

# Partnering with the Private Sector - Improving Outcomes ~ Risks and Risk Mitigation on PPP ~

~ Risks and Risk Mitigation on PPP ~

**Financial Reform for Economic Development  
- Public Sector Forum 2016-**

**Japan International Cooperation Agency (JICA)**

**18<sup>th</sup>, May 2016**

# Points of Discussion

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- Infrastructure Investment Needs
- Risks in PPP
- JICA's Approaches for Risks in PPP

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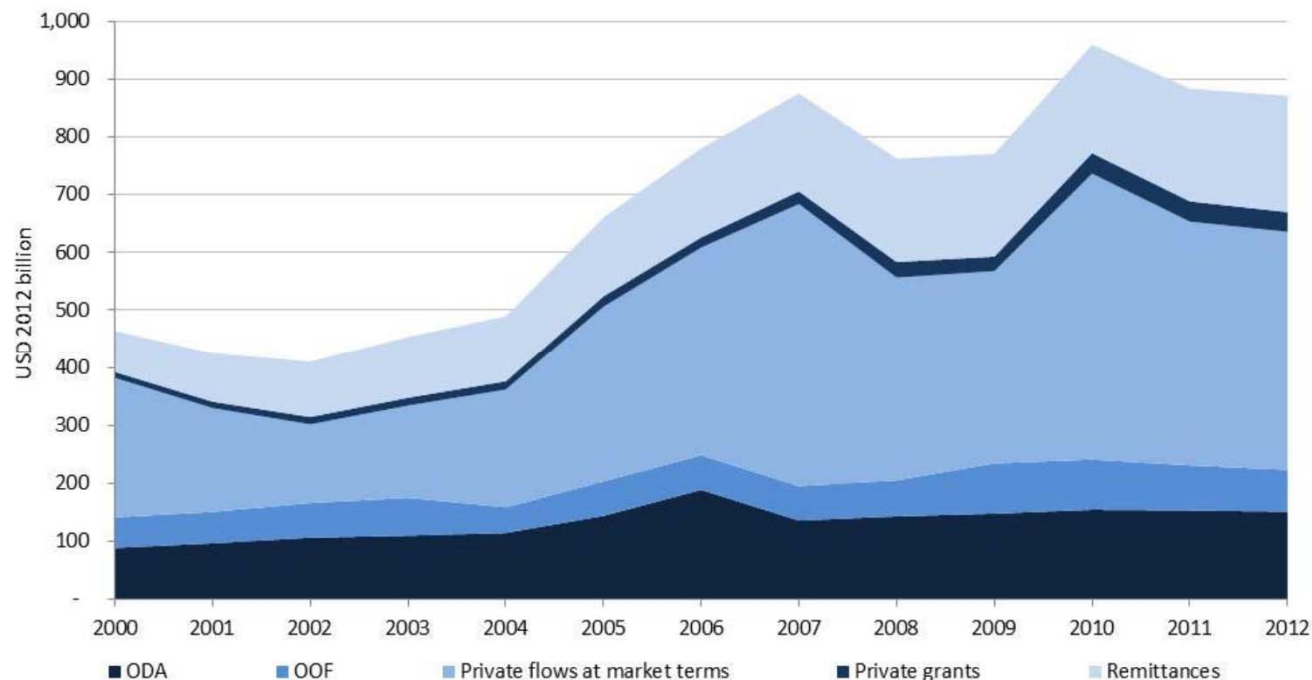
# The 3<sup>rd</sup> International Conference on Financing for Development in Addis Ababa

## “From Billions to Trillions”

✓ From Billions in ODA to Trillions in investments of all kinds.

## ODA is limited in terms of resource mobilization

✓ Need to focus on Domestic Resource Mobilization and Int’l Private Resource Mobilization to reach “Trillions”.



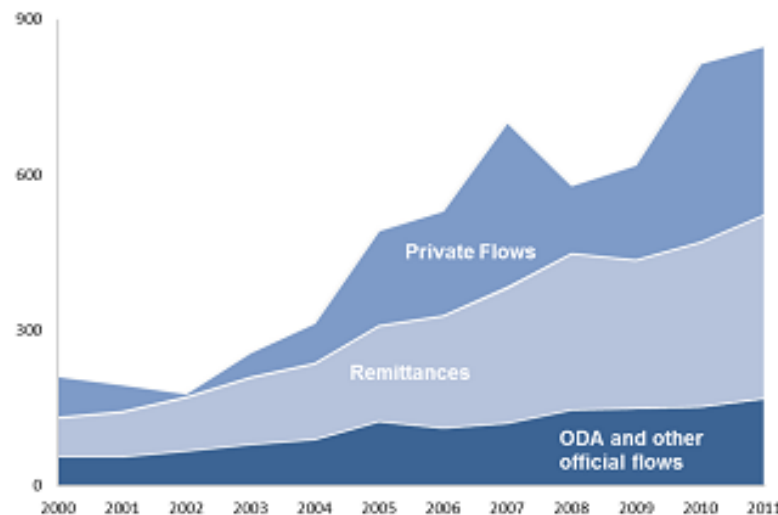
# Importance of ODA is still unchanged in LDCs

ODA is still important in Least Developed Countries (LDCs), whereas we need to engage and incentivize Private Finance in developing countries.

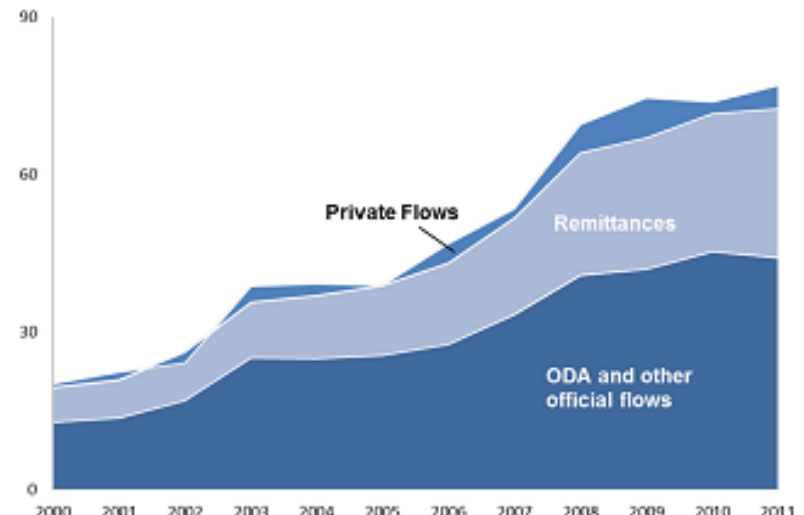
## Financing flows<sup>4,1</sup>

(in billions of United States dollars)

### To developing countries



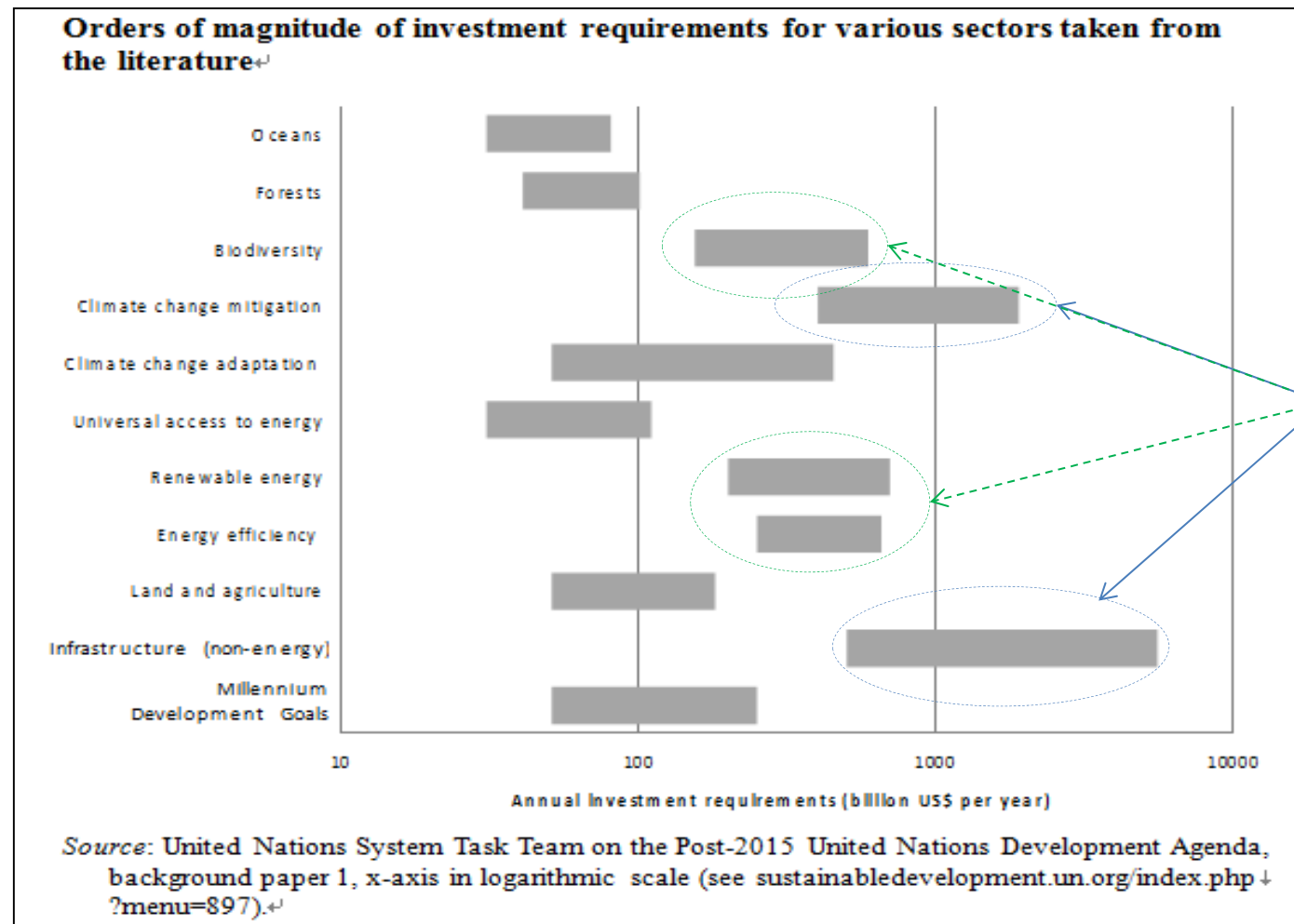
### To least developed countries<sup>4,1</sup>



Source: Organization for Economic Cooperation and Development (OECD) Development Assistance Committee statistics and World Bank data on migration and remittances.<sup>4,1</sup>

# Finance Needs Analysis by the Sectors

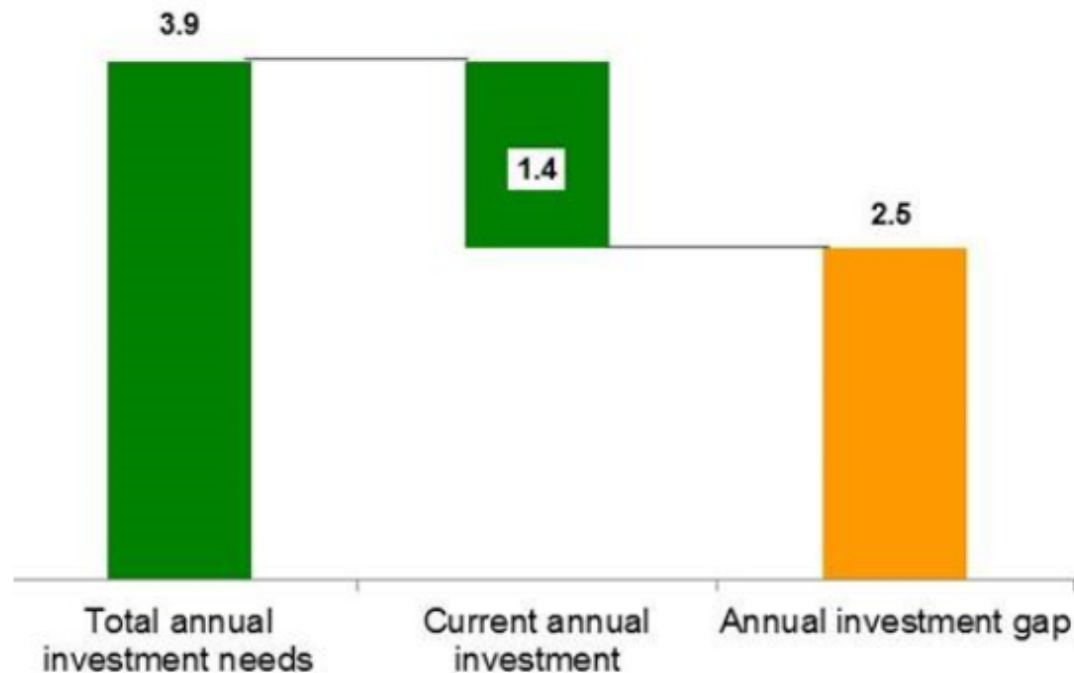
Finance needs of Infrastructure and Climate Change Mitigation are in the order of US\$ "Trillions". Bio Diversity and Energy sector finance to follow.



Sectors require  
"Trillions"

**SDG Annual Investment Needs is huge, and there is a 'gap' to achieve it.**

Figure 1. Estimated annual investment needs in key SDG sectors, 2015–2030  
(trillions of dollars, annual average)



Source: UNCTAD, World Investment Report 2014

**Quality  
Infrastructure  
Approach**

- Effective Resource Mobilization
- Strengthening Partnership
- Environmental/Social Considerations, Life Cycle Cost
- Comprehensive and Tailor- Made Approach

# Points of Discussion

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- A large, semi-transparent graphic of a globe is positioned on the left side of the slide. The globe is blue with white outlines of continents. The country of Japan is highlighted in white, making it stand out from the rest of the globe. The globe is partially obscured by the text of the list items.
- Infrastructure Investment Needs
  - Risks in PPP
  - JICA's Approaches for Risks in PPP



# Risks Analysis in PPP by Phases

Phase of PPP	Risks
Enabling environment and Project selection	<ul style="list-style-type: none"> <li>- Changes in regulatory system, permission, and authorization</li> <li>- Mismatch with economic and social development strategy</li> </ul>
Project preparation and Structuring	<ul style="list-style-type: none"> <li>- High cost for surveys</li> <li>- Low charge (usage fee)</li> <li>- Low demand (Off-taker)</li> <li>- Fluctuating foreign exchange</li> </ul>
Bidding process (Granting concession)	<ul style="list-style-type: none"> <li>- Delay in conducting a bid process</li> </ul>
Construction	<ul style="list-style-type: none"> <li>- Delay / obstacles in land acquisition</li> <li>- Delay in construction / insufficient condition</li> <li>- Delay in developing surrounding infrastructure</li> </ul>
Operation	<ul style="list-style-type: none"> <li>- Higher than expected Life Cycle Cost (LCC)</li> <li>- Deteriorating environment / economy</li> </ul>

# Risks Analysis in PPP by Participants

Participants	Risks
Investor / Lender	<ul style="list-style-type: none"> <li>- Changes in regulatory system, permission, and authorization</li> <li>- Low charge (usage fee)</li> <li>- Low demand (Off-taker)</li> <li>- Fluctuating foreign exchange</li> <li>- Delay/obstacles in land acquisition</li> <li>- Delay in developing surrounding infrastructure</li> <li>- Deteriorating environment / economy</li> <li>- Refinancing Risk / Tenor</li> </ul>
Government	<ul style="list-style-type: none"> <li>- Mismatch with economic and social development strategy</li> <li>- High preparation cost</li> <li>- Delay in conducting a bid process</li> <li>- Delay in construction / insufficient condition</li> <li>- Insufficient Legal documents</li> <li>- Higher than expected Life Cycle Cost (LCC)</li> </ul>

# Risk Analysis in PPP by Sectors

	Particular Feature	Risks
Energy (Thermal Plant)	<ul style="list-style-type: none"> <li>- Private sector may be willing to participate in Thermal Plant Project as an IPP, if there is a solid PPA backed by a government guarantee.</li> <li>- Risk of fuel cost can be hedged by shifting fees through two-tiered cost, consisted of basic charge (Capacity Charge/ Availability Charge) and Variable Charge/ Energy Charge.</li> </ul>	<p><u>Foreign exchange</u></p> <ul style="list-style-type: none"> <li>▪ Mismatch in currency between revenue and repayment / dividend</li> </ul> <p><u>Policy</u></p> <ul style="list-style-type: none"> <li>▪ Change in electricity sales price by electricity sector liberalization / deregulation</li> </ul> <p><u>Off-take</u></p> <ul style="list-style-type: none"> <li>▪ Capacity(finance) of Off-taker</li> <li>▪ Change of policy in providing government guarantee to PPA</li> </ul>

# Risk Analysis in PPP by Sectors

	Particular Feature	Risks
Energy (Renewable)	<ul style="list-style-type: none"> <li>- Cost more than thermal plants</li> <li>- “Feed in Tariff (FIT)”, which sets higher electricity sales price for renewable energy than thermal plant, is often introduced.</li> </ul>	<p><u>Policy</u></p> <ul style="list-style-type: none"> <li>▪ FIT provokes fiscal burden (ex. High cost operation keeps fees high and may provoke over-investment, thus resulting in financial difficulties of operators.)</li> </ul> <p><u>Instability in electric capacity</u></p> <ul style="list-style-type: none"> <li>▪ Commercializing renewable energy needs to be backed by reliable data to be bankable;               <ul style="list-style-type: none"> <li>➤ Wind Generation: Air volume, wind conditions</li> <li>➤ Solar Generation: day length</li> <li>➤ Small hydroelectric generation: amount of water flow</li> </ul> </li> </ul> <p><u>Capacity of grid</u></p> <ul style="list-style-type: none"> <li>▪ Since supply of electricity is not stable, need to secure other base load power plant.</li> </ul> <p><u>Off-take</u></p> <ul style="list-style-type: none"> <li>▪ Capacity (financial) of off-taker</li> <li>▪ Governmental commitment to comply to PPA</li> </ul>



# Risk Analysis in PPP by Sectors

	Particular Feature	Risks
Transportation	<ul style="list-style-type: none"> <li>- Feasibility depends on how transportation demand risk is taken into account.</li> <li>- Difficult for foreign firms to take unfamiliar transportation demand risk. (particularly railroads and roads)</li> <li>- Risk control would be easier in case of Availability Payment.</li> </ul>	<p><u>Foreign exchange</u></p> <ul style="list-style-type: none"> <li>▪ Mismatch in currency between revenue and repayment / dividend</li> </ul> <p><u>Difficulty of bankability</u></p> <ul style="list-style-type: none"> <li>▪ Low charge (usage fee)</li> </ul> <p><u>Demand</u></p> <ul style="list-style-type: none"> <li>▪ Uncertainty of demand (benefit)</li> <li>▪ Risk Allocation between public sector and private sector.</li> <li>▪ Government guarantee to support for downside risks of minimum volume of transportation</li> </ul>

# Risk Analysis in PPP by Sectors

	Particular Feature	Risks
Water Supply and Sewerage Systems	<ul style="list-style-type: none"> <li>- Often difficult to make the project 'bankable', because water charges are politically set at relatively low rate.</li> </ul>	<p><u>Foreign exchange</u></p> <ul style="list-style-type: none"> <li>▪ Mismatch in currency between revenue and repayment/dividend</li> </ul> <p><u>Difficulty of bankability</u></p> <ul style="list-style-type: none"> <li>▪ Low charge (usage fee)</li> <li>▪ Political consideration to low-income groups</li> </ul> <p><u>Off-take</u></p> <ul style="list-style-type: none"> <li>▪ Poor capacity (finance / management) of Water and Wastewater Authority</li> <li>▪ Guarantee by municipalities</li> </ul>

# Points of Discussion

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- A large, semi-transparent blue globe is positioned on the left side of the slide. The map of Japan is highlighted in white on the globe's surface.
- Infrastructure Investment Needs
  - Risks in PPP
  - **JICA's Approaches toward Risks in PPP**

# Risks and Risk Mitigation : Business

## Business Risks

- Changes in regulatory system, permission, and authorization
- Low charge (usage fee)
- Low demand (Off-taker)
- Fluctuating foreign exchange
- Deteriorating environment / economy
- High preparation cost
- Higher than expected Life Cycle Cost

## Way to mitigate risks

- Solid Project Preparation

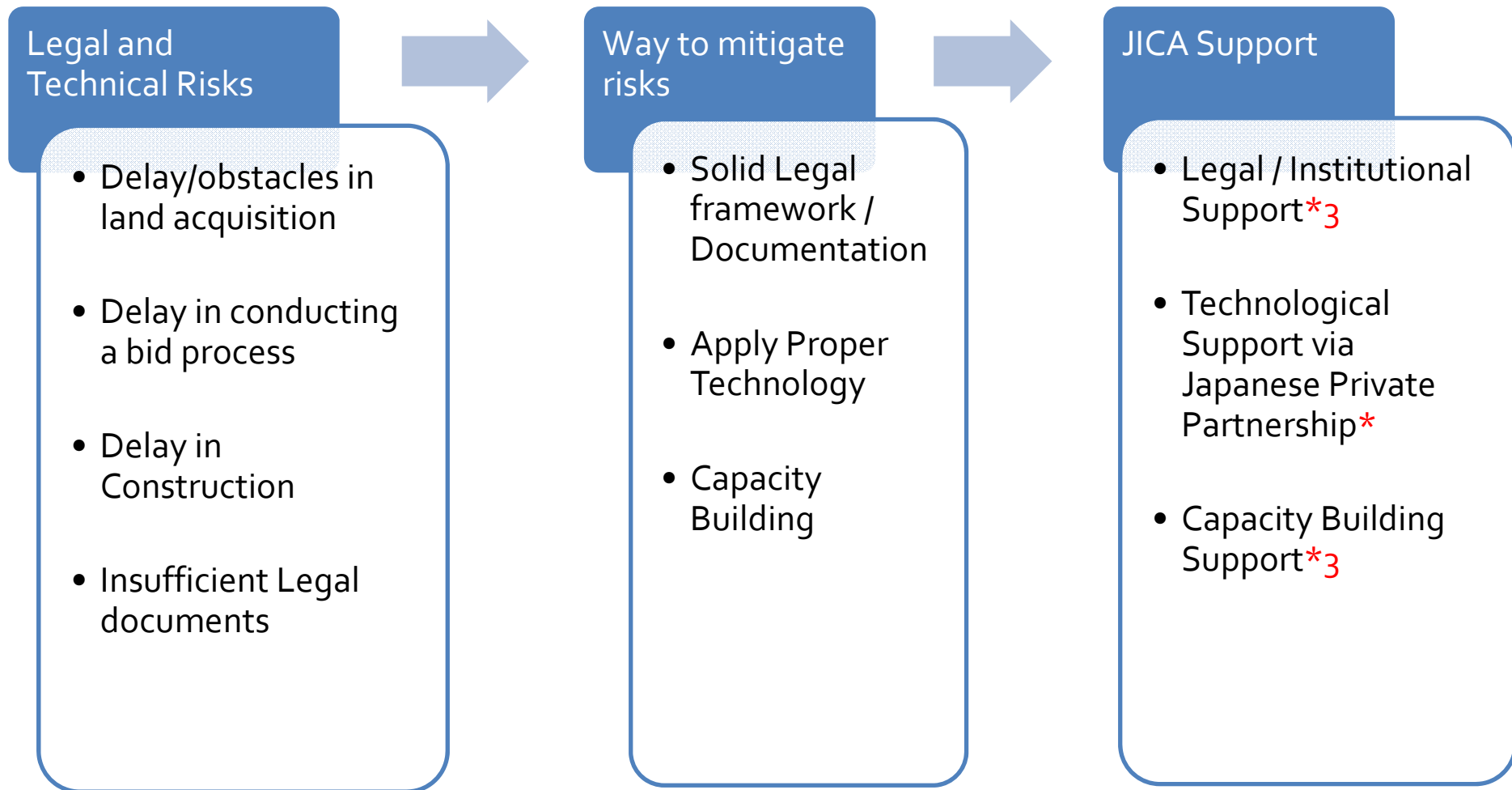
## JICA Support

- Master Plan Development
- Feasibility Study Support\*
- Project Preparation Support

\* Please refer to '2. Public Private Partnership F/S'



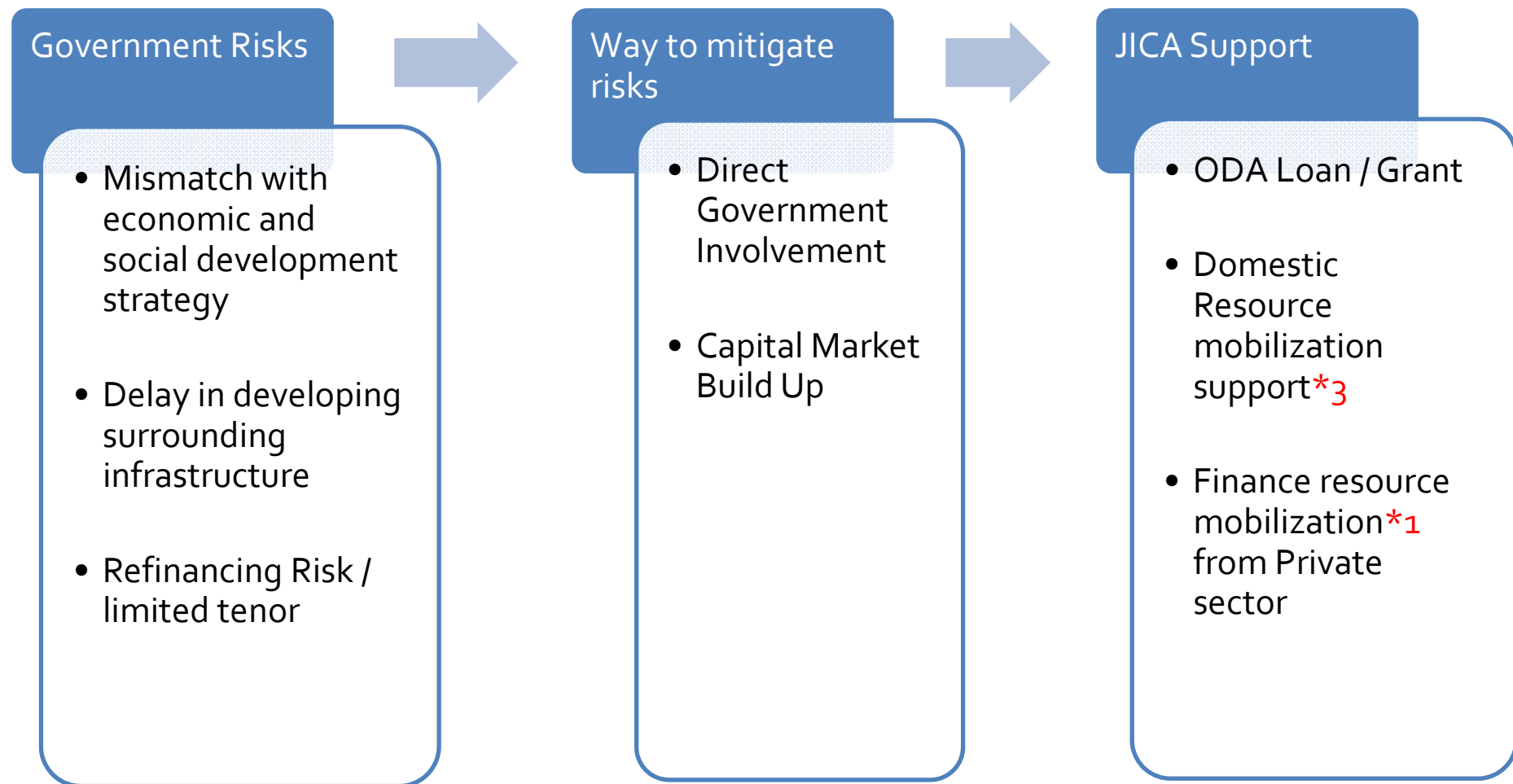
# Risks and Risk Mitigation : Legal and Technical



\* Please refer to '3. Technical Assistance for improving PPP systems'

\* Please refer to '4. Feasibility Survey for the Private Sector for Utilizing Japanese Technologies in ODA Projects' 17

# Risks and Risk Mitigation : Government



\* Please refer to '3. Technical Assistance for improving PPP systems'

\* Please refer to '1. Private Sector Investment Finance (PSIF)'

## Information About JICA

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- JICA's Web site

- <http://www.jica.go.jp/english/countries/asia/index.html>

- Private Partnership

- [http://www.jica.go.jp/english/our\\_work/types\\_of\\_assistance/partnership/index.html](http://www.jica.go.jp/english/our_work/types_of_assistance/partnership/index.html)

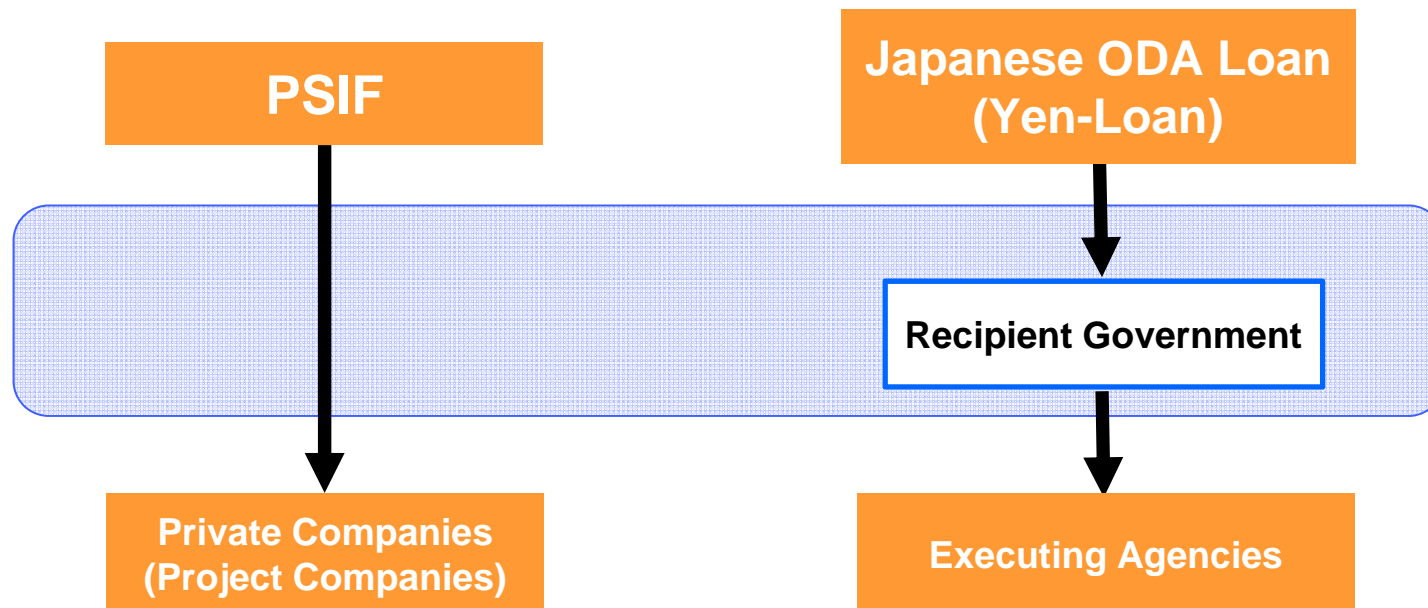
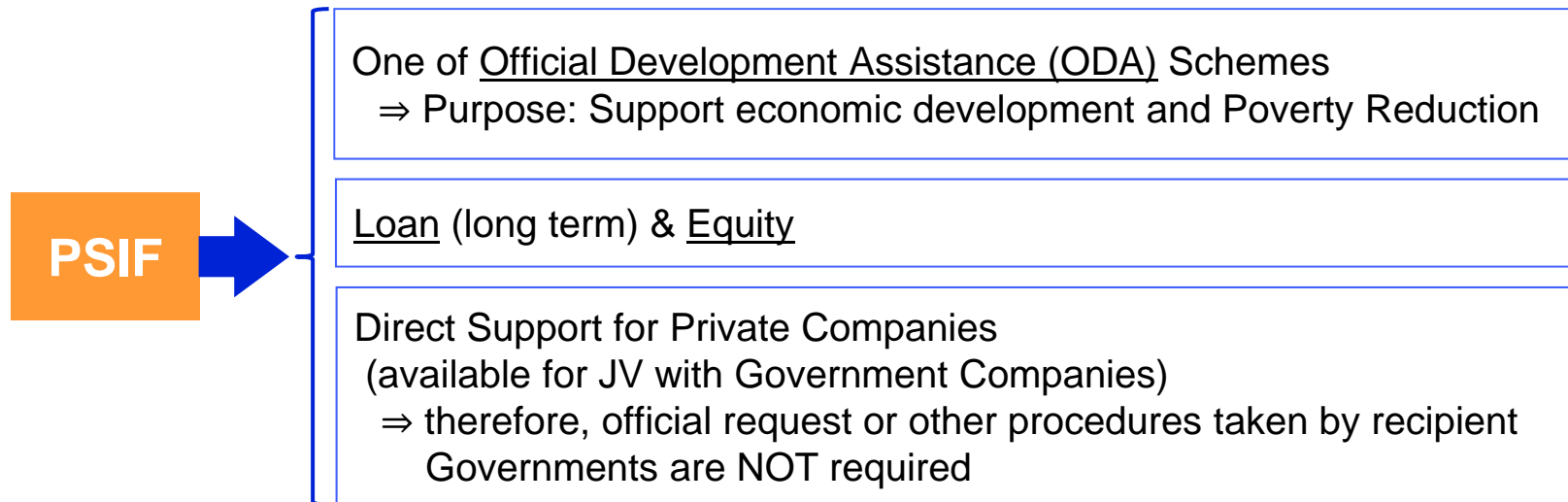
- Contact

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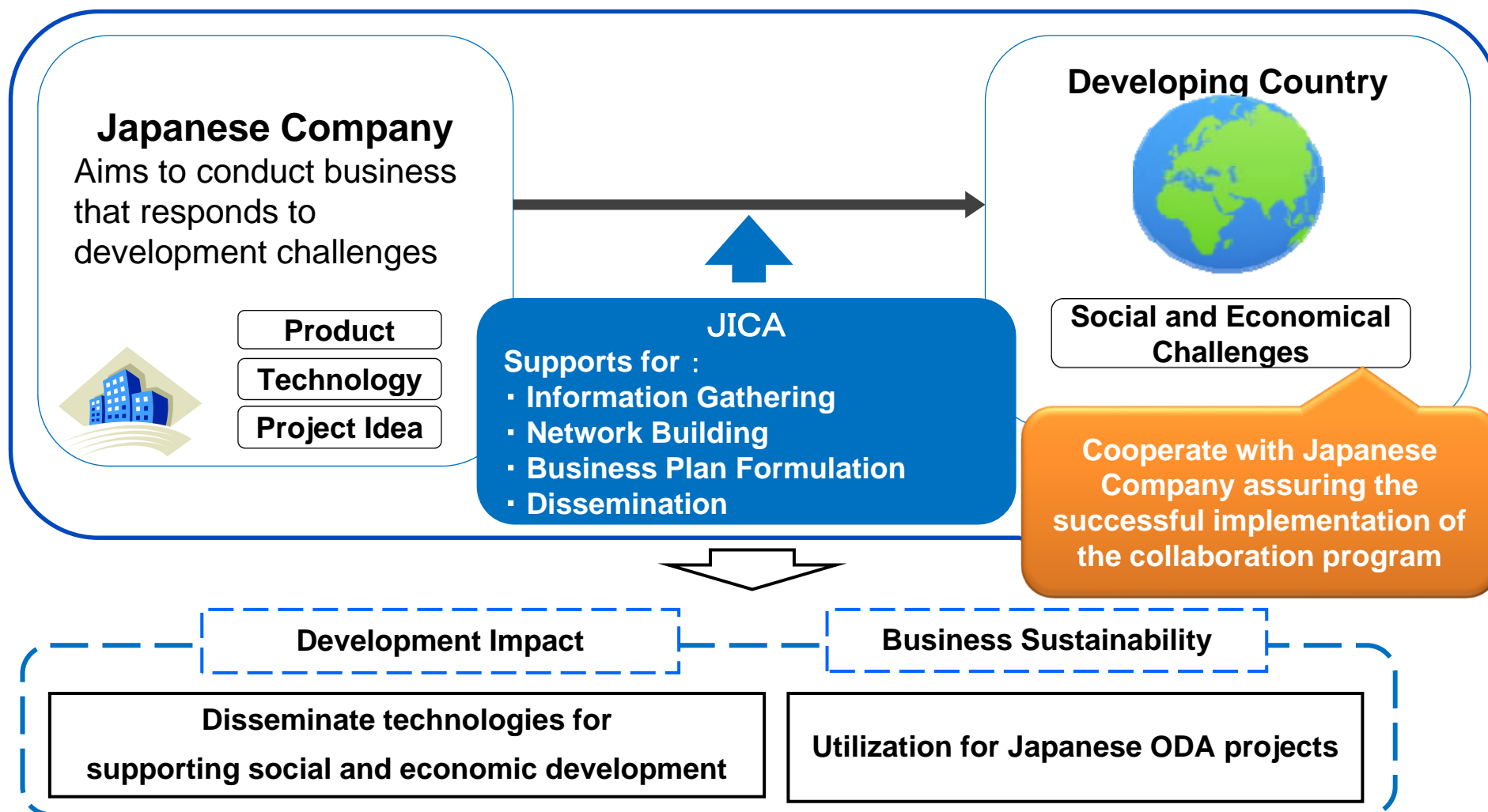
# 1. Private Sector Investment Finance (PSIF)





## 2. Public Private Partnership F/S

In order to involve private sector for response to development challenges in developing countries, JICA offers [Survey, Feasibility Study, Promotion] as tools to support private companies.



## 2. PPP F/S

### (F/S for Private Initiated Infrastructure Projects)

- Overview

#### Background:

- ▣ F/S is necessary for project implementation.
- ▣ F/S costs are risk money for private companies. However, conducting a F/S on challenging projects in developing countries are in many cases difficult without public sector support.
- ▣ JICA bears all or part of cost of F/S by means of soliciting proposals for F/S on PPP projects from private companies, and entrusting implementation of F/S to the proponents who submitted successful proposals.

#### Eligible projects:

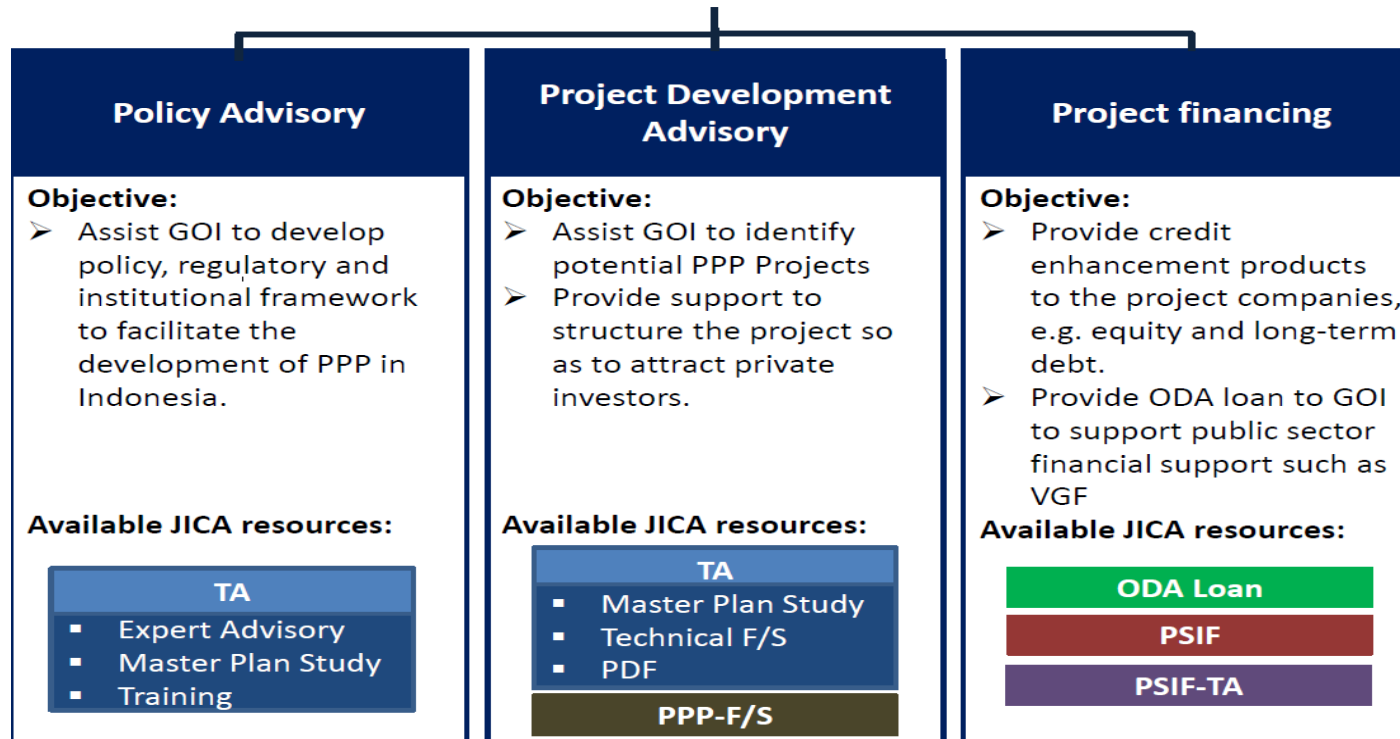
- ▣ PPP infrastructure projects in developing countries
- ▣ Preparation for utilizing JICA ODA assistance or PSIF
- ▣ Proponents should have an intention to invest in the project (not only construction)

#### Results:

- ▣ 8 batches since 2010, around 50 proposals awarded. → see list attached

# 3. Technical Assistance for improving PPP systems

## JICA's PPP Supporting Framework



## TAs for PPP

Indonesia	Philippines	Mongolia	Kyrgyz
<div>Projects</div> <div>Advisory on PPP Sector Policy Capacity Building for PPP Operation on Toll Road Sector ( - July 2012)</div> <div>KPPIP Support Facility : Framework PPP Network Enhancement Project (ongoing)</div>	<div>Projects</div> <div>The Study on Institutional Improvement for PPP</div> <div>The Study on PPP Institutional Building (ongoing)</div> <div>Technical Cooperation Project for Capacity Development of PPP Project Formulation</div>	<div>Projects</div> <div>Project for Capacity Building of Public-Private Partnership in Mongolia (ongoing)</div>	<div>Projects</div> <div>Capacity Building for PPP Projects Structuring(ongoing)</div>

## 4. Feasibility Survey for the Private Sector for Utilizing Japanese Technologies in ODA Projects

A survey conducted to examine the potential use of Japanese companies' products and technologies for Japanese ODA projects. The scope of the survey includes network building and information gathering to develop ODA projects.

