PROJECT QUALITY
AT ENTRY:
TEN KEY ELEMENTS
Richard A. Calkins, Operations Advisor, EA3DR

INDONESIA DISCUSSION PAPER SERIES
NUMBER 3

20271
1996
SUMMARY

PROJECT QUALITY AT ENTRY: 
Ten Key Elements

Richard A. Calkins
Operations Advisor, EA3DR

The Bank's success is measured, not by the number of loans approved, but by results on the ground.

To ensure quality at entry, Government of Indonesia officials and the Bank's task team need to answer some common sense questions during project identification, preparation and implementation. Addressing the 10 key elements described here will help improve the success rate of Bank projects in Indonesia and ensure results on the ground.

DISCUSSION PAPERS PRESENT RESULTS OF COUNTRY ANALYSIS UNDERTAKEN BY THE DEPARTMENT AS PART OF ITS NORMAL WORK PROGRAM. TO PRESENT THESE RESULTS WITH THE LEAST POSSIBLE DELAY, THE TYPESCRIPT OF THIS PAPER HAS NOT BEEN PREPARED IN ACCORDANCE WITH THE PROCEDURES APPROPRIATE FOR FORMAL PRINTED TEXTS, AND THE WORLD BANK ACCEPTS NO RESPONSIBILITY FOR ERRORS. SOME SOURCES CITED IN THIS PAPER MAY BE INFORMAL DOCUMENTS THAT ARE NOT READILY AVAILABLE. THE WORLD BANK DOES NOT GUARANTEE THE ACCURACY OF THE DATA INCLUDED IN THIS PUBLICATION AND ACCEPTS NO RESPONSIBILITY FOR ANY CONSEQUENCE OF THEIR USE.
Over the past several years, the Bank has put greater emphasis on the performance of country portfolios. The Bank’s real success, after all, is determined, not by the number of loans it approves, but by the benefits achieved on the ground in terms of sustainable development impact.

Quality at entry into the portfolio is a critical determinant of success in project outcomes. Specific factors vital to project success must be addressed from the beginning of project identification. These factors must be featured during project preparation and be fully reflected in the detailed project implementation plan.

What are these critical success factors, and how important are they? According to a recent analysis of past Bank projects, there are 10 key elements to quality at entry that have been incorporated into a framework for project analysis. For each element, we present a list of key questions that need to be carefully considered in order to avoid serious problems in project implementation and to minimize risk of failure in achieving development objectives.

The importance of these 10 key elements can be seen in the fact that those Bank projects which have not used this analytical framework have a much higher rate of failure than those where the key questions have been asked and answered. After three years of implementation, for example, the probability of being rated unsatisfactory in terms of meeting development objectives is seven times greater for projects where the task team failed to answer the questions adequately than for those where they did. After four years of implementation, the probability of an unsatisfactory rating was 17 times greater. These factors do make a difference.

Most of the questions are a matter of common sense and are routinely asked of Bank projects in Indonesia by Government of Indonesia (GOI) officials and by the Bank’s task team. The issue is: how well are the Bank and GOI doing in answering these questions? The answer, clearly reflected in recent analyses of completed projects, is that both the Bank and GOI must do better.

This presentation is based on a framework for project analysis developed by staff in the Bank’s Operations Evaluation Department and Operations Policy Department, modified by the author to reflect priorities and initiatives of the Bank’s East Asia and Pacific Region and the experiences of Country Department III with project identification, preparation, and appraisal, and corresponding results in terms of portfolio performance among our borrowing member countries.

Let us turn now to the questions.
I. CONSISTENCY WITH DEVELOPMENT GOALS AND STRATEGY

Project identification should begin with a clear diagnosis of the problems addressed by the project. The diagnosis should be consistent with the country’s development objectives, the government’s strategy for achieving those objectives, and the Bank’s country assistance strategy.

The key questions to be considered in the area of consistency are:

- How does this project relate to the country’s macroeconomic goals and objectives, such as growth, poverty reduction, regional development, etc.?
- How does this project relate to sector-specific or regional issues and concerns (identified through Bank economic and sector work) and the government’s strategy for development of the sector or region?
- Is there clear evidence of government commitment to and ownership of the project concept; i.e., whose idea was it, is it included in the defined public investment program, and is it considered by senior government officials to be a high priority project?
- How does the project relate to the Bank’s country assistance strategy, including linkage to other ongoing and planned projects and to the priority attached to various macroeconomic and sectoral goals and objectives?
- Should the project be in the public or private sector, and if in the public sector, what is the rationale for Bank involvement; i.e., what special contribution or value added does the Bank, as the lender of last resort, bring to this project that no other donor or source of funds could provide?

ELABORATION

Establishing the basis for solid, on-the-ground development impact starts with identification of a development problem and sound diagnosis of the causes of the problem. This is the necessary prelude to the design of an investment plan and/or policies to solve it. This means that Bank operations must be firmly based on sound economic and sector work that identifies the policy, investment, and institutional constraints and opportunities and provides a framework for discussions with the government on possible Bank assistance.

One key test of ownership is the borrower’s leadership role in project preparation, including the staffing of the project preparation team and timely action to resolve questions of project policy and design.

The Bank, for its part, must be sure that its desire to meet annual lending targets does not influence the objectivity needed for project identification and appraisal.
II. CLARITY OF PROJECT OBJECTIVES AND KEY PERFORMANCE INDICATORS

Perhaps the most critical aspects of project identification are the specification of objectives and establishment of standards that will determine the extent to which the objectives have been achieved. This is something currently receiving a great deal of attention within the Bank. The Vice President has ordered that no project can go to the Board unless its objectives and performance indicators are clearly defined. The relevance of performance indicators for ex-post evaluation is self-evident, but their virtues in project identification and design are often not fully appreciated. Experience shows that the effort to be clear and precise provides significant benefits simply by ensuring that all parties concerned understand and agree on the project’s basic rationale. Quantifying how we will know whether or not the project has achieved its objectives also imposes useful restraints on overly ambitious development goals. More importantly, for improving portfolio management, we expect the new performance indicators to help the government, project implementing authorities, and the Bank to monitor progress and results on the ground while there is still time to deal with problems and thus help to achieve the intended project benefits.

The key questions to be considered in the area of clarity of project objectives and performance indicators are:

- Have the project’s objectives been clearly defined, and do they appear to be achievable within the known constraints and risks?
- Have each of the key project objectives been defined in measurable ways (quantitatively and/or qualitatively), and have performance indicators been defined in a way that will allow clear assessment of eventual project success?
- Do the project indicators cover the key risks identified under the project’s sensitivity and risk analysis, as well as the key inputs/outputs, and most importantly, the key project outcomes?
- Is the number of performance indicators manageable, and/or has provision been made for aggregating indicators at the subproject level so that project managers and Bank supervision missions can readily assess progress toward objectives?
- Does the project design and implementation plan include a monitoring and evaluation component that will track the performance indicators on a timely basis and in a cost-effective manner?

ELABORATION

This is a conceptually simple exercise, but in practice it can be complex and challenging, requiring considerable thought and analysis. Given its benefits, however, the Bank has agreed to try to retrofit the existing project portfolio to include clear objectives and monitorable performance indicators.
III. ALTERNATIVE PROJECT DESIGN

Project preparation should include consideration of alternative project design, both in terms of other projects that might achieve the same results in a different way, or alternative designs for a given project. This should begin with a careful review of past experience.

The key questions to be considered in the area of alternative project design are:

- What similar projects have been completed in the past, what went well in them that should be repeated, what went less well and can be avoided or corrected in project design?
- How else could the problem of clarity in defining project objectives and performance indicators (diagnosed in II, above), be resolved through alternative projects or alternative designs of the proposed project?
- In particular, what are the prospects for the private sector to be involved in solving this problem (the “private sector counterfactual”), especially if the government were not involved, or if the government established enabling conditions rather than directly investing scarce fiscal resources?
- On the basis of this assessment, which should be rigorous and quantitative, is the proposed project the least-cost solution?
- Is there any way to reduce the complexity of the project, especially the number of agencies involved in implementation and the number of project components, since too many participants and components are statistically correlated with unsatisfactory outcomes?

ELABORATION

Under current Bank policy, the private sector counterfactual is critical to consideration of alternative design. It is up to the task team to prove that private sector participation would not be appropriate.

Pressure to add components to a project must be resisted. One way to do so is to agree on the design of a multiyear, multiproject (programmatic) approach to Bank support within a given sector. This should provide broader coverage of the key sectoral constraints (policy, investment, and institutional) without overburdening one project. This approach could also include a series of regional projects (e.g., secondary education expansion) within an agreed policy framework and strategy for Bank assistance to a given subsector, with considerable potential efficiency gains for both the government and the Bank.
IV. CONSIDERATION OF FISCAL IMPACT AND COST RECOVERY

Since most Bank projects support public sector projects, it is important to understand not just the economic impact of the project, but its impact on the government budget. These costs often represent a significant share of government revenues and expenditures, and the sustainability of the project may depend on provisions for cost recovery, either directly, through project-related fees or indirectly, through taxes or other charges. Thus, fiscal implications, potential for cost recovery, and the willingness of beneficiaries to pay for benefits should be taken into account.

The key questions to be considered in the area of fiscal impact and cost recovery are:

• What is the project’s overall fiscal impact and what is the timing of that impact in terms of public sector revenues and expenditures?

• Does this impact, in terms of investment and/or recurrent costs, represent a significant share of existing government revenue and expenditures (for the sector, at that level of government)?

• Is cost recovery appropriate; if so, what methods should be used?

• Is the project financially sustainable on its own (i.e., are beneficiaries willing and able to pay), or will continued subsidies be required?

• If subsidies are required, to what extent are they transparent?

• Who would benefit from the subsidies, and how does this relate to government policies and strategies for poverty alleviation and reduction of income disparities among different groups and/or regions?

ELABORATION

Bank projects must take into account the fiscal implications of their implementation, especially subsequent operations and maintenance. Failure to do so will jeopardize the sustainability of project benefits.

Understanding of budget administration, including allocation, release, and use of recurrent and development funds, is critical for design of a realistic project implementation plan. This is especially important for Bank projects implemented at the provincial and local level.

The scarcity of budget funds, and the fact that most projects involve private benefits, argue for cost recovery wherever feasible.
V. SOUND COST-BENEFIT ANALYSIS (OR OTHER SELECTION CRITERIA)

The purposes of economic analysis (particularly cost-benefit or least-cost analysis) include: (a) determining the extent to which a project contributes to a country's welfare, (b) identifying bad projects that should be rejected, and (c) improving project design through sensitivity analysis that can highlight opportunities to increase the expected value of future benefits. The essential question is what would happen with and without the project in terms of the flow of related costs and benefits. For some projects, the nature of costs and benefits may make quantification difficult, and a different approach based on assessment of alternative approaches to achieving the same results, evaluation of the costs of each approach, and selection of the least-cost approach, will be required.

The key questions to be considered in the area of cost-benefit analysis are:

- What is the net present value (NPV) of the project (the discounted value of its cost and benefit streams, using an agreed discount rate), or the internal economic rate of return (IERR, the discount rate at which the present value of benefits and costs are equal, which is then compared with a cutoff rate of return)?

- Has this rate of return been calculated using nominal (current market) or real prices; i.e., taking into account opportunity cost principles?

- Has the project used conversion (shadow) prices for certain factors or a standard conversion factor, and if so, how have these been calculated?

PROPERLY DONE, AT THE FEASIBILITY STAGE, RATE OF RETURN AND LEAST-COST ANALYSIS SHOULD RESULT IN CHANGES IN PROJECT DESIGN.

ELABORATION

Formal cost-benefit analysis does not apply to all sectors, and even where it does apply, it is not an adequate substitute for careful assessment of alternative project designs; i.e., the rate of return calculation is a narrower assessment than that required to ensure optimal performance on a macroeconomic and sectoral basis.

Even for sectors where formal cost-benefit analysis does not apply, projects and project components must be subject to least-cost analysis to ensure optimal project design and selection. Increasingly, however, we are stretching the boundaries of project cost and benefit evaluations in order to expand our appreciation of the real impact of Bank projects in, for example, health and education.

Properly done, at the feasibility stage, rate of return and least-cost analysis should result in changes in project design. It should not be seen as an end-of-process, ex-post rationale for an investment already decided on.
VI. RATE OF RETURN SENSITIVITY AND RISK ANALYSIS

The purpose of project sensitivity testing is to identify those factors to which the project's rate of return is most sensitive. These may include increased project investment or operating costs, delays in project implementation, lower than anticipated prices for project outputs, etc. Some factors may be entirely outside the control of the project's sponsors, but all must be identified so that they can at least be monitored. Where a project's rate of return is seriously dependent on one or more sensitivity factors, project design should include mitigation plans to offset the risk of those factors occurring. At the same time, the rate of return calculation should reflect the expected outcome of the project, taking into account both the sensitivity of the NPV or IERR to project risks, and the probability of those risks occurring. Hence, the real rate of return should be the most likely one, taking known risks into account, not the rate of return that would be achieved if everything goes according to plan.

The key questions to be considered in the area of quantitative sensitivity and risk analysis are:

- Has project preparation included an attempt to identify underlying or causal factors that introduce risk into the project's potential outcome(s)?
- Does the analysis determine if variations in key underlying variables have an important impact on the NPV or IERR?
- Have the risks been clearly presented, and does the project design include a mitigation or contingency plan for major risks?
- Does the project implementation plan include a provision for monitoring and evaluation of the underlying risk factors facing the project?
- Were switching values (values for the risk factors that would result in an unacceptably low NPV or IERR) calculated?

ELABORATION

All too often, sensitivity analysis is approached mechanically (automatically factoring in plus or minus 10 or 20 percent of investment costs, a one or two year delay in project implementation, etc.) rather than as a true search for the factors most important to determining the final outcome of the project's costs and benefits.

The key project risks should be built into project design, at least through provisions in the plan for monitoring and evaluation. Major risks should also be the subject of well thought out mitigation and/or contingency plans.
VII. INSTITUTIONAL ASSESSMENT AND CAPACITY BUILDING

In most projects that fail, institutional shortcomings (including difficulties of interagency coordination) are a major contributing factor. This is often cited as one of the lessons of experience. Although institutional strengthening is one of the most challenging areas of development, it is the one perhaps least well understood by Bank task managers. To minimize project risks, special attention to institutional strengths and weaknesses is required.

The key questions to be considered in the area of institutional assessment and capacity building are:

- Has the project preparation team adequately assessed the demands the project will make on the implementing agencies, their current capacities, and the extent to which further institutional strengthening is required?

- Does project design include a coherent, sensible, and cost-effective plan for institutional strengthening that takes into account the current baseline and the absorptive capacity of the relevant organizations?

- Do the project design and the implementation plan provide for effective monitoring and evaluation of the institutional strengthening program, with provision for mid-course assessment and corrections?

- Have the risks of failing to achieve the institutional strengthening objectives been factored into the overall rate of return (or least-cost assessment), and, taking the results into account, does it still make sense to go ahead with the project?

ELABORATION

While concern about weak institutional capacity is frequently cited in the lessons learned sections of Bank appraisal reports, the corresponding risks to achieving a project's development objectives are not always incorporated into the quantitative assessment of project risks.

Mitigation plans generally include provision of technical assistance for institutional strengthening, but performance indicators (including baseline measures of capacity and targets for improvement) are often missing. As a result, monitoring and evaluation of institutional strengthening components may not be provided for in the project's implementation plan. Thus, results in this area are generally weaker than for the overall project.

This factor will be increasingly important to the success of the Bank's portfolio in Indonesia, given the growing number of projects implemented by regional and local government agencies.
VIII. CONSIDERATION OF POVERTY REDUCTION AND OTHER SOCIAL IMPACTS

It is well-recognized that the design of a lending operation should be based on a thorough understanding of the problems, needs, and interests of those who are to benefit from it, and just as important, those who might be harmed by it. The virtues of a participatory approach can be seen in the record of more effective implementation and significantly greater sustainability of project benefits, especially for projects in the social sectors and those implemented at the local level, such as kampung improvement or local water supply in Indonesia. In the case of potentially negative impacts, such as projects involving involuntary resettlement, project design and implementation must be consistent with Bank policies and procedures.

The key questions to be considered in the area of poverty reduction and social impacts are:

• Who will benefit from the project, and who might lose?

• What are the incomes of project-affected people, and what is likely to be the poverty reducing effect of the project?

• If land acquisition is required, will this involve involuntary resettlement? (In such cases Bank operational directives may require a resettlement action plan.)

• What procedures will ensure that the incomes and livelihoods of those negatively affected will be fully restored? (This is a basic tenet of Bank policy.)

• Will the project impact indigenous peoples? (In such cases Bank operational directives may also require an indigenous peoples action plan.)

• To what extent have other cultural factors (e.g., gender roles in agriculture and alternative approaches to extension activities targeted to women farm workers) been taken into account in project design?

• Is a participatory approach required in project identification, preparation, or implementation? Is participation primarily consultation or does it also include decisionmaking?

ELABORATION

While a high degree of participation is not required for every project, participation is likely to be featured increasingly in the design of effective regional projects.

Resettlement costs are a relatively small part of total project costs if resettlement is properly planned and implemented. However, costs can increase exponentially if planning and implementation are not carefully done.
IX. ENVIRONMENTAL IMPACT AND RISK ANALYSIS

As a matter of policy, all Bank projects undergo an environmental screening which results in assignment of a category of environmental impact and risk. Category A indicates substantial environmental impact and risk. Category C means the project has no significant environmental impact or risk. All A-rated projects must have a thorough environmental assessment (EA) completed prior to appraisal of the project by the Bank.

The key questions to be considered in the area of environmental impact and risk are:

- Does the project require a full EA (project specific, sectoral, or regional)?
- Has there been consideration of alternate project designs that might reduce potential environmental impacts and risks?
- Has an environmental mitigation, monitoring, and management plan been completed and is this fully reflected in project cost and risk analysis?
- Have the potential environmental impacts been evaluated from an economic perspective (e.g., project externalities) and, if quantifiable, have they been incorporated in the IERR/NPV calculation?
- In programmatic operations, is there adequate provision for subsequent review and approval of the environmental impacts of subprojects?

ELABORATION

Given the need for baseline measurements, which can take months to obtain, EAs should begin at the earliest stage of feasibility analysis. EAs should not be considered an add-on but should be an integral part of the feasibility study, especially in the early consideration of alternative project design and of alternative project locations and layout. The EA process, if it is to be useful, must be completed early in the project cycle.

Bank implementation and supervision plans must take fully into account the need to monitor and evaluate potential environmental impacts and the success of mitigation and management plans. These plans are sometimes not fully understood by project implementation staff or fully supervised by visiting Bank missions.

Greater attention should be given to sectoral and regional environmental assessments, and greater support must be given to government planning at the regional and local levels.
X. DETAILED IMPLEMENTATION PLAN

Projects differ in the extent to which they require fully detailed implementation plans. Large infrastructure projects, such as hydroelectric dams, typically involve complex engineering designs and sophisticated critical path analysis in their implementation plans. For projects having separable components to be implemented over time (the programmatic approach), it may be necessary to identify in advance only the first year's program, with annual reviews of the results and subsequent yearly plans. Such projects are also likely to benefit from a midterm review, with appropriate adjustments made based on experience to that point.

The key questions to be considered in the area of detailed implementation planning are:

- Is there clear understanding of the respective roles that each participant will play in project implementation, and are effective mechanisms established to ensure close coordination of effort?
- Has there been agreement on arrangements for procurement during at least the first year of the project, including agreed terms of reference, an agreed short list of consultants for technical assistance, bid documents, letters of invitation for civil works, and/or procurement of goods)?
- Was the plan prepared by the people who will implement it, and does it fully reflect all the decisionmaking steps by both the government and the Bank?
- Does the plan reflect the realities of budget cycles and counterpart funding availability at the relevant level of government, and, as a document that will guide project implementation, is it readily available in the local language?
- Has provision been made for a project launch workshop and other training needed to familiarize local project staff with the Bank's administrative requirements?
- Does the plan include adequate provision for monitoring and evaluation, including measures of implementation progress (inputs and outputs) and development impact (outcomes)?

ELABORATION

Unless the project implementation plan has been prepared with the participation of those responsible for implementing it, there is serious risk that it will fail to take into account the situation on the ground and thus may be unrealistic.

Experience shows that careful attention must be paid to preparation of procurement actions expected during the first year of project implementation.