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Case Study Presentation

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MYANMAR
Contact

- Myanmar: Urban Planning Status
- Government Structure
- Study Area: Yangon City
- Challenges and Response related with Climate Change
- Outcomes and Future Improvements
- Lesson Learned and Conclusion
Myanmar: Urban Planning Status

- Urban Population: 29.6%
- Poverty Population: 32% (15.8 million)
- Poverty Rate in Rural Area: 38.8%
- Poverty Rate in Urban Area: 14.5%
- Total Area: 676,578 sq.km
- Density: 1 sq km 76 unit
- Population: 51.4 million (2014 Census)
- By 2040: 70 million

Study Area: Yangon City

Current Yangon Land Use

Total Area
9178.96 sq.km
(Yangon Region)
1043.57 sq.km
(YCDC)

1 sq.km in 716 unit of density
Heritage Building 189
Study Area: Yangon City

Population
5.14 millions (Yangon City)
7.3 millions (Yangon Region) (2014 Census)

Urban Population 70%

Density 716 per km sq

1.23% of city area is Slum area which is 432 wards in 21 townships.

Current Average Informal Settlement in Yangon is 6.8% of Population

34% of city pop: is living below the poverty line

Population Projection of

Source: Urban Planning Authority, 2018
Resources of Socio-economics in Yangon

Myanmar and Yangon Region GDP (USD Billion)

The secondary sector employment in YCDC is around 25%

Economically Active Population 71%

GDP in Yangon Division
**Development Vision**

- **International Logistics HUB City**
  - International Port (River & Sea)
  - Inland Water Transport
  - Development Corridor
  - SEZ and Industrial Development

- **Knowledge & Comfortable City**
  - Research & Development (R&D)
  - Heritages, Culture & History
  - Living Environment & Housing
  - Rich Green and Garden

**Yangon Future Vision**

**Attractive International Port & Logistics HUB**
- *A City of Blue, Green and Gold*

- **Well Managed Infrastructure City**
  - Integrated Public Transport
  - Information Development
  - Disaster Risk Management
  - Social Service and Healthcare

- **City of Good Governance**
  - Rule of Law
  - Land Use & Zoning Regulations
  - Urban Financial & Taxation
  - Institutional & Human Capacity

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**Urban Structure**

- City Center
- New City
- Green and Water Spot
- Growth Axis
- East-West Linkage
## Main Challenges & Response linked with Climate Change

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<thead>
<tr>
<th>Challenges &amp; Causes</th>
<th>Responses</th>
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<tbody>
<tr>
<td><strong>Urban Management</strong></td>
<td>■ Legal system reform</td>
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<td>▪ High migration</td>
<td>■ Systematic urban management</td>
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<td>▪ Increased informal settlement</td>
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<td>▪ Lack of specific regulations for</td>
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<td>standards which have not met the</td>
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<td>actual requirements</td>
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<td><strong>Flooding</strong></td>
<td>■ Flood Risks Modal &amp; Flood Hazards Modal</td>
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<td>▪ Pollution of urban rivers by solid</td>
<td>■ Flood forecasting in future</td>
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<td>waste lead to reduce the water</td>
<td>■ Plan to relocate informal settlements</td>
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<td>flow</td>
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<tr>
<td>▪ Flooding in urban area</td>
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<td>▪ Old sewage system and inadequate</td>
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<td>storage and drainage</td>
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<td>▪ There is no separate rainwater</td>
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<td>drainage system in the urban area</td>
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<td><strong>Land Use Planning</strong></td>
<td>■ Demarcation of Zoning Layer</td>
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<td>▪ Urban sprawl/Area-wise development</td>
<td>■ Development Permission system (YUDM)</td>
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<td>projects</td>
<td>■ Develop Zoning Regulation</td>
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<td>▪ Increase the rate of concretization and reduce the proportion of green areas</td>
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<td>▪ Green area and surface permeability decreased</td>
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<td>▪ Lack of planning guideline &amp; zoning plan</td>
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Climate Change Integration into Planning

- **2008**: DRR working group
  - to support recovery & reconstruction efforts of Cyclone Nargis

- **2012**: Drafted MAPDRR
  - 65 priorities projects
  - 7 components

- **2013**: Disaster Management Law
  - Legal basis to set up Disaster Management bodies
  - Roles/Responsibilities/Funds

- **2015**: Disaster Management Rules
  - To implement 36 members Task Force

- **2016**: Institutional Arrangements
  - A 36 members Task Force

- **2017**: MAPDRR
  - Formulated NDMC
  - Four Technical working groups which includes 25 departments and partners
  - Myanmar private sector Disaster Management network

Source: MAPDRR, 2017
Disaster Management Bodies in Myanmar

National Disaster Management Committee

Advisor Group

State/Region Disaster Management Body

District Disaster Management Body

Township Disaster Management Body

Ward/Village Tract Disaster Management Body

Disaster Management Work Committee

Financing and Financial Management Work Committee

Security Work Committee

News and Information Work Committee

Health Care Work Committee

Livelihood Restoration Work Committee

International Relation Work Committee

Search and Rescue Work Committee

Logistic Work Committee

Rehabilitation and Reconstruction Work Committee

Initial Need Assessment, Damage and Loss Verification and Need Identification

Environmental Conservation Work Committee

Source: MAPDRR, 2017
Region/State Disaster Management Body

YRG (Chief Minister)

Response Coordination (Emergency Operation Center)

International assistance

Private sector

Private International assistance

YCDC

FSD

GAD

RRD

Health

MRCS

CSOs

Work Committee (12)

Building Urban Resilience To address disaster and Climate risks, Cleaning Damages operation, Drinking Water Supply, Toilet....

Search and Rescue and Fire Risk Management

Overall Disaster Management

Provides emergency assistance for the disaster victims

Providing emergency health services

First Aid, Search and rescue, Provide Non Food Item

Data Assessment for Disaster Preparedness

Source: SUDP, 2016
Financial Sources

- State Budget (Both National & Local)
- International Support
- Private Sector
- Community Contribution

- Annual Department Budget (Lead Ministry)
- National Disaster Management Fund (NDMF) - 20 Bill MKK/Year
- Contingency Fund (erstwhile President’s Reserve Fund)
- Region & State Budget
- Public Private Partnership (Union of Myanmar Federation of Chambers of Commerce and Industry UMFCCI)

Source: MAPDRR, 2017
## Ongoing Projects with YCDC

<table>
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<tr>
<th>Project Name</th>
<th>Objects</th>
<th>Term</th>
<th>Development Partner</th>
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<tr>
<td><strong>Global Future Cities Programme</strong></td>
<td>▪ Urban Planning, to provide technical assistance for spatial restructuring (Heritage)&lt;br▼ Resilience, to provide technical assistance to develop strategies to address the impact of climate change &amp; ensure development is sustainable. (Streetscapes improvement)</td>
<td>From mid-2019 to March 2021</td>
<td>Global Future Cities Programme (GFCP), UN-Habitat &amp; YCDC</td>
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<td><strong>Myanmar Southeast Asia Disaster Risk Management Project (SEA-DRM)</strong></td>
<td>▪ To reduce the impacts of flooding and earthquake in Yangon;&lt;br▼ To enhance the capacity of the government to finance disaster response; and&lt;br▼ To provide immediate and effective response to an eligible crisis or emergency through a regional financial protection mechanism.</td>
<td>2017-2023</td>
<td>World Bank, YCDC</td>
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<td><strong>Yangon Mapping Project</strong></td>
<td>▪ To install the CORS station install and data center&lt;br▼ To produce Digital topographic Maps for of Yangon&lt;br▼ To formulate zoning regulation and zoning classification</td>
<td>2017-2019</td>
<td>JICA &amp; YCDC</td>
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<td><strong>Yangon Urban Development Management Project</strong></td>
<td>▪ Urban development in Yangon will be properly managed according to zoning regulation and development permission system.</td>
<td>2018 - 2021</td>
<td>JICA &amp; YCDC</td>
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<td><strong>Multiple risks management in extreme events in fast growing (mega)cities in Myanmar</strong></td>
<td>▪ Understanding the multiple risks challenges for Yangon in detail, in order to establish a comprehensive, integrative multiple risk management</td>
<td>From Nov 2017 to 2025 (estimated)</td>
<td>BMBF, Cologne University (Germany), YCDC</td>
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<td><strong>Building Urban Resilience of children, communities and institutions in Myanmar</strong></td>
<td>▪ Vulnerable communities, especially children &amp; young people, in urban areas have increased resilience against disasters, shocks and stresses.</td>
<td>2018-2021</td>
<td>Australian aids, Plan International Myanmar, YCDC</td>
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## Outcomes & Future Improvements

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<th>Project Name</th>
<th>Outcome</th>
<th>Future improvement</th>
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</table>
| **Global Future Cities Programme**                               | ▪ Strategies  
▪ Streetscapes improvement                                                                                                             | ▪ Can follow up design, technique & cost for future projects                                           |
| **Myanmar Southeast Asia Disaster Risk Management Project (SEA-DRM)** | ▪ Flood Risk Modal & Flood Hazard Model by making the Light Detection and Ranging-LiDAR Process.(370 sq Km)  
▪ Priority public facilities to reduce disaster risk by retrofitting (Reservoir, Compressor Station, Pumping Station, Markets)  
▪ Risk assessment for lifeline infrastructure  
▪ Capacity development                                                                                         | ▪ Flood Hazard Map & Flood Risk Map  
▪ Has to apply the LiDAR data for other services                                                              |
| **Yangon Mapping Project**                                       | ▪ Esquires strict and concise map scale. (1:5,000 for YCDC area (1,500km²)/1:10,000 in the south suburbs of Yangon area (1,100km²)  
▪ Risk assessment for lifeline infrastructure  
▪ Capacity development                                                                                         | To sustain the construction of urban development with GIS system .  
▪ Land management system is improvement (To support establishment of the Continuously Operating Reference Stations (CORS) in Yangon Area)  
▪ web based geospatial platform                                                                                   |
| **Yangon Urban Development Management**                         | ▪ Zoning regulation and improved development permission system                                                                            | ▪ Demarcation of Zoning Layer  
▪ Formulation of Development Policies and Land use Plan  
▪ Mitigate & adapt disaster management                                                                            |
| **Multiple risks management in extreme events in fast growing (mega)cities in Myanmar (Yangon, Mandalay, Naypyitaw, Taunggyi, Mawlamyaing)** | ▪ Phase-1 : Structure of project & good proposal  
▪ Phase-2: Analysis of situation & problems, SWOT  
▪ Phase-3 : Research on concepts, procedures and stakeholder’s priorities and action  
▪ Phase-4 : Implementation of the developed concepts and procedures for risk awareness and risk management, capacity enhancement | effective/reliable research-based data bank, inter-institutional dissemination of information (incl. Geographic Information System) |
| **Plan International Myanmar**                                   | ▪ Job opportunities, Awareness Raising Events, Vulnerable communities especially for youths and children in urban areas have increased resilience against disasters | Communities have a safer & enabling environment that can increase child & youth resilience to prepare & respond to disasters |
Defined Development Areas for Zoning

- Conservation Area
- Development Controlled Area
- Guided Densification Area
- Development Promotion Area
- Redevelopment & Upgrade Area
Zoning Regulation and Zoning Map shall be established considering the Master Plan, current land/building usage and the capacity of the infrastructure as well as Zoning Standard and Guidelines.
Lesson Learned

- Management and supervise the implementation of Urban Planning.
- Risk of climate change and natural disasters
- Lack of uniform and standardized database system among sectors
- Stakeholders and community involvement to let them to be aware of the importance of the systematic urban management.
Conclusions

- Implementation and future development of the legal basis for Urban Planning is needed, responding to climate change.
- Provide precise management, implementation of the counter measures and supervision for Urban Disaster to minimize the risks.
- Effective use of human and natural resources in Urban Disaster.
- IT application in Urban Planning management in response to climate change.
- Mechanisms to provide useful information to stakeholders and support decision-making.
Building disaster resilience is not an option. Past events have clearly demonstrated the far-reaching, detrimental impact of disasters on hard-won development gains. I congratulate the National Disaster Management Committee for preparing the “Myanmar Action Plan on Disaster Risk Reduction 2017”, which lays out the path that must be followed to make our country disaster resilient. The backbone of our nation is our people and their role in the implementation of the Plan cannot be overstated. Let us all join with the National Disaster Management Committee to build a truly disaster resilient Myanmar.

H.E. Daw Aung San Suu Kyi
State Counsellor, Republic of the Union of Myanmar
9-10-2017