

CHAPTER 2

ADB's Experience in Analyzing Education Sector Problems— Retrospective Review

Introduction

ADB's new education policy (approved in August 2002) stresses the need to pay more attention to sector analysis. This chapter reviews ADB's experience in analyzing education sector problems. The chapter is also a logical follow-up to the two earlier retrospective reports published by ERD that reviewed the quality of economic analysis of all ADB-financed projects and programs processed in 2002 and 2003.⁴ Relative to the two earlier exercises, this retrospective is much more focused—on a single sector (education), and on a narrower range of issues (sector analysis/problem diagnosis). The proposed emphasis follows logically from the findings of *Retro 2002* and *Retro 2003*. These studies concluded that ADB paid insufficient attention to establishing a sound rationale for a project.⁵ Many project proposals fail to clearly demonstrate why public sector involvement is called for, or why a particular set of interventions is proposed. *Retro 2003* further noted that the key to strengthening the articulation of project rationale and improving analysis of alternatives lies in systematic and careful problem diagnosis.

The objectives of *Retro 2004* is twofold. First, it assesses how well the issue of project rationale has been articulated in the education sector context (it largely revalidates the findings of *Retro 2002* and *Retro 2003*). Second, it assesses how rigorously the issue of sector analysis/problem diagnosis has been dealt with in the education sector. The exercise is based primarily on a selected review of RRP, PPTAs, and

ADTAs processed for the most part after the approval of the education policy.⁶ However, two main difficulties in accurately tracking economic and sector work (ESW) in education present themselves: there are no centralized data on ADB-wide ESW efforts, and the linkages between ESW and ADB's operations are not always well documented.

Ultimately, the goal of this retrospective is to promote learning and knowledge sharing among ADB staff for conducting meaningful analysis that will inform project design and implementation, so as to enhance the effectiveness of ADB operations by helping its staff learn from its own experience. The retrospective refers to actual project cases, which are solely intended to illustrate and clarify the discussion. While the exercise focuses on the education sector exclusively, many of the findings are likely to apply to other sectors as well.

How Well Has the Issue of Project Rationale been Articulated in the Education Sector? Revalidation of *Retro 2002* and *Retro 2003* Findings

Establishing a sound project rationale involves three levels of inquiry: (i) problem diagnosis, (ii) articulation of the rationale for public sector intervention, and (iii) the choice of design and modality. Items (ii) and (iii) together form part of the broadly defined “analysis of alternatives.” Each of these issues was examined in the specific context of the education sector.

⁴ *Economic Analysis in 2002: A Retrospective (Retro 2002)*, and *Economic Analysis Retrospective: 2003 Update (Retro 2003)*.

⁵ For simplicity purposes, “project” refers to both investment- and program-type interventions.

⁶ The review did not focus exclusively on finalized RRP, PPTA, and ADTA papers. Instead, the author worked closely with the project teams throughout the processing cycle. As a result, some of the examples that are used in the paper for illustration purposes may have been addressed at later stages of project processing and therefore may not be reflected in the final project documents.

Problem Diagnosis

Quality and thoroughness of problem diagnosis vary greatly across projects. Ideally, problem diagnosis should involve several steps: (i) identification of problems in the sector that need to be addressed, (ii) developing a sense of priorities (which problems are more important and should be addressed first), and (iii) developing a sound understanding of the underlying causes of the problems to be targeted under the proposed project. Weaknesses were identified at all levels of analysis in the projects reviewed.

The problems to be addressed were not always articulated in a sufficiently detailed manner or fully substantiated. For example, the UZB Information and Communication Technology (ICT) in Basic Education Project (PPTA paper) did not clearly highlight the specific problems that the project sought to address. The technical assistance (TA) paper argued that, in Uzbekistan, basic education was often of low quality and relevance, and school attendance rates were low. How ICT could address these problems, however, was not clearly spelled out in the TA paper. As a result, the rationale for the proposed intervention was weakened considerably. The TA paper should have more clearly explained to what extent the lack or inadequate provision of ICT services was a binding constraint to improved quality, relevance, and access of basic education in Uzbekistan. In this particular instance, the problem was not clearly expounded, but was merely identified as a lack of a solution—in this case, ICT.

The VIE Lower Secondary Education Project (draft RRP) identified three main constraints that needed to be addressed in the lower secondary education subsector in Viet Nam: (i) poor quality and efficiency; (ii) limited access, especially by the poor and disadvantaged; and (iii) limited management capacity. However, the RRP did not clearly specify the nature of the problems identified (for example, what was the exact nature of the quality problem to be addressed?) The RRP noted that learning assessments were inadequate. If this was the case, how could it be known that there was indeed a quality problem? The RRP included some data to capture internal efficiency issues (drop-out rates,

repetition rates, and average time for completing lower secondary education). However, they showed substantial progress in terms of internal efficiency gains over the previous 10 years, and it was therefore not clear (based on the data alone) that there was indeed an internal efficiency problem. (Perhaps some comparative data with other countries would have helped show that.) The more important point is that the report provided no data on external efficiency, even though this was mentioned as a weakness to be addressed. The RRP articulated well the nature of the access/equity problem identified, by showing stark differences in net enrollment rates by various ethnic groups, income groups, and gender. In terms of management capacity, the report did not elaborate on the nature of the capacity problem that needed to be addressed. Indeed, this is a common weakness observed in the reports reviewed. Virtually all projects included some capacity-building components, yet the nature of the capacity-building needs were rarely articulated clearly, such that in many cases it was not clear to what extent the issue had been examined through some sort of institutional analysis.

There are often no references to earlier ESW undertaken in project documents. Where references to such work are made, it is usually in a footnote (to the title of a report or a reference to a PPTA or ADTA). The scope or methodology of the work is almost never specified and the findings of the work are not synthesized. For example, the PNG Literacy for Everyone Project (draft RRP) noted that field surveys were conducted during the PPTA to assess demand for adult literacy programs. Yet it provided no details, such as coverage, methodology used, and key findings, on these surveys. More specifically, the RRP did not discuss whether current literacy programs were sufficient to meet demand and what factors affect attendance in these programs. As a result, the rationale for the proposed intervention was weakened considerably.

The PAK Restructuring of the Technical Education and Vocational Training System Project in North-West Frontier Province (processed in 2004) built on the results of a labor market survey conducted in 2003 under a small-scale TA (SSTA for Preparation of the Restructuring of Technical Education in the

NWFP). The findings of the survey were briefly summarized as part of the sector analysis (included in an appendix to the RRP). However, no detail was provided on the scope of the survey and the methodology used. Very limited details on scope and methodology were provided in the TA paper itself, which raised some concern with respect to the thoroughness of the analysis. ERD requested a copy of the consultant report but the report could not be located, so ERD was unable to assess how rigorously labor market issues were examined in this particular case.

In many instances, the review revealed that the problem diagnosis may not have been thorough enough to distinguish symptoms from causes. Incentives and institutional issues are rarely considered as an integral part of the problem diagnosis. Because the discussion of causes and effects is often missing, the link between the problem identified and the proposed solution is weakened. The LAO Basic Education Project focused on two key objectives: (i) improving access to basic education, particularly in rural areas, and (ii) improving quality and efficiency of education services delivery, particularly in rural areas. The PPTA (processed in 2004) focused on several issues, among them the physical construction of schools and provision of qualified teachers as a way to improve access. However, the TA paper did not clearly explain why enrollment rates were so low and drop-out rates so high in rural areas. The TA paper actually sent mixed messages on the issue. The text of the TA paper suggested that these problems stemmed mainly from supply-side issues, such as lack of schools, learning materials, and equipment, as well as of qualified teachers. The initial poverty and social analysis, though, seemed to indicate that the most binding constraints to increased access were the high costs (direct and indirect) of schooling. Again, there were no references to prior sector work on these issues. Because the underlying cause of the problem was not clearly articulated (or examined), the link between the problem identified (lack of access) and the proposed solution (building more schools or training teachers) was weak. The project seemed to implicitly assume that if more schools were built or more teachers were trained, students would come,

though it undertook no careful demand analysis to examine what factors affected enrollment rate and attendance, especially in rural areas.

The BAN Teaching Quality Improvement in Secondary Education Project (approved in 2004) sought to enhance the quality of education in Bangladesh secondary schools by improving the quality of teaching. The link between education quality in general and the quality of teaching was well established in the RRP, and the sector diagnosis emphasized incentives issues. For example, teachers' incentives were identified as a major problem area, with many unfilled vacancies at all levels of the system. While the RRP suggested some underlying causes (lack of transparency in the recruitment system, for example), it did not clearly state why teachers' incentives were so low. Also, even though it described the organizational structure of the secondary education system (which is essentially managed by the private sector but with the Government paying uniform salaries for all teachers), it did not seem to explicitly acknowledge the link between the organization structure of the education system and the issue of teachers' incentives, despite the fact that the issue appeared to be important. Clearly, if all teachers are paid the same, what incentive will they have to pursue training or remain in the profession once they are trained? If the secondary education system is privately managed, why should the public sector become involved in teacher training? Even though the project introduced some sort of incentive schemes, such as increased salaries for trained teachers, the broader issue of management of the education system as a whole and the role of government versus the private sector was not addressed in the scope of the project. (In fact, the project team later clarified that these issues were to be addressed under different projects.)

Analysis of Alternatives

Having clearly established the problem to be addressed, the next question is how best to address the problem at hand. This involves asking why there should be public sector intervention and, if public intervention is warranted, what are the best ways to meet the project objectives?

Rationale for Public Sector Intervention

It is important to justify a particular type of intervention in terms of the rationale for public sector involvement. In most project proposals reviewed, this rationale was not explicitly stated. This may have been because the reports dealt with a social sector, and because government intervention in education is widespread in many countries.

The few exceptions that specifically mentioned the rationale for public sector intervention did so in rather generic terms. For example, the NEP Skills for Employment Project (draft RRP) simply noted that public intervention in the technical education and vocational training (TEVT) subsector was justified on the grounds of market imperfection, externalities, and equity. This standard textbook argument was neither very insightful nor convincing. The RRP should have elaborated on the specifics of the Nepalese TEVT context, for example, what kind of market imperfections and/or externalities were being tackled, and what the specific equity issues, which needed to be addressed, were. The BAN Second Primary Education Development Program offered a notable contrast. The rationale for government intervention was articulated reasonably well in the RRP, with the discussion going beyond the standard public good argument, and specific to the Bangladesh context. The RRP also included a discussion of what would happen in the absence of the proposed intervention, which really helped highlight the potential benefits.

Lending in the education sector often helps strengthen public sector institutions and expand the coverage of public services. The relative merits of public versus private sector activities should be carefully examined. Any project should take into account the need to ensure complementarities between public sector education services and alternative modes of provision. While the state remains the main financier and provider of education services in many countries, it is important to recognize that there are other providers, such as private for profit or nonprofit organizations, religious bodies, nongovernment organizations, and the home. The role of these alternative providers should be carefully examined. The INO Decentralized Senior

Secondary Education Project (currently in preparation) seeks to establish about 60 selected schools with “international education standards.” The initial draft technical report noted that there had been a growth in private schooling in Indonesia combining the national curriculum with international standards. The report maintained that these schools had been quite successful and demand was high for them. Through the proposed project, however, it seemed that the Government was to come in and do the same thing, raising a couple of important questions: If private schools are already doing this and doing it reasonably well, why should the Government become involved? Can the Government do it better than the private sector, or even as well? Presumably, the Government may have a role to play on equity grounds, but this point was not well emphasized in the report—in fact, the report even argued that poverty reduction and equity of access were not the main aims of the project. Consequently, the rationale for the proposed intervention was not clearly highlighted. It seemed that the project would benefit a few privileged recipients, already well served by the private sector.

The PNG Literacy for Everyone Project raised similar concerns. While the rationale for focusing on the issue of adult literacy was fairly well established in the RRP, that for public sector intervention in the subsector was not. In Papua New Guinea, nongovernment organizations and churches are the major literacy providers to the community. While these bodies have limited capacity, it is not clear whether the public sector can do better. The RRP argued that the district administrations had weak capacity and virtually no budget for literacy programs. It was therefore unclear how the public sector could complement or build upon the role of these alternative providers. To establish a solid rationale for government intervention in a sector, it has to be demonstrated that the Government can actually improve on private sector outcomes—something not always obvious, even in a sector like education.

Choice of Design and Modality

There are different ways of achieving education goals. For example, measures to increase access may

include school construction or rehabilitation, teacher recruitment or deployment, introduction of multiple shifts, or some type of demand-side financing mechanisms (such as stipends or vouchers). Similarly, to increase the quality of education, one may rely on teacher training activities, curriculum reform, distribution of textbooks, or various system-wide reforms (education financing, monitoring and evaluation, etc.). Too many projects propose interventions for financing, often representing a chosen package of inputs, without any indication that other possibilities have been considered. The UZB Second Textbook Development Project (draft RRP processed in 2004) did not clearly highlight the rationale for focusing on the issue of textbook development. The RRP simply argued that textbooks play a key role as a determining factor of student performance, using references to broad education research findings dating back to 1978. More recent education research suggests that institutional variables, such as centralized examinations, issues related to school management, and extent of competition from private sector schools, are much more important in explaining the variation in student performance than the availability of textbooks themselves. ERD has suggested that the discussion focus instead on the key role of textbooks as the main form of teaching/learning support in Uzbekistan, and on the link between the proposed intervention and ADB's earlier work in the sector.

The discussion of alternatives also includes the choice of instruments—TA, investment loan, program loan, sector loan, or sector development program (SDP). In line with the recommendations of ADB's education policy, recent education projects have put greater emphasis on policy issues, as evidenced by a greater number of program loans and SDPs. Even with typical investment-type interventions, policy elements seem to play an increasingly important role. There is also an evident push—coming from both the developing member country (DMC) and donor governments—toward sector-wide approaches (SWAPs). In most RRPs reviewed, the reason for choosing a particular modality was not discussed. The few exceptions are as follows. The TAJ Education Sector Reform Project (RRP) explained that three types of lending

modalities were considered (program loan, SDP, and investment loan) and explained the rationale for eventually choosing the investment-type modality. The RRP argued that the environment in Tajikistan was not yet appropriate for a program loan or SDP, due to ADB's still limited understanding of the sector and poor institutional capacity on the government side. The BAN Second Primary Education Program (RRP) also explained the rationale for choosing a SWAP approach and for focusing on one subsector (primary education). Various consultations with staff have also revealed that there seems to be considerable confusion among staff on the so-called program-based approaches, such as: What is the difference between a program loan, a sector loan, and an SDP? What is a SWAP? When are program-based approaches appropriate? What are the main differences in terms of project preparation relative to more traditional investment-type modalities?

Summary

Retro 2002 and *Retro 2003* provided a detailed assessment of the practices of project rationale and analysis of alternatives and concluded that this part of project analysis was a weak link in the analytical chain. *Retro 2004* provides a further assessment of how the issues of project rationale and analysis of alternatives have been dealt with in the education sector, and largely confirms the findings of *Retro 2002* and *Retro 2003*, as detailed in the following paragraphs.

First, the problems to be addressed are often not articulated in a sufficiently detailed manner or fully substantiated. As a result, it is difficult to assess whether the problems identified are real problems, how serious they are, and whether they should be a priority. There are often no references to prior ESW undertaken in project documents. As a result, it is virtually impossible to assess how rigorously sector issues were analyzed (i.e., is analysis based on facts or on opinions) or how the project builds on the findings of preliminary sector work. Relevant sector work should, therefore, be cited in the project document. When specific surveys or studies are undertaken as part of project preparatory work, the scope and coverage of these studies, along with their key findings, should be summarized in the RRP. In

many cases, the review revealed that the problem diagnosis may not have dug down enough to distinguish symptoms from causes. Because the discussion of cause and effect is often missing, the link between the problem identified and the proposed solution is weakened. The inclusion of a problem tree diagram should help clarify these causal links. Although the New Business Processes indicate this as a requirement, it is rarely done in practice (very few RRP include such a diagram).

Second, many project proposals do not clearly demonstrate why public sector involvement in the education sector is called for. Careful assessment of the appropriate role of the government in the sector should involve an analysis of: (i) whether there is market failure; (ii) the source of that market failure (i.e., is it because of capital market imperfections, information problems, affordability problems, etc.); and (iii) whether government intervention would produce a better result than the private market, after accounting for the fact that government intervention is itself not costless (there are efficiency costs to raising taxes) and not perfect (government failures may also exist). It is not sufficient to take for granted the role of government just because a social sector is under discussion. While the state remains the main financier and provider of education services in many countries, there are other providers as well. Their role should be acknowledged and carefully examined to ensure that ADB's projects actually improve upon private sector activities and outcomes rather than merely substituting for them.

Third, many project proposals do not explicitly indicate why a particular project design or modality is adopted. Many projects propose specific interventions without any indication that other possibilities have been considered. Selecting the most appropriate approach to reach the chosen objective needs to be based on rigorous economic criteria. At the very least, each project should discuss the alternative options considered and on what basis a particular option was chosen. This is especially important in cases where rates of return are not calculated, so as to justify the project on some other, nonfinancial, basis. With respect to the choice of instrument, there seems to be a push in the

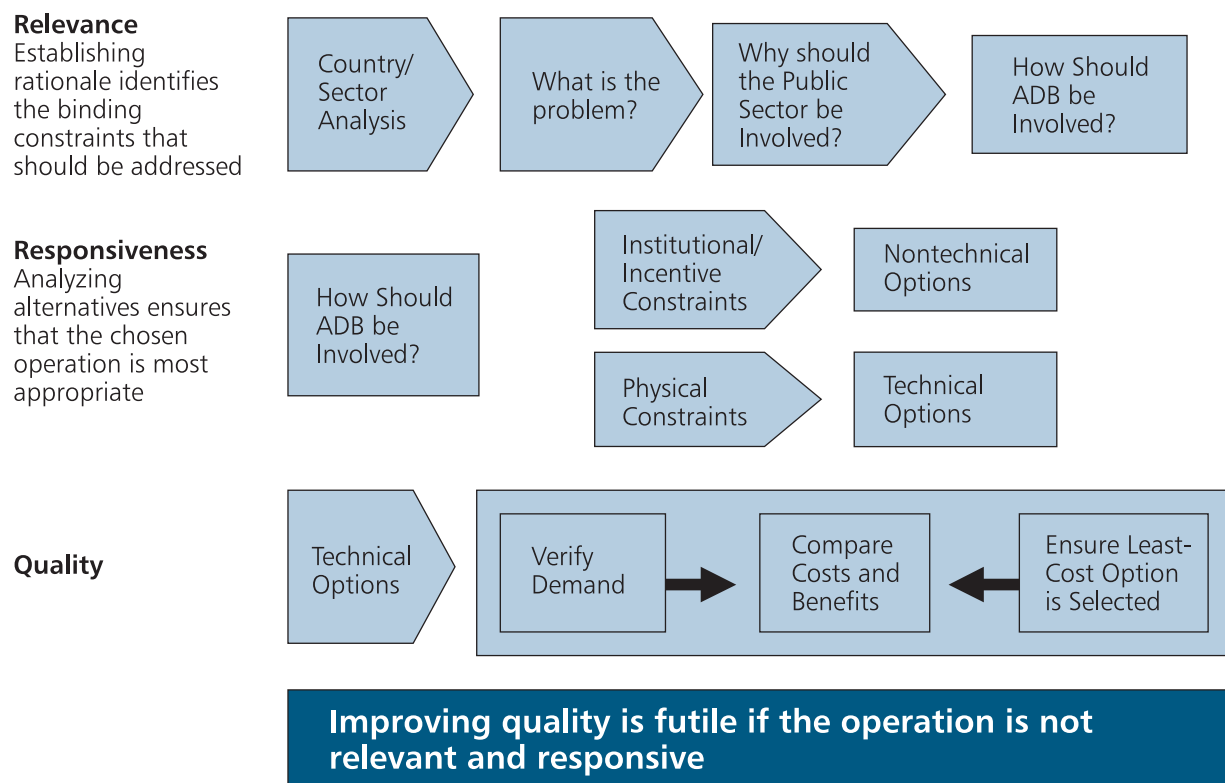
sector toward program-based approaches, yet there appears to be limited understanding among some staff of such approaches. This is an area of concern. Should this trend continue, it might be worthwhile to invest in further training to upgrade staff skills.

Retro 2004 therefore confirmed that in the majority of projects reviewed, insufficient attention was paid to establishing a sound rationale. A primary factor in the analytical weakness of project rationale seems to be the lack of prior and critical analysis of problems and their underlying causes. Solutions seem to be proposed before problems are clearly articulated and/or understood. Establishing a sound project rationale is among the necessary first steps in assuring the overall high quality of project analysis, for two main reasons. First, from a development viewpoint, unless a project represents the most effective means to address a real problem, its effectiveness is in doubt. Second, from an analytical perspective, a project proposal silent on rationale implicitly assumes that it does the right thing and does it the right way, but without critically examining how the project adds value. Articulation of project rationale and consideration of alternatives (which in turn should be based on solid ESW) are critical links in the sequence of economic analysis and constitute the groundwork for subsequent analysis. Focusing on the quality of operations without first addressing the broader issues of project relevance and responsiveness is tantamount to blind targeting (see Figure 1).

[A Closer Look at Sector Analysis](#)

Sector analysis is an essential step to identify key problems, their causes and effects, and consequently the basic rationale for a project and its objectives. However, ADB offers no detailed guidelines on what a sector analysis should cover. Its Operations Manual refers to sector analysis in various sections (Section D3/BP on sector lending, Section D4/BP on sector development programs, and Section D5/BP on program lending). These broad guidelines apply to all sectors and stipulate that sector loans, SDPs, and program loans need to be supported by a comprehensive sector analysis covering policy issues, a review of sector expenditure, the respective roles of public and private sectors, social and

Figure 1: Getting it Right Early



environmental dimensions, and institutional development needs.

The 1994 “Framework and Criteria for the Appraisal and Socioeconomic Justification of Education Projects” offers some suggestions specific to the education sector. More specifically, it highlights three areas: (i) the sociocultural context and its receptiveness to the proposed education intervention (in particular, demographic composition, sociological and religious structure, cultural traditions that can have an impact on e.g., the schooling and performance of minorities, and of girls and boys); (ii) the economic and financial capacity of a country (macroeconomic outlook, education sector financing, cost-recovery and privatization alternatives, labor supply and demand, and returns to education); and (iii) institutional capacity (organizational structure and culture, capabilities and skills of available personnel, supportive information systems, and incentive structure for teachers and qualified personnel).

The manner in which these various issues have been addressed in the various project documents is summarized in the following paragraphs. More specifically, the focus is on three broad areas that appear particularly relevant from an economic analysis perspective but that were not well covered in the majority of projects reviewed: (i) macroeconomic linkages (including a discussion of the fiscal context disaggregated at the sector level), (ii) social dimensions, and (iii) the institutional framework.

Macroeconomic Linkages

ADB's Operations Manual stipulates that program loans and SDPs must take into account the linkages between the proposed intervention in the sector considered and the macroeconomic conditions in the DMC concerned. While *Retro 2004* concurs that understanding macroeconomic linkages is critical in the case of program loans and SDPs, it also argues that in the case of education, these linkages should be emphasized even with investment-type

interventions in view of the way that macro variables affect the viability of investments in the sector. In particular, the following aspects should be examined as an integral part of the sector analysis: (i) the budget framework for the country as a whole and for the education sector in particular (since in most countries the government remains the main financier of education services, and so a closer look at the budget allows an examination of how efficiently government funds are spent); and (ii) labor market trends (since education benefits are in the majority of cases measured in terms of employment gains, e.g., more people can find a job or earn higher wages).

The issue of education financing is typically not discussed as part of the sector analysis but rather as part of the economic and financial analysis to assess the fiscal or financial sustainability of a project (if it is discussed at all). The CAM Second Education Sector Development Program covered the issue very comprehensively and even developed a medium-term education financing scenario. The BAN Second Primary Education Development Program also covered it very comprehensively, but this was not reflected in the sector analysis (it was discussed in a draft working paper that was circulated with the draft RRP). ERD has recommended that the underlying budget constraints identified in the financial and economic analysis be brought up in the RRP's analysis of key problems and opportunities (this was important to justify a SWAP). For investment-type interventions, the issue of sector-wide financing is often not discussed at all. The financial sustainability analysis for these types of projects relies typically on the argument that a project's claim on future fiscal resources is very small in proportion to the reported total resource availability in the sector. Past experience has revealed serious limitations to this type of individual project-based fiscal impact analysis. In particular, postevaluation findings indicate that many social sector operations face a persistent problem of being underfunded after project completion. A sector-wide public expenditure review (PER) may therefore be more useful to assess the overall fiscal sustainability of a project. Such a review would provide critical analysis of sector development priorities, budgeted and actual allocations of capital and recurrent financing, and

consequently provide a substantive basis to determine additional requirements of fiscal resources.

The examination of labor market trends and needs should be an integral part of the demand analysis. Demand for education sector projects can be assessed from two perspectives: (i) from the students and parents' perspective, since they decide whether or not to enroll and attend school; (ii) from the employers' perspective, since employers decide whether or not to hire graduating students, and at what rate. This latter aspect is particularly relevant for upper levels of education (secondary, higher education) and for TEVT. The extent to which labor market issues are addressed in project documents varies greatly across projects.

The CAM Second Education Development Program (SDP processed in 2004) sought to improve access and quality of secondary education and life-long learning opportunities for out-of-school youth. The RRP included an extensive discussion of the macroeconomic context, but the linkages between the proposed intervention and the macroeconomic situation in Cambodia were insufficiently emphasized. For example, the RRP highlighted one key source of uncertainty regarding the macroeconomic outlook, namely the change in garment quotas, which was likely to affect growth, employment, and overall fiscal prospects in the country. This could have serious implications for the design of the proposed intervention—Where are the job prospects likely to be in the medium term? What do people need to be trained for?—and for the overall sustainability of the reform agenda. This point was not explicitly addressed in the RRP.

The RRP included a discussion of labor market trends, though. Overall, the labor market prospects in Cambodia looked pretty bleak: the population was very young and growing, and the number of unemployed was already large. The RRP argued that high levels of economic growth would be needed to translate this into job creation, yet the macroeconomic outlook suggested that this was unlikely to occur in the short to medium term. The

RRP further argued that the role of the education and training sector would be pivotal in determining economic prospects. The discussion of the macroeconomic outlook and labor prospects raised concerns on this latter point, given that the education and training sector can only do so much, seen against overall macroeconomic prospects. The proposed intervention focused on basic education (to address basic literacy and numeracy needs) and skills training (to encourage job creation), particularly in rural areas. The rationale for ADB intervention in skills training was not clearly established in the RRP. Although the project suggested various skills such as growing mushrooms, sericulture, and raising ducks, there was no real discussion of job creation prospects in these activities.

A similar issue arose in the NEP Skills for Employment Project. The project focused on the TEVT sector and was based on economic grounds, and posited that students would more easily find jobs (abroad, locally in the informal sector, or through self-employment) after being trained. The draft RRP discussed foreign labor market prospects and demand fairly well, but the discussion of labor prospects in the informal sector or for self-employment could have been strengthened substantially. Effective TEVT interventions should be based on a thorough examination of the precise skills that are needed in the market. In this case, the RRP argued that labor market prospects in the formal sector were limited because of the slow growth of the economy. Presumably this could affect the informal sector and self-employment as well, i.e., if labor market conditions are depressed because of unfavorable macroeconomic conditions, it is questionable whether TEVT can really make a difference in terms of access to informal or self-employment. In severely depressed labor markets, the link between training and access to jobs is likely to be weakened considerably, and it seems unrealistic to expect that TEVT projects will lead to strong employment gains in such circumstances. A thorough labor market analysis would have been helpful to determine whether poor labor markets prospects were due to poor overall macroeconomic prospects or to specific skills mismatches and deficiencies.

Social Dimensions

Social dimensions, in the education sector context, refer primarily to the issues of access and participation. Resolving them requires presenting and analyzing education coverage by level and type of education. To the extent possible, the analysis of education coverage should be disaggregated by gender, location (region, district, rural versus urban), and sociocultural groupings (social stratum, ethnicity, language, etc.). The analysis then should go one step further and examine the factors that affect enrollment and attendance, through a demand analysis from the parents'/students' perspective. The analysis of access and participation should consider both supply- and demand-side factors, which means finding out if access and schooling are more limited by incomplete supply, by deficient demand, or by a combination of the two. For example, children may not have access to education because there are no schools in their village or because there is not enough space in their school; or they may not wish to go to school for other reasons. This investigation will allow the forward identification of appropriate strategies to increase schooling, either by enlarging the school supply, by boosting social demand for education, or by improving the school environment. To tackle this in a rigorous manner, it is often necessary to organize household surveys, in order to identify the real causes and possible corrective measures.

It is difficult to assess how rigorously the issue of demand analysis was examined in most project documents. The majority of projects reviewed had no discussion on whether a demand analysis was undertaken—and if so, what it entailed. A few exceptions stand out. The PNG Literacy for Everyone Project (draft RRP) noted that field surveys were conducted during the PPTA to assess demand for adult literacy programs, though gave no details on these surveys with regard to e.g., coverage, methodology used, and key findings. The SRI Distance Education Modernization Project mentioned focus group discussions with A-level graduates from poor families as the basis for the demand analysis, though again, the scope and coverage of these discussions were not specified. The VIE Second Lower Secondary Education

Development Project (RRP) did include a demand analysis that built on the results of the 2002 Living Standards Survey. The analysis raised a number of interesting points. First, households are willing and able to pay for a share of schooling costs. Second, there is substantial unmet demand for lower secondary education in every province of the country. Third, the main reason for low secondary enrollment among the poor has to do with the opportunity cost of sending children to school, because poor students need to contribute toward the family income or assist in the household. While these findings are very important, it was not entirely clear how they had been incorporated in the project design.

Institutional Framework

Institutional issues are very important for projects with a strong policy dimension. A successful education reform often stems from a country's institutional capacity to design sound reform policies and carry out clear implementation plans. For such projects, an institutional assessment is recommended as an integral part of the sector analysis. Ideally such an assessment should cover three key areas: (i) identification of key institutions involved in the sector and in the project in particular (including both public and private institutions if applicable), (ii) a clear definition of the roles of these institutions, and (iii) an assessment of their capacity to carry out that role.

Most project documents reviewed provided limited discussion of institutional issues. In many cases, they

failed to provide a comprehensive discussion of key institutions in the sector, and discussion was often restricted to certain public institutions, with little reference to private institutions. Furthermore, the roles of these institutions were rarely portrayed in a clear manner. This is particularly important in decentralizing environments, where project documents should: name the functions that are being decentralized; explain the roles of the various institutions at the central, provincial, and district levels; and describe how decentralization is actually being implemented. Consequently, the capacity of various institutions was almost never assessed or discussed, since one cannot meaningfully discuss capacity if the roles of the various institutions have not been clearly laid out.

The World Bank has developed a tool kit to assess organizational capacity in the education sector. Broadly speaking, capacity can be assessed in three main areas: (i) formulating a vision, designing strategies, and developing plans and programs; (ii) mobilizing funds to implement them; and (iii) actually carrying them out. The kinds of functions that are typically associated with these three abilities are summarized in Table 1.

The World Bank tool kit also stipulates that an institution has capacity if and only if all the following conditions are met: (i) its key functions and activities are clearly allocated to adequate subunits; (ii) it has effective leadership; (iii) it has adequate financial resources with which to procure the necessary input; (iv) it has the material resources necessary to carry

Table 1: Defining Capacity in the Education Sector

Formulating Vision, Policies, Strategies, and Plans of Action	Mobilizing Funds	Conducting Operations
<ul style="list-style-type: none"> • Collect statistics and information • Analyze and generate policy and strategy alternatives • Debate policy and strategy alternatives • Develop programs and plans of action • Monitor, evaluate, and provide feedback 	<ul style="list-style-type: none"> • Obtain funds from parent organization • Obtain funds from donor organizations • Introduce user fees and collect revenues • Obtain contributions in kind from communities • Control fund allocation and expenditure 	<ul style="list-style-type: none"> • Administer personnel • Provide technical support • Conduct core operations • Train teachers • Deliver primary, secondary, and tertiary education • Provide pedagogical supervision • Provide diagnostic services • Conduct national examinations and assessments

out its mandate; and (v) it has the human resources necessary to carry out its mandate and the people working for it follow adequate work practices.

These issues were rarely discussed or examined in the project documents reviewed. If they were mentioned at all, it was often only as a risk or assumption (the magnitude of which was not specified). The SRI Secondary Education Modernization Project II, for example, identified several project risks. One referred to the sustainability of the investment, in terms e.g., of ensuring that the project had adequate teaching staff, especially in rural areas. In addition, schools were expected to develop cost-recovery schemes for the community learning centers. The RRP noted that schools in poor communities might not be able to sustain themselves. To mitigate this risk, the Government had given assurances that it would finance the incremental recurrent costs of the project for 7 years after project completion. An additional covenant was included as part of the loan assurances requiring the Government to prepare, within 6 month of loan effectiveness, a review of the incentives and disincentives for teacher transfers to rural areas and to develop an action plan to deal with this problem.

Another risk in the project was that stakeholders might not have the capacity to implement decentralization, yet the project gave greater roles to zonal offices to facilitate and monitor school activities. A covenant was included as part of the loan assurances requiring the Government to prepare, again within 6 month of loan effectiveness, a review and synthesis of its policies on decentralization and to develop a series of action plans for implementing decentralization of education. These issues are critical for the success and sustainability of the proposed project, and should not be treated merely as risks mitigated through the use of assurances. These assurances have little meaning unless a previous assessment suggests that they can realistically be met.

Summary

The review has revealed that, in contrast to the recommendations of ADB's education policy, critical aspects of sector analysis do not receive sufficient attention in project documents. This often leads to

projects with weak analytical underpinnings and rationale. Solutions seem to be proposed before problems are clearly articulated or understood. Lack of thorough problem diagnosis may result in projects that only address some symptoms of a problem rather than its causes. Even worse, lack of clear identification of these causes may result in proposals for inappropriate solutions. Sector analysis is therefore an essential step to identify key problems, their causes and effects, and consequently the basic rationale for a project and its objective.

It is difficult to track ESW in the education sector because of a lack of centralized data on ADB-wide ESW efforts, and because the linkages between ESW and ADB's operations are not always well documented. Overall in the education sector over the past 5 years, the majority of ESW appears to have been funded from TA resources, primarily PPTAs; ADTA amounts were primarily used for capacity building and implementation support. The scope of the majority of PPTAs reviewed was found to be overly broad vis-à-vis the available resources (project preparatory work together with sector work). It would seem very difficult, if not impossible in many cases, to fully implement all the tasks required to a high quality within the relatively short TA duration and available budget. This applies to ESW as well. Given the limited resources, the best consultants may be able to creatively assemble existing data, or in a few cases even generate new data, that will shed light on important problems. But in most cases, their assessment does not go far enough to achieve a careful analysis of the underlying causes of a problem in the particular country or sector context considered.

The review has also revealed that the consultants' terms of reference (TOR) are often worded in a very loose manner (broad tasks are given without any suggestions on depth of coverage or potential methodology). As a result, it is not always clear what the consultants are expected to do. In addition, the TOR rarely build on earlier ESW, and do not consider what is already known (through previous ESW) and where the information gaps are. Ideally, the TOR should focus on the specific areas where information is missing. In practice, however, they

tend to cover the widest possible range of relevant topics. This seems to be a deliberate decision by mission leaders to allow greater flexibility. In many cases, the mission leader implicitly relies on the consultant to review the literature (this is sometimes included as an additional task in the TOR) and to focus on the needed areas. This approach is very risky. It also nearly always precludes a focused and in-depth investigation of specific areas of interest.

There is a need to better rationalize TA resources. More focused TAs have several advantages over those with broader coverage. Instead of comprehensive reviews of a general nature, a focused TA may provide clear insight into the key factors underlying particular issues, detailed measures for addressing such problems, and the testing of selecting recommendations when appropriate. The TOR of the consultants should also reflect the sharp focus of the TA's scope. Finally, ADB staff should be given more opportunities to engage directly in these kinds of studies. This would help maintain or upgrade staff skills and ADB's knowledge base, as well as staff morale and interest (since staff would

be offered a broader and more interesting range of tasks rather than being mere project administrators).

The review has identified three key areas with shortcomings in sector analysis—discussion of macroeconomic linkages, social dimensions, and institutional context. Of the three, understanding the institutional context is particularly important in education. Successful education systems vary widely across countries: some systems are centralized, others are decentralized; some have almost exclusively public schools, while others provide public support to private providers. “One size does not fit all” is a truism, but it is not in itself very helpful. Everyone wants to know “what size fits me,” i.e., what are the actions that would improve services in my circumstances? To evaluate alternative arrangements for the provision of services, an encompassing framework is required to analyze which of the many items on the menu of reforms is right for the circumstances. Chapter 3 introduces such a framework, while Chapters 4 and 5 present various tools to diagnose problems more rigorously.