Introduction to City Planning in Japan

Yuko Okazawa, Urban Specialist
Tokyo Development Learning Center
Social, Urban, Rural and Resilience Global Practice
World Bank Group
Urban Expansion of Tokyo

Rapid expansion took place first before WWII, and then in 50s and 60s. Tokyo stabilized since, but expansion in the suburbs continued till the late 80s.

Highly concentrated Taito Ward exceeding 320/ha
Rural areas at the periphery
Less extensive Tokyo Harbor

Largest urban area by 1970
“Fingers” of development along rail
Tokyo proper losing population to suburbs

Redensification of the Tokyo proper
Greater Tokyo population reaching 30 million excluding rural areas

Source: [https://perihele.wordpress.com/2014/04/18/mapping-japanese-city-spaces-greater-tokyo/](https://perihele.wordpress.com/2014/04/18/mapping-japanese-city-spaces-greater-tokyo/)
Adverse Impacts due to Densification

“Commuting Hell”
Traffic Congestion
Inadequate and Dense Housing

Air Pollution
Frequent Floods and Water Contamination
Waste Management Issues
Population Dynamics: Metropolis vs Others

Long-term trend of Rural-Urban Migration

Source: Ministry of Land, Infrastructure, Transport and Tourism
City Planning Area and UPA/UCA

City Planning Area

Urbanization Control Area (UCA)
Urban development and urban land use are prohibited or strongly restricted

Urbanization Promotion Area (UPA)
Urban development are promoted with zoning system

Growth Boundary

Natural Preservation Area
- Forest Area
- Natural Conservation Area
- Agricultural and Rural Village Area
- Disaster and Flood Prone Area

Development Potential Area
- Existing built-up area (construction land)
- New development area

Growth Boundary
Land Use Zones

- Regulates the **use, density and form** of buildings in guiding land use.
- Must be designated in the entire Urbanization Promotion Area.
- Based on designated use zone by block. Floor Area Ratio (FAR), Building Coverage Ratio (BCR), and maximum building height are designated for each use zone to control volume of buildings by block.
- Pro-development in nature. Development which conforms to these land use zones are **in principle** permitted by default.
Urban Facilities

- Urbanization happened very quickly and hence became very costly to secure land in a built-up area for urban facilities in urban areas.

- Hence, location and area of Urban Facilities are stipulated in advance to:
  - Tightly regulate the building and land development activities of the land plots and;
  - Ensure the consistency across land use, projects and facilities, ensuring the effective consultation with relevant agencies and general public.

- This is done through a “City Planning Decision” otherwise known as toshi keikaku kettei. Developments subject to the decision will be restricted.

Urban Facility includes...

Transport facilities, parks, open space, utilities, waterways, education/cultural facilities, medical/welfare facilities, etc.

Source: Kawasaki City, Japan
Various Urban Development Projects Schemes

- Enables the **public and private sector** to carry out necessary development projects to serve public **interests** through provision of infrastructure and service delivery.

- Can be done through land use conversion schemes (below) or whole purchase schemes.
District Plans

- District Planning was introduced in 1980 as a detailed land use planning system applying to areas with several hectares, often with theme-specific development purposes.
- It is stipulated by the municipality and must be drafted through consultation with land owners.
- It is an overlay regulation over primary regulations (Urbanization Promotion Area/Urbanization Control Area, Land Use Zones) to provide more detailed regulation on land use and building activities to cater to the specific needs of the area.

Examples of Development Themes
- Disaster prevention
- Corridor development
- Urban villages
- Cultural heritage preservation
- Intensive utilization of land in built-up areas
Special Districts and Bonus FARs

- **Relaxing the base FAR** (stipulated through Land Use Zones) is possible under certain circumstances. Significantly higher FARs allowances are granted as a “bonus” in return for private investment in compensating public facilities (e.g. station plazas, open space, pedestrian walkways, etc.)

- Unused FAR (difference of maximum permitted FAR of the area to the building’s actual FAR) can be transferred to another building in the vicinity as air rights transfer (possible only in certain District Planning areas).

- Underlying principle of this deregulation is the optimal distribution of costs and benefits based on local conditions. From the Government’s perspective, FAR bonuses are given to realize public goods with no cost for the Government.
What can we learn from Japan’s experience?

1. Effective land development controls on the urban fringe for future infrastructure is crucial. Public space can become less affordable as the society gets wealthier.

2. Land development control systems requiring allocation of certain proportion of land for public needs is essential for long-term sustainable development.

3. LR is a powerful to achieve compulsory dedication of private land to public uses. However LR by itself cannot control urban sprawl without a combination with blanket restriction on development outside LR projects or universal building-line systems.

4. Pro-development policies may encourage growth/ productivity over urban amenity. Important to get the basic urban patterns right at the time of rural to urban land conversion (adequate control of private investments is key).

5. Weaker land development restrictions increase housing supply and keep prices down. Is this really true?

Reference: “The Making of Urban Japan” (Sorensen, 2002)
6. **Existence of strong and civic organizations and a lively civil society** is highly important for urban governance and urban planning. Local environmental management through *machizukuri* (city building) organizations has been an important contributor.

7. **Good public transit systems can mitigate many serious urban problems.** (transport accessibility for all, unifies job markets and increases economic competitiveness, decreases traffic congestion).

8. **High intensity of mixed use in central cities** can be a positive force in keeping urban areas vital and interesting versus strictly segregated land use.

Reference: “The Making of Urban Japan” (Sorensen, 2002)
Thank you for your attention!
Overview of City Planning in Japan

Designation of areas which will be subject to city planning: City Planning Area (CPA)

Formulation of 1) CPA Master Plan (prefectures) + 2) Municipal Master Plan (municipalities)

City Planning Instruments and Tools

- Land use regulations
  - Area division (UPA/ UCA)
  - Land use zones
  - Special districts

- Urban facilities (infrastructure)

- Urban development projects
  - Land readjustment projects
  - Urban redevelopment projects
  - Special districts

Mechanisms to Ensure Realization

Basic mechanisms
- Land development permissions
- Building confirmation
- Notification through District Plans

Additional measures for Urban Facilities/ Urban Development Project
- Development restrictions within the designated area
- Eminent domain and tax incentives for land acquisition
- Technical and financial assistance to the implementing body
## Role Demarcation to Finance Infrastructure

<table>
<thead>
<tr>
<th>Road Type</th>
<th>Manager</th>
<th>Financier</th>
<th>Costs borne by National Government</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>New/ Renewal</strong></td>
</tr>
<tr>
<td>National Expressway</td>
<td>Toll road</td>
<td>National (MLIT)</td>
<td>Expressway Company</td>
</tr>
<tr>
<td></td>
<td>New direct</td>
<td>National, Prefectural</td>
<td>3 / 4</td>
</tr>
<tr>
<td>National Road</td>
<td>Direct</td>
<td>New/ Renewal: National</td>
<td>Nation (MLIT), Prefectural</td>
</tr>
<tr>
<td></td>
<td>Supplemental</td>
<td>O &amp; M: National, Prefectural</td>
<td>1 / 2</td>
</tr>
<tr>
<td>Prefectural Road</td>
<td></td>
<td>Prefectural</td>
<td>Under 1 / 2</td>
</tr>
<tr>
<td>Municipal Road</td>
<td>Municipality</td>
<td>Municipal</td>
<td>Under 1 / 2</td>
</tr>
</tbody>
</table>

Source: Ministry of Land, Infrastructure, Transport and Tourism (translated from original source)
### Urban Development Project Schemes

<table>
<thead>
<tr>
<th></th>
<th>Land Readjustment</th>
<th>Urban Redevelopment</th>
<th>New Residential Area Development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Methods</strong></td>
<td>Replotting and land rights exchange</td>
<td>Rights conversion from land to building floor</td>
<td>Whole purchase through compulsory expropriation</td>
</tr>
<tr>
<td><strong>Objectives</strong></td>
<td>• Development of Urban Facilities</td>
<td>• Development of fire-resistant buildings</td>
<td>• Large-scale development of housing with livable</td>
</tr>
<tr>
<td></td>
<td>• Higher added value to land</td>
<td>• Development of Urban Facilities</td>
<td>environments to ensure provision of housing for all</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Rational and sound high utilization of land</td>
<td></td>
</tr>
<tr>
<td><strong>Application</strong></td>
<td>Broadly from urbanized areas to new towns</td>
<td>Urbanized areas</td>
<td>New towns</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>More than 100 hectares</td>
<td>Several hectares (1-3 ha)</td>
<td>More than 100 hectares</td>
</tr>
<tr>
<td><strong>Achievements</strong></td>
<td>395,206 ha</td>
<td>1,193 ha</td>
<td>17,943 ha</td>
</tr>
</tbody>
</table>

- Urban Development Project schemes enable the **public and private sector to carry out necessary development projects to serve public interests** through the provision of infrastructure and service delivery.

- Major schemes: land readjustment project, urban redevelopment project, new residential development project, residential district development project, industrial zone development project, and new urban infrastructure development project.
How are continuity of plans ensured in Japan?

1. **Bureaucrats** are the professionals in policy formulation and finance allocation.
   a. Politicians influence specific sectoral policies of their interest: “road clan” “port clan” “pension clan”
   b. Long Liberal Democrat Party representation at the national + local level, but nothing fundamentally changed when the Democrat Party recently had power for 3 years
   c. This is also why plans and policies tend to be very rigid in Japan.

2. **Two-tier plan set-up ensures implementation on the ground.**
   a. **Long term vision and strategies** defined in the 10-20 year time frame. (e.g. Growth boundaries for UPAs and UCAs defined for next 10 years.)
   b. **Specific plans** backed by financing for every 5 years.

3. **Plans are a shared democratic ground,** a shared consensus of how a city should be developed by the people – agreement by public consultation cannot be overridden even by politicians.
   a. Not a compromise of all interests, but an agreement of what is important in the urban development direction
   b. District Planning (neighborhood planning) non-statutory and overlay plan to the statutory
   c. This is the theory at least...we are getting there 