

CAPACITY DEVELOPMENT AND INSTITUTIONAL CHANGE IN INDIAN WATER SECTOR (JBIC' CONTRIBUTION)¹

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Abstract: Besides infrastructure development, the Japan Bank for International Cooperation (JBIC) has been suitably structuring its soft loan assistance for recipient countries to achieve significant development impact by initiating and sustaining institutional reforms. This paper shows how to synergize physical activities with capacity development for catalyzing institutional change through a case study of Indian water sector project. We also analyze the underlying critical success factors, such as aligning with national policy, creating an environment conducive to reform, and utilizing built-in advantages of loan-grant mix. The finding leads to several important implications for policy direction for the newly re-established JICA operations.

Key words: Asia, India, water sector, institutional change, municipal reform, infrastructure development.

1. Introduction

For several years, the Japan Bank for International Cooperation (JBIC) has been extending soft loan for financing mega infrastructure projects in many parts of the world. JBIC also extends technical assistance, though smaller in size compared to soft loan assistance, for policy research, project formation and facilitating project implementation/sustainability. JBIC has developed its own methodologies for blending soft loan assistance with technical assistance facilities, thereby synchronizing provision of

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infrastructure with capacity development for improved service delivery. With these efforts, JBIC has been able to achieve significant developmental impact through its assistance. This paper shows how to synergize physical activities with capacity development for catalyzing institutional change through a case study of Indian water sector project. We also analyze the underlying critical success factors, such as aligning with Indian national policy, creating an environment conducive to reform, and utilizing built-in advantages of loan-grant mix.

With effect from October 2008, JBIC's Overseas Economic Cooperation Operations will be merged with the Japan International Cooperation Agency (JICA). The findings of this study will have several important implications and future challenges to the newly re-established JICA, equipped with grant and soft loan scheme in addition to the existing technical cooperation scheme.

2. Case study in Indian water sector: Yamuna Action Plan Project

Background

Yamuna, a major tributary to the holy river Ganga, is one of the holiest rivers of India and is used by millions as a source for drinking water as well as for bathing and irrigation. In recent years, however, the river has become grossly polluted due to various causes, affecting human health and bio-diversity of the eco-system.

The main cause of river pollution is discharge of untreated domestic wastewater and other wastes into the river from the cities located along its banks.

Loan request to the Government of Japan

To arrest river pollution, the National River Conservation Directorate (NRCD) of the Ministry of Environment and Forests (MoEF) of the Government of India (GOI) formulated an action plan called Yamuna Action Plan (YAP), comprising of various pollution control measures in 15 riverside cities. GOI sought financial assistance from the Government of Japan for YAP project, and accordingly the Government of Japan through the Overseas Economic Cooperation Fund (OECF²) extended soft loan assistance of JPY 17,773 million in 1992. Subsequently in 2002, further loan assistance of JPY 13,333 million was extended for the Phase 2 project.

² In 1999, the Japan Bank for International Cooperation (JBIC) was established by merging the Export-Import Bank of Japan (JEXIM) and OECF.

Holistic approach

The YAP project uses a holistic approach for river pollution abatement and hygiene promotion by integrating construction of physical infrastructure with institutional change measures and public participation activities as depicted in Figure 1. As the project ultimately aims to improve water quality on a river basin-wide basis, the project activities/policy measures are designed to address issues at multiple levels of governance—city/municipality level, sub-regional/state level, and national level in addition to on-site activities.

Integration of physical works with institutional change

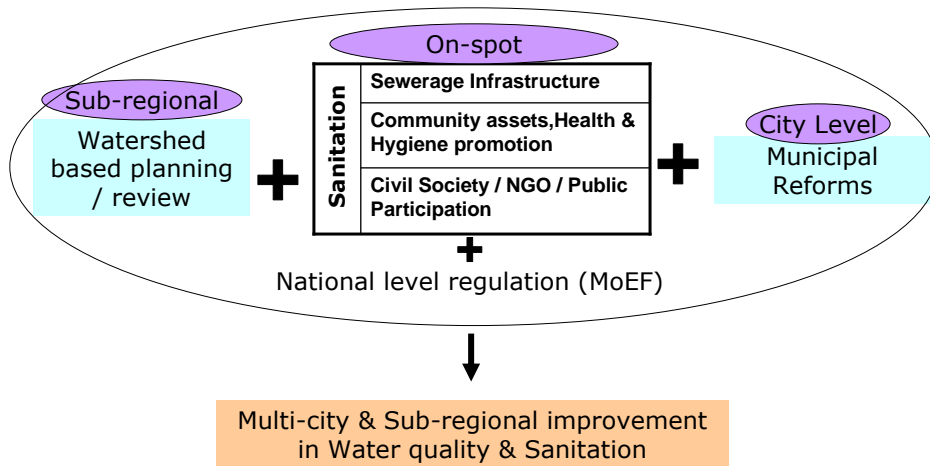


Figure 1

Physical and technical

As regards physical infrastructure, the project comprises provision of sewerage system infrastructure for about 6 million people and sanitation facilities through community toilets for about 1 million urban poor. The project also includes utility level service improvement measures such as training for operation and maintenance (O&M) and introduction of modern technology.

Institutional change

Project includes public participation & awareness, public relations, and public health & hygiene promotion activities which are implemented through a network of NGOs, Community Based Organizations (CBOs), academicians, industry, etc. Under the project the framework for comprehensive municipal reforms was evolved through a policy research study, too. Starting from pilot reform initiative for Agra Municipal Corporation, wider scale reform initiatives are being implemented in all cities by utilizing Reform Fund under YAP Phase 2 Project.

Achievement of Agra Municipal Reform

Despite a strong thrust on decentralization of power as envisioned under 74th constitutional amendment³, the progress of decentralization in terms of development of financial and administrative powers to urban local bodies has been rather slow. As a result, urban local bodies lack necessary technical, financial and managerial capacity to deliver various kinds of urban services including operation of newly constructed sewerage facilities. Like all other urban local bodies in India, Agra Municipal Corporation, one of the YAP town, was caught in a “Vicious cycle” trap of low revenue base, leading to poor service delivery, resulting in poor cost recovery/tax collection, causing further worsening the situation. JBIC conceived and designed a policy research study culminating into a comprehensive reform package, which facilitated transforming the “Vicious cycle” into “Virtuous cycle.” The reform process which began in 2003 has now become irreversible, and the city has now initiated the second generation reform. Moreover, the municipal reform process in Agra, now widely known as Agra model, is being replicated in all 15 YAP cities.

The reform process in Agra being comprehensive in nature resulted in specific achievements on the revenue side as well as the service delivery side. As regards the revenue side, the property tax collection increased by over 5 times from Rs.17 million in FY 2005 to Rs.96 million in FY 2007 as a result of measures such as updating and computerization of database of properties, introduction of computerized billing, awareness generation and public participation, training of tax collector and other staff. On the service delivery side, the reform measures included financial management system reform, introduction of complaint redressal system, promotion of private sector participation (through pilot projects in key municipal function of solid waste management and street lighting).

The introduction of financial management system and complaint redressal system coupled with training has strengthened staff capacity in managing service delivery. Also the successful implementation of pilots in solid waste management and street lighting opened the doors for wide-scale private sector participation and community participation. As depicted in Figure 2, the approach and methodology for reform process included a rigorous consultative process by systematically engaging multiple and diverse stakeholders.

³ In 1992, GoI has amended its constitution for delegating a responsibility of public service delivery including water supply and sewerage to urban local bodies.

Approach & Methodology



Figure 2

3. Analysis of Critical Success Factors

The success in conception and implementation of the municipal reform process can be attributed to the following three critical success factors; (i) alignment with Indian policy reform efforts; (ii) creation of environment conducive for reforms; and (iii) leveraging built-in advantages of loan-grant mix.

Alignment with Indian policy reform efforts

JBIC has been consciously ensuring that the project is consistent with the Indian policy, and also has been flexible to accommodate changes in the project design in line with Indian policy evolution. As more and more attention was given by GoI to policy issues like community sanitation and decentralization, JBIC was responsive in researching and finding a way forward to reflect measures in its project portfolio. Similarly, in response to Indian side's increasing priority for public attention⁴, JBIC evolved methodologies for pro-actively engaging civil society/NGO networks under the project.

The focus area under Yamuna Action Plan Project itself has evolved over the years. As shown in Figure 3, the first stage (1996 to 2000) involved an engineering approach with focus mainly on construction of sewerage infrastructure. After 2000, with increased thrust

⁴ As shown in Figure 3, Public Interest Litigation about River Yamuna pollution was filed in the Honorable Supreme Court against GoI in 1994. Subsequently, the Indian judiciary got very actively involved in the monitoring process of cleaning River Yamuna.

by Indian government on decentralization of governance and increase in civil society engagement the project focus expanded public participation program, provision of community assets especially for the poor, and institutional change. The evolving focus is evident from JBIC's disbursement trend, too.

Focus area under Yamuna Action Plan has evolved, too.

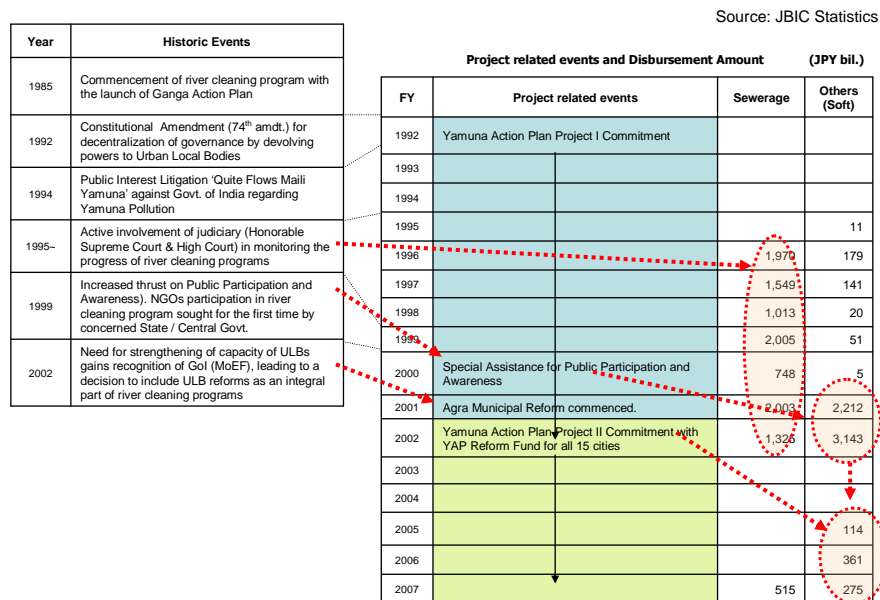


Figure 3

Creation of an environment conducive to reform

The recognition of the key role played by stakeholders in the determination of a policy, its implementation, and outcomes has made stakeholder analysis a vital tool for policy managers (Brinkerhoff and Grosby, 2002). In Agra Municipal Reform project, stakeholder analysis as Figure 4 summarizing the reaction/response to reform among three distinct stakeholder classes, namely, central government/policy maker, municipality/utility/service provider, and citizen/grass root organization/media was utilized as a basis for planning and implementation.

Stakeholder analysis

	Central Govt./ Policy maker	Municipality/ Utility/ Service provider	Citizen/ Grass- root org./ Media
Incentive for Project	Positive	Very Positive	Positive
Incentive for Reform	Positive	Very Negative	Neutral to Negative
Attention to Reform	Very High	High	High to Low
Information	Better in Policy	Better in Tech.	Better in Local & Social

Source: Author's classification

Figure 4

From the above stakeholder analysis, it is observed that the general perception about reform from the point of view of municipality/service provider is that reform means taking risk, which includes political risk, short-time revenue decrease, pressure from labor union, attention/criticism from citizens, etc. Thus the preferred option is “No change (reform), no risk (uncertainty).”

On the other hand, from the point of view of citizens, the information pertaining to benefits of reform is not clearly known among all citizens. While the anti-reformists remain vocal, the pro-reformists are generally silent. Moreover, there is an element of mistrust by citizens against government and municipality/service provider. The combined effect of risk averseness of municipality/service provider, lack of information among citizens and the mistrust by citizens towards government and municipality/service provider results in a status quo situation.

The strategy to create an environment conducive to reform, that facilitates all stakeholders to move out of the status quo situation is depicted as Figure 5.

Strategy to create an environment conducive to Reform

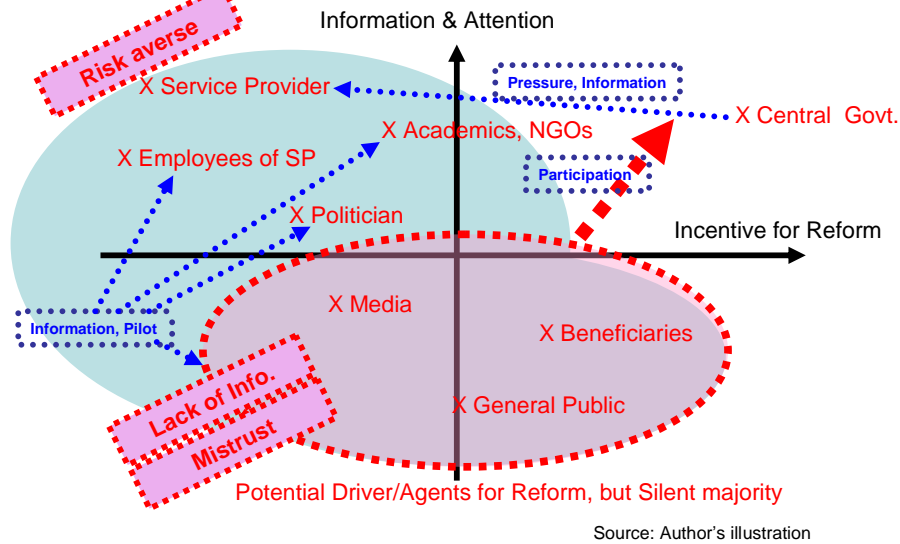


Figure 5

The policy research study with thorough consultation identified pilot projects and a carefully crafted communication plan. They were designed to transform the perception among citizens towards municipality/service provider from mistrust to expectation as shown in Figure 6.

Strategy to create the faith in Service Provider



Figure 6

The following strategic inputs were suggested in the study to create an environment conducive to reform:

(1) Constitution of reform team:

A well balanced Reform Team with a mix of political heads, administrative officials, representatives of unions & opposition parties was constituted in Agra Municipal Corporation. Such a broad based composition ensured that there was general consensus regarding direction and content of the reform. Also the team identified one of its members as a reform champion to act as a prime mover for leading the implementation and engaging wider set of stakeholders in the reform process. Accordingly, NGOs and citizen groups were closely engaged in the consultative process, right from the beginning till the conclusion of the reform blue print.

(2) Quick and visible pilot project:

To gain the confidence of citizens by showing the municipality's intention to act (not just speak), pilot projects were carefully selected so that the benefits got visible in the immediate run. The pilot solid waste management project with private sector participation was started in one colony with 3,000 residents. It showed distinct cleanliness of a locality. Similarly, the pilot project on street lighting operations involving private sector resulted in visible improvement along one of the major city roads. Besides sending positive signal to private sector and citizens, the project reassured the municipal staff that reforms were not meant for retrenchment.

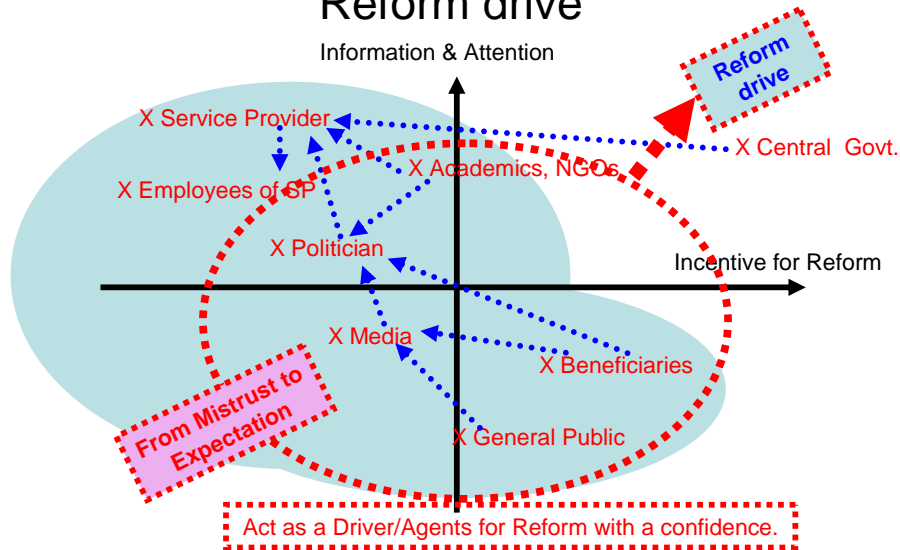
(3) Communication plan:

The study suggested several communication strategies to build and evolve a wide consensus. First of all, citizen survey was conducted to make the politicians confident about the need for reform⁵. A PR plan was implemented to disseminate factual information through media to the public. Peer-to-peer lectures and question-answer sessions were organized for the municipal staff and politicians, where reform practitioners explained about the benefit of reforms and cleared all doubts/ apprehensions. Regular newsletter and press conference were utilized as a tool to continuously update the status of reforms. In the entire process, presentations were made in local language to ensure that the message reaches one and all. Against key staff of municipality, audio-visual MIS tools were used to highlight the best practice stories. Also a hands-on approach was taken to actively engage staff in reform design and implementation.

The end results of the multi-pronged strategy were not only a clear consensus on the reform path but also a rally by different stakeholders to form pressure groups to create and sustain the reform drive, as shown in Figure 7.

⁵ The results of citizen survey showed that the general concept of reform and its sequence were broadly supported by the public.

Creation and reinforcement of Reform drive



Source: Author's illustration

Figure 7

Built-in advantage of Loan-grant mix

Both loan and grant have its own comparative advantages as an instrument of development assistance, as depicted in Figure 8.

Scheme comparison (Relative Advantage/Disadvantage)

Grant	<ul style="list-style-type: none"> ✓ Suitable for Knowledge/Tech. transfer ✓ Tendency of off-budgeting ✓ Quick, No eligibility issues ✓ Project/sector specific policy oriented
Loan	<ul style="list-style-type: none"> ✓ Alignment (on-budget), Ownership ✓ Slow, Eligibility issues ✓ Project/sector specific policy oriented to Macro policy oriented (esp. General Budget Support) ✓ Scale ✓ Long time commitment ✓ Untied

Source: Author's classification

Figure 8

The salient features of blending loan and grant schemes are presented below:

- (1) Firstly, loan by its very nature is on-budget for a recipient country, thereby making it easier to align with national government's policy.
- (2) As a mega loan project takes long time (almost 10 years) from its commitment to completion, a loan project facilitates a long term close involvement with the counterpart government agencies. Especially, in the course of implementation, as there occur various issues to be solved with a very close coordination between GoI and JBIC, a sense of mutual trust is built, and development agenda is commonly shared, resulting in a strong cooperation platform⁶. Sometimes, succeeding projects can address the challenges identified in the preceding project. In this case, YAP Phase 2 Project covers more intensive municipal reform package as well as public participation components by utilizing lessons from Phase 1 Project.
- (3) Depending on political will and absorbing capacity, the required scope of assistance may change. Loan-grant mix provides donor a combination of dynamism and flexibility in aligning with the actual developmental needs. For instance, while a mega physical intervention may require loan scheme, policy research or capacity building may be covered under grant assistance. Once physical intervention and technical transfer is reaching to a completion stage, the next challenge of policy/institutional change for replication can be better achieved with loan-grant mix, as shown in Figure 9.

Not only financial support but also technical and policy level support

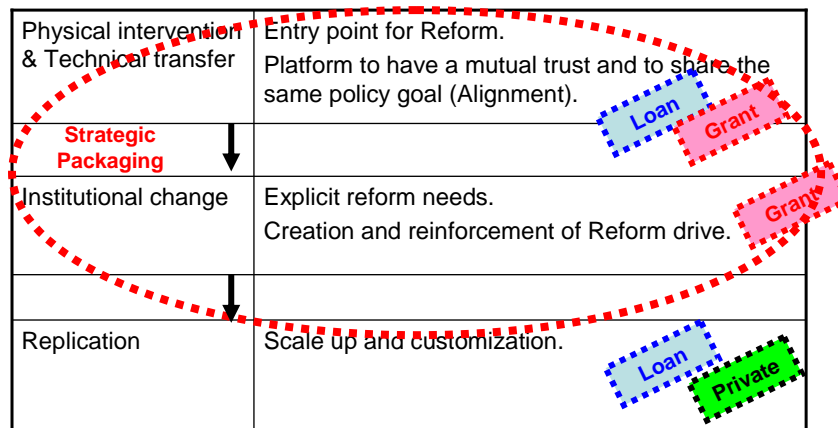


Figure 9

⁶ There is, however, a strong demand by a recipient country for more predictability for Japanese assistance scheme.

(4) Loan-grant mix enables to work on a large scale, thereby maximizing the level of impact across wider sections of the society. Large scale assistance with international competitive bidding naturally selects the most cost effective technology/development model. In addition, the fact of being proven by the massive scale implementation and operation has a substantial advantage for replicating in other places/schemes. As a leading donor in Indian water sector as shown in Figure 10 and Figure 11, JBIC's policy supports relating to the physical intervention will be a strong back-up to reform initiatives of GoI.

Size matters

(Significant contribution to Indian water sector)

	1991-1995	1996-2000	2001-2005
Total Bilateral	698	780	973
Japan	383	442	681
(%)	(55% of Bi.) (31% of Total)	(57% of Bi.) (46% of Total)	(70% of Bi.) (42% of Total)
Total Multilateral	532	462	643
WB	531	458	623
UNICEF	0	4	20
Total	1,231	1,243	1,617

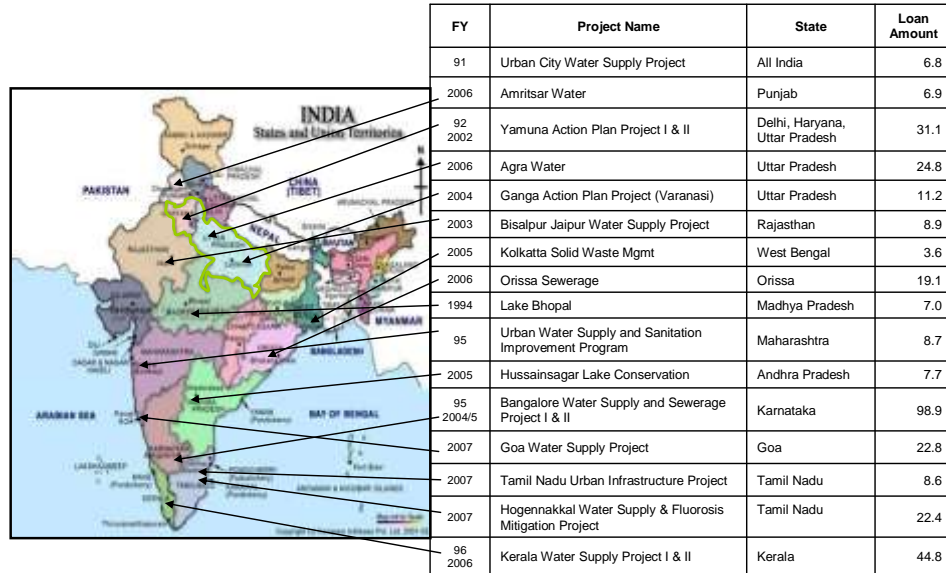
(US\$ mil., Source: OECD Statistics)

Figure 11

JBIC has a **large** and **geographically diversified** portfolio of water & sanitation projects over 15 yrs.

Committed : about JPY 350 billion (or USD 3,000 million) for 19 projects in 14 states

(amt in billion JPY)



Source: JBIC Statistics

Figure 10

(5) Untied procurement policy is open to utilization of local experts and local good practices. Unlike pure technical transfer, international experts and international good practices have less advantage for an attempt of institutional change, because of complex nature of its cultural, social and political background/constraints. Therefore, utilization of local experts and local good practices with customization in accordance with the very local context will make the reform initiative more feasible, sustainable, and cost-effective. This approach has another advantage of encouraging ownership of reform drivers. In this case, mobilized local experts (mixture of management consultants, sociologist, and PR experts) were very competent to draw local good practice and to motivate reform champions. Moreover, there was another unexpected effect of stimulating a sense of competition of concerned officials, by cross-learning opportunity among very eminent officials from cities with good practices.

4. Major Learning

Successful JBIC's initiative introduced in this paper offers learning summarized below:

Alignment with Indian policy reform efforts

- ✓ Requirement for National government
- (1) Consistent policy with full ownership
- (2) Active policy dialogue

✓ Requirement for Donor:

- (1) Long-term intensive policy dialogue based on accumulated expertise
- (2) Predictability to recipient countries is to be improved. Mid-term development agenda and assistance strategy including project pipelines (at least indicative ones in the form of rolling plan) should be intensively discussed for its strategic planning.
- (3) Flexibility based on country-based, demand side driven approach is to be improved. Development agenda and demand are always evolving, and such evolution may be closely followed up by country office. Therefore, donor agency should improve its flexibility by strengthening country-based, demand side driven approach.

Creation of an environment conducive to reform

✓ Requirement for National government

- (1) Political will is a prerequisite. Without political will, no policy/institutional change will be feasible or sustainable.
- (2) Democratic set-up and active media enable pro-reform policy makers to create a momentum for reform drive. Without public pressure, even a minor political turnover may negatively affect reform process.

✓ Requirement for Donor

- (1) Donor should be aware of its role as only a catalyst. If donor takes a lead or implements by itself, the initiative will never be sustainable.
- (2) Flexibility based on country-based, demand side driven approach is required.
- (3) Local experts' utilization is necessary especially for an attempt of institutional change because of complex nature of cultural, social and political background/constraints. Depending on needs, healthy mixture of local and international expertise should be explored.

Built-in advantage of Loan-grant mix (Continuous requirement for Donor)

- (1) On-budget, Long-term close involvement, Predictability to Recipient countries, Dynamic and flexible intervention
- (2) Scale merit with a comprehensive packaging strategy of financial, technical and policy level support should be kept. For achieving this strategy, focus and holistic approach should be adopted at each country office.
- (3) Utilization of Local experts and local good practices besides international expertise

5. Future Challenges for New JICA

The main challenges for newly re-established JICA in terms of blending loans and grants as instruments of development assistance are summarized as under:

More focus and holistic approach at the designing stage, but more flexibility in the implementation stage

While less attention has been given to institutional side at mega-physical intervention project formation stage (including this case), less attention has been given to scale merit and synergy effects with physical intervention at technical cooperation project

formation stage. More comprehensive packaging strategies clearly targeting synergy effects of physical, technical and institutional change should be formulated in New JICA. Under this strategy, given its resource constraints, by squeezing the number of projects (even countries), more resource should be given to each project. As the policy needs in developing countries are very dynamic in nature and country offices have definite advantage in close follow-up, more flexibility is needed at country office especially in the implementation stage to respond to such policy evolution.

Schematic requirement

For more development impacts, New JICA should further improve its strength of technical assistance and physical intervention, with a nature of (1) On-budget, (2) Long term close involvement, (3) More predictable operations to recipient countries utilizing Rolling Plan, (4) Significant size, (5) Blending of financial, technical and policy level support, and (6) Local experts and local good practices utilization. Evolving such a scheme will be a continuous challenge for New JICA.

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