Evidence-Based Policy Making (EBPM) for Development Challenges in Africa: EBPM at JICA with some examples

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Outline of my presentation

- Reality of EBPM at JICA
- Three examples of EBPM
- (1) Zambia: boreholes
- (2) Kenya: agricultural extension
- (3) Morocco: rural road improvement
- Future Direction of EBPM

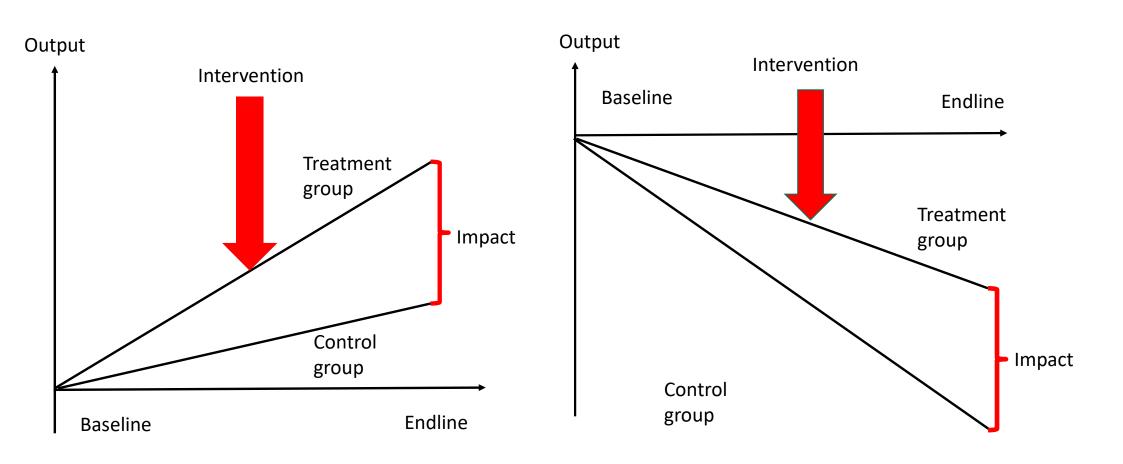
EBPM at JICA (1) EBPM as worldwide trend

- The importance of EBPM is now well recognized worldwide.
- The Evaluation Bureau (Hyoka-bu) is responsible for the evaluation of JICA's projects; JICA Ogata RI conducts academic research to obtain rigorous evidence for policy evaluation.
- (In my view), younger staff are more likely to understand the importance of EBPM.
- However, sufficient scientific evidence has not yet been accumulated for EBPM, which is the case in Africa.

EBPM at JICA (2) Misunderstanding of EBPM

- So far, however, EBPM has not become widespread.
- Most of the datasets used for analysis are collected only from the "treatment group" on a "before and after" basis without using control group data (next figure).
- Most staff are busy conducting their own projects, with limited resources on evaluation.
- Insufficient collaboration with academic researchers is noted.
- Some staff misunderstand scientific evaluation as a measure to justify their projects.

EBPM at JICA (3) Impact evaluation



1. Boreholes in Zambia (1)

- The second phase of the grant aid project for groundwater development was financed by JICA.
- The project involved constructing 216 new boreholes in 4 districts of Luapula province in the period 2012-2013.
- Treatment group with boreholes and control group without boreholes were used with some conversions in the case of unsuccessful drillings.
- JICA hoped for a positive impact on health (reduction in incidence of diarrhea) and a reduction in water collection burden.

1. Boreholes in Zambia (2)

- 1. Impact on children/adults
- Reduction of diarrhea in preschool children and adults (not schoolchildren)
- No reduction in water-collection time for girls due to larger demand for clean water; a shift seen in the burden of fetching water from female adults to their daughters living with them.
- Time gained by female adults spent on leisure, not incomegenerating activities.

1. Boreholes in Zambia (3)

2. Economic impact

- The project did not reduce the time burden for collecting water due to the increased demand for safe water.
- The main net benefit lies in improved productivity due to reduced incidence of diarrhea among working-age adults.
- The estimated internal rate of return (IRR) of the project is not large (health benefits only).
- Dynamic health benefits: decrease in disability-adjusted life years (DALYs).

2. Agricultural Extension in Kenya (1)

- SHEP program (Smallholder Horticulture Empowerment and Promotion)
- Public agricultural extension program in a technical cooperation project supported by JICA.
- New and practical "market-oriented" approach to establish decentralized decision-making by farmers in a market ("market survey"), with technology transfer in the last phase.
- "From "Grow AND Sell" to "Grow TO Sell."

2. Agricultural Extension in Kenya (2)

- <u>SHEP works</u>: SHEP improves horticultural income by 70% over 2 years on average.
- <u>SHEP is for all</u>: effective for vulnerable groups (head of household is female, less educated, or older) and regardless of previous horticultural experience, in contrast to the "common sense" of traditional agricultural extension.
- <u>SHEP rallies power of activities</u>: Farm Business Linkage Stakeholder Forum and Gender Mainstreaming Training play an important role together with group exercises.

3. Rural road improvement in Morocco (1)

- The Rural Road Improvement Project II was financed by JICA (530km in a total of 5 provinces).
- The project paved 30 sections of rural unpaved roads and widened the roads to allow two-way traffic so that the rural population can gain access to the all-weather road.
- Construction and rehabilitation of rural roads were undertaken in 2012-2016.

3. Rural road improvement in Morocco (2)

- 1. Gendered impact on young generation
- Positive impact on girls in secondary school or above, with a lower proportion of early marriage
- Positive and significant effect on wage employment for boys
- 2. Inclusiveness: consumption growth for rich and middle
- Richer HH: increase in wage employment
- Middle HH: increase in family business
- Poor HH: no new employment opportunities

Why is EBPM important?

- 1. Scientific contribution: Evidence creates new knowledge to advance science.
- 2. Efficient policy making: Evidence quantitatively reveals the merits/demerits of projects, which provides an opportunity to review the unintended consequences.
- 3. Accountability: Evidence is necessary to account for the significance of projects, with stakeholders such as counterparts, international organizations, and people.

EBPM on infrastructure

- Evidence is particularly scarce on infrastructure in Africa (compared with Asia).
- Limited budget and resources: more rigorous evidence is required on (heterogenous) benefits in advance.
- Hardware and software: evidence on how to maintain infrastructure is particularly limited.
- Understanding and cooperation with CPs and stakeholders to be maintained with frequent and open communication.

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Thank you!