPLEMENTATION | 2010-2019

BLACKSPOT and CPTED Initiatives

Fear of Crime (FoC) + High Crime Case (Hotspot)

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Quantity/Details</th>
<th>Budget</th>
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<tbody>
<tr>
<td>Lightings</td>
<td>24,844 units</td>
<td>RM340.84 million (US$95.00 mil.)</td>
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<tr>
<td>Pedestrian Walkways</td>
<td>385.65 km</td>
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<tr>
<td>Motorcyle Parking</td>
<td>44,061 units</td>
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<tr>
<td>Safety Mirrors</td>
<td>2,810 units</td>
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<tr>
<td>CCTV</td>
<td>992 units</td>
<td>RM29.79 million (US$8.00 mil.)</td>
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<tr>
<td>Traffic Calming</td>
<td>385 units</td>
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</tr>
<tr>
<td>Crime Prevention Signage</td>
<td>2,211 units</td>
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</table>

Safe City Monitoring System (SPBS)
Promoting and Implementing Green Neighbourhood Initiatives

Guideline Purpose: To drive local authorities to support green lifestyle through the neighbourhood design that would reduce carbon emissions & improve the quality of life and well-being.

Yearly Awards: To appreciate the community’s efforts in implementing the green neighbourhood initiatives.

- Provision of Bicycle Lane
- Rain Water Harvesting
- Provision of Pedestrian Walkway
- Composting
- Community Gardening
- Other Initiatives
HEALTHY WALKABLE CITY

Site 1: Kuala Terengganu (1.15km)

• BEFORE

• AFTER

Localising SDGs – Project Showcase 2015 | Pioneer
HEALTHY WALKABLE CITY

Site 2: Kluang (0.5 km)

• BEFORE

• AFTER
HEALTHY WALKABLE CITY

Site 3: Kuala Terengganu

BEFORE

AFTER

NATIONAL - LOCAL | Localising SDGs – Project Showcase | 2016 - 2nd Phase
TRANSIT ORIENTED DEVELOPMENT (TOD)

Site 4: LRT Station, Ampang KL
Site 5: Bidor

PLACEMAKING THROUGH POCKET PARK

Petai Lane @ Bidor, Perak
GOVERNING SUSTAINABLE DEVELOPMENT INITIATIVE | SDGs

Kuala Terengganu Drawbridge
MALAYSIA

…..The first drawbridge built in Southeast ASIA
MURNInets – Data Collection and Verification
National and State Operation Centre + 150 Local Authorities

MURNInets
Malaysian Urban Rural National Indicators Network for Sustainable Development

National Operation Centre
Ministry of Federal Territories
PLANMalaysia
Perancangan Melangkai Kelaziman
Planning: Beyond Conventional

KEMENTERIAN WILAYAH PERSEKUTUAN
KPKT
KEMENTERIAN KESIHATAN MALAYSIA

JABATAN SEKITAR MALAYSIA
JABATAN PENGAIRAN
JABATAN PERDANA MENTERI

SPAN
www.span.gov.my

PERHUTAN

INDAHWATER

20 Years Partnership
SAFE CITY – Crime Blackspot Whitening Program

Agencies Collaboration – Blue Ocean Strategy

Main Agency

<table>
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<tr>
<th>Ministry of Federal Territories</th>
<th>PLAN Malaysia</th>
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<tr>
<td>Perancangan Melangkah Keluzaan</td>
<td>Planning: Beyond Conventional</td>
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<tr>
<td>Ministry of Home Affairs</td>
<td>Royal Malaysia Police (PDRM)</td>
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Blackspot Whitening Initiative

- Community Policing
- Operasi PATI
- Omnipresence
- Rukun Tetangga
- Skim Rondaan Sukarela (SRS)
- Gotong royong & aktiviti kesukarelawanan
- Cure&Care Service Centre
- Klinik Cure&Care 1Malaysia
- Skuad 1Malaysia
- Jabatan Peranginan Negara dan Integrasi National
- Peratuan Penduduk

Agencies Collaboration – Blue Ocean Strategy