Science and Technology Research Partnership for Sustainable Development (SATREPS) Guidelines for JST Mid-term Evaluation

Revised April 2023 Japan Science and Technology Agency Department of International Affairs

1. Mid-term Evaluation for Science and Technology Research Partnership for Sustainable Development (SATREPS) Projects

JST conducts Mid-term Evaluations based on the regulations for the conduct of international science and technology collaborative research programs (Science and Technology Research Partnership for Sustainable Development program). As a guideline, a Mid-term Evaluation should be implemented no later than around three years after the start of a project that has a project term of five years or longer. For research projects of less than five years, a Mid-term Evaluation may be conducted depending on the evaluator's policy.

Mid-term Evaluations are conducted by assessing the overall progress of international joint research, both in Japan and in the partner country, and its research outcomes. Multiple aspects are taken into consideration for the assessment such as the outcomes of international joint research contributing to resolving global issues, raised levels of science and technology, contributions to science and technology policy and to society as a whole, and capacity development. The Mid-term Evaluation serves the purpose of reviewing appropriate resource allocation, project planning, and target outcomes, etc. and encouraging improvements to the research management structure during the time remaining until the project's completion.

JICA is not obliged to conduct an evaluation corresponding to JST's Mid-term Evaluations (JICA uses the term "Mid-term Review") but conducts project regular progress monitoring meeting in the project sites every six months (the responsible department staff in JICA may attend this meeting). In principle, JICA coordinates the timing of this regular progress monitoring meeting to coincide with the Site Survey conducted by JST as part of its Mid-term Evaluation. As stated above, JICA is not obliged to conduct a Mid-term Review, but if it is conducted, it will coincide with the regular progress monitoring meeting, and in principle, the responsible department staff in JICA will attend the meeting (sometimes accompanied by external consultants).

2. Procedures for Mid-term Evaluation

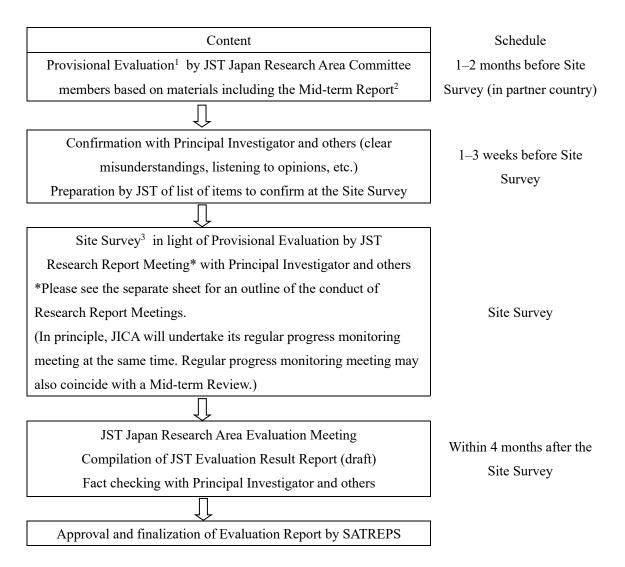
A Japan Research Area Committee composed of outside experts (including Research Supervisors and Program Committee members) holds an Evaluation Meeting using materials prepared by the Japanese Principal Investigators, including a Mid-term Report, Target Outcomes Sheet, Overall Research Plan/Annual Research Plan, and Annual Progress Report. At this Evaluation Meeting the researchers will present the outcomes of their research followed by a question-and-answer session with the evaluators. The Evaluation Committee will then deliberate among themselves and decide the overall evaluation, after which an Evaluation Report (draft) will be prepared based on the critiques of individual committee members. During the preparation

of this Evaluation Report, individual Evaluation Committee members and the Principal Investigator will be contacted to confirm that there are no misunderstandings.

The Evaluation Committee members will review the Mid-term Report in advance and seek a response from the Japanese Principal Investigator concerning any questions and comments that they may have. Factors including the actual status and sustainability of the international joint research are also confirmed by methods such as a Site Survey by Research Supervisors and others and interviews with the partner country's researchers. These factors are reported to the members of the Evaluation Committee during an Evaluation Meeting.

If the Site Survey can be coordinated to coincide with an event at which all those involved can meet locally, such as a meeting of the Joint Coordination Committee (JCC), it would reduce the burden on the researchers through the efficient use of time. Please see the separate sheet for details.

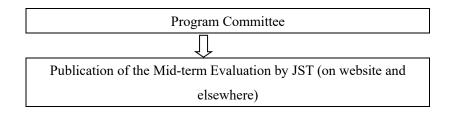
The standard schedule is as follows.



¹ This consists of the review of evaluation materials and other documentation, and a provisional evaluation including points for confirmation and improvement.

² For specifics, please see Section 4 (Documentation used in Mid-term Evaluation).

³ This consists of a visit to the partner country in order to gather information pertinent to the evaluation, for the purpose of ascertaining the partner country's stance and institutions and assessing the progress and outcomes of the research. If JICA times a Mid-term Review together with regular monitoring to coincide with the JST Site Survey, a policy decision meeting may be held before the Site Survey.



3. JST evaluation items, Mid-term Evaluation items, and overall evaluation criteria

The evaluation items and other information for the JST Mid-term Evaluation are shown in Table 1. These evaluation items are also used in Terminal Evaluations and Follow-up Evaluations.

JST Evaluation items	Main considerations	Notes
Project purpose	 Importance of contribution to resolving global issues Originality/novelty in science and technology or academic terms 	Review and Suggestion under Mid-term Evaluation.
Attainment of international joint research targets	• Degree of attainment of the research targets during the project period, details of outcomes	Evaluation based on performance under Mid-term Evaluation/ Terminal Evaluation.
Management of	 Management/Administration system of project activities 	Evaluation under
international joint	Management of research budget	Mid-term Evaluation/
research (activities)	Compliance	Terminal Evaluation.
Progress and prospects for science & technology	 Contribution to global issues and to enhancing science and technology capacity in the partner country Intellectual property, academic publications/conference presentations etc. (journals, number of citations), concrete achievements, etc. Importance of scientific and technical outcomes (qualitative comparison with similar research in Japan and overseas) Potential deployment and growth of science and technology in Japan Impact/effects brought about by Japanese science and technology, such as the adoption of Japanese research methods, systems, and standards Training Japanese human resources (young researchers, global capabilities) 	Evaluation under Terminal Evaluation/ Follow-up Evaluation. Evaluation including anticipated results under Mid-term Evaluation.

Utilization and adoption of research outcomes Contribution to sustainable research activities, etc.	• Building of human networks (training exchange students,	Evaluation under
	research students, young researchers)	Terminal Evaluation/
	• Independence and autonomy of researchers or research institutes	Follow-up Evaluation.
	in partner country	Evaluation including
	• Utilization of research outcomes, impact on policy, etc.	anticipated results
	Sustainable growth of research and utilization activities based on	under Mid-term
	outcomes	Evaluation.

At the Mid-term Evaluation, the actual perspective of the JST team regarding evaluation is as follows.

- (1) Regarding the state of progress of international joint research:
 - What progress has been made, and what level of attainment has been achieved from the perspective of the original research plans?
 - Have any new developments emerged that were not envisaged in the original plans, including any new orientation, policy modification, etc.
 - What is the impact of outcomes in science and technology? How do the levels and importance of the research outcomes compare with relevant research in Japan or overseas (from a qualitative perspective)?
- (2) Regarding the management structure (operational structure) for the international joint research
 - How good are the structure and performance of the research team and leadership by PI?
 - Is the funding for research expenses used in an efficient and effective manner (is the research expense funding for individual groups used effectively, is the equipment purchased used effectively, etc.)?
 - Is the implementation of international joint research based on compliance?
- (3) Regarding the development of science and technology and future research priorities
 - Is the planned direction of the research appropriate (orientation of the research, cooperation with the partner country, research operations structure, research expenses)?
 - How good are the expected outcomes (including contribution to global issues and to enhancing science and technology capacity in the partner country, potential for deployment and growth of science and technology in Japan, impact/effects brought about by Japanese science and technology, such as the adoption of Japanese research methods, systems, and standards, and prospects for the impact of the outcomes on society)?
 - Are Japanese human resources being trained (training young Japanese research staff, training Japanese human resources with global capabilities, etc.)?
- (4) Regarding the prospects for contributing to sustainable research activities
 - What are the prospects for building human networks (e.g., training young Japanese research staff, independence and autonomy of researchers or research institutes in the partner country)?
 - What are the prospects for the sustainable development of the research and utilization activities based on the outcomes (impact on policy, utilization of research outcomes, etc.)?
- (5) Overall evaluation (this evaluation takes into account all the items above)

S. Attainment is outperforming plans

A+. Attainment is somewhat outperforming plans, and an excellent outcome can be anticipated

A. Attainment is in line with plans

A-. Attainment is almost in line with plans, and a certain level of outcome can be anticipated

- B. Attainment is underperforming plans, but some attainment in line with or outperforming plans is apparent
- C. Overall, attainment is underperforming plans
- 4. Documentation used in Mid-term Evaluation
 - O Mid-term Report (prepared by Principal Investigator)
 - O Target Outcomes Sheet (updated by Principal Investigator)
 - O Overall Research Plan/Annual Research Plan (existing documentation)
 - O Annual Progress Report (existing documentation)
 - O Comments from the Provisional Evaluation prepared in advance by Japan Research Area Committee members and the responses from Principal Investigator
 - O Evaluation Meeting presentation materials (prepared by Principal Investigator), Project Evaluation Form (completed by Japan Research Area Committee members)
 - O Site Survey Report (prepared by JST)
 - O Other necessary information (reference materials)

5. Evaluation

- O The JST evaluation consists of the Japan Research Area Committee members (Evaluators) assigning an absolute evaluation at the Evaluation Meeting, based on information provided by the Principal Investigator.
- O Japan Research Area Committee members (Evaluators) who are stakeholders or interested parties in a project cannot act as Evaluators for that project. The scope of exclusion for conflict of interest is as stipulated in the numbered list below.
- (1) A person who is in kinship with the person subject to evaluation.
- (2) A person who belongs to the same department or has the same specialization at a research institution, such as a university or national R&D agency, or belongs to the same company with the person subject to evaluation.
- (3) A person who conducts a joint research closely with the person subject to evaluation. (For example, a person performing a joint project or writing a co-authored research paper, a research member having the same purpose, or a joint researcher pursuing the same research project who is considered to belong to a research group substantially the same as that of the person subject to evaluation)
- (4) A person who has a close teacher-and-student relationship or a direct employment relationship with the person subject to evaluation.
- (5) A person who is in an academic competition with the research project of the person subject to evaluation or belongs to a company in a competitive relationship in the market.
- (6) Others determined by JST to be a stakeholder.

Also, in other cases where an Evaluator personally judges that there is a conflict of interest, he or she cannot act as an Evaluator for that project.

O Evaluators are expected to look through the evaluation documents (Research Progress Reports prepared

by the PI, etc.) in advance of the Evaluation Meeting.

- O The evaluation is made from an overall judgment taking into account the state of progress seen from previous Annual Reports, site visits, symposia, Annual Meetings, etc., evaluation documents, exchanges of opinions, and presentations by the PI at the Evaluation Meeting.
- O Before the publication of the evaluation results, the draft evaluation report is checked by the PI to ensure that there are no factual misunderstandings, etc.

6. Other details

- Examples of published evaluation results for previous projects are available at the following websites.
 (JST) <u>https://www.jst.go.jp/global/kadai/index.html</u> (Japanese)
 (JICA) <u>https://www.jica.go.jp/activities/evaluation/middle-end.html</u> (Japanese)
- When handling Evaluation Meeting documentation, persons involved in evaluation are required to take sufficient care from the perspective of protecting personal information and maintaining confidentiality. In particular, it is essential to maintain the confidentiality of evaluation comments in order to make a rigorous evaluation. Such comments must be handled with great care. All documentation will be collected after the Evaluation Meeting.

7. References

 National Guidelines for Evaluating Government-Funded R&D (December 2016, Decision of the Prime Minister)

https://www8.cao.go.jp/cstp/kenkyu/taikou201612.pdf (Japanese)

(2) Guideline for Evaluation of Research and Development in MEXT (revised April 2017, Decision of the Minister of MEXT)

https://www.mext.go.jp/a_menu/kagaku/hyouka/1260346.htm (Japanese)

- (3) The 6th Science, Technology, and Innovation Basic Plan (March 2021, Cabinet decision) <u>https://www8.cao.go.jp/cstp/english/sti_basic_plan.pdf</u> (English) <u>https://www8.cao.go.jp/cstp/kihonkeikaku/index6.html</u> (Japanese)
- JICA Guidelines for Operations Evaluation (Second Edition) (May 2014)
 <u>https://www.jica.go.jp/english/our_work/evaluation/tech_and_grant/guides/c8h0vm000001rfr5-att/guideline_2014.pdf</u> (English)
 <u>https://www.jica.go.jp/activities/evaluation/guideline/index.html</u> (Japanese)
- (5) Project Evaluation in JICA <u>https://www.jica.go.jp/english/our_work/evaluation/about.html</u> (English) <u>https://www.jica.go.jp/activities/evaluation/about.html</u> (Japanese)

(end)

Appendix

Request: Research Report Meetings for the Mid-term and the Final Year

In principle, JST conducts Site Surveys for the purpose of ascertaining the partner country's stance and institutions and assessing the progress and outcomes of the research, in order to conduct the evaluation of international collaborative research projects appropriately. Site Surveys are conducted to coincide with the timing of Japanese researchers' visit to the partner country [such as for a Joint Coordination Committee (JCC)] in the mid-term year (third year after the project officially starts) and the final year (fifth year after the project officially starts).

JST therefore requests that researchers from both countries jointly hold Research Report Meetings to coincide with the third-year and fifth-year JCC, following the procedure described below. The presentations and discussions of these Research Report Meetings, the content of the Site Surveys, and other information will be used in the subsequent Mid-term Evaluation Meeting and Terminal Evaluation Meeting held by JST in Japan.

The Procedure for Research Report Meetings

1. Basic Agenda:	JST envisages progress reports from the Japanese and partner country researchers on the	
	research topics for which they are responsible, a question-and-answer session, and	
	general comments from JST Research Supervisors or others.	
	(These meetings are considered a part of the Site Surveys for gathering information in	
	preparation for the conduct of the evaluation in the JST Japan Research Area Committee,	
	and evaluations are not assigned in Research Report Meetings.)	
2. Presenters:	Members of the research teams in both countries, including young researchers	
3. Participants:	The presenters, representatives of the partner country research institution, and JST	
	(Research Supervisors and others). As there are no restrictions on the number of people	
	who may attend, and the attendance of JCC members such as senior officials of related	
	government departments is encouraged.	
4. Timing:	To confirm the status of progress of research, taking advantage of the opportunity	
	provided by a site visit from the Japanese researchers such as before or after the JCC.	
5. Management:	The research teams from both countries are responsible for the preparation, management	
	on the day of, and chairing the meeting.	
6. Budget:	There is no additional budget for these events.	

- * During the preparations, please coordinate between all those involved in the project in advance and inform the JST/JICA staff responsible of the scheduled date and other relevant matters. If JICA Project Coordinator is involved in operations to assist with the smooth running of a Research Report Meeting, please share this information with the staff at JICA responsible in advance.
- * Please share the Research Report Meeting documents with the JST/JICA staff responsible.

- * If the responsible department staff in JICA attend the regular progress monitoring meeting, the decision on whether to hold a Research Report Meeting or not will be made after JST has consulted the Principal Investigator in light of the content of the JICA Site Survey.
- * Example schedule
 - Day 1: Visit to research site (half day to full day)
 - Day 2: Research Report Meeting (half day to full day)
 - Day 3: Joint Coordination Committee (JCC)

(end)