

Supporting utility	Bureau of Waterworks Tokyo Metropolitan Government		Case No.	7
About recipient utility			Data from	2012-2017
Recipient utility	Yangon City Development Committee, Myanmar (YCDC)			
Cooperation year	2013-			
Service area	Yangon City			
Service population	City area: 1.92 ¹ Metropolitan area: 1.92 ¹	Service coverage	City area: 37% ¹ Metropolitan area: 24% ¹	
Water distribution	636,440 m ³ /d	Maximum water distribution	Unknown	
Water consumption per capita	Unknown	NRW	66% ¹	
Water source	Storage water・Ground water	Pipe length	71.73 km	
No. of WTP ²	6 ¹	No. of Employees	2,196 (as of June 2012)	
Water treatment	Coagulation + Sedimentation + Rapid filtration + Aeration + Micro strainer ³ *water not treated for 2/3			
Water rates	Public: 4.4 JPN /m ³ General: 7.0 JPN /m ³ Commercial: 8.8 JPN /m ³ (Calculated with 1 MMK=0.08 JPY)			
About technical cooperation to YCDC				
Background	<div><div></div><div>December 2012 and January 2014: HIDA training in Japan</div><div></div><div>September 2013: Signed a Memorandum of Understanding for technical cooperation</div><div></div><div>October 2013: Held a seminar</div><div></div><div>January 2014: Made a proposal for non-revenue water project</div><div></div><div>October 2014: Signed a contract for the non-revenue water project (grass-root gratuitous)</div><div></div><div>October 2016: Concluded a contract for a non-revenue water project (grant aid with project management right type)</div></div>			

¹ According to a cooperation preparatory report of JICA

² WTP = Water Treatment Plant

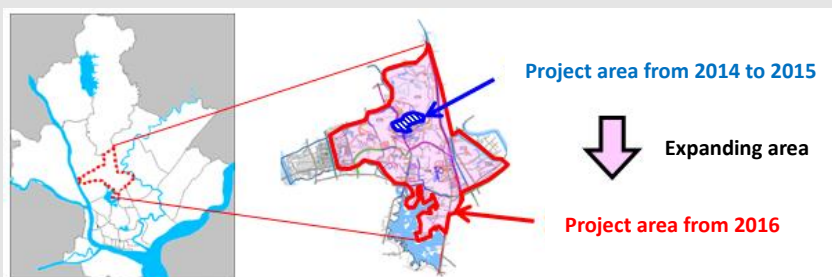
³ According to a preparatory report for Yangon City Development Program Formation

Cooperative scheme	<ul style="list-style-type: none"> ■ Cooperative scheme: Grant aid with project management right type ■ Partner organization: Japan International Cooperation System (YCDC's procurement agency) ■ Supporting organization: Japan Consortium, LLC. (Tokyo Suido Services Co., Ltd., Toyo Engineering Corporation)
Recipient utilities' challenges	<ul style="list-style-type: none"> ■ Deterioration of water quality in raw water rivers ■ Water quality analysis ■ Reduction of non-revenue water ■ Management of water distribution network ■ Financial management and human resources development

Technical
cooperation
provided

<Non-revenue water reduction project: grant aid with project management right type>

- Implementation of non-revenue water reduction (infrastructure development) project from 2016 (scheduled to be completed in 2022)
- Project contents
Leakage survey, replacement and repair of water pipes, replacement and installation of meters, etc.
- Target area
Mayangon District in Yangon City (expanding the area covered by the above project)
- Project cost
Approximately 1.8 billion JPY (ODA funds)






[References: status of other cooperation projects]

<Technical cooperation project>

- From 2014 to 2018, a JICA's technical cooperation project was implemented to improve the service management capacity of YCDC staff
- Implementation details
 - ☀ Strengthening of water supply management capacity
 - ☀ Strengthening of non-revenue water reduction capacity
 - ☀ Strengthening of water quality management capacity

<Non-revenue water reduction project: Grassroots grant aid>

- A non-revenue water reduction project was implemented from 2014 to 2015.
- Project contents
Leakage survey, replacement and repair of water pipes, replacement and installation of meters, etc.
- Target area
Part of Mayangon District in Yangon City
- Project cost
Approx. 50 million JPY
- Results
 - ☀ Halved the non-revenue water rate from 77% to 32%
 - ☀ Realized 24/7 water supply

<p>Future plans and prospects</p>	<p>Following the non-revenue water reduction (infrastructure development) project from 2016, the below project is scheduled to be implemented for the management of water facilities.</p> <p><Water facility maintenance and management project></p> <ul style="list-style-type: none"> ■ Project Description Sharing technical knowledge through consultations and training on reducing non-revenue water (*Yangon City will conduct daily maintenance and management of water distribution pipes) ■ Implementation period At least 5 years (the project will be implemented sequentially, starting from the areas where infrastructure development is completed. The project is scheduled to start in FY 2018) ■ Project cost Funds of Yangon City (amount to be determined)
<p>Pictures</p>	<div data-bbox="434 770 925 1095">  <p>← Pipe replacement in Yangon City</p> </div> <div data-bbox="434 1128 925 1489">  <p>←Water pipes in Yangon City (Installations not well organized)</p> </div> <div data-bbox="443 1534 729 1910">  <p>←Utilization of Japanese products (leakage detector)</p> </div>