

The logo for the Asian Development Bank (ADB), consisting of the letters 'ADB' in a white serif font inside a black square.

ADB

Evaluation Study

Special Evaluation Study
May 2006

Pathways Out of Rural Poverty and the Effectiveness of Poverty Targeting

Operations Evaluation Department

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 18 May 2006)

Currency Unit	–	dong (D)
D1.00	=	\$0.0001
\$1.00	=	D15,964.00

Currency Unit	–	yuan (CNY)
Y1.00	=	\$0.1250
\$1.00	=	Y8.0025

Currency Unit	–	ringgit (RM)
RM1.00	=	\$0.2796
\$1.00	=	RM3.5765

ABBREVIATIONS

ADB	–	Asian Development Bank
ARD	–	agricultural and rural development
CCF	–	Central Credit Fund
CDD	–	community-driven development
EA	–	executing agency
FDI	–	foreign direct investment
HCM City	–	Ho Chi Minh City
IRR	–	internal rate of return
O&M	–	operation and maintenance
OEM	–	operations evaluation mission
NGO	–	nongovernment organization
PCF	–	people's credit fund
PCR	–	project completion report
PFI	–	participating financial institution
PRC	–	People's Republic of China
PRS	–	Poverty Reduction Strategy
RCC	–	rural credit cooperative
RCP	–	Rural Credit Project
RISP	–	Rural Infrastructure Sector Project
SES	–	special evaluation study
SLA	–	sustainable livelihoods approach
VBSP	–	Viet Nam Bank for Social Policies

WEIGHTS AND MEASURES

km	–	kilometer
mu	–	1/15 hectare

NOTE

In this report, "\$" refers to US dollars.

Director	R.K. Leonard, Operations Evaluation Division 1, Operations Evaluation Department (OED)
----------	--

Team leader	Qiaolun Ye, Senior Evaluation Specialist, OED
-------------	---

Team members	O. Nuestro, Evaluation Officer, OED
--------------	-------------------------------------

	O. Badiola, Senior Operations Evaluation Assistant, OED
--	---

Operations Evaluation Department, SS-66

CONTENTS

	Page
EXECUTIVE SUMMARY	ii
I. INTRODUCTION	1
A. Background and Rationale of the Study	1
B. Literature Review	2
C. Objective and Methodology	5
D. Limitations of the Study	12
II. POVERTY EXIT AND UNDERLYING FACTORS	12
A. Poverty Exit and Sustainability	13
B. Household Strategies for Poverty Exit	15
C. Household Resources	18
D. Context and Conditions	19
III. POVERTY REDUCTION INTERVENTIONS	23
IV. ISSUES, UNDERLYING CAUSES, AND ALTERNATIVES	26
A. Poverty Exit and the Roles of Agriculture and Migration	26
B. Household Vulnerability and Poverty Reversal	29
C. Financing Rural Infrastructure Investment	31
D. Credit and Poverty Reduction	35
E. Fundamental Problems in Poverty Targeting	36
V. CONCLUSIONS	40
A. How Rural Households Rise Out of Poverty	40
B. What Mattered to the Poverty Exit	42
C. What Worked and What Did Not	44
D. What Went Wrong and Why	47
E. Recommendations	49
APPENDIXES	
1. Basic Questionnaires for Household Interview	52
2. Case Study: Viet Nam	54
3. Case Study: People's Republic of China	82
4. Case Study: Malaysia	102
5. Basic Data of Projects Selected for Case Studies	112
6. Issues Deserving Further Study	129

In accordance with the guidelines formally adopted by the Operations Evaluation Department (OED) to avoid conflict of interest in its independent evaluations, the Director General of OED delegated approval of this evaluation to the Director of Operations Evaluation Division 1. Octavio Damiani was the consultant. Prof. Alain de Janvry (University of California, Berkeley) reviewed the report and provided comments. To the knowledge of the management of OED, there were no conflicts of interest of the persons preparing, reviewing, or approving this report.

EXECUTIVE SUMMARY

This special evaluation study (SES) arises from the increasing importance the Asian Development Bank (ADB) places on poverty reduction, which has become the overarching goal of its operations. To achieve this goal, ADB uses geographic and household targeting to channel funds to poor regions or deliver benefits to poor households. Many ADB projects add such components to make projects pro-poor. The widespread use of poverty targeting has generated (i) an increased need for evaluating the effectiveness of poverty reduction interventions and (ii) a need to understand what worked, what did not, and why. This SES aims to provide insights into key factors determining the effectiveness of poverty reduction interventions, with a view to generating lessons for the future design and implementation of ADB projects.

The SES applied a poverty exit framework as its conceptual model to systematically analyze factors affecting the pathways out of rural poverty and the sustainability of the poverty exit. These factors included (i) various assets that rural households had, (ii) the context and conditions they faced, and (iii) the strategies they used to rise out of poverty. The SES focused on the following questions: (i) How did poor households in rural areas rise out of poverty? (ii) What were the factors critical to their rise out of poverty? (iii) How effective were poverty reduction interventions? (iv) What were the key factors determining the effectiveness of the interventions? (v) What measures could be taken to improve the effectiveness of poverty reduction interventions in the future?

Using mixed methods to collect data, the SES selected seven ADB-financed projects for in-depth study. These included (i) one rural credit project and one rural infrastructure project in Viet Nam, (ii) two expressway projects in the People's Republic of China (PRC), and (iii) one land settlement and two township development projects in Malaysia. These three countries have experienced rapid economic growth in the past 2–3 decades, achieving remarkable records in poverty reduction.

The Operations Evaluation Mission (OEM), comprising a senior evaluation specialist from ADB and an international consultant, visited the three countries and conducted extensive fieldwork in 75 villages. To obtain a deep understanding of how rural households rise out of poverty and what contributes to their poverty exit, the OEM conducted many in-depth interviews with a wide range of informants, including project designers in ADB, implementers in government agencies and financial institutions, field staff working directly with beneficiaries, local governments, village leaders, and ordinary residents in project areas—both the poor and others, people who benefited from projects and those who did not. Among the poor, the OEM interviewed not only those that rose out of poverty, but also those that remained in poverty and those that slipped into poverty due to misfortune.

Using both official poverty lines and definitions of poverty used by households themselves, the OEM observed substantial reduction in rural poverty in all areas visited. The sustainability of the poverty exit, however, varied significantly across regions. In the areas visited, agriculture played a key role in poverty exit in early stages, when farmland was relatively abundant. Agriculture's role declined dramatically, however, when continued rural population growth intensified the shortage of farmland per capita in these areas. Meanwhile, off-farm employment was limited in many remote regions that remained unattractive to private investors even after projects upgraded rural roads. The OEM found that a great majority of the rural poor, especially those from remote and poorly endowed regions, rose out of poverty by migrating to non-poor regions and working in non-agricultural sectors.

In the cases studied, most of the poor had few assets other than their labor. Consequently, their strategies to rise out of poverty were to find whatever ways available to employ family labor. The OEM identified the following, among other factors, as being the main constraints on rural employment. For employment in agriculture, (i) shortage of farmland, (ii) scarcity of water in the dry season, and (iii) other adverse farming conditions such as a harsh climate were among the most binding constraints. For self-employment in off-farm activities, the lack of access to commercial credit was a key constraint, especially when capable individuals identified good investment opportunities but lacked the required funds. For wage employment, job availability and barriers to migration mattered most, including (i) government control on labor mobility, (ii) language difficulties among ethnic minorities, and (iii) households' lack of social connections in cities. Road conditions and transportation costs, while relevant in households' migration decisions, were by no means a binding constraint, as most migrants traveled long distances to work in cities; poor roads in their hometowns did not stop their migration. The OEM found that migrants' lack of education and skills were not a binding constraint for employment in the informal sectors such as construction and services. For formal employment such as in foreign-invested factories, however, secondary education was a precondition. Many private firms—who knew best their training needs—provided training to new workers who migrated from rural areas.

In the areas visited, household vulnerability was a primary cause of new poverty. Major factors underlying vulnerability included (i) serious or chronic illness of family members and (ii) investment failures due to price fluctuations, epidemic outbreaks of animal disease, or natural disasters. At times of emergency, searching for immediately available funds was a typical coping strategy of many rural households. For the first- or one-time shock, many households could recover by themselves through reinvestment, working harder, and reducing consumption if they had timely access to commercial loans with a maturity that was long enough for them to recover. Unfortunately, most formal financial institutions did not provide emergency loans quickly enough, and a great majority of rural households relied on moneylenders. The high interest charged by moneylenders trapped some borrowers in poverty after distress sales of farmland forced by accumulated debt.

In the cases studied, the OEM found that the following government and ADB interventions worked well: (i) public investments to promote economic growth and job creation, such as the two expressway projects in the PRC; (ii) policies or programs to reduce barriers to labor mobility or to facilitate migration; (iii) projects to make unsubsidized loans more readily available for most rural residents, such as the rural credit project in Viet Nam; and (iv) policies or programs to reduce household vulnerability, such as free education and health services in Malaysia.

In contrast, the following interventions were found to be largely ineffective in the cases studied: (i) upgrading isolated rural roads in remote and poorly endowed regions, (ii) add-on components satisfying ADB's pro-poor objective without sufficient demand from clients, and (iii) household and geographic targeting used in investment projects that did not tackle the key causes of poverty but simply assumed that funds flowing into poor regions, or benefits received by the poor, would automatically lead to poverty reduction.

The OEM found this assumption largely invalid in the cases studied. Locating projects in poor regions did not guarantee significant poverty reduction if the project interventions were largely irrelevant to the key causes of poverty in the particular project areas. In the remote and poorly endowed regions visited, the key causes of poverty included, among others, (i) a severe

shortage of farmland per capita, (ii) a large and rising labor surplus, and (iii) a lack of sufficient local off-farm employment to absorb the surplus labor. These factors underlay widespread rural unemployment or underemployment. Since these key constraints were not mitigated by the project interventions, poverty remained largely unchanged after the projects improved rural roads or small-scale irrigation facilities, which brought only small, poorly sustained benefits to rural residents due mainly to insufficient funds to maintain the facilities after project completion. In these cases, the long-term solution to persistent rural poverty seemed to lie largely outside the poor regions, and a great majority of the rural poor selected migration as their primary strategy to rise out of poverty.

These findings should not lead to a simple rejection of all targeting approaches, which can be effective for certain interventions such as welfare programs. Instead of applying targeting in all poverty reduction projects, there is a need to differentiate poor households and poor regions. For the poor without working capacity, welfare programs should be designed to take care of this group on a long-term basis, and targeting is an effective mechanism to channel public subsidies to the poor and minimize the leakage of the benefits to others. To effectively reduce poverty among the productive poor, however, project interventions need to be tailor-made to mitigate the key constraints on poverty reduction in the particular project areas. Merely focusing projects on poor households or poor regions may end up isolating the poor from the more dynamic actors in society, who are usually not poor, and from the mainstream of economic growth. While bringing small and temporary benefits to the poor, such projects failed to lift them out of poverty in the cases studied. To be effective, projects aiming to reduce poverty among the productive poor should target the key causes of poverty instead of poor households or poor regions. Solutions that effectively reduce poverty in the poor regions may require public investment in non-poor regions to promote economic growth, as well as participation of non-poor individuals in job creation.

In regions with high potential to generate significant employment, such as areas with sufficient land and well-endowed for commercial agriculture, infrastructure projects may elicit large inflows of private capital and substantial job creation. Such investments may not be effective, however, in remote and poorly endowed regions, which, in the cases studied, remained unattractive to private investors even after projects upgraded rural roads. Without private investment to generate long-term jobs, the projects may temporarily improve living conditions for the poor without actually lifting them out of poverty. In contrast, interventions to facilitate the orderly migration of surplus rural labor from the poor regions to areas with dynamic growth, including measures to reduce migration costs, may be a more effective alternative.

Without a deep understanding of these issues, many ADB projects have focused on locating project activities in poor regions instead of identifying the key constraints in the particular project areas and designing tailor-made interventions accordingly. Projects were too often justified by the number of beneficiaries who were poor or female. Many projects added pro-poor components without sufficient demand from clients. Few projects were evaluated by the number of households that sustainably rose out of poverty.

Instead of targeting less relevant investments in poor regions, the SES calls for finding alternative areas where ADB interventions may lead to effective, sustainable reductions in rural poverty. These may include

- (i) infrastructure investment in areas naturally attractive to private investors and with high potential for significant employment generation, even if they are not poor;
- (ii) investments to enhance the capacity of the poor to capture opportunities, such as programs to facilitate orderly migration or reduce migration costs, or projects to

- improve rural residents' access to unsubsidized loans that could effectively mitigate the constraints of insufficient capital for private investment and job creation;
- (iii) programs to reduce household vulnerability, such as by providing health services at affordable cost, or projects to facilitate households' recovery from shocks, such as the timely provision of emergency loans at commercial rates with maximum flexibility and long maturity; and
 - (iv) projects to break the vicious cycle of inherited poverty, such as subsidized loans for parents to invest in their children's education, including post-compulsory education, which may create access to better-paid jobs for the next generation.

In addition, the following issues are discussed in the main text or appendixes, which report on the case studies of the three countries: (i) alternative approaches to financing rural infrastructure; (ii) the role of expressways and local roads in poverty reduction; (iii) add-on components in expressway projects; (iv) the effectiveness of new government programs in the PRC aiming to reduce rural poverty and household vulnerability; and (v) the eradication of remaining hardcore poverty in Malaysia.

The SES is not an impact evaluation of ADB projects, and the cases studied did not represent all ADB operations. The SES conclusions, while consistent with the findings of many studies, have not been confirmed by large surveys in a range of different country contexts, notably not in countries that have yet to experience rapid economic growth. Thus, the SES conclusions cannot be simply generalized to other countries without first analyzing their contexts.

The SES recommends that an informal working group comprising staff of ADB regional departments' agriculture divisions be tasked with, among other things, reviewing the findings of this study as a step towards redefining the role of agriculture in poverty reduction. The output of this exercise, which may include a strategy statement and an action plan, should feed into the proposed review of ADB's Long-Term Strategic Framework.

R. Keith Leonard
Director
Evaluation Division 1
Operations Evaluation Department

I. INTRODUCTION

A. Background and Rationale of the Study

1. This Special Evaluation Study (SES) arises from the increasing importance the Asian Development Bank (ADB) is placing on poverty reduction and the practice of including targeting mechanisms in projects to ensure that benefits are directed to the poor.¹ In 1999, ADB decided that eradicating poverty in Asia and the Pacific would be its overarching goal. The Poverty Reduction Strategy (PRS) approved in November 1999 established that all ADB loans and technical assistance would be expected to contribute to poverty reduction and that 40% of ADB lending would be on poverty interventions.²

2. A review of the PRS by ADB in 2003 criticized the 40% target established in the PRS.³ First, the target conveys the message that targeted projects are superior to non-targeted interventions, which may have indirect but potentially larger impact on poverty reduction. Second, the target stresses the importance of inputs rather than development results. Finally, the target tends to narrow the focus of the PRS to isolated interventions. In addition, the PRS review identified two issues relating to targeted interventions. First, many projects have added pro-poor components to increase the delivery of project benefits to the poor, but some of the add-ons had inadequate technical justification, increased project complexity, and/or reduced project efficiency and effectiveness. Second, as projects targeting households or individuals are generally more difficult to implement and monitor, greater emphasis on targeting increases the complexity of projects and reduces their efficiency.

3. At the recommendation of the PRS review, ADB issued a staff instruction in December 2004⁴ that replaced “poverty interventions” with “targeted interventions” with three project categories:

- (i) individual or household targeting (projects with a proportion of poor beneficiaries larger than national average);
- (ii) geographic targeting (projects located in geographic areas with a significantly higher poverty incidence than the national average, regardless of whether their impact on poverty is direct or indirect); and
- (iii) sectoral and subsectoral targeting (projects with a direct impact on the non-income dimensions of poverty as represented in Millennium Development Goals 2–7).⁵

Projects not classified as targeted interventions will be listed as general interventions. While ADB’s new, or “enhanced,” PRS recognizes the previous unsatisfactory experience of narrow targeting and considers general interventions as important, the trend of including add-ons to

¹ This SES was prepared jointly by Qiaolun Ye, senior evaluation specialist from ADB and Octavio Damiani, international consultant. R. Keith Leonard and Njoman Bestari (peer-reviewers from ADB) and Alain de Janvry (external reviewer from University of California, Berkeley) reviewed the early draft of the report and provided valuable comments. Various departments and/or divisions in ADB also provided comments on a late draft. In this report, poverty targeting refers to the mechanisms built into the design of projects and policies in order to benefit the poor.

² ADB. 1999. *Fighting Poverty in Asia and the Pacific: The Poverty Reduction Strategy*. Manila.

³ ADB. 2004. *Review of ADB’s Poverty Reduction Strategy*. Manila.

⁴ ADB. 2004. *Staff Instructions: Updating the Project Classification System*. Manila.

⁵ There are other forms of targeting such as (i) self-targeting, which is based on incentives that make the cost of participation higher for the non-poor and so discourage their participation and (ii) community-based targeting, which, through participatory approaches, uses local information, decision-making, and enforcement capacity to identify and select poor participants. The SES did not assess these approaches because they are not included in ADB’s targeting interventions (footnote 4).

make projects pro-poor has continued, probably due to a widespread perception that pro-poor components enhance the chances of project approval.

4. The great importance ADB places on poverty reduction generates an increased need for evaluating how effectively projects reduce poverty and for understanding what worked and what did not. While there are numerous studies on targeting, most of them measure its effectiveness in terms of distributing inputs such as budgets, funds, or projects, or in terms of short-term benefits such as subsidized farm inputs, training courses, or entitlement to construction work during project implementation. What is lacking is results-based evaluation that measures the effectiveness of targeting in terms of the number of households that rise out of poverty. Based on the considerations above, the SES analyzes the effectiveness of different ADB projects, both targeted and non-targeted, in reducing rural poverty, with the aim of generating insights useful for designing and implementing future interventions for poverty reduction.

B. Literature Review

1. Pros and Cons of Targeting

5. Most aid agencies with projects that aim to reduce poverty give substantial credence to targeting mechanisms. Targeting is considered necessary to identify different types of poor people, ensure that project benefits reach them, prevent the non-poor from capturing project benefits, and devise strategies appropriate for poor people. In other words, targeting avoids spreading resources to unintended groups of people and thus reduces the cost of poverty alleviation. Some analysts argue, in addition, that experience from both industrialized and developing countries shows that circumstances often require supplementary and targeted public actions. For example, in an extended drought, broad-based solutions may offer little to famine victims, but an effective transfer program providing food for work can mean the difference between life and death and prevent damaging responses such as asset sales, which inhibit poverty reduction in the long term. Even in the best of times, some elderly and disabled people require public assistance to meet their most basic needs.⁶ Targeting is therefore necessary.

6. In contrast, other analysts argue that poverty targeting may not be the most effective way to reduce poverty. Several of them point out that targeted programs usually fail either to fully cover the poor or avoid leakage to others, increasing the cost per unit of benefit finally received by the poor. Van de Walle⁷ and Weiss⁸ show that most targeted projects have hidden costs, and that, once these costs are considered, the projects may not have any more effect on poverty than those that are broadly targeted. Conning and Kevane,⁹ Paxson and Schady,¹⁰ and Rao and Ibanez¹¹ stress that participatory approaches used in community-based targeting, poverty mapping, decentralization, and self-targeting suffered various problems, most significantly (i) attracting local elites who capture the benefits of the targeted programs, (ii) rent

⁶ World Bank. 1993. *Development Briefs*, No. 9. Washington, DC.

⁷ Van de Walle, Dominique. 2002. Targeting Revisited. *The World Bank Research Observer*. Vol. 13, (No. 2): 231–248.

⁸ Weiss, John. 2004. Experiences with Poverty Targeting in Asia. In *Poverty Targeting in Asia: Experiences in India, Indonesia, People's Republic of China, the Philippines and Thailand*. Manila: Asian Development Bank Institute.

⁹ Conning, Jonathan, and Michael Kevane. 2002. Community Based Targeting Mechanisms for Social Safety Nets: A Critical Review. *World Development*. Vol. 30 (No. 3): 375–394.

¹⁰ Paxson, Christina, and Norbert Schady. 2002. The Allocation and Impact of Social Funds: Spending on School Infrastructure in Peru. *The World Bank Economic Review*. Vol. 16 (No. 2): 297–319.

¹¹ Rao, Vihayendra, and Ana María Ibanez. 2001. *The Social Impact of Social Funds in Jamaica: A Mixed-Methods Analysis of Participation, Targeting and Collective Action in Community Driven Development*. DECRG: The World Bank.

seeking, and (iii) malpractice. Galasso and Ravallion,¹² and Srivastava¹³ also argue that decentralized targeting of poverty programs provides room for corruption and malpractice, worsening local inequality. A recent study by the ADB Institute documented malpractices in decentralized targeting in India, including the use of intermediaries; falsifying records; providing false information from the group level up; and collusion between contractors, government officers, and village elites.¹⁴ Similar problems were found, though not as well documented, in studies of various post-crisis programs in Indonesia.¹⁵ Thus, it is important to understand the benefits and costs of targeting to generate lessons for future projects about how to reduce poverty more effectively and efficiently.

2. Effectiveness of Projects in Reducing Poverty

7. Analysts, governments, and international organizations have long been worried about how effectively projects reduce rural poverty. Many projects have focused on facilitating the access of the rural poor to services such as farm extension, training, farm inputs, or formal credit to promote the adoption of new crops and technologies. Others have attempted to integrate farmers with markets by investing in roads, markets, and storage facilities.¹⁶ While these interventions may have had positive impacts on agricultural production, the results in terms of poverty reduction have often been disappointing.¹⁷ Rural development projects have often been plagued by implementation problems because they were too complex and difficult to coordinate.¹⁸ The connection between projects and policies has frequently been weak, so farmers ended up cultivating crops for which prices decline or that are not favored by national agricultural policy.¹⁹ Rural elites have frequently taken the most advantage of projects, credit,

¹² Galasso, Emanuela, and Martin Ravallion. 2003. Decentralized Targeting of an Anti-Poverty Program. *Journal of Public Economics*. In press.

¹³ Srivastava, Pradeep. 2004. Poverty Targeting in Asia: Country Experience of India. Asian Development Bank Institute Discussion Paper No. 5. Manila.

¹⁴ ADB Institute. 2004. *Poverty Targeting in Asia*. Manila.

¹⁵ Pritchett, Lant, Sudarno Sumarto, and Asep Suryahadi. 2002. *Targeted Programs in an Economic Crisis: Empirical Findings from Indonesia's Experience*. CID Working Paper No. 95 Cambridge: Center for International Development at Harvard University.

¹⁶ For historical revisions of agricultural development ideas and policies, see (i) Staatz, John M., and Carl K. Eicher. 1990. Agricultural Development Ideas in Historical Perspective. In *Agricultural Development in the Third World*, edited by Eicher, C. and Staatz, J.: 3–38. Baltimore and London: The John Hopkins University Press; and (ii) Ashley, C., and S. Maxwell. 2001. Rethinking Rural Development. *Development Policy Review* 19 (4): 395–425. For an overview of integrated rural development programs, see (i) Schultz, Theodore W. 1964. *Transforming Traditional Agriculture*. New Haven: Yale University Press; and (ii) Ruttan, Vernon W. 1984. Integrated Rural Development Programs: A Historical Perspective. *World Development*, 12 (4): 393–401.

¹⁷ For an appraisal of the effects on rural poverty of agricultural development policies, see (i) Chambers, Robert. 1983. *Rural Development: Putting the Last First*. New York: J. Wiley; and (ii) Lipton, Michael. 1989. *New Seeds and Poor People*. Baltimore: John Hopkins University Press. For a critical view of the integrated rural development approach, see Peek, Peter. 1988. How Equitable are Rural Development Projects? *International Labor Review*, 127 (1): 73–98.

¹⁸ For example, see Grindle, Merilee. 1981. Anticipating Failure: The Implementation of Rural Development Programs. *Public Policy*, Vol. 29 (No. 1); and Grindle, Merilee. 1986. *State and Countryside: Development Policy and Agrarian Politics in Latin America*. Baltimore: John Hopkins University Press.

¹⁹ Timmer, C. Peter, Walter Falcon, and Scott Pearson. 1983. *Food Policy Analysis*. Washington, D.C.: The World Bank.

and technical assistance.²⁰ Little attention was paid to building local institutions that could coordinate rural development efforts.²¹

8. In addition, a new set of social fund projects emerged in the 1980s, initially aiming to serve as a safety net to mitigate the negative effects on the poor of structural adjustment programs, and later posed as a community-driven development (CDD) model for service delivery to the poor. These projects support the poor with grants for small projects ranging from infrastructure, social services, and training, to micro-enterprise development. They aim to give control of planning decisions and investment resources to community groups and local governments, operating on the principle of local empowerment, participatory governance, demand-responsiveness, administrative autonomy, downward accountability, and enhanced local capacity. Some studies also claimed that CDD projects could contribute to developing local capacity, building social and human capital, facilitating community and individual empowerment, deepening democracy, improving governance, and strengthening human rights.²² However, others argued that CDD projects were plagued by problems, including low impact on job creation and income generation among the poor, an emphasis on short-term benefits, and communities other than the poorest receiving the benefits.²³ A review of CDD projects by the World Bank in 2003 did not support the high expectations placed on beneficiary participation. While there was evidence that some CDD projects created effective community infrastructure and improved welfare outcomes, the evidence was missing for most projects reviewed, and the studies did not establish that the participatory elements in CDD projects were what caused improved project outcomes.²⁴ Finally, an ADB evaluation in 2005 found that the typical forms of beneficiary participation used in ADB projects—such as engaging nongovernment organizations (NGOs), organizing beneficiary groups, providing training, and developing village plans—did not provide an effective solution to the conventional problems in rural development projects. A deeply seated institutional cause of the problem was the grant nature of the projects, which were largely free to beneficiaries, whose lack of payments for project benefits underlie their lack of power to hold government agencies and project staff accountable for the use of public funds and delivery of project benefits.²⁵

3. Sustainable Livelihoods and Poverty Exit

9. Poverty was traditionally viewed as insufficient income to satisfy basic needs, but the view has recently evolved to incorporate other dimensions, in particular the lack of access to capital, be it physical, financial, natural, human, or social. The literature incorporating these dimensions includes the sustainable livelihoods approach (SLA), which is currently used by a

²⁰ For a detailed account of these problems in World Bank-funded agricultural projects in Brazil's northeast, see Tendler, Judith. 1993. Tales of Dissemination in Small-farm Agriculture: Lessons for Institution Builders. *World Development*, Vol. 21 (No. 10): 1567–1582. Cambridge: Pergamon Press; and Tendler, Judith. 1993. *New Lessons from Old Projects: The Workings of Rural Development in Northeast Brazil*. A World Bank Operations Evaluation Study. Washington, DC: The World Bank.

²¹ Donaldson, Graham. 1991. Government-Sponsored Rural Development: Experience of the World Bank. In *Agriculture and the State*, edited by Peter Timmer: 156–190. {City}.

²² Gillespie, Stuart. 2004. *Scaling Up Community-Driven Development: A Synthesis from Experience*. FNCD Discussion Paper No. 181. Washington, DC: International Food Policy Research Institute.

²³ Among others, see Tendler, Judith. 2000. Why are Social Funds so Popular? In *Local Dynamics in an Era of Globalisation*, edited by Evenett Yussuf: 114–129. Washington, DC: The World Bank.

²⁴ Mansuri, G., and B. Rao. 2003. *Evaluating Community Driven Development: A Review of the Evidence*. World Bank, Washington, DC.

²⁵ ADB. 2005. *Special Evaluation Study on Effectiveness of Participatory Approaches: Do the New Approaches Offer an Effective Solution to the Conventional Problems of Rural Development Projects?* Manila. Available: www.adb.org/Documents/Reports/Evaluation/sst-reg-2005-01.pdf

wide range of development agencies engaged in poverty reduction.²⁶ The SLA originated in the literature on food security and famines that studied the vulnerability of the poor based on an integrated view of how they make a living.²⁷ It later evolved to identify and analyze different strategies of the poor to deal with poverty and vulnerability; the existence of different avenues out of poverty; and the influence of policies, projects, and institutions.²⁸ Ellis (footnote 28) studied income diversification as a major sustainable livelihood strategy, finding that rural families made a living by engaging in diverse activities ranging from farming and rural trade, to migration to distant cities or even abroad. Other authors analyzed multiple strategies, including intra- and international migration. More recently, some authors used the SLA to analyze the impacts of globalization on the poor, looking at how it affected poor people's assets, options, activities, vulnerability, as well as the context of local governance.²⁹

10. These studies made a great contribution to the understanding of poverty, showing that poor households can make a living and rise out of poverty not only through agriculture but also through a wide range of activities and strategies. What is important is not only the understanding of different avenues out of poverty but also the understanding of how to enhance the availability of opportunities to poor households, as well as the role of policies and projects in providing opportunities and reducing the constraints faced by the poor. Since funding agencies have traditionally focused on the agricultural dimension of rural development, with less attention and expertise paid to the nonfarm dimensions, it is important to understand the multiple strategies that poor people use to escape poverty, with a view to making poverty reduction interventions more effective.

C. Objective and Methodology

1. Objective and Scope

11. The SES aims to provide insights into key factors determining the effectiveness of poverty reduction interventions, with a view to generating lessons useful for designing and implementing future ADB projects. It focuses on the following questions:

²⁶ The SLA is used by, among other organizations, the United Kingdom's Department for International Development (DFID), Food and Agriculture Organization of the United Nations (FAO), International Fund for Agricultural Development (IFAD), United Nations World Food Programme, Oxfam, and CARE. For an analysis of the application of the SLA approach by 15 international organizations, see Hussein, Karim. 2002. *Livelihoods Approaches. Compared: A Multi-Agency Review of Current Practice*. London: DFID/ODI. Also see World Bank. 2001. *World Development Report 2000/2001, Attacking Poverty*. Oxford University Press: New York, NY.

²⁷ Sen, Amartya K. 1981. *Poverty and Famines: An Essay on Entitlements and Deprivation*. Oxford: Clarendon Press; and Swift, J. 1989. Why Are Rural People Vulnerable to Famine? *IDS Bulletin* Vol.20 (No. 2): 8–15. Brighton: Institute of Development Studies at the University of Sussex.

²⁸ Among others, see (i) Bebbington, A. 1999. Capitals and Capabilities: A Framework for Analyzing Peasant Viability, Rural Livelihoods and Poverty. *World Development* Vol. 27 (No. 12): 2021–2044; (ii) Carney, D., ed. 1998. *Sustainable Rural Livelihoods: What Contribution Can We Make?* London: Department of International Development; (iii) Ellis, Frank. 2000. The Determinants of Rural Livelihood Diversification in Developing Countries. *Journal of Agricultural Economics* 51 (2): 289–302; (iv) Ellis, F. 2000. *Rural Livelihoods and Diversity in Developing Countries*. Oxford: Oxford University Press; (v) Ellis, F. 2003. *A Livelihoods Approach to Migration and Poverty Reduction*. Paper Commissioned by the DFID. London; and (vi) Scoones, Ian. 1998. Sustainable Rural Livelihoods: A Framework for Analysis. *IDS Working Paper No. 72*. Brighton: Institute of Development Studies at the University of Sussex. For applications to specific case studies, see (i) Bagchi, D.K., P. Blaikie, J. Cameron, M. Chattopadhyay, N. Gyawali, and D. Seddon. 1998. Conceptual and Methodological Challenges in the Study of Livelihood Trajectories: Case Studies in Eastern India and Western Nepal. *Journal of International Development* 10: 453–468; and (ii) Murray, Colin. 2001. *Livelihoods Research: Some Conceptual and Methodological Issues*. Background Paper 5, Department of Sociology University of Manchester: Chronic Poverty Research Centre.

²⁹ Ellis, F., and J. Seeley. 2001. Globalisation and Sustainable Livelihoods: An Initial Note. *Livelihoods Connect*. Institute of Development Studies: University of Sussex.

- (i) How did poor households in rural areas rise out of poverty?
- (ii) What were the factors critical to their rise?
- (iii) How effective were the poverty reduction interventions of ADB and/or national governments?
- (iv) What were the key factors determining the effectiveness of the interventions?
- (v) What measures could be taken to improve the effectiveness of ADB's poverty interventions in the future?

2. Conceptual Framework

12. The SES applies a poverty exit framework (Table 1) as its conceptual model, which is a modified version of the SLA (para. 9). The modification was based on tests of evaluation methodology in the pilot phase of the SES. The basic ideas of the SLA include the following:

- (i) Poverty is viewed not only as material deprivation derived from low income, but also as a scarcity of assets (physical, financial, natural, human, and social capital) that determines the capacity of households to generate income.
- (ii) The historical, political, economic, social, and policy context in which poor households live is key in their capacity to find pathways out of poverty.
- (iii) Poor households implement strategies to rise from poverty based on the resources they have as well as the context they face.
- (iv) The outcomes in terms of poverty reduction are (a) the results of the evolution of the context, (b) its influence on resources available to poor households, and (c) the strategies implemented by poor households.

Table 1: Poverty Exit Framework

Household Resources (Asset and Capacities)	Context (Opportunities and Constraints)	Poverty-Exit Strategies (Choices and Selection)	Results (Poverty Reduction and Sustainability)
1. Land, water, and other natural resources	1. History, culture, gender, and initial inequalities	1. Options available	Exit from Poverty
2. House, equipment, and other physical assets	2. Policies and politics	2. Risks associated	1. Employment
3. Livestock, savings, and other financial assets	3. Macroeconomic growth	3. Poverty exit strategies adopted:	2. Income level and sources
4. Household size and demographic features: a. No. of dependents b. Health status of family members	4. Regional and/or local growth	a. Agricultural intensification	3. Living standards
5. Human capital: a. Education b. Skills c. Characteristics	5. Geographic location and topology	b. Agricultural diversification	Sustainability
6. Social capital: a. formal membership b. informal relationship c. connections in cities	6. Infrastructure and its location	c. Nontraditional agriculture (e.g., high-value crops)	1. Household capacity to cope with shocks
	7. Access to education	d. Trade - petty trade - long-distance trade	2. Sustainability of natural resource base
	8. Access to health services	e. Off-farm employment in rural areas	3. Poverty exit of next generation: a. Education level b. Health status c. Employment perspectives
	9. Access to credit	e. Migration to cities - formal sectors - informal sectors	
	10. Population density and local market size	f. Transfers - public - private - remittance	
	11. Village traditions (crop patterns, trade, off-farm employment, migration)	g. Pluriactivity (mix of above)	
	13. Local institutions: a. Traditional and/or informal b. New and/or organized by projects c. Local government and/or village leaders		
	14. Vulnerabilities: a. Natural disasters b. Price fluctuations c. Health risks		
	15. Project interventions: a. government b. funding agencies		

Source: Modified from Scoones, Ian. 1998. *Sustainable Rural Livelihoods: A Framework for Analysis*. IDS Working Paper No. 72. Brighton: Institute of Development Studies at the University of Sussex.

3. Methodology

a. Units of Observation

13. Under the SES, the principal units of observation were selected ADB projects, including those with household and geographic targeting as well as general interventions.³⁰ Aiming to provide insights into issues identified as relating to the effectiveness of poverty interventions, the SES aims to attract to its report readers in both ADB and national governments. While ADB projects are used as cases for in-depth analysis, the SES does not limit its analysis to ADB operations exclusively but includes a broad exploration of factors that contribute to poverty reduction, including government programs observed in the areas visited. Aiming to learn from successful experiences in poverty reduction, the ADB projects were selected from countries with remarkable records of poverty reduction. Based on recommendations of ADB staff in various departments as well as its resident missions, seven projects were selected, including one rural credit project and one rural infrastructure project in Viet Nam, two expressway projects in the People's Republic of China (PRC), and one land settlement and two township projects in Malaysia.³¹ The selection covered a few popular types of ADB interventions, such as rural roads, irrigation, drinking water supply, rural finance, and highway construction. Projects based on participatory approaches were not covered by this SES because they were the subject of another SES on the effectiveness of participatory approaches completed in 2005 (para. 8). As shown in Table 2, the three selected countries covered by this SES experienced rapid economic growth in the past 2–3 decades, achieving remarkable records in poverty reduction. For example, \$1-per-day poverty in Viet Nam was reduced by 41% from over 50% in 1990 to less than 10% in 2003. Using the same poverty indicator, 204 million poor in PRC rose from poverty during the same period.

b. Data Collection

14. The SES used mixed methods to collect information, including (i) a desk review of relevant project files, government documents, and monitoring and evaluation reports submitted by project offices, academic publications, and other relevant materials; (ii) investigation of the projects selected for case studies; and (iii) in-depth interviews with a wide range of informants, including project designers in ADB, implementers in government agencies and financial institutions, field staff working directly with beneficiaries, local governments, village leaders, and ordinary residents in project areas—both the poor and others, people who benefited from projects and those who did not.

³⁰ Due to time and resource constraints, the SES did not cover sector targeting, which occurs mainly in primary education and basic health services projects.

³¹ The seven projects were: (i) ADB. 1996. *Report and Recommendation of the President on a Proposed Loan to the Socialist Republic of Viet Nam for the Rural Credit Project*. Manila (Loan 1457[SF]-VIE); and ADB. 1997. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Socialist Republic of Viet Nam for the Rural Infrastructure Sector Project*. Manila (Loan 1564-VIE); (ii) ADB. 1998. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the People's Republic of China for the Chengdu-Nanchong Expressway Project*. Manila (Loan 1638-PRC); and ADB. 1999. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the People's Republic of China for the Southern Yunnan Road Development Project*. Manila (Loan 1691-PRC); and (iii) ADB. 1974. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to Malaysia for the Sabah Land Development Project*. Manila (Loan 186-MAL); ADB 1978. *Report and Recommendation of the President to the Board of Directors to Malaysia for the Terengganu Tengah Township Development Project*. Manila (Loan 344-MAL); and ADB. 1982. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to Malaysia for the Second Terengganu Tengah Development Project*. Manila (Loan 583-MAL).

Table 2: Key Indicators in Viet Nam, PRC, and Malaysia

Indicators	Unit	1987	2004	Changes from 1987 to 2004		
				Magnitude	Overall Growth %	Average Annual Growth (%)
Population						
Viet Nam	million	62	82	20	31.3	1.6
PRC	million	1,093	1,300	207	18.9	1.0
Malaysia	million	17	26	9	52.5	2.5
Labor Force						
Viet Nam ^a	million	29	42	13	46.0	2.2
PRC	million	531	768	238	44.8	2.2
Malaysia	thousand	9,152	10,353	1,201	13.1	0.7
Agricultural Employment						
Viet Nam	million	20	24	4	19.3	1.0
PRC	million	317	353	36	11.4	0.6
Malaysia	thousand	1,628	1,476	(152)	(9.3)	(0.6)
GDP						
Viet Nam ^b	bn dong	113,154	362,093	248,939	220.0	7.1
PRC ^c	bn yuan	677	6,787	6,110	902.3	9.3
Malaysia ^d	Mn Ringgit	27,224	278,710	251,486	923.8	7.1
Agriculture's Share in GDP						
Viet Nam	%	40.6	21.8	(18.8)		
PRC	%	26.8	15.2	(11.6)		
Malaysia	%	19.7	9.1	(10.6)		
Changes from 1990 to 2003						
Indicators	Unit	1990	2003	Changes from 1990 to 2003		
				Magnitude	Overall Growth %	Average Annual Growth (%)
\$1-a-Day Poverty Index						
Head Count Ratio						
Viet Nam	%	50.7	9.7	(41.0)		
PRC	%	33.0	13.4	(19.6)		
Malaysia	%	0.6	0.2	(0.4)		
Magnitude						
Viet Nam	million	33	8	(26)	(76.5)	(10.5)
PRC	million	377	173	(204)	(54.1)	(5.8)
Malaysia	million	0.103	0.037	(0.066)	(64.1)	(7.6)
\$2-a-Day Poverty Index						
Head Count Ratio						
Viet Nam	%	87.4	54.2	(33.2)		
PRC	%	72.2	41.8	(30.4)		
Malaysia	%	11.4	9.0	(2.4)		
Magnitude						
Viet Nam	million	58	44	(14)	(23.6)	(2.0)
PRC	million	825	537	(288)	(35.0)	(3.3)
Malaysia	million	2.065	2.223	0.158	7.7	0.6

() = negative, bn = billion, GDP = gross domestic product, mn = million, PRC = People's Republic of China.

^a Due to lack of data on labor force in Viet Nam, persons employed were used, which refers to total number of persons employed regardless of age and sex.

^b At constant 1994 prices, with average annual growth rate computed from 1987 to 2004.

^c At constant 1990 prices, with average annual growth rate computed from 1978 to 2004.

^d At constant 1990 prices, with average annual growth rate computed from 1970 to 2004.

Source: ADB. Key Indicators 2005. Available: www.adb.org/Documents/Books/Key_Indicators/2005/default.asp; <http://unstats.un.org/unsd/snaama/dnlist.asp>.

15. With the aim to understand in detail how the poverty interventions worked or did not work under what contexts and conditions, the SES used heavily qualitative methods and case studies. Qualitative methods are widely used in the development field as tools to make comparisons, identify common patterns, and understand the causal relationships of factors that led to observed outcomes. They provide well-grounded, rich descriptions and explanations of processes in identifiable local contexts. Qualitative data makes possible (i) preserving chronological flow, (ii) identifying which events led to which consequences, and (iii) deriving fruitful explanations—going beyond initial impressions and revising the conceptual framework.³² Furthermore, insights obtained from qualitative evaluation can serve as a basis for designing quantitative evaluation.

16. To obtain a thorough understanding of how rural households rise from poverty and what contributes to their rise, the authors of the SES conducted a large number of in-depth interviews at the grassroots, including rural households who rose from poverty, those who remained in poverty, and those who slipped into poverty due to misfortune. To compare areas with and without ADB-financed projects, about one third of the household interviews were carried out in control areas, mainly villages that did not benefit from the project investments, or in areas proposed for future ADB projects with current conditions similar to those in the project areas before project implementation. In areas with ADB-financed projects, both beneficiaries and non-beneficiaries were interviewed to assess the impact of the projects on poverty.

17. The interviews were open-ended and flexible in length and the type of questions asked, aiming to understand the life history of the interviewed households, the initial conditions they faced, and the impact of government interventions on their chosen avenue out of poverty. Each interview lasted from 20 minutes to 1 hour, with the first interviews in each village lasting longer than the later ones. The interviews were guided by a questionnaire with open-ended questions but also relied on probing and following up on answers. Specifically, the questionnaire included the following: (i) the basis of determining household poverty or not (income and non-income dimensions of poverty); (ii) the evolution of poverty status in the past 5 to 10 years; (iii) current household resources (physical, financial, natural, human, and social capital) and how they evolved; (iv) the context and conditions faced by the household; (v) household strategies implemented to rise out of poverty; and (vi) the results in terms of poverty exit and its sustainability. Appendix 1 provides details of the questionnaire.

18. Triangulation was applied to the extent possible. Information from ordinary villagers was compared with official data as well as information provided by village leaders, local governments, field staff, and officials from executing and implementing agencies. The SES did not rely solely on official data but paid particular attention to the formal and informal practices actually occurring at the grassroots. In addition to qualitative methods and case studies, official statistics and syntheses of the findings of relevant studies were used to verify or supplement the SES findings and conclusions.

c. Fieldwork

19. Fieldwork was conducted by the Operations Evaluation Mission (OEM) comprising a mission leader (a senior evaluation specialist from ADB) and an international consultant. Interpreters were used when necessary, and one local consultant in the PRC participated in the

³² Miles, M. B., and A. M. Huberman. 1994. Chapter one of *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks: Sage.

fieldwork for 15 days. The visit to Malaysia lasted 3 weeks and served to test the evaluation methodology, after which adjustments were made for the other countries and projects selected. The visits to Viet Nam and the PRC lasted 4 weeks each, with a second OEM visiting Viet Nam for 15 days to conduct postevaluation on the rural credit project.

20. In Malaysia, the OEM interviewed 29 government officers involved in implementing government policies, programs, or projects, including those working in the federal, state, and village governments. In addition, the OEM visited three of the six townships constructed with financial support from ADB projects, as well as eight villages located in five land settlement schemes, interviewing 64 rural households, six managers of palm oil and wood processing industries, and six government employees at the grassroots (four teachers, one doctor, and one nurse).

21. In Viet Nam, the OEM examined 21 of the 180 subprojects financed by the rural infrastructure projects and visited 39 villages in six provinces.³³ The second OEM for postevaluation of the rural credit project interviewed 14 branches of the participating financial institutions (PFIs) and visited 12 villages in three provinces.³⁴ Altogether, the two OEMs in Viet Nam visited 51 villages in nine provinces and conducted 299 interviews, including 161 rural households, eight migrants who had moved from rural areas to cities, 30 traders in markets, 41 local government officials, and 59 field staff working in PFIs or government agencies.

22. In the PRC, the OEM visited 16 villages and conducted 204 interviews during its fieldwork in the provinces of Sichuan and Yunnan, including (i) in-depth interviews with 93 rural households, (ii) individual discussions with 76 government officials (13 from provincial agencies, 30 from municipalities and counties, and 33 from townships and villages), (iii) individual discussions with 15 managers or staff members of commercial companies or financial institutions, and (iv) brief discussions with 14 shop owners and six migrants working in shops and restaurants. To understand the role of the expressway projects in households' rise out of poverty, the OEM visited areas both close to and far away from expressways and improved local roads.

23. Altogether, the OEM visited 75 villages in Malaysia, PRC, and Viet Nam and conducted 608 interviews. The interviewees included 211 government officers, field staff, or village leaders, as well as managers or field staff of financial institutions; 318 rural households; 44 traders or shop owners; 14 migrants from rural areas to cities; and 21 managers or staff members of commercial companies. As mentioned earlier, about one-third of the household interviews were carried out in control areas. In addition to the above, the OEM consulted many project staff in ADB on project design and implementation issues.

4. Organization of the Report

24. The report is organized as follows. After this introductory chapter, the second chapter focuses on poverty exit and its underlying factors, analyzing the evolution of poverty in the villages visited, the sustainability of the rise out of poverty, the strategies adopted by rural households to rise out of poverty, and the influence of household resources, as well as of the context and conditions faced by the poor. The third chapter examines the role of ADB projects in poverty reduction and assesses their effectiveness. Based on evidence observed at the

³³ These were Lang Son in the northeastern mountains, Bac Giang on the outskirts of Red River delta, Quang Nam in the central region, Tra Vinh on the Mekong River delta, and Son La and Dien Bien in the northwestern mountains.

³⁴ These were Dak Lak in the Central Highlands, Phu Yen in the South Coastal Region, and Dong Nai in the Southeast Region.

grassroots, the fourth chapter analyzes five issues in conjunction with their underlying causes and alternatives, including the roles of agriculture, migration, and credit in poverty reduction; household vulnerability as a cause of new poverty; alternative ways to finance rural infrastructure development; and the fundamental problems of poverty targeting. The last chapter concludes with the SES findings and recommended alternatives. Case studies of the three countries are presented in Appendixes 2–4.

D. Limitations of the Study

25. The SES had the following limitations. First, due to time, data, and resource constraints, it relied heavily on the qualitative method of case studies. While quantitative analysis was conducted when reliable statistics were available, no large-scale survey was conducted under the SES. The conclusions derived from the case studies, while consistent with the findings of many available studies, were not confirmed by survey data representing a range of different country contexts. Second, while the qualitative methods used by the SES provide insights into how poverty interventions worked or did not work under what context and conditions, the cases studied are not representative of the whole range of different contexts and conditions in the vastly different countries of Asia. In fact, the three countries studied are characterized by rapid industrial and urban growth in the past 2–3 decades. This had a great influence on the poverty exit strategies adopted by rural households, as industrialization created employment opportunities, attracting many rural residents to cities and reducing the relative importance of agriculture. In countries that have not experienced such rapid change, the opportunities and options available for rural households to rise out of poverty may differ significantly. In addition, in areas studied in Viet Nam and Sichuan Province of the PRC, population density is high and the availability of farmland per capita is low, making it difficult for rural households to live on agriculture. Lessons identified from these cases may not be applicable to areas with abundant farmland. Furthermore, all three countries studied are characterized by an active role of the state, which has a strong presence even at the grassroots. The state's strong influence on the context faced by the poor, as well as their assets, may differ significantly with conditions observed in countries with a strong private sector and relatively weak government influence. Thus, the conclusions and recommendations derived from the case studies need further testing by studies in a wider range of countries with different features. Third, some ideas proposed in the SES, such as encouraging private investment in small-scale rural infrastructure (paras. 96–105), have not been widely practiced thus far, so their positive and negative results cannot be precisely known at this stage. Pilot testing is needed, followed by vigorous evaluation of the pilot results before replication. Finally, the SES identified a few topics that seem to be important to poverty reduction and ADB operations, in addition to the issues discussed above. Due to the difficulty of covering many topics under one study, the SES outlines these topics in Appendix 6 without providing in-depth analysis. Hopefully, these topics can be further investigated by future studies. In summary, the SES is not an impact evaluation of ADB projects, its findings do not represent all ADB operations, and its conclusions cannot be generalized to all countries without first conducting contextual analyses of them. Rather, the SES intends to shed light on the issues identified, so that the insights gained can serve as a basis for designing future evaluation studies using large surveys to cover a wider range of poverty reduction interventions in vastly different countries.

II. POVERTY EXIT AND UNDERLYING FACTORS

26. This section reports the evolution of rural poverty observed in the areas visited and analyzes underlying factors, including poverty-exit strategies adopted by rural households, resources available to them, and the context and conditions they faced.

A. Poverty Exit and Sustainability

1. Evolution of Poverty

27. While the SES used official poverty lines, it mainly applied the concept and definition of poverty used by households themselves. In all areas visited, the OEM was told that the definition of poverty had changed over time. In the past, being poor meant not having enough to eat. Today, there is no hunger poverty in the areas visited. In the PRC and Viet Nam, being poor means lacking cash to spend. In Malaysia, being poor means lacking a stable income. In addition, the OEM paid attention to the non-income dimensions of poverty, including housing conditions;³⁵ ownership of furniture and appliances; rural infrastructure; and access to education, healthcare, and other basic services. Improved living standards were also reflected by better and more varied food and clothing, and in motorcycle ownership.

28. Poverty fell substantially in all villages visited in the Viet Nam, PRC, and Malaysia. In most villages visited in Viet Nam, the poverty rate fell from 60–80% in the early 1990s to 10–20% in 2004. Most interviewees said that their life was much better than 5 or 10 years earlier, and that they no longer considered themselves poor. Only in some mountainous regions did poverty remain high—as high as 57% in one commune near the border with the Lao People's Democratic Republic, which was dominated by ethnic minorities.³⁶

29. In the PRC, most households interviewed (both poor and not) said that their life was better than 5 or 10 years earlier. In the villages visited in Sichuan, interviewees estimated poverty at less than 3% in better-off villages, and less than 10% or 20% in the poorer ones. Poverty remained relatively high in the villages visited in mountainous Yunnan, where 24 registered ethnic minorities comprise 34% of the population.

30. In Malaysia, the poverty rate fell from 45% in the early 1970s to 8% in 2000 and less than 5% in 2004.³⁷ The great majority of those interviewed by the OEM said that they were poor in the 1980s. Today, the OEM observed hardly any poverty in the villages visited. The OEM made a point of interviewing a few households who remained in poverty, with the rest all having risen from poverty. OEM's observations at the grassroots level were consistent with nationwide official data in these three countries, as shown in Table 2.

2. Causes of Remaining Poverty

31. While most interviewees rose out of poverty as they define it, the OEM interviewed rural households that remained poor. In Malaysia, this group included disabled people, single mothers with many children, and those with low skills and weak human capital. In Viet Nam, the poor included not only families headed by women or those with many young children, but also

³⁵ The OEM noted that the materials and other characteristics of housing sometimes depended on cultural factors. For example, in the lowland areas visited in southern Viet Nam, even better-off families lived in houses with thatched roofs, reportedly because they preferred them (Appendix 2).

³⁶ For more detailed information about the evolution of rural poverty in Vietnam, see (i) World Bank. 2004. Vietnam Development Report 2004. Joint Donor Report to the Viet Nam Consultative Group Meeting. Hanoi; and (ii) Government of Viet Nam. 2001. *Interim Poverty Reduction Strategy*. Hanoi.

³⁷ Information provided to the OEM by the Economic Planning Unit of the Prime Minister's Department of Malaysia. Also see (i) Economic Planning Unit. 2004. *Malaysia: 30 Years of Poverty Reduction, Growth and Racial Harmony*. Paper presented at the Shanghai Poverty Conference – Scaling up Poverty Reduction, organized by the World Bank. Kuala Lumpur; and (ii) Khan, Mahmood. 2002. *When is Economic Growth Pro-Poor? Experiences in Malaysia and Pakistan*. IMF Working Paper WP/02/85. Washington, DC: International Monetary Fund.

young couples recently separated from parents with little or no farmland. The last group usually had young children, which made it difficult for the parents to migrate or search for off-farm employment outside their villages. In the PRC, the causes of poverty varied by region. In Sichuan, most of the interviewed poor were “unproductive,” meaning that they were unable to work due to disability, age (70s–80s) or chronic illness, and those with the need to care for family members who were chronically sick and with no income sources other than subsistence farming. These households had limited or no productive labor but substantial expenditures for medicine; their productive family members, if any, could not migrate because they needed to stay home and take care of the old, sick, or disabled. In contrast, poor households in Yunnan included many productive poor, meaning that they were poor even though they could work. The causes of poverty for these people seemed to include low human capital such as lack of education, being less aggressive or easily contented, or reluctance to expose themselves to the outside world. They also faced unfavorable environments, with farmland insufficient and poor quality, inadequate access to water, or isolation in remote areas with high transportation costs.

3. Sustainability of Poverty Exit

32. How sustainably people rose out of poverty varied significantly across the countries visited. In Malaysia, sustainability was most likely. Except in a few villages in Sabah, most youth in the visited villages had left agriculture and earned stable incomes in urban areas. Consequently, those who stayed in villages had sufficient land to make a decent living in agriculture. Furthermore, the Government of Malaysia provided education and medical services largely free to all citizens including those in the rural areas, thus minimized household vulnerability.³⁸

33. In contrast, sustainability was at risk in the villages visited in Viet Nam, where the official poverty line was low,³⁹ and a large portion of rural households appeared to be near poor. With farming as their primary source of income, these households were highly vulnerable. They faced the danger of slipping back to poverty when encountering misfortune, such as illness of family members or investment failure due to price fluctuations, epidemic outbreak of animal diseases, or natural disasters. A more common risk was insufficient farmland for the rising generation, who would become poor if most of them remained in villages and relied on agriculture.

34. The situation in the PRC was mixed. The risk of rural households returning to poverty was low in the villages visited in Sichuan, where most youth migrated and left agriculture. Remittances from migrants strengthened the safety net for those remaining in rural areas (para. 39). The villages visited in Yunnan had a high proportion of productive poor who did not migrate due to cultural, language, and other barriers. While poverty was low in areas with commercial agriculture, it was high in remote areas dominated by subsistence farming, where the risk of returning to poverty was high.

35. These observations are consistent with nationwide statistics in the three countries. While the \$1-a-day poverty rate has fallen to 9.7% in Viet Nam, the \$2-a-day poverty rate remained at a high 54.2% in 2003. Similarly, there are 537 million people in the PRC living on \$2 per day, more than three times the number living on \$1 per day (Table 2). In the cases studied, the large number of the near poor and their vulnerability to slipping back into poverty combine to become the primary cause of new poverty (paras. 89–94).

³⁸ Economic Planning Unit of the Prime Minister's Department of Malaysia. 2004. (footnote 37)

³⁹ The official poverty line in Viet Nam was increased substantially in August 2005 from Đ100,000 (\$6.3) to Đ200,000 (\$12.6) per person per month for rural areas and from Đ150,000 (\$9.5) to Đ260,000 (\$16.5) per person per month for urban areas (General Statistics Office of Viet Nam).

B. Household Strategies for Poverty Exit

36. In the areas visited, poverty-exit strategies adopted by households varied by region and changed over time, reflecting the choices available to them as well as their capacity to capture opportunities. Three major strategies are discussed below.

1. Rural–Urban Migration

37. Migration⁴⁰ of young members of rural households to urban areas to work in construction, manufacturing, and services was by far the most important strategy for rising out of poverty, resulting in widespread, sustainable escape from poverty. Migration was easy and widely adopted by the young generation in the Malaysian state of Terengganu, southern Viet Nam, and the PRC's Sichuan Province, but lower in the Malaysian state of Sabah, and limited in northern Viet Nam and the PRC's Yunnan Province.

38. Many factors influenced households' decisions on migration, including in particular the supply of jobs in cities, costs of migration, availability of social connections in urban areas, and existence or absence of barriers to migration. The great relevance of migration arises from the rapid development of manufacturing and services in Malaysia, Viet Nam, and PRC, which has generated high demand for labor. The largest proportion of migrants went to regions and cities with high concentration of industry, such as peninsular Malaysia, coastal provinces in the PRC, and Ho Chi Minh City in Viet Nam. In addition, social connections in cities were critical because they provided job information, reduced uncertainty, and minimized the cost of migration by providing accommodation for new migrants during their initial days of job hunting in cities.

39. In Malaysia, southern Viet Nam, and Sichuan, migration not only made possible the exit from poverty of large numbers of migrants themselves, but also reduced population pressure in rural areas, leaving those who stayed in villages more land to farm than they would have had without migration. In the PRC, most migrants sent remittances to their rural families, which were used to buy food, pay for school fees, and deal with health problems and other emergencies. The OEM found that informal lending was more active in villages with many migrants, because many households had additional cash to lend to others, and borrowers had a higher capacity to repay loans because of their remittance income. In these cases, remittances strengthened the safety net for the rural poor.

40. The limited migration in northern Viet Nam can be explained by the lack of social connections in cities because very few people had migrated in the past. In Yunnan, other factors, including language barriers, were also at work. Since many minority people in Yunnan did not speak fluent Mandarin, they found it difficult to communicate with outsiders and were afraid of migrating to unfamiliar cities. Moreover, many people in the villages visited in Yunnan were reluctant to live far away from home, and some seemed unaggressive and easily contented.

41. The OEM recognized that migration was not without problems. As reported by many studies, migrants typically endured low wages, poor working conditions, poor housing, and non-compliance with labor promises, especially during their early months in cities. Many analysts also reported various problems with migration, including in particular the transfer of rural poverty

⁴⁰ Migration in this report refers to the self-driven flow of surplus rural labor from poor regions to areas with dynamic growth to search for employment. This differs fundamentally from the voluntary or involuntary relocation of households in resettlement programs resulting from public construction works or government-organized relocation projects such as the transmigration programs in Indonesia.

to cities, urban congestion, human trafficking, and labor exploitation. Nevertheless, a great majority of the households interviewed by the OEM selected migration, when available, as their primary strategy to rise from poverty. The OEM did not find cases of migrants facing serious problems or returning home due to unemployment in cities. The evidence showed that the effects of migration were overwhelmingly positive. In the areas visited in Viet Nam, because migration was relatively recent, many migrants worked for low pay and saved little to send home after deducting the relatively high urban living expenses. Even in these cases, interviewees pointed out that at least the migrants could take care of themselves, and that their families had more land to farm compared with the scenario without migration.

2. Agricultural Intensification and Diversification

42. In the early stages of economic development, when industrialization was small scale and could not generate much employment, agricultural intensification and diversification were the common strategies adopted by households to rise out of poverty. In Malaysia, many rural poor escaped from poverty in the 1970s and 1980s by participating in government settlement programs, which provided farmland to participants as long-term loans repayable by farm harvests over 20–25 years. In the PRC, policy reforms since 1978 distributed land-use rights to rural households and relaxed government control of grain production and marketing. As a result, the PRC experienced a substantial increase in agricultural production, especially grain output.⁴¹ Most people interviewed said that they rose out of poverty during that period by working hard, using more inputs, and diversifying away from grain production toward cash crops, livestock, or fish farming. In Viet Nam, policy reforms since 1986 suspended collective farming and distributed land-use rights to individual households. As in the PRC, many rural poor escaped poverty during that period by intensifying and diversifying agricultural production. Meanwhile, the issuance of certificates of land-use rights in Viet Nam enabled most rural households to use the certificates as collateral for loans. In the villages visited, easily available credit enabled many poor families to raise one or two cows or buffaloes, which made a big difference to their poverty status, as they had previously relied on subsistence grain production with little cash.

43. In the later stages of development, however, continued rural population growth intensified the pressure on farmland. None of the areas visited had any more open land for distribution to the rising generation, who risked become poor if most of them remained in villages and relied on farming. In the areas visited, the primary cause of the remaining poverty was high population pressure and the shortage of farmland per capita. Some of the young couples visited in Viet Nam, while physically healthy and able to work, could hardly support their families by farming their tiny plots of land.⁴²

44. The OEM visited some areas where agriculture continued to play an important role in poverty reduction. These areas had the following features: (i) sufficient farmland per capita to enable a decent living from agriculture and (ii) high potential for commercial agriculture, especially for cash crops of high value. In southern Yunnan, for example, commercial firms signed contracts with rural households to promote such high-value crops as tobacco, tea, sugarcane, and coffee, the firms attracted largely by the relatively abundant land and favorable climate for these crops. However, the OEM observed cases where new crops, livestock and fisheries brought sizable profits only to the first batch of producers to adopt the innovations. Many of the late followers did not enjoy the same fortune, and some experienced heavy losses

⁴¹ Lin, Justin Y. 1993. Agricultural Reform in a Socialist Economy: The Experience of China, edited by Braverman, A., K. Brooks, and Csaba Csaki. *The Agricultural Tradition in Central and Eastern Europe and the Former U.S.S.R.* Washington, DC: World Bank, 292–314.

⁴² In the villages visited in Viet Nam, per capital land availability was as small as 160–250 square meters.

from sharply reduced market prices as more and more producers supplied the same products. In the areas visited, it appeared that agriculture once played an important role in escaping poverty. Its relevance now and in the future, however, appeared to be limited unless accompanied by substantial migration to reduce the population pressure on arable land. This finding, however, does not represent all situations in vastly different regions, especially not the situation in countries without rapid industrialization, where farmers have few migration opportunities.

45. Finally, the OEM noted that high-value crops required production on a certain scale to be profitable, so regions where farms are too small may not be attractive to commercial firms. In addition, experience in developing countries with steadily growing “new agriculture” based on high-value crops and animal products shows that small farmers have great difficulty producing the new commodities. High-value agricultural products are associated with high-income consumers and the large role of supermarkets in their marketing, which requires high quality, standardized products, and certification (e.g., for organic products). These demands pose tremendous challenges to smallholders. Institutional arrangements like contract farming have been instrumental in promoting the inclusion of small farmers in new agriculture, but they require complex negotiations, an adequate legal and institutional framework, and a forward-looking private sector willing to invest in rural areas.⁴³

3. Off-Farm Employment in Rural Areas

46. Opportunities for off-farm employment were rather limited in the rural areas visited, with the exception of Terengganu in Malaysia, where many rural households engaged in multiple jobs, including construction or services in nearby towns, while tending their small rubber or oil palm plantations. Factors underlying this observation included the availability of part-time jobs in the gas and oil industries in coastal towns in Terengganu, and the high mobility of rural households, the majority of which have vehicles. In other areas, off-farm employment was a significant source of employment only for villages within 3–5 km of towns, where many women engaged in retailing, or in areas close to a medium-sized city with industry, such as Quang Nam in Viet Nam. In Sichuan, young members of rural households preferred to migrate to other provinces, where they could get higher wages than were offered by local industries, which provided only limited employment due to their small scale.

47. Finally, it is important to stress that the poverty-exit strategies above are not mutually exclusive. For example, many households farmed while engaging in small trade and/or other off-farm employment. Within one family, old members engaged in farming while young ones migrated to cities. In fact, pluriactivity was essential, as no household interviewed relied on only one income source, except those who migrated to cities and worked in factories. The most common mix was crop production (rice on lowlands and coarse grains on uplands) and raising livestock. In areas with little hope of migration and few opportunities for off-farm employment,

⁴³ Among others, see (i) Damiani, Octavio. 2000. *The State and Non-traditional Agriculture for Export in Latin America. Lessons from Three Case Studies*. Washington, DC: Interamerican Development Bank; (ii) Damiani, Octavio. 2001. *Diversification of Agriculture and Poverty Reduction: Effects on Small Farmers and Rural Wage Workers of the Introduction of Non-traditional High-value Crops in Northeast Brazil*. Paper presented at the Workshop on Priorities and Strategies for Rural Poverty Reduction: East Asia and Latin America, organized by the Interamerican Development Bank (IDB) Institute for Social Development and the IDB Office in Japan. 4–8 June 2001, Tokyo and Shimane, Japan; (iii) De Janvry, Alain, and Elizabeth Sadoulet. 2004. *Toward a Territorial Approach to Rural Development*. Paper prepared for the Fourth Regional Thematic Forum in Latin America and the Caribbean “Harvesting Opportunities: Rural Development in the 21st Century,” Costa Rica, 19–21 October 2004; and (iv) Reardon, T., C.P. Timmer, C.B. Barrett, and J.A. Berdegue. 2003. The Rise of Supermarkets in Africa, Asia and Latin America. *American Journal of Agricultural Economics* 85 (5) December.

such a mix was very common. However, whenever possible, most households, even those with multiple activities, clearly recognized migration as the key strategy to escape from poverty, with other activities, including farming, viewed as complementary.

C. Household Resources

48. Household resources include physical, financial, natural, human, and social capital. In the areas visited, the following elements of household resources had the largest impacts on poverty exit.

49. **Land.** Farmland was the most important factor in poverty exit as it was the traditional way of employing rural labor. In areas without easy access to migration or other off-farm employment, the quantity and quality of farmland in one family, including in particular access to water, determined if the family was poor or not. While most households interviewed in all three countries had land or land-use rights, in most cases, the area of farmland was too small to provide a decent living (footnote 42). In particular, many poor villages visited in northern Viet Nam suffered a severe shortage of lowlands, making cultivation on high or steep slopes a common practice, causing soil erosion. The OEM observed that some young people in those villages, while physically healthy and strong, were among the poorest because they were landless and lacked alternative employment. The only exceptions were observed in Malaysia and Yunnan, where land per capita was relatively plentiful. Even in these two cases, coming generations may have difficulty maintaining their standards of living if most of them remain in villages and live by agriculture alone, because no more open land is available for them.

50. **Human Capital.** Human capital was important to poverty exit, with secondary schools completion required for obtaining formal employment as in foreign-invested factories. Graduating from senior high school brought access to better-paying jobs and more chances of receiving training and promotions. For employment in informal sectors—farming, trade, construction, housekeeping, and other services—personal characteristics were more important than schooling. In addition to working hard, the willingness to be exposed to the outside world, and the capacity to manage risk, affected the success or failure of poverty exit, especially when self-employment or migration was the exit strategy. In mountain villages in northern Viet Nam and Yunnan, the OEM found that many members of ethnic minorities could not speak fluently the dominant language in cities. The language barrier significantly affected which poverty exit strategies they selected, and many of them enjoyed fewer choices due to their inability to communicate effectively with outsiders. Finally, a relationship seems to exist between formal education, the capacity to speak the dominant language, and self-esteem. Those who are illiterate or have little education, and those with poor fluency in the dominant language, are more shy and reluctant to migrate.

51. **Household Size and Other Demographic Features.** The OEM found that having a lot of children, as observed in minority-dominated villages in northern Viet Nam and in Sabah, Malaysia, contributed to poverty, as young children prevented parents from migrating or searching for off-farm employment outside their village. Children in school incurred heavy expenses, and grown children often demanded land from their parents if they stayed in villages, resulting in less land per household for parents and children alike. Finally, households with elderly suffering from health problems tended to be poor due to high expenditures on healthcare, as comprehensive social protection was not observed except in Malaysia.

52. **Social Capital.** Social capital includes, among others things, grassroots organizations and social networks. In the areas visited, the OEM did not find active informal organizations,

probably because strong local governments promoted semi-official mass organizations such as, in Viet Nam, farmers' associations and women's associations. While some of these organizations were active in lending programs run by government banks, their impact on poverty exit did not seem to be significant. By contrast, social networks played a key role in households' decisions regarding migration. In particular, having connection in cities, such as relatives, friends, or other fellow villagers, was a positive factor deciding for migration. In areas with a long history of migration, such as villages visited in Malaysia (especially in Terengganu), Sichuan, and southern Viet Nam, many households had relatives or acquaintances who had migrated and were working in industry and construction. Migration was therefore easy because the city connections provided job information, reduced uncertainty, and minimized the costs of accommodation during the initial days after arriving in cities. In the absence of social connections, the risks felt by potential migrants and the actual costs of migration were high, as observed in the villages visited in Yunnan, the highlands in northern Viet Nam, and, to a lesser extent, the Malaysian state of Sabah.

53. **Physical and Financial Assets.** Physical assets such as housing and equipment played a less important role in poverty exit, as its lack was a result of poverty rather than a cause. The OEM observed that remittances from migrants were used for renovating houses or building new ones, or for buying equipment, furniture, or motorcycles. Savings were common in households with migrant members who sent remittances, which were used mainly to deal with emergencies rather than invested in agriculture. In most cases, savings took the form of livestock, which also contributed to poverty exit in Viet Nam, though its further development on a large scale is highly restricted by limited grasslands and water.

D. Context and Conditions

54. Context and conditions influenced which options were available for poverty exit in a particular area. They affected households' selection of poverty-exit strategies as well as their success or failure.

1. Macroeconomic Growth

55. The three countries studied all experienced rapid economic growth in the past 2–3 decades (see Table 2), which played a critical role in reducing rural poverty.⁴⁴ First, rapid and continued growth generated many employment opportunities, making it possible for rural migrants to find jobs in cities. Second, demand for rural labor encouraged a large flow of migration, forming an integrated labor market nationwide. In the mountain villages visited in Yunnan Province of the PRC and in northern Viet Nam, however, national economic growth did not seem to have a significant impact on poverty exit, as few people migrated to urban areas due to language barriers or a lack of connections in the cities, which made migration more difficult and costly (para. 40). Indirectly, economic growth was also important to poverty reduction because it generated tax resources for governments and strengthened their financial capacity to implement poverty reduction programs. In Malaysia, the federal Government provided education and healthcare largely free to all citizens. In recent years, the PRC Government initiated several programs to provide health and education subsidies to the rural

⁴⁴ Many studies analyzed the outstanding record of economic growth in the PRC, Malaysia, and Viet Nam and its key role in reducing poverty. Among others, see (i) Malaysia Economic Planning Unit. 2004. (footnote 37); (ii) Khan, Mahmood. 2002. (footnote. 37); (iii) World Bank. 2003. *China: Promoting Growth With Equity*. Country Economic Memorandum. Report No. 24169-CHA. Washington, DC: The World Bank; and (iv) Dollar, David, and Jennie Litvack. 1998. Macroeconomic Reform and Poverty Reduction in Viet Nam, in *Household Welfare and Vietnam's Transition*, edited by David Dollar, Paul Glewwe, and Jennie Litvack. pp. 1–28. Washington, DC: The World Bank.

poor (Appendix 3), due partly to its increased budgetary resources resulting from continued economic growth in the past 2-3 decades.

2. Government Policies and Programs

56. Government policies can play a direct and significant role in poverty exit with low cost, as the OEM observed in the following cases. The first one was the household responsibility system adopted in the PRC in the late 1970s, which distributed land-use rights to individual farmers, and the subsequent relaxation of government control on grain production and marketing. These policy reforms stimulated a dramatic increase in agricultural production and resulted in the first large-scale poverty reduction in PRC history, with little financial cost to the government. The second case was the allocation of land-use rights to rural households in Viet Nam following the policy reform in 1986, which substantially increased rice production and reduced rural poverty.⁴⁵ In addition, the issuance of land-use rights certificates enhanced farmers' access to formal credit, contributing to poverty reduction indirectly but significantly. Lastly, the PRC Government has relaxed its controls on labor migration since 1989. In conjunction with rapid economic growth, this policy reform resulted in the second large scale poverty reduction in the PRC.⁴⁶

57. The OEM found that the role of government programs in poverty reduction varied significantly. In Malaysia, the government created the Federal Land Development Authority, which used undeveloped lands to run settlement schemes and provided land to landless or marginal farmers. The authority also invested in rubber and oil palm plantations as well as processing industries. Land development and investment in new plantations were also undertaken by other federal and state government agencies, including the Rubber Industry Smallholders Development Authority, state departments of agriculture in Sabah and Sarawak, and the Federal Land Consolidation and Rehabilitation Authority, which had the mandate to consolidate and enlarge fragmented and uneconomic holdings.⁴⁷ These initiatives resulted in large-scale poverty escape for the first generation of rural residents. In Viet Nam, the distribution of health services cards and poor household certificates channeled subsidies to the targeted people, reduced their medical and school expenditure burdens, and brought them some benefits. Primarily because of insufficient budgets, however, these programs suffered low coverage and were far from being effective safety nets for the poor.

3. Access to Education and Health Services

58. In all three countries, access to education was available to all households. In Viet Nam and the PRC, however, the heavy burden of financing education restricted rural families' ability

⁴⁵ See (i) Do, Quy-Toan, and Lakshmi Iyer. 2005. *Land Titling and Rural Transition in Viet Nam*. Harvard Business School Working Paper No. 05-067. Cambridge, MA: Harvard Business School; (ii) Do, Quy-Toan, and Lakshmi Iyer. 2003. *Land Rights and Economic Development: Evidence from Rural Viet Nam*. Rural Development Working Paper No. 3120. Washington, DC: The World Bank; and (iii) Deininger, Klaus, and Songqing Jin. 2003. *Land Sales and Rental Markets in Transition: Evidence from Rural Viet Nam*. World Bank Policy Research Working Paper No. 3013. Washington, DC: The World Bank.

⁴⁶ For reviews of the evolution of rural poverty in the PRC and the role of government policies, see (i) World Bank. 2003. (footnote 44); and (ii) Ravallion, Martin, and Shaohua Chen. 2004. *China's (Uneven) Progress Against Poverty*. Development Research Group. Washington, DC: The World Bank.

⁴⁷ See (i) Arshad, Fatimah Mod and Shamsudin, Mad Nasir. 1997. *Rural Development Model in Malaysia*. Serdang, Selangor: Faculty of Economics and Management University Putra Malaysia; and (ii) Overseas Economic Cooperation Fund. 1997. *Rural Development Administration for Poverty Eradication in Malaysia: Focusing on Coordination Mechanisms*. OECF Research Paper No. 17. Tokyo, Japan: Research Institute of Development Assistance (RIDA)-The Overseas Economic Cooperation Fund (OECF).

to keep their children in school, especially after secondary education, which was necessary for employment in formal sectors (para. 50). This issue has recently been addressed by a new policy in the PRC.⁴⁸ In Viet Nam, the Government exempted the poor from paying school fees. However, other school-related expenses continued to be a big burden on the poor and the near poor, including in particular school uniforms. In some mountain villages visited, secondary schools were far away, and most families could not afford the high cost of school boarding. The OEM was told that dropout rates were particularly high for secondary schools, due primarily to financial difficulties experienced by parents. In areas dominated by ethnic minorities, another key constraint was their poor capacity to speak the dominant language, which was used for teaching in all schools. The OEM found that school dropout rates were high among minorities in Viet Nam and Yunnan, even in elementary schools. In areas dominated by ethnic minorities, low cultural esteem for education also contributed to the high dropout rates.

59. In Viet Nam and the PRC, the high cost of medicine and medical care was a serious concern affecting most rural households, poor or not, who could easily slip into poverty when family members suffered serious or chronic sickness. Since the primary cause of the problem was the high cost of medicine and medical services, public investment in upgrading buildings and equipment for hospitals did not seem to be effective; the OEM observed some township hospitals had few visitors even after projects improved their offices and equipment. In Malaysia, all citizens had access to health services largely free of charge. In Viet Nam, the government distributed cards to the rural poor and to households living in poor communes entitling them to free health services. These policies had positive impacts in many cases but also suffered from many problems. In particular, some medicines and medical treatments were not covered, including expensive surgical procedures, treatment for automobile accidents, and, in some communes, hospitalization. Moreover, the actual implementation of the policy was subject to budgetary availability in one commune. In some areas visited, budgetary shortfalls resulted in insufficient supplies of medicines, which were provided on a first-come, first-served basis, denying latecomers (Appendix 2). Finally, some poor households interviewed said that they used private doctors even though they had free medical cards because their patients could not wait 3–4 hours to be treated.

4. Access to Credit

60. In the areas visited, the OEM found that rural residents' easy access to formal credit (unsubsidized loans from formal financial institutions requiring little paperwork) contributed significantly to poverty exit. For entrepreneurial individuals who identified investment opportunities but lacked capital, access to formal credit enabled private investment, increased self-employment, and generated employment for others. In areas visited in Viet Nam, many farmers took loans to raise one or two cows or buffalos, which made a big difference to their cash income, especially in villages with a severe shortage of farmland and little access to off-farm employment. In most areas visited in Viet Nam, the OEM noted that short-term credit from formal financial institutions was easily accessible to most rural residents, who used their land-use certificates as collateral and paid market interest rates. Very often, farmers with tiny subsistence farms usually did not borrow for agriculture. However, in areas with a lot of commercial agriculture such as the coffee areas in the Central Highland of Viet Nam, farmers needed long-term capital for investment and routine operations. In these areas, the OEM observed a high demand for medium- and long-term loans and a severe shortage of their supply. Another problem of formal credit was its lack of sufficient flexibility. For example, the rural credit

⁴⁸ In December 2005 the PRC Government announced a dramatic reform to eliminate fees for rural compulsory education (grades 1–9), effective in January 2006 for the western region and in 2007 for the remaining rural areas.

project in Viet Nam restricted lending to “productive investment” only, denying borrowers loans for their children’s education or emergencies. With no alternative, most households turned to moneylenders in emergencies, who provided the urgently needed funds on the spot without collateral, and without any restriction on loan size, repayment schedule, or extension. The high interest charged by moneylenders, however, forced distress sales of animals or farmland by some borrowers who had accumulated heavy debts. This problem could have been mitigated if formal financial institutions had provided quick loans with maximum flexibility.

5. History, Culture, Gender, Inequality, and Traditions

61. In the cases studied, history, culture, and gender affected the rise from poverty only indirectly, through their influence on human capital or social connections (Appendixes 2-4). Initial inequalities in income and household assets did not seem to be significant in villages visited in Viet Nam and the PRC, where land-use rights were equally distributed to all households in a same village. Nevertheless, regional disparities, which related closely to geographic and topology features of different regions, remained high and continued to increase as local economies grew at different paces.

62. Village tradition strongly influenced household strategies. Households in a same village tend to adopt similar strategies, such as same cropping patterns or off-farm activities. In villages visited in Sichuan, southern Viet Nam, and Terengganu, a long history of migration made it easy for households to select migration as their primary strategy to rise from poverty, because many of them had social connections in cities. In contrast, the OEM found hardly any migrants from the many mountain villages visited in northern Viet Nam and observed little off-farm employment in villages without a tradition of trade or migration.

6. Geography, Topography, and Population Density

63. The geographic location and topography of a village, together with population density, are critical factors determining options available to households for escaping poverty. The three countries visited had substantial regional disparities, which explained the various patterns of poverty exit strategies adopted, as well as their results. The OEM identified the following factors as critical to households’ poverty exit strategies: (i) the area of farmland per capita and its quality (for example, uplands without access to water had low productivity); (ii) the size of local markets and the availability of off-farm employment (for example, little trade was observed in areas with low population density); and (iii) access or barriers to migration (for example, remote villages with high language barriers and few social connections in cities had few migrants).

7. Local Growth

64. In the areas visited, local economic growth provided employment for households in adjacent areas, but its role in poverty reduction was limited due to the small number of jobs generated. In Viet Nam, many households living within 3–5 km of towns engaged in marketing and trade; some young men living in villages within 15–20 km of cities went to towns everyday to wait for casual labor work. The impact of local growth was particularly small in mountainous regions, which attracted little private investment even when roads were of good quality, probably because of the high cost of conducting commercial business in remote areas as well as the small size of the local markets. In Sichuan, the growth of industries and services in county cities or townships provided some employment for households living in nearby villages, but the impact was limited because villagers preferred to migrate to other provinces where wages were higher. In Malaysia, Terengganu represented a special case because it had developed an important oil

and gas industry that attracted people from rural areas to work in that industry and in related construction. Nevertheless, the number of workers in these industries was small compared with the number of migrants employed in national centers of growth.

8. Local Institutions

65. In these three countries, governments were strong even at the grassroots, and the OEM did not observe active informal organizations in the rural areas visited. In Viet Nam, all villages had the same mass organizations supported by the government, such as farmers' associations, women's associations, veterans' associations, youth associations, and fathers' foundations. The first two were active in lending programs for the poor run by government banks. Their leaders facilitated loans by identifying poor households, recommending borrowers, facilitating the formation of borrower groups, channeling loans to households, and collecting interest payments from them. Meanwhile, the local authorities in Viet Nam played an important role in implementing government programs for poverty reduction. Most village leaders interviewed had detailed information about poverty in their villages. They were in charge of identifying poor households every year, based on the criteria set by government programs, and recommended poor households for poor household certificate cards, health service cards, education fee exemptions, and other benefits.

66. In the villages visited in Yunnan, county and village leaders actively helped commercial companies that invested in new crops by persuading farmers to participate. Village leaders would pioneer the cultivation of the new crops and receive training in technologies, later serving as models for other households. They also monitored the application of production practices. In Malaysia, government-organized farmer cooperatives received free fertilizer and seed from government programs and distributed those benefits to their members. These institutions and village leaders also helped identify problems and local demand and provided information about villages to state governments. In addition, federal Government agencies that developed rubber and oil palm plantations had strong field presence at the farm level, some with their own plantations and processing factories that directly hired farm laborers.

III. POVERTY REDUCTION INTERVENTIONS

67. Based on this understanding of how rural households rise from poverty, the following sections assess the effectiveness of poverty reduction interventions. To provide lessons for future ADB operations, seven ADB-financed projects (para. 13) were selected for in-depth analysis. In Viet Nam, the rural credit project provided a credit line to PFIs for on-lending to rural borrowers, while the rural infrastructure project financed 180 subprojects building or upgrading rural roads, markets, irrigation systems, and drinking water systems. In the PRC, the two expressway projects constructed expressways and upgraded local roads in selected poor regions. In Malaysia, the land project provided farmland to landless poor for palm oil production, while the two township projects financed infrastructure investment in six towns. Appendix 5 provides basic data on these projects, including their objectives, components, costs, financing, and implementation.

68. The Rural Credit Project (RCP) in Viet Nam was rated successful by a project performance evaluation report prepared by ADB in 2005.⁴⁹ With a target of 102,000 rural households, the RCP had extended formal credit to 135,000 rural borrowers by project

⁴⁹ ADB. 2005. *Project Performance Evaluation Report: Rural Credit Project in the Socialist Republic of Viet Nam*. Manila (Loan 1457-VIE[SF]).

completion, exceeding the target by 32%. Loan repayment rates were above 95%, higher than the appraisal target of 80%. Overdue loans were relatively small, with overdue debts accounting for 1.7% of the total outstanding loans in AgriBank—the primary PFI supported by the RCP—in 2004. Loan processing time was reduced, as reported by most of the borrowers interviewed. The RCP realized its development goals of contributing to economic growth, diversifying the rural economy, and reducing rural poverty. From 1997 to 2002, the gross domestic product in Viet Nam increased by 35.4%, and rural poverty fell from 45.5% in 1998 and 35.6% in 2002 (footnote 49). While these achievements could not be attributed solely to the RCP, OEM fieldwork found that rural credit played a key role in facilitating poor households' exit from poverty, and that AgriBank made a significant contribution to poverty reduction by making unsubsidized loans readily available for most rural households. While the \$50 million loan from the RCP accounted for only a small fraction of the funding resources in AgriBank, the long maturity of the ADB credit was highly appreciated due to the severe shortage of long-term funds in the country (footnote 49). In many AgriBank branches visited, loans from the RCP were their only sources of long-term funds enabling their provision of medium-term (3 year) loans to rural households. As noted above, convenient access to unsubsidized credit enabled many poor households to rise from poverty by raising animals—a common strategy in areas severely short of farmland and with limited off-farm employment.

69. To satisfy ADB's desire to address social issues, the RCP included two add-on components: (i) a \$2 million credit line for lending to the poor at subsidized rates with a loan ceiling of \$100 and (ii) \$2 million for computerizing the operation of people's credit funds (another PFI supported by the RCP). For lack of client demand, these two add-ons did not work. Borrowers considered the maximum size of the subsidized loans too small to be useful, and the people's credit funds refused to take unsubsidized loans to buy computers.

70. In contrast to the case of RCP, the impact on poverty reduction of the Rural Infrastructure Sector Project (footnote 31) was rather limited. That project financed 180 subprojects to construct or upgrade rural roads, markets, irrigation systems, and water supply systems. In most of the road subprojects visited, the OEM observed light traffic on the improved roads. With insufficient farmland per capita, farmers in these areas had little surplus with which to attract large buyers. While households along the roads appreciated the public investment that was free to them, the actual benefits seemed to be insignificant—mainly less difficult travel on foot, by bike, or by motorcycle. Due partly to their remote location, and partly to the limited budget, these roads did not link to commercial centers (Appendix 2). Overall, the OEM found that the improved rural roads provided convenience for a small number of residents living along the roads but did not promote economic growth or stimulate business.

71. The small-scale irrigation subprojects examined by the OEM suffered more problems. Due largely to the small amount of water resources, especially in the dry season, these subprojects increased water supplies for only a small portion of farmland along the canals. While beneficiaries appreciated the benefits that were largely free to them, the actual increased output was insignificant in the cases studied (Appendix 2). Sustainability of the subprojects was another major concern because many water companies could not collect sufficient user fees to cover maintenance (Appendix 2). Similarly, the drinking water facilities suffered from insufficient fee collection to fully cover their maintenance. These were located in district towns, where most beneficiaries were not poor. Some subprojects also suffered from insufficient demand, because most households had their own wells before the subproject, and some did not want to pay the required fee to connect to the system, even when the water pipe passed in front of their houses (Appendix 2).

72. The two expressways projects in the PRC financed the construction of expressways and upgrading of local roads in poor regions. The OEM found that not all expressways had a direct impact on poverty reduction even when they were located in poor regions, because they were closed to local traffic except in areas with an exit; the OEM observed that poor villages remained poor even when they were next to an expressway. The assumption that expressways facilitate labor migration was not valid in the cases studied, as most interviewees said that they never used expressways, which were much more expensive than travel by railway.

73. The OEM nevertheless observed significant indirect impacts on poverty reduction from expressways. In Sichuan, most of the households interviewed rose from poverty after some family members migrated to more prosperous regions and found work outside agriculture. As major parts of the National Trunk Highway System in the PRC, the two project expressways contributed to economic growth and job creation nationally, not limited to the project areas. Through migration, the benefits of the national economic growth spread throughout the country as surplus labor from poor areas found employment in the regions with dynamic growth.

74. The OEM found that the real impact of local road investment on poverty reduction varied significantly depending on local realities. In areas with high potential for commercial agriculture, such as southern Yunnan—where land was relatively abundant, the climate was ideal for certain cash crops, water was abundant, and the only key constraint was the lack of all-season roads—upgrading rural roads was worthwhile, as it contributed significantly to poverty reduction. In contrast, upgrading isolated roads in remote areas with a shortage of farmland per capita, and where the roads were not linked to growth centers or road networks, attracted few commercial users and had little real impact on poverty reduction.

75. Even in the cases where improved local roads had a direct impact on poverty reduction, the ADB requirement of adding investments in local roads to expressway projects had many negative effects, as observed by the OEM. First, it disrupted government planning of road development in the PRC, where the central and provincial governments are responsible for national highways and county governments are in charge of local and rural roads. By combining expressway construction with local roads development, the ADB projects used professionals highly specialized in expressways to supervise the upgrading of rural roads, resulting in inefficient use of human and organizational resources. Second, due to the need to complete the local roads under the expressway projects, local governments had to adjust their road investment plans to make counterpart funds and other resources available for the “ADB roads,” which might not be their first priority in their original plans.⁵⁰ The adjustment was achieved at the cost of delaying the construction of other roads, which might have been more urgently needed. If ADB intends to promote developing rural roads or improving road network planning, standalone projects should be designed for the purpose, instead of adding into expressway projects a few rural roads in poor counties to show its pro-poor focus.

76. In Malaysia, the land development project was part of a large government investment program in Sabah, which distributed to participants government land for palm oil production, together with low-cost houses, as long-term loans to be repaid by revenues from the palm oil harvest. In addition, palm oil processing factories were established, which generated employment, although on a relatively small scale.

⁵⁰ While ADB policies promote a network-based approach to road development, in the cases studied, local roads to be included in the expressway projects were selected on the basis of being located in poor counties, or of having the largest number of poor beneficiaries, not by their critical contribution to forming road networks.

77. The OEM found that the land project provided a direct pathway out of poverty for participants when Malaysia was at an early stage of economic growth without sufficient jobs for surplus rural labor. Some interviewees said that they rose from poverty by receiving land from the government or employment in the processing factories. The impact was achieved, however, at the cost of some inefficiency. First, the project design overestimated the availability of participants. Because of a shortage of eligible candidates, some non-poor also participated in the settlement schemes and benefited from the generous government subsidies. Second, the size of 10 acres (4 hectares) of land per participant, while sufficient to lift a poor family out of poverty, was too small to enable economic efficiency in palm oil production, with crop yields significantly below what could be achieved on large plantations.

78. The two township projects in Malaysia, part of a master plan for developing the state of Terengganu, were located in a same district, with the first project creating five towns and the second expanding them and creating a sixth town. Both projects financed infrastructure development, including buildings, water supply, low-income housing, and feeder roads. Because government agencies could not accurately foresee future development and select locations for town development, the two projects oversupplied infrastructure, especially water facilities. The rapid growth in the oil and gas industry in Terengganu meant that the small towns created by the ADB projects were unable to attract wage workers, and, 4 years after the completion of the second project, had achieved populations less than half of the appraisal target.

IV. ISSUES, UNDERLYING CAUSES, AND ALTERNATIVES

79. The OEM identified a set of issues during its fieldwork, which are discussed in detail in the country reports (Appendixes 2–4). This section summarizes five most important ones, as discussed below.

A. Poverty Exit and the Roles of Agriculture and Migration

80. The role of agriculture in economic development and reducing poverty has long been discussed in development literature. In the 1950s, most development economists did not view agriculture as important, understanding that economic development entailed facilitating the transfer of labor from rural to urban areas to work in industry. This view was strongly influenced by Arthur Lewis,⁵¹ who focused on how surplus labor flowing from the subsistence agriculture sector to the capitalist or industrial sector facilitated the expansion of the latter. This model was later expanded and applied by other development economists⁵² and was instrumental in explaining economic development and poverty reduction. De Janvry and Sadoulet⁵³ noted that there has been limited past success in reducing rural poverty without relying on migration. For example, in Latin America, more than 75% of the reduced incidence of rural poverty, relative to that of urban poverty, in the last 30 years has been due to migration, not to improved rural incomes.

⁵¹ Lewis, Arthur. 1954. Economic Development with Unlimited Supply of Labor, in *The Economics of Underdevelopment*, edited by A.N. Agarwala, and S.P. Singh: 400–449. London: Oxford University Press.

⁵² Among others, see (i) Ranis, Gustav, and John Fei. 1961. A Theory of Economic Development. *American Economic Review*, 51 (4): 533–565; (ii) Jorgenson, D. W. 1961. The Development of a Dual Economy, *Economic Journal*, 72 (June): 309–334; and (iii) Kuznets, Simon. 1966. *Modern Economic Growth*. New Haven: Yale University Press.

⁵³ De Janvry, A., and E. Sadoulet. 2000. Rural Poverty in Latin America: Determinants and Exit Paths. *Food Policy* 25 (4): 389–409.

81. These views about the role of agriculture were reinforced by the problems faced by development programs aiming to help farmers improve agricultural production. Many authors criticized the results of the Green Revolution,⁵⁴ arguing that the new varieties benefited mainly landlords and large farmers in areas with favorable conditions, notably good natural resources, while impoverishing small and poor farmers in regions with unfavorable conditions such as uplands or other areas with poor natural resources. Rural development programs suffered many other problems, including poor coordination among participating agencies, high operation costs, and appropriation of benefits by large farmers.⁵⁵

82. In spite of these problems, several analysts reevaluated the role of rural development, defined as the improvement of rural incomes and rural welfare, arguing that it has a fundamental role to play in poverty reduction. Many authors argue that rural–urban migration too often moves poverty from rural areas to urban centers, recreating in urban areas the same poverty problems that poor people face in rural areas. Others stress that rural–urban migration has frequently contributed to urban sprawl. Some argue that rural–urban migration imposed important social costs on the sending area, taking future village leaders and bringing instability to rural families, and that the costs may be higher than the possible gains from wage remittances.⁵⁶ Empirical research found, however, that remittances, transfers, wages, and salaries from non-agricultural activities were the most important sources of income for rural households in South Asia and sub-Saharan Africa.⁵⁷

83. The evidence from this SES shows that the role of agriculture is dynamic, changing over time. In the areas visited, agricultural intensification and diversification played an important role in poverty reduction in the early stages of economic development, with the most effective interventions being policies that provided access to land and incentives to individual farmers to increase production. Distributing land to individual rural households in Malaysia, and land-use rights in Viet Nam and the PRC, resulted in the first large wave of poverty reduction, as reported by many interviewees. This finding is consistent with reports from available studies.⁵⁸ In later stages, job creation outside agriculture played the main role in poverty reduction through the combination of rapid overall economic growth and rural–urban migration, and so provided employment to the young generation migrating from rural areas. This enabled not only the migrants to rise from poverty, but also their families who remained in the village. Again, this finding is consistent with reports from various countries.⁵⁹

84. One factor underlying this observation is a basic feature of rural poverty and agriculture. Taking into account the multiple dimensions of household resources, including physical, financial, natural, human, and social capital, poor people had few assets other than their labor.⁶⁰

⁵⁴ Griffin, Keith. 1974. *The Political Economy of Agrarian Change: An Essay on the Green Revolution*. Cambridge: Harvard University Press; and Frankel, Francine. 1971. *India's Green Revolution: Gains and Political Costs*. Princeton: Princeton University Press.

⁵⁵ Among others, see World Bank. 1993. *Lessons and Practices: Area Development Projects*. Operations Evaluation Department. Washington, DC.

⁵⁶ Amin, Samir. 1976. *Unequal Development: An Essay on the Social Formation of Peripheral Capitalism*. New York: Monthly Review Press.

⁵⁷ Ellis, Frank, and Stephen Biggs. 2001. Evolving Themes in Rural Development 1950s–2000s. *Development Policy Review* 19 (4): 437–448.

⁵⁸ Lin, Justin Y. 1993. Cooperative Farming and Efficiency: Theory and Experience from China, edited by Csaba Csaki and Yoav Kislev. *Agricultural Cooperatives in Transition*. Boulder: West View, 1993, 207–226.

⁵⁹ International Organization for Migration. 2005. *Migration, Development and Poverty Reduction in Asia*. Available: www.iom.int/DOCUMENTS/PUBLICATION/Migration_Development_and%20Poverty_Reduction_in_Asia.pdf

⁶⁰ Most of the poor interviewed by the OEM had few assets other than their labor. First, their land was small, insufficient per capita, and of poor quality without access to water. Second, they had few physical or financial

Consequently, the strategies they adopted for escaping poverty, although differing substantially across the countries and regions visited, shared the same bottom line, which was to find ways to employ their family labor, whether by self-employment or working for others. At the early stages, when farmland was relatively abundant relative to labor, the distribution of land or land-use rights to individual families enabled their self-employment, provided strong incentives to increase farm production, and resulted in large-scale poverty reduction in the three counties visited.

85. Occasional increases in land productivity continued to occur in the later stages with the introduction of new technologies or untraditional products. In the areas visited, however, the number of households able to climb out of poverty in this way was small compared with that of earlier times. As the rural population continued to rise and no additional open land became available for distribution to the rising generation, population density rose and the land area available per household became too small to provide a living. The rising generation would become poor if most of them remained in villages and relied on agriculture. In most of the poor villages visited, the primary causes of poverty included a severe shortage of farmland, poor soil, a shortage of water resources, a large and continuously growing labor surplus, insufficient off-farm employment locally to absorb the surplus labor, and local people's inability to migrate, largely due to a lack of social connections in cities, reluctance to weather exposure to the unknown world, and a culture of being easily contented.

86. At the later stage of economic development, when per capita land was insufficient to support a decent living in agriculture, job creation outside agriculture became an effective strategy for escaping poverty for the rural poor. Under these conditions, migration played a positive and significant role in facilitating poverty reduction by drawing surplus laborers from poor regions to others in which the industrial sector was growing quickly and generating substantial employment.⁶¹

87. The OEM observed significant contributions from migration toward poverty reduction. First, migration enabled poverty exit at least for the migrants themselves, who before migrating had been surplus labor in their families and villages. Second, it reduced population pressure for those remaining in the villages, because they now had more land per capita compared with the scenario without migration. Third, remittances from migrants enhanced rural households' capacity to address the non-income dimensions of poverty according to their own choices and priorities, such as paying school fees for children and improving houses, the drinking water supply, and other village infrastructure. Fourth, remittances increased the amount of cash available in villages, enabling informal lending among villagers and contributing to an improved safety net, because poor people could borrow more easily and repay when they received remittances. Finally, some migrants interviewed by the OEM returned to their hometown and invested their savings accumulated as migrants in agriculture or rural services. In these cases, accelerating economic development in non-poor regions to generate significant employment for the surplus labor migrating from poor regions seemed to be an effective strategy to support the development of poor regions, albeit indirectly. If most of the surplus labor can migrate out of a poor region, there may be sufficient land per capita for those that remain in the villages to

assets. Third, human capital—health, education, skills, and personal character—was their primary asset. Finally, most poor had few social connections outside their villages except those living in areas with a long history of migration.

⁶¹ This finding is consistent with available studies. Among others, see reports from the Centre for Research on Migration, Globalisation and Poverty, University of Sussex, 2003. Available: www.dfid.gov.uk/research/migration.asp.

enable them to make a decent living in agriculture. Remittances from the migrants may enable their families to address social issues as well.

88. The OEM recognized that the migration strategy was not free of problems, including strong criticism that migration transferred rural poverty to urban areas without solving the problem. In spite of the negative views, the great majority of the interviewees selected migration as their primary strategy and rose out of poverty successfully. Instead of criticizing the migration decisions made by the poor, or conversely denying its negative impacts, ADB may better make sufficient efforts to fully understand this critical issue and design interventions accordingly, with a view toward (i) promoting job creation for the rural poor, (ii) facilitating the orderly migration of surplus labor to areas with dynamic growth, and (iii) strengthening social connections between potential migrants and actors in the cities that attract migrants, so that the latter can provide job information and other help that reduce the costs of migration and job hunting.

B. Household Vulnerability and Poverty Reversal

89. Most poverty reduction interventions focus on improving the living conditions of the poor, paying little attention to those who are not poor but vulnerable to falling into poverty after a shock. Analysts in the sustainable livelihoods literature have been most active in looking at vulnerability, defining a livelihood as sustainable when it can cope with and recover from stresses and shocks, as well as maintain or enhance its capabilities and assets while not undermining the natural resource base.⁶² Some analysts have used the SLA to analyze the strategies adopted by poor households to reduce their vulnerability, finding that rural households combined a range of strategies with different risk profiles to decrease the likelihood of losing everything.⁶³ However, understanding of the effectiveness of specific policies and projects in dealing with vulnerability is rather limited.

90. The OEM paid close attention to the problem of household vulnerability and found it, in some cases, to be a more serious problem than current poverty. While rural poverty fell substantially in all three countries visited, the sustainability of the decline varied significantly across regions—strong in areas where migration had been adopted by most rural households as their primary strategy to rise from poverty, but weak in many other areas. In particular, the risk of rural households slipping into poverty was high in the mountainous regions in northern Viet Nam, where the definition of poverty was low, and many of the non-poor appeared to live only slightly above the official poverty line (para. 33). The OEM found that household vulnerability, as a cause of new poverty, has become a major perpetuator of rural poverty. This concern is confirmed by available studies, which reported high numbers of poverty reversal.⁶⁴

91. The OEM identified the following common threats underlying household vulnerability in the areas visited: (i) crop price fluctuations, (ii) epidemic outbreaks of animal disease,

⁶² Among others, see (i) Scoones, Ian. 1998. (footnote 28); (ii) Davies, S. 1996. *Adaptable Livelihoods. Coping with Food Insecurity in the Malian Sahel*. London; and (iii) Payne, P., and M. Lipton, with Longhurst, R., J. North, and S. Treagust. 1994. *How Third World Households Adapt to Dietary Energy Stress. The Evidence and the Issues*, Food Policy Review 2. Washington: IFPRI.

⁶³ Among others, see (i) Siegel, P. and J. Alwang. 1999. *An Asset Based Approach to Social Risk Management: A Conceptual Framework*. Social Protection Discussion Paper No. 9926. Washington, DC: World Bank; and (ii) Alderman, H., and C. Paxson. 1992. *Do the Poor Insure? A Synthesis of the Literature on Risk and Consumption in Developing Countries*. Agriculture and Rural Development, Working Paper No. 1008. Washington, DC: World Bank.

⁶⁴ According to a survey on health services conducted in the PRC in 1998, the ratio of rural households returning to poverty due to health problems was 21.6%, rising as high as 50% in poor regions. Available: www.china.com.cn/chinese/news/927390.htm

(iii) natural disasters, and (iv) serious or chronic illness of family members. The first three factors reflected the features of agriculture, causing investment failure and a sharp fall in income for rural households. The OEM found that many farmers could recover by themselves from an occasional investment failure by reinvesting, working harder, and reducing consumption, if they had timely access to long-term credit at affordable commercial interest rates. The OEM interviewed other households who had become poor because they could not handle investment failure. Largely for lack of alternatives, these farmers borrowed from moneylenders at high interest rates, and the quickly accumulated debts forced them to sell their land and became poor (Box 1).

Box 1: New Poverty Caused by Misfortune

In Viet Nam, the Operations Evaluation Mission (OEM) interviewed some households that had become poor due to misfortune. In one village in Tra Vinh, a man said that he had become poor after four investment failures in which he lost 500–600 ducks each time to epidemic outbreaks. He sold land to repay a loan he had taken for the duck investment. One migrant interviewed in Ho Chi Minh City said that he was encouraged by the high price for longan (Đ6,000/kg) in 2000 and borrowed Đ20 million from AgriBank to plant longan trees. As the longan price fell to Đ2,000/kg in 2004–2005, he lost Đ5 million in 1 year. He borrowed Đ20 million from a moneylender to repay the AgriBank loan, which was due at that time with no extension allowed. He paid the moneylender Đ120,000 per day for 3 days, and took from AgriBank a second loan of Đ20 million to repay the moneylender. At the time of the interview, he was still Đ20 million in debt. He migrated to Ho Chi Minh City and relied on the long-distance fruit trade to repay the debt. In one mountain village in Dien Bien, the OEM was told that 14 households had become poor after their farms were buried by landslides caused by a severe storm. The village had only 101 households, so when the village head persuaded some families to contribute a 100 square meters of land each, the 14 families received only 300–400 square meters each, which was too small to support a family.

(See Appendix 2.)

92. The last factor—serious or chronic illness of a family member—actually occurred to only a few households in the areas visited. However, almost all rural households were subject to this risk. While farmers in Malaysia received from the government largely free medical services, most rural residents in Viet Nam and the PRC lived without comprehensive medical protection. In the areas visited in Viet Nam, poor households received health cards and were entitled to free medical services, but the program was far from being a strong safety net (para. 59). As the costs of medicines and medical services increased in these countries, the threat of slipping into poverty due to inability to finance the high cost of medical services became an increasingly serious concern of rural households and governments. The OEM interviewed households who had become poor because of the heavy burden of medical bills and associated costs. When facing such misfortune, the coping strategy adopted by most households was to look for immediately available funds at whatever cost. Very often, their first options were to sell animals and/or borrow from relatives or friends, who provided small loans free of interest. If these were insufficient to meet urgent needs, which was frequently the case, households had to borrow from moneylenders at high interest rates. The quickly accumulated debts forced some of them to sell farmland at depressed prices and became poor (Appendix 2).

93. Finally, a more fundamental cause of weak sustainability of poverty exit is the lack of employment opportunities for the new generation of rural residents. The OEM observed such

cases in remote mountainous regions in northern Viet Nam, where young couples, despite good health and a strong capacity for physical labor, were among the poorest in their villages. As population rose in those villages, no additional open land was available for distribution to the young, who demanded land from their parents, meaning less land per household for parents and children alike.

94. The risk of non-poor households becoming poor and the causes of household vulnerability suggest the importance of designing public interventions that effectively prevent sharp shocks from developing long-term negative impacts. The interventions may not necessarily be limited to free cash transfers from government safety net programs, which may be too expensive for governments to finance long term. Since many households could recover by their own efforts if they had timely access to readily available funds in times of emergencies, a more effective and low-cost mechanism may be to encourage formal and informal financial intermediaries to provide unsubsidized emergency loans with less paperwork, quick loan approval, few restrictions on the purpose of loans, maximum flexibility, and a maturity long enough to allow households to recover from shocks. In the areas visited in Viet Nam, where strong local institutions enforce loan repayment (para. 65), providing emergency loans may work well without threatening the financial sustainability of AgriBank. In fact, it may open new business opportunities for AgriBank to expand its operations. Of course, pilot testing of emergency loans is necessary, which should be followed by vigorous evaluation of the pilot results, to learn from mistakes and modify the design and operation of such loans.

95. Finally, making medium- or long-term loans readily available for investment in children's education may be an effective measure to prevent inherited poverty, especially when children who performed well in school cannot finish post-compulsory education due to their parents' financial difficulties. The OEM noted that graduation from senior high school substantially increased young people's chances of finding formal employment, as in foreign-invested factories. In the context of strong local institutions in Viet Nam, where village leaders exercise their power to enforce loan repayment (para. 65), education loans to parents may not be as risky as students credit as practiced in some countries. Considering the positive externalities of private investment in education, interest subsidies may be provided for the education loans if they are found to work well after pilot testing.

C. Financing Rural Infrastructure Investment

96. A great deal of the development literature has stressed the key role of infrastructure in development, and ADB has financed many infrastructure projects to promote economic growth and reduce poverty. Although capital-intensive investments like roads have sometimes been criticized as benefiting mainly the better-off, a great deal of the literature has a positive view of the role of rural infrastructure in promoting agriculture growth and reducing poverty. Roads, irrigation, market facilities, electricity, and drinking water supply are viewed as providing the bases for an efficient rural economy and having positive effects on rural employment and income distribution, both by stimulating agricultural production in the long term and through employment generated during construction.⁶⁵

97. Five of the seven ADB projects examined by the OEM financed rural infrastructure investment in poor regions with the assumption that infrastructure development would help reduce poverty. In particular, investment in rural roads was justified by the argument that

⁶⁵ Among others, see Timmer, C. Peter. 1991. The Role of the State in Agricultural Development. In *Agriculture and the State*, edited by C. Peter Timmer: 1–28. Washington, D.C.

improved roads would reduce the time and cost invested in agricultural marketing, resulting in higher prices paid for farm products and thereby increasing poor farmers' income and reducing rural poverty.

98. The OEM found this assumption overly simplified. In the cases studied, the real impact of rural road improvement varied significantly depending on the local context. In remote and poorly endowed mountainous areas visited in northern Viet Nam and Yunnan, the OEM found that upgrading isolated rural roads that did not connect to major road networks was neither a necessary condition nor an effective measure for poverty reduction for the following reasons:

- (i) For households that selected migration as the main strategy to escape poverty, poor roads did not stop them from migrating if other conditions were met, such as high demand for labor in more prosperous regions, having social connections in cities, and the absence of barriers to labor movement.
- (ii) Due to insufficient farmland per capita and adverse farming conditions, especially water shortage, poor households in those villages had little surplus to sell, so the improved roads, while convenient for rural residents, failed to lift them out of poverty.
- (iii) In areas without the potential to generate significant employment, such as remote regions with no potential for commercial agriculture, no private firms came to invest even after projects upgraded rural roads, primarily because of the lack of commercial scale to justify their investment. Without private investment, temporary jobs created by the construction of subprojects provided short-term benefits to some residents in the poor regions but failed to lift them out of poverty.

99. In contrast, upgrading rural roads contributed significantly to poverty reduction in areas with high potential for commercial agriculture—where farmland was relatively abundant, the climate was ideal for certain cash crops, water supplies were sufficient for irrigation, and the only key constraint was the lack of all-season roads. Even if these regions were not poor, public investment in rural infrastructure could be justified because, if half of their farmlands were shifted from grain to cash crops after the road investment, demand for labor might increase substantially, stimulating seasonal migration of surplus laborers from nearby poor villages. Thus, employment generation in better-off regions might provide an avenue out of poverty for the poor in poor regions without directly investing in their remote, poor villages.

100. In Viet Nam, the irrigation and water supply subprojects examined by the OEM suffered many problems, including insignificant benefits from the small-scale irrigation investment and insufficient demand for drinking water to justify economically the investment expenditure (para. 71). Many interviewees reported insufficient water supply in the dry season, even after the irrigation investment, which improved the water availability but not significantly, primarily because of the small amount of water sources. In the long run, the lack of sufficient operation and maintenance (O&M) funds are another major concern. Even though the investment was fully covered by the central Government, irrigation and water-supply companies had to self-finance their operations in full and were unable to do so because of difficulties encountered in charging and collecting sufficient user fees. In the areas visited, district governments had to pay companies' staff salaries. As the water systems age, O&M costs will increase, and the inability to cover them with user fees will threaten the sustainability of the water systems.

101. The analysis above does not lead to a simple conclusion that investment in rural infrastructure is not worthwhile. The worthiness of a particular investment will depend on its real benefits versus its total costs, taking into account future O&M needs and available funds, which affect the sustainability of the benefits. However, the information critical to determining the

worthiness of a particular project is available only in the project area. The grant nature of ADB projects (which are largely free to beneficiaries), unfortunately, provides a perverse incentive for local authorities, community leaders, and beneficiaries to welcome any investment project that is free to them.⁶⁶ Government implementing agencies also frequently have a strong incentive to construct as many subprojects as their budget allows, regardless of the worthiness of the investment from the viewpoint of the public, because their budget allocation and performance assessments are linked to the physical completion of subprojects.

102. In searching for feasible alternatives, the OEM studied real cases of private investment in small roads, bridges, and irrigation facilities in villages visited in Viet Nam and the PRC (Box 2). Some of these investments were financed by loans from financial institutions to local elites borrowing on behalf of a large number of beneficiaries, who agreed to repay the loans by selling village-owned land or through household contributions over a long period. In more cases, interviewees, both village leaders and farmers, strongly supported the idea of taking long-term loans to invest in village infrastructure that was urgently needed. These cases seem to support the hypothesis that farmers, individually or collectively, would be willing and able to pay for infrastructure investment that brings them more benefits than costs, if long-term loans were available at low interest. Investments in small-scale rural infrastructure, however, have so far been severely restricted by beneficiaries' lack of readily available funds, even if they have future repayment capacity, because long-term loans for private investment in rural infrastructure are unavailable.

Box 2: Real Cases of Private Investment in Small-Scale Rural Infrastructure

The Operations Evaluation Mission (OEM) observed real cases of private investment in small roads, bridges, and irrigation facilities in some areas visited in Viet Nam and the People's Republic of China (PRC). In Lang Son province (Viet Nam), the OEM visited a village that was located next to an irrigation system rehabilitated by the ADB-financed Rural Infrastructure Sector Project. This village did not benefit from the Asian Development Bank project because its farmlands were higher than the irrigation canal. The OEM found that some households purchased pumps on their own cost for irrigation, which enabled them to intensify rice production from single to double crops. In Bac Giang province, the OEM noted two cases where village leaders borrowed loans from AgriBank to invest in irrigation (small pump stations), and sold village-owned land to repay the loans. Such village investment was supported by the households interviewed, due to the significant increase in rice production after the investment. In Fu Yen province, an AgriBank branch provided 11 loans for village infrastructure investment, with individuals (mostly commune heads) using their names to borrow on behalf of a large number of beneficiaries. Due to the lack of long-term funds, the maturity of the infrastructure loans was only 3 years, and the repayment was reportedly good. In Yunnan (PRC), an individual agreed with farmers and a sugarcane processing firm to finance the construction of a dirt road necessary for the transportation of the sugarcane to the firm's facilities. He charged farmers for the investment costs and collected from them an annual fee from revenues of sugarcane sales. In several other cases, interviewees expressed their strong willingness to borrow long-term loans for infrastructure investment when free money from external sources was clearly not available. These cases seem to support the hypothesis that farmers (individually or collectively) would be willing and able to pay for infrastructure investment that brings them

⁶⁶ Farmers may support even a bad project that is free to them, as long as they benefit a little from it, because a little is better than nothing when it is free. See ADB. 2005. *Effectiveness of Participatory Approaches: Do the New Approaches Offer an Effective Solution to the Conventional Problems in Rural Development Projects?* Available: www.adb.org/Documents/Reports/Evaluation/sst-reg-2005-01.pdf.

more benefits than costs, if there is no hope of free money from external sources.

(See Appendixes 2 and 3.)

103. While there is excessive demand for rural infrastructure projects that are largely free to beneficiaries, the supply of such projects is severely limited by government budgetary resources. Overcoming this problem may require a search for feasible alternatives. One of them may be to make long-term loans readily available for private entities, individuals, or beneficiary representatives to invest in small-scale village infrastructure. Compared with the current practice of financing all rural infrastructure investment with free money from government projects, the new approach may have the following merits. First, it will enable self-selection of infrastructure investment by regions with a true potential of high economic returns, because only areas with future repayment capacity will be willing and able to borrow. Without the perverse incentive generated by free money from government projects, this mechanism helps to reveal the true worthiness of a particular project (para. 101). Second, while many regions with high potential for commercial agriculture have good future repayment capacity, they cannot invest in rural infrastructure for lack of access to immediately available funds. The current practice of waiting for grants from government projects severely restricts the pace of rural infrastructure development, because the demand for free projects substantially exceeds supply. The shortage of supply in relation to demand has stimulated rent seeking and political intervention in the actual allocation of projects, making corruption difficult to control. A new approach of providing small grants to subsidize interest and attract the participation of both beneficiaries and PFIs in rural infrastructure investment is likely to stimulate the use of a much greater financial resources—currently idle in banks—to speed up rural infrastructure development. Finally, compared with using subsidized loans, interest subsidies are less risky because PFIs will more carefully select borrowers and more vigorously collect repayment when they use their own funds for lending. Similarly, farmers have more incentive to repay loans from commercial banks than cheap loans from governments, which are expected to be merciful and less harsh in enforcing repayment.

104. The OEM highlights the need to pilot test the above idea, as many problems are bound to occur in its actual implementation. For example, some villages may borrow without intending to repay in the future, especially if the investment in infrastructure does not prove to generate the expected benefits due to unforeseen problems such as crop failure or price collapse. Infrastructure cannot be foreclosed, and banks cannot require collateral due to its large size, which may be far beyond the capacity of rural residents. Furthermore, the initiative may be affected by free rider problems, as some villagers may support the infrastructure investment while refusing to pay, leaving that responsibility to others. Finally, long-term loans are needed for the investment, and the long term of the loans may create problems for aging populations in rural areas from which the young have migrated. Within a loan period of 10 or 15 years, a portion of those who said yes to the investment may die, and those who buy land from the original owners may be unwilling to pay for something they did not participate in choosing. These concerns should be addressed in the design of the pilot projects in close consultation with both borrowers and PFIs, which, for their own interest, may come up with feasible solutions to these problems.

105. Instead of repeating the old approach, which has been found not to work due to the lure of free money from projects, it may be better to pilot test innovations that may work, experimenting with different business models. At the least, real cases of private investment in village infrastructure were observed by the OEM, although without ready solutions or complete

certainty. Finally, the OEM stresses the need for vigorous evaluation of the pilot results before their replication.

D. Credit and Poverty Reduction

106. Very limited access to financial services has long been considered one of the key constraints to agricultural development. Small farmers often have difficulty accessing credit because they lack collateral. Banks are usually less interested in lending to them because of the perceived high risk of agricultural lending, as well as the high transaction costs of managing a lot of small loans. To deal with this problem, many rural development programs have included credit components that provide resources to financial institutions to increase the supply of rural credit. More recently, an emphasis has been placed on access for the poor not only to credit but also to savings services. Finally, emphasis has been placed on microcredit and the role of microfinance institutions in poverty reduction. However, microfinance has not worked well in agriculture mainly because it is too expensive, as agriculture investments may not generate enough profit to cover interest charges. The OEM noted that, except for such commercial crops as coffee, many interviewees did not borrow for agriculture, partly because low profits would hardly cover commercial interest charges, and partly because the tiny size of their subsistence farms allows management with minimal cash expense.

107. Literature from the 1970s and 1980s argued that credit market interventions both crowded out private sector providers and skewed access to credit toward wealthy borrowers. Others argued that government credit programs often weakly enforced loan repayment, creating a default culture among borrowers, which further inhibited private sector provision of credit. In addition, liberalization policies popular in the 1980s and 1990s assumed that deregulation and eliminating financial market interventions were necessary to open the way for private sector providers able to meet the necessary capital and risk requirements.⁶⁷

108. In contrast to many formal financial institutions that were reluctant to lend to farmers, AgriBank in Viet Nam focused primarily on rural borrowers. The good performance of loan repayments (para. 65)—which contributed to AgriBank's rapid expansion⁶⁸—was due partly to the country context. In the areas visited, most rural households had land-user right certificates, which they used as collateral for loans. In addition, strong local institutions, especially commune and village leaders, played an active role in enforcing loan repayment (para. 65). In this context, the risk of rural lending was relatively low. Most interviewees had access to formal credit, and the impact of rural credit on poverty reduction was overwhelmingly positive. The OEM noted that formal and informal credit could potentially (i) facilitate self-employment by rural households, (ii) mitigate shocks in times of emergency, (iii) facilitate self-recovery by households after shocks, and (iv) enable parents to invest in education for their children and so break the vicious cycle of inherited poverty.

109. In the areas visited, suppliers of rural credit included (i) formal financial institutions and (ii) informal players such as relatives, friends, and moneylenders. Most rural credit for investment came from formal financial institutions. For emergencies, however, most borrowers turned to informal sources, including in particular moneylenders, who seemed to be the only source that provided the urgently needed funds quickly enough—on the spot or within the same day—

⁶⁷ Mathieu, Nicola. 1998. *Financial Sector Reform: A Review of World Bank Assistance*. World Bank.

⁶⁸ AgriBank's net portfolio and deposits increased at average annual growth rates of 28% and 36%, respectively, from 1996 to 2004; its borrowers increased from fewer than 3 million in 1995 to 9 million in 2004, accounting for 92% of the formal financial market in rural Viet Nam (footnote 49).

without collateral and with maximum flexibility in terms of loan use, size, maturity, repayment schedule, and extensions. However, the high interest charged by moneylenders quickly piled high debts on borrowers, some of whom ended up selling their farmland at depressed prices and returning to poverty.

110. When studying the RCP in Viet Nam, the OEM observed the following weaknesses in the provision of formal credit in rural areas. First, the processing time of loans varied significantly in different areas, ranging from 3 days in the best case to 2 months in the worst (lending through groups), with the majority reporting a processing time of 10 days to 2 weeks. This time lag was acceptable to most people borrowing for investment. In emergencies, however, none could afford to wait such a long time. This explained why most borrowers turned to moneylenders in emergencies.

111. Second, due to a conventional practice originated from an assumption that repayment capacity comes only from the invested subproject, subloans from the RCP were restricted to “productive investments.” The OEM noted that many rural households needed loans for other purposes as well, including in particular children’s education and emergencies, especially medical bills. As many households could recover by themselves from a one-time shock, if they had timely access to commercial loans that were long term enough, AgriBank could have minimized reliance on moneylenders by providing unsubsidized loans for emergencies.

112. Third, the need to develop infrastructure in rural areas creates demand for long-term loans for private investment in small-scale rural infrastructure when grant funds from government projects are limited (para. 102). The OEM observed cases of households contributing cash to upgrade small roads, bridges, and irrigation facilities. In many cases, however, rural households could not themselves raise sufficient funds to finance these investments even if they have future repayment capacity. Providing long-term loans for rural infrastructure investment, to be repaid by beneficiaries, would have accelerated rural development by alleviating the constraint of insufficient funds for infrastructure development under the current practice of relying solely on free money from government projects.

E. Fundamental Problems in Poverty Targeting

113. Targeting, especially household and geographic targeting, has been widely used by both governments and aid agencies. Serious problems have been observed in many targeting programs, as reported by numerous studies (para. 6). Most of the studies, however, focused narrowly on (i) the exclusion of the poor due to misspecification and low coverage or (ii) the inclusion of the non-poor due to misspecification and leakage, with little discussion of the more fundamental problems of the poverty targeting in investment projects.

114. The OEM found that, even with accurate specification of poor households and poor communes in Viet Nam, the various targeting projects had only a marginal impact on poverty reduction in the cases studied, largely because of some fundamental problems in poverty targeting. The targeting approach did not focus on sustainable poverty exit but narrowly concentrated on channeling resources to poor regions or distributing subsidies to the poor. In many cases, the targeting programs brought small benefits—such as short-term training, subsidized farm inputs, or work on subproject construction—to poor households without lifting them out of poverty. Instead of measuring the effectiveness of the targeting programs by the number of poor that rose sustainably from poverty, many targeting projects are justified by the number of beneficiaries who are poor or female, or by their location in poor regions. This practice distracts project designers with less important issues.

115. Worse, poverty targeting in investment projects seems to be based on invalid assumptions, including the following: (i) poor people live in poor regions, (ii) money flowing into poor regions or public investment in poor regions will lead to poverty reduction, and (iii) the solution to reducing poverty in a poor region is within that region. The OEM found inconsistencies between these assumptions and the realities observed in the areas visited. First, a bulk of the poor live in less poor regions. Despite of the high incidence of poverty in poor regions, the absolute number of poor people in those regions is relatively small because of low population densities in remote areas. A recent study of the spatial patterns of poverty in Viet Nam concluded that “most poor people live in less poor areas.”⁶⁹ Second, public funds flowing into poor regions did not necessarily result in poverty reduction; the location of projects in poor regions did not guarantee significant impact on poverty reduction.⁷⁰ Finally, in some remote and poorly endowed regions visited, the solution to persistent poverty seemed to lie largely outside those regions, where the primary causes of poverty included a severe shortage of farmland, a large and growing labor surplus, and insufficient local off-farm employment to absorb the surplus labor. These constraints were not relieved by rural infrastructural investment in these regions, which remained poor after the projects upgraded the rural roads, because no private firms came to invest and create jobs.

116. To be effective, poverty reduction interventions may be designed using a decision tree to distinguish the different types of the poor by the cause of their poverty (see Table 3). For the poor unable to work—such as the disabled, aged, or weak, or poor families with chronically or seriously sick members—welfare programs should be designed to take care of them long term. When the number of targeted beneficiaries is small, identifying them is relatively easy, leakage is less likely or difficult to control, and long-term financing of the welfare program is affordable. In such cases, household or individual targeting is likely to be the right approach, as it channels government subsidies to the targeted groups with a low cost, insignificant leakage, and likely sustainability. Meanwhile, investment in rural infrastructure or support for agricultural production may not directly or significantly help this group.

Table 3: Decision Tree Analysis

Item	Feature of Poverty	Suitable Interventions	Need for Targeting
A. Differentiate Poor Households			
(i) Nonproductive poor	Poor households unable to work, such as the disabled, aged, and weak, or poor families with chronically or seriously sick members	Welfare programs are needed to take care of this group long term, as public investment in agriculture or rural infrastructure may not have a direct or significant impact on them.	Targeting is needed to exclude the non-poor from capturing public subsidies. Since the number of the non-productive poor is small, identifying them is relatively easy, leakage is unlikely, and long-term financing of welfare programs is affordable.

⁶⁹ Minot, N., B. Baulch, and M. Epprecht. 2003. *Poverty and Inequality in Viet Nam: Spatial Patterns and Geographic Determinants*: page 71. Washington, D.C.

⁷⁰ ADB. 2002. *Project Performance Audit Report on the Second Barani Area Development Project in Pakistan*. Manila.

Item	Feature of Poverty	Suitable Interventions	Need for Targeting
(ii) Productive poor	Poor households able to work but lacking employment or necessary conditions for self-employment	Tailor-made interventions to mitigate the key constraints to poverty reduction in a particular project area by generating employment or providing conditions for self-employment, such as easy access to unsubsidized loans for capable borrowers.	No need for targeting. Rather, active participation of the non-poor—such as large farmers, private firms, and commercial banks—is needed to generate employment and link the poor to the mainstream of economic growth.
B. Differentiate Poor Regions			
(i) Regions with potential to generate significant employment	Including (a) lowlands close to commercial centers; (b) areas suitable for commercial agriculture because they have abundant land and are well-endowed with natural resources	For (a), investment to improve infrastructure may attract private investment in industries or services, resulting in large-scale employment generation. For (b), investment in rural infrastructure may cause a shift from subsistence grain production to cash crops that demand much more rural labor.	Even if these regions are not poor, public investment may create conditions for private investment to generate significant employment. Through migration, surplus labor from poor regions may find employment in these non-poor regions.
(ii) Areas without potential to generate sizeable employment	Remote areas with a severe shortage of farmland per capita and poorly endowed with natural resources, such as harsh climate for farming or shortage of water resources	Migration of surplus labor out of the poor regions may be the long-term solution to poverty reduction. If most of the surplus labor migrated from a poor village, the remaining villagers may have more land per capita. They may also use remittances to address social issues such as financing children's education; paying medical services; and improving houses, water supply, or other village infrastructure.	Instead of targeting these poor regions, facilitate migration of surplus rural labor out of them to areas with dynamic growth and jobs created by private investment. Remittances from migrants may enable their families to invest in children's education, pay for medical services, and improve living conditions.

Source: Operations Evaluation Mission.

117. For the “productive poor” (those with working capacity), however, poverty interventions need to be tailor-made to tackle the key causes of poverty in a particular project area based on a thorough understanding of the local realities. In many cases, effective interventions to lift the productive poor out of poverty may require active participation of the non-poor, such as contract farming where rich individuals or private firms play a lead role in generating long-term employment for small farmers (footnote 43). Among many others, the following measures may facilitate employment generation for the productive poor:

- (i) policies that create a good business environment in regions naturally attractive to private investors—even if these are the non-poor regions (para. 118);

- (ii) interventions that facilitate contract farming such as reducing the transaction costs of negotiating contracts through the promotion of farmer organizations that avoid the need of negotiating a large number of contracts with individual farmers; and
- (iii) access to unsubsidized loans by commercial banks for the majority of rural residents—including the poor, the near poor, and the non-poor, in conjunction with other conditions, rural households' easy access to credit may enable self-employment or job creation for others, as were the cases observed in Viet Nam (Appendix 2).

The targeting approach, by excluding the non-poor from participating in projects, ends up separating the poor from the most dynamic actors in society, and isolates the poor from the mainstream of economic growth, which is often led by the non-poor. As a result, the poor received small and temporary benefits from the targeting projects without means to permanently rise from poverty—some of them developed a culture of dependence on external assistance.

118. The “decision tree” may also be used to distinguish areas with the potential to generate sizeable employment from those without. The former may include (i) flat areas with proximity to commercial centers, where investment to improve infrastructure may attract private investment in industries or services and result in large scale employment generation; and (ii) areas suitable for commercial agriculture, where land is abundant and climate and other conditions are ideal for certain cash crops. Investment in flat areas close to cities may provide sizeable employment for rural migrants from poor regions. Investment in regions suitable for commercial agriculture may cause a major shift of subsistence grain production to cash crops, which demand much more labor. Rising demand for farm labor may provide employment not only for local residents, but also surplus labor from neighboring counties or provinces, including poor regions, attracting those that could not migrate to cities for lack of language skills or social connection.

119. For regions without potential to generate sizeable employment—including in particular remote and poorly endowed regions such as those with a severe shortage of farmland, poor quality of soil, shortage of water, harsh climate, and a large and rising amount of surplus labor—migration of surplus labor out of these regions seems to be the long-term solution to poverty reduction. If most of the surplus labor migrates out from a poor village, the remaining villagers may have enough farmland per capita to make a decent living on agriculture, as was observed in Malaysia (Appendix 4). Non-income poverty could be addressed as well, as was observed in the villages visited in Sichuan (PRC), where most of the productive youth had migrated. Remittances from migrants enabled their families to invest in children's education, pay for medical services, and improve housing conditions (Appendix 3).

120. The analysis above suggests the need to explore feasible alternatives to reduce poverty in poor regions in addition to the conventional approach that narrowly focuses on locating government projects in poor regions. A recent study by ADB (footnote 25) found fundamental problems underlying the conventional approach, including less relevant project interventions and poor sustainability of project benefits. Due to the grant nature of the government projects, which were largely free to beneficiaries, no mechanism existed for beneficiaries to hold government agencies and project staff accountable for the use of public funds and delivery of project benefits. Furthermore, the lack of funds after project completion resulted in poor maintenance and deterioration of such project facilities as rural roads and irrigation systems. Instead of repeating the old approach that has not worked, it may be worthwhile to explore new ways that may work, such as infrastructure investment in areas with a high potential for generating employment, even if they are not poor, and facilitating self-driven migration of

surplus labor from poor regions to areas with dynamic growth and abundant job opportunities.⁷¹ While most migrants may sustainably escape poverty, as was observed in all three countries, those remaining in the villages may have a better chance to improve their income and living conditions compared to the scenario without migration. This indirect approach may increase the effectiveness of public investment in poverty reduction when government resources are insufficient to finance infrastructure investment in all poor villages due to the high cost of constructing roads to remote areas with low population density.

121. It seems that household and individual targeting may better be limited to their original use of channeling welfare or subsidies to a small number of the non-productive poor; geographic targeting should focus on areas with a high potential of generating sizeable employment, which are very often not poor. Projects aimed at poverty reduction should be measured by the number of poor people sustainably rising from poverty, instead of merely the number of beneficiaries who are poor or female.

V. CONCLUSIONS

122. Based on case studies of how rural poor rise out of poverty in three Asian countries that experienced remarkable reductions in rural poverty, the OEM arrived at some conclusions regarding (i) how households rise out of poverty, (ii) what mattered to the poverty exit, (iii) what worked and what did not, (iv) what went wrong and why, and (v) what to recommend. These conclusions are supplemented by the findings of available studies.

A. How Rural Households Rise Out of Poverty

123. In the areas visited, household strategies to rise out of poverty varied significantly across regions and changed over time, reflecting the resources available to the poor as well as the conditions they faced. Yet the many strategies seemed to share the same bottom line, which was to find ways to employ family labor—by self-employment or working for others. This observation may be explained by the following basic features of rural poverty and agriculture:

- (i) Poor households had few assets other than their labor (footnote 60).
- (ii) Traditionally, agriculture was the primary way to employ rural labor, especially when industrialization was in its early stages and could not generate significant employment.
- (iii) The potential for employment in agriculture depended heavily on the quantity and quality of land as well as water resources.

124. The cases studied suggest that, in the early stages of industrialization in a country or area with abundant land relative to rural labor, agriculture played a key role in poverty reduction.⁷² The OEM noted large-scale poverty exit arising from the distribution of land in

⁷¹ Approaches to facilitate migration may include measures to release barriers to migration or reduce migration costs, if these are the key constraints to migration in a particular project area. Appendix 2 proposes specific measures, such as incentives for private firms to hire qualified youth such as high school graduates from remote poor villages that are currently without migrants, and providing cheap housing for the new migrants for their initial days in cities, on the assumption that, if these migrants settle well in cities, they will become the social connection for their fellow villagers to migrate in the future.

⁷² This conclusion is consistent with findings of available studies. Among others, see Department of International Development (UK). 2005. *Growth and Poverty Reduction: the Role of Agriculture*. London. Available: www.dfid.gov.uk/pubs/files/growth-poverty-agriculture.pdf

Malaysia and the granting of land-use rights in the PRC and Viet Nam.⁷³ As rural population continued to grow with no additional land available for distributing to the young generation, the intensified shortage of farmland per capita, large and growing labor surplus, and lack of sufficient local off-farm employment to absorb the surplus labor became primary causes of poverty in many areas visited. Under these conditions, the contribution of agriculture to poverty reduction became smaller.⁷⁴ Continued agricultural intensification and diversification, while increasing crop yields, often came at a high cost because of higher use of purchased inputs and did not bring large-scale poverty reduction in the areas visited. The OEM noted that the number of rural households rising out of poverty through agriculture was relatively small at the current stage of development, as a shortage of arable land restricts agricultural employment.⁷⁵

125. Meanwhile, off-farm employment was limited in most of the poor areas visited, especially in remote mountainous regions, which were unattractive to private investors even after projects upgraded rural roads. While some households living in areas adjacent to towns rose out of poverty by engaging in trade or other off-farm jobs, a great majority of those living in poor regions did so by migrating to more prosperous regions and working outside of agriculture, typically in manufacturing, construction, and services.⁷⁶ This was especially the case for the

⁷³ The observation was also consistent with findings of available studies. Among others, see (i) Lin, Justin Y. 1993. (footnote 58); (ii) *Viet Nam Development Report 2004*. Available: www.worldbank.org.vn/news/VDR04%20Poverty.pdf; and (iii) Economic Planning Unit. 2004. (footnote 37).

⁷⁴ The decline of agriculture in a country's labor force and total output as incomes per capita increase is well known and long documented and studied by many development economists. Among others, see (i) Clark, C. 1940. *The Conditions of Economic Progress*. London: MacMillan; (ii) Kuznets, Simon. 1966. (footnote 52); (iii) Chenery, Hollis and Moshe Syrquin. 1975. *Patterns of Development, 1950–1970*. London: Oxford University Press; (iv) Timmer, Peter. 1988. The Agricultural Transformation. In *Handbook of Development Economics*. Vol. 1, edited by H. Chenery and T.N. Srinivasan. Amsterdam: North-Holland, pp. 275–331; and (v) Syrquin, Moshe. 1988. Patterns of Structural Change. In: *Handbook of Development Economics*, Vol. 1, Chapter 7. Amsterdam: Elsevier Science Publishers.

⁷⁵ Many development economists have stressed that, in spite of its declining contribution, agriculture continues to play a relevant role even at later stages of economic development through its interdependence or linkages with other sectors, especially industry. They argue that developing modern agriculture is necessarily concomitant to developing the rest of the economy. Among others, see: (i) Johnston, Bruce F. and John W. Mellor. 1961. The Role of Agriculture in Economic Development. In *American Economic Review* 51, No. 4, September, 566–593; (ii) Nicholls, William H. 1964. The Place of Agriculture in Economic Development. In *Agriculture in Economic Development*, edited by Carl Eicher and Lawrence Witt, pp. 11–44. New York: McGraw-Hill; (iii) Shultz, Theodore W. 1953. The Economic Organization of Agriculture. *American Journal of Agricultural Economics*, 58:802–811; (iv) Jorgenson, D. W. 1961. (footnote 52). The linkages between agriculture and industry have been measured in different settings by many authors. Among others, see (i) Mellor, John W., and Uma Lele. 1973. Growth Linkages of the New Food Grain Technologies. *Indian Journal of Agricultural Economics*. Vol. 18, No. 1, pp. 35–55; (ii) Hazell, Peter, and Steven Haggblade. 1993. Farm-Nonfarm Growth Linkages and the Welfare of the Poor. In *Including the Poor: Proceedings of a Symposium Organized by the World Bank and the International Food Policy Research Institute*, edited by Michael Lipton and Jacques van der Gaag. The World Bank: Washington, DC; (iii) Hazell, Peter, and Ailsa Roell. 1983. *Rural Growth Linkages: Household Expenditure Patterns in Malaysia and Nigeria*. IFPRI Research Report 41, Washington, DC; (iv) Haggblade, Steven, Jeffrey Hammer, and Peter Hazell. 1991. Modelling Agricultural Growth Multipliers, *American Journal of Agricultural Economics*, Vol. 73, No. 2, pp. 74–361.

⁷⁶ The process of rural–urban migration has long been recognized by the development literature as a key feature of economic development. Since the 1950s, Arthur Lewis and other development economists have viewed the migration of surplus labor from traditional agriculture in rural areas to the industrial sector in urban areas as central in the process of economic transformation (footnotes 52 and 53). Economic theories of labor migration have emphasized the role of wage differentials (the opportunity of earning higher incomes) to explain migration. See (i) Sjaastad, L.A. 1962. The Costs and Returns of Human Migration. *Journal of Political Economy*, 70:80–93; (ii) Todaro, Michael. 1969. A Model of Labor Migration and Urban Unemployment in Less Developed Countries. *American Economic Review*, 59: 138–148; (iii) Harris, John, and Michael Todaro. 1970. Migration, Unemployment and Development: A Two-Sector Analysis, in *American Economic Review*, 60:162–142; (iv) Yap, L. 1977. The Attraction of Cities: A Review of the Migration Literature. *Journal of Development Economics*, 4:239–264. For the specific case of the PRC, see Du Ying. 2000. Rural Labor Migration in Contemporary China: An Analysis of Its Features and the Macro Context. In *Rural Labor Flows in China*, Research Papers and Policy Studies Series no. 42 edited by West, Loraine A., and Yaohui Zhao. Berkeley: University of California, Institute of East Asian Studies.

young generation, who would have become poor if most of them had remained in villages and relied on agriculture. In most areas visited, migration was the primary strategy of poverty exit at the present stage, with the exception of areas with good potential for high-value commercial agriculture, where land was still sufficient to engage labor.

B. What Mattered to the Poverty Exit

126. Since searching for ways to employ family labor was the bottom line of rural households' strategies for rising out of poverty, factors facilitating or restricting self-employment or employment generation mattered. The OEM identified the following factors as having the largest impact on households' adoption of poverty exit strategies, and their success, in the areas studied. For employment in agriculture, a shortage of farmland and its poor quality, scarcity of water in the dry season, and other adverse farming conditions such as a harsh climate were among the most binding constraints. For self-employment outside agricultural, lack of capital or access to commercial credit were key constraints, especially when capable individuals identified good investment opportunities but lacked capital, or commercial farmers or firms required medium- and long-term credit that was unavailable. Other constraints included limited entrepreneurial capacity. For wage employment, the first key factor was job availability. The OEM found that the location of jobs and transportation costs, while relevant to households' decision-making, were by no means a key constraint, as most migrants traveled long distances to work in cities. Notably, poor roads in their hometowns did not stop migration. Similarly, migrants' lack of skills was not a major problem, as private firms—who knew best their training needs—usually provided training to new workers migrating from rural areas. For formal employment, however, secondary education was usually required, in the cases studied.

127. The second key factor in the search for wage employment were barriers to migration, including government controls on labor mobility, language difficulties among ethnic minorities, and households' lack of social connections in cities. Within a same country with a rapid economic growth in cities and dynamic regions, the largest reduction in rural poverty was observed in areas with active migration in those areas, due partly to government relaxation of controls on labor mobility, and partly to a long history of migration, which enabled many rural households to develop social connections in cities.⁷⁷ In contrast, the OEM observed persistent

More recently, many authors have documented the positive role of both internal and international migration in poverty reduction, mainly through remittances and informal credit supplied by migrants to their home families that are used for both consumption and to acquire assets such as housing, land, and businesses in the community of origin. Among others, see (i) Adams Jr., Richard, and John Page. 2005. Do International Migration and Remittances Reduce Poverty in Development Countries? In *World Development*, Vol. 33, No. 10, pp. 1,645–1,669. London: Elsevier; (ii) Adams, Richard H. 1991. The Economic Uses and Impact of International Remittances in Rural Egypt. *Economic Development and Cultural Change* 39 (July): 695–722; (iii) Ilahi, Nadeem, and Saqib Jafarey. 1999. Guestworker Migration, Remittances and the Extended Family: Evidence from Pakistan. *Journal of Development Economics* 58, no. 2:485–512; (iv) Lucas, Robert E. B., and Oded Stark. 1985. Motivations to Remit: Evidence from Botswana. *Journal of Political Economy* 93, no. 5:901–18; (v) Osili, Una Okonkwo. 2004. Migrants and Housing Investments: Theory and Evidence from Nigeria. In *Economic Development and Cultural Change*, 821–849. Chicago: The University of Chicago. In addition, recent research in the PRC has found that rural–urban migration may also have had positive effects on households' income from rural activities. Whereas migration itself had a negative effect on incomes generated by crops by reducing labor availability, households were found to increase their incomes from shifting their remaining labor into home activities with higher returns, most probably self-employment. See Taylor, Edward, Scott Rozelle, and Alan de Brauw. 2003. Migration and Incomes in Source Communities: A New Economics of Migration Perspective from China. *Economic Development and Cultural Change*, 75–101. University of Chicago Press.

⁷⁷ Neoclassical economics consider labor mobility crucial for efficiently allocating resources. Barriers to migration limit the integration of labor markets. Lower barriers to migration allow workers in declining sectors to move to jobs in growing sectors. Some of the constraints to labor mobility include lack of information about destination areas and capital market imperfections. See (i) Rosenzweig, M.R. 1988. Labor Markets in Low-Income Countries. In

poverty in the mountainous regions dominated by ethnic minorities, where language and cultural barriers restricted migration; isolation and the lack of connection in the outside world underlay the fear of searching employment in the unknown cities.

128. As a primary cause of new poverty, household vulnerability has become a major factor underlying persistent rural poverty in the areas visited.⁷⁸ Among the many factors underlying household vulnerability, the OEM identified two critical ones: (i) serious or chronic illness of family members and (ii) investment failure due to price fluctuations, epidemic outbreaks of animal diseases, or natural disasters. Many households could recover from a first shock by themselves by reinvesting, working harder, and reducing consumption, if they had timely access to long-term credit at affordable cost such as commercial interest charges. Unfortunately, most formal financial institutions did not provide loans quickly enough, largely because of their formal procedures and collateral requirements. Their regulations restricting loan size, repayment schedule, maximum number of loan extensions, and loan uses further reduced the usefulness of formal credit. As a result, a great majority of households interviewed turned to informal players in times of emergencies, because their typical strategy to cope with shocks was to find money that was immediately available, whatever the cost. Their first option was to sell animals or borrow from relatives or friends. When funds from these sources were insufficient, which was often the case, households turned to moneylenders as the last resort, who provided the urgently needed money on the spot without collateral and with maximum flexibility. Households could borrow as much as they wanted and repay at any time and in any amount as long as they continued to pay the interest charges. This was not easy, and the high interest charged by moneylenders trapped some borrowers in poverty, forcing distress sales of farmland as borrowers became increasingly unable to repay accumulated debts (see Appendix 2 for cases observed in Viet Nam). The problem of household vulnerability and new poverty has not received sufficient attention in ADB operations.⁷⁹

Handbook of Development Economics, Vol. I, chapter 15 edited by Hollis Chenery and T.N. Srinivasan. New York: Elsevier; (ii) Greenwood, M. 1971. A Regression Analysis of Migration to Urban Areas of a Less-developed Country: the Case of India, *Journal of Regional Science*, 11:253–262; (iii) Nabi, I. 1984. Village-End Considerations in Rural–Urban Migration. *Journal of Development Economics*, 14:129–145; and (iv) Schwartz, A. 1976. Migration, Age and Education, *Journal of Political Economy*, 84: 701–720. Transitional economies are often viewed as suffering from inadequate reallocation of labor due to additional barriers to migration. More specifically, governments in both the PRC and Viet Nam imposed barriers to rural–urban migration, many of which were lifted as part of broad-based market reform policies. In the PRC, relaxing the *hukou* registration system and other regulations allowed the migrant labor force to grow. See Solinger, Dorothy. 1999. *Contesting Citizenship in Urban China: Peasant Migrants, the State, and the Logic of the Market*. Berkeley: University of California Press.

⁷⁸ Households' vulnerability is a central concept in the literature about SLA. The ability to cope with and recover from stresses and shocks is central to the definition of sustainable livelihoods and, in the framework used by the OEM, to the sustainability of poverty exit. Those who are unable to cope or adapt are inevitably vulnerable and unlikely to achieve a sustainable exit from poverty. See (i) Davies, S. 1996. (footnote 62); and (ii) Scoones, Ian. 1998. (footnote 28). For analysis of responses to different types of shock or stress, see Payne, P., and M. Lipton, with Longhurst, R., J. North, and S. Treagust. 1994. (footnote 62).

⁷⁹ Several studies have found that informal credit plays a key role in allowing individuals to smooth financial shocks over time, mainly because complete insurance markets are absent. Among others, see: (i) Bardhan, P. 1989. *The Economic Theory of Agrarian Institutions*. Oxford, England: Clarendon Press; (ii) Bell, Clive. 1988. Credit Markets, Contracts, and Interlinked Transactions. In *Handbook of Development Economics*, edited by Hollis Chenery and T.N. Srinivasan. New York: North-Holland; (iii) Eswaran, M. and A. Kotwal. 1989. Credit as Insurance in Agrarian Economies, *Journal of Development Economics*, 31:37–53; (iv) Udry, Christopher. 1990. Credit Markets in Northern Nigeria: Credit as Insurance in a Rural Economy, *The World Bank Economic Review*, Vol. 4, No. 3, 251–269.

C. What Worked and What Did Not

129. In the areas visited, the OEM found that some poverty interventions worked well, including some of the governments' own policies, programs, and projects as well as projects financed by ADB.⁸⁰ First, migration of surplus rural labor from poor regions to areas with fast economic growth effectively reduced rural poverty.⁸¹ Government interventions to promote economic growth and job creation, such as the two expressway projects in the PRC, contributed significantly to poverty reduction, though their effects were indirect and difficult to quantify.⁸² Such positive impacts took place even when projects were located in non-poor regions, because poor laborers migrated to wherever jobs were created, which were often outside the poor regions. Furthermore, government policies or programs that reduced barriers to labor mobility or facilitated orderly migration worked well, as observed in the areas visited in the PRC (Appendix 3).

130. Second, making unsubsidized loans—both commercial loans from formal financial institutes and informal credit from moneylenders—easily accessible to most rural households contributed to poverty reduction in the cases studied. Easy access to loans does not imply interest subsidies or undisciplined loan repayments. Rather, it refers to simplified paperwork, quick loan approval, few restrictions on loan uses, and affordable costs such as commercial interest charges, consistent with sound prudential banking practice. In the areas visited, the OEM noted the following positive effects of rural households' easy access to credit on poverty reduction:

- (i) Convenient access to rural credit eased the constraint of insufficient capital on private investment, especially when capable individuals identified good investment opportunities but lacked the required funds, thereby facilitating their self-employment or employment generation for others.
- (ii) Timely access to rural credit enhanced households' capacity to cope with emergencies, or facilitated their recovery from shocks, if the maturity of the loans was long enough.
- (iii) Medium- or long-term credit at low interest enabled households to invest in their children's education, especially senior high school education, which could effectively break the vicious cycle of inherited poverty (Box 3).

In areas where formal financial institutions did not provide loans quickly enough, moneylenders were the last resort for households to handle shocks, albeit at very high cost. What did not work was a simple government ban on moneylenders, which did not make them disappear because

⁸⁰ ADB-financed projects were joint efforts of governments and ADB because ADB financed only a portion of the project costs.

⁸¹ Many studies recognize that economic growth is a precondition for poverty reduction. Among others, see (i) Fan, Shenggen; Linxiu Zhang, Xiaobo Zhang. 2002. *Growth, Inequality, and Poverty in Rural China: the Role of Public Investments*. Washington, DC: International Food Policy Research Institute; (ii) Quibria, M.B. 2002. *Growth and Poverty: Lessons from the East Asian Miracle Revisited*. Manila: ADB Institute; and (iii) ADB. 2005. *Assessing the Impact of Transport and Energy Infrastructure on Poverty Reduction*. Manila.

⁸² Specialists have recognized that, although it is possible to evaluate relatively localized user costs and benefits of transportation projects, it is difficult to quantitatively link such investments to (i) national or regional growth; (ii) economic development, industry, or national productivity; (iii) growth in economic welfare; or (iv) the nation's competitiveness internationally. The most informative studies evaluating the economic impacts of highways use a combination of quantitative statistical techniques and qualitative assessments to identify causal factors and determine relationships. However, studies of regional and national highway investments have generally established correlation with economic growth but not causation. Other difficulties include that disaggregated economic data are available but rarely utilized due to the expense and effort required, and that most studies measure change over a single time period. While some impacts may occur immediately, others may take many years to occur. See Smith, Teresa. 1994. *The Impact of Highway Infrastructure on Economic Performance*. Public Roads On-line, spring 1994, vol. 57, No. 4, Washington, DC: US Department of Transportation, Federal Highway Administration.

the demand for quick and flexible loans to handle shocks was not met by formal financial institutions. The government ban only increased the operational costs of moneylenders, resulting in higher interest charges to borrowers.⁸³ In contrast, relaxed control on moneylenders may encourage competition among them, resulting in lower interest charges, as was observed in Viet Nam (Appendix 2).

Box 3: Education Investment as a Means to Break the Cycle of Inherited Poverty

In Viet Nam, the Operations Evaluation Mission (OEM) noted that many rural households, including the poor, had a strong incentive to invest in children's education, including post-compulsory or senior high schools. In one poor household of a widow and two daughters, the OEM found that the mother took a loan from AgriBank to support her elder daughter's completion of senior high school, with the hope that the daughter might find a good job after graduating and repay the loan. In other cases, many interviewees said that they would support their children in school as far as possible. These parents understood very well the importance of education as necessary for their children's access to formal sector jobs, upon which they based their hope for a permanent exit from poverty. This desire, however, was restricted by their inability to finance the high costs of education, especially for secondary schools. While poor households in Viet Nam were exempted from paying school fees, other school-related costs, including in particular uniforms and school boarding expenses, were a heavy burden on many parents. The OEM was told that dropout rates were particularly high in secondary schools, due largely to parents' financial difficulties. If long-term loans were available at low interest, many parents could borrow to invest in their children's education, especially if their children performed well in school and had a high potential of being employed in formal sectors, for example, foreign-invested factories. In such cases, long-term loans to parents for education investment may be an effective mechanism to sustainably reduce rural poverty. Discussions with AgriBank staff, local governments, and farmers found that such an idea may deserve consideration or even pilot testing. In the context of rural Viet Nam, where commune and village leaders played an active role in enforcing loan repayment, education loans to parents may be less risky than student credit as experienced in some countries. With a view to encouraging private investment in education, subsidized interest for the education loans may be justified considering the positive externalities of private investment in education, and the relatively low cost of the subsidies as compared to free education provided by governments.

(See Appendix 2.)

131. Third, government policies worked that addressed rural households' vulnerability, especially those related to their inability to finance children's education and health services. In the areas visited in Malaysia, rural households did not worry about the cost of children's education or medical care, as these services were provided by the government largely free to all citizens. In Viet Nam, the government exempted the poor from paying school fees, and provided them with health service cards that reduced the cost of medical services, but the system was far from being an effective safety net (Appendix 2). In recent years, the PRC Government has initiated a set of programs to reduce the financial burden on rural residents financing education

⁸³ Governments have often viewed rural moneylenders usurious, making their activities illegal and implementing programs to provide low-cost credit to rural households or relax collateral requirements. However, experience has shown that informal moneylenders continued to be an important source of finance for rural households. Several studies found that the high interest rates charged by moneylenders reflect their actual costs of operations. See Aleem, Irfan. 1990. Imperfect Information, Screening, and the Costs of Informal Lending: A Study of Rural Credit Market in Pakistan. *The World Bank Economic Review*, Vol.4, No. 3, pp. 329–349.

and health services (Appendix 3). While it is too early to assess the results of these programs, the direction of the interventions seems to be correct, because they tackle squarely the key causes of new poverty in rural areas of the PRC.

132. In the areas visited, the OEM observed that the following poverty reduction interventions did not seem to be effective. First, upgrading isolated rural roads, not connected to the larger road network, in remote and poorly endowed areas temporarily improved living conditions for some rural residents but did not lift them out of poverty. The lack of good roads in these regions was a result of poverty rather than its cause, which included a severe shortage of arable land for agricultural employment and few off-farm jobs for surplus labor. These key constraints were not mitigated by infrastructure investment. The poor had little surplus to sell, and the villages remained unattractive to large buyers or private investors even after the projects upgraded the roads because of their remote location and poor endowment of natural resources. Without long-term jobs created by private investors, the projects generated only small benefits, such as easier walking, and temporary jobs, mostly on earthworks during project construction. Furthermore, these projects suffered poor sustainability for lack of maintenance funds after project completion—a problem commonly observed in conventional rural development projects financed by ADB (footnote 25). In these cases, upgrading rural roads seemed to be neither necessary nor sufficient for poverty reduction, as a great majority of the poor rise out of poverty by migrating to areas with dynamic growth, and the poor roads in their hometowns did not stop migration.⁸⁴

133. Second, the add-on components included in the ADB projects, although well intended to help poor households or poor regions, did not seem to work in the cases studied.⁸⁵ While satisfying ADB's desire to address social issues, they did not work at the grassroots for lack of sufficient demand from end-borrowers in the case of RCP in Viet Nam (see Appendix 2) or borrowing countries in the case of the expressway projects in the PRC (see Appendix 3). The ADB requirement to include the add-ons, imposed from the top down, caused inefficiencies and distortions in local governments' planning for rural road development (for PRC cases, para. 75). Without mitigating the key causes of poverty in the project areas, the add-on components generated few real results.⁸⁶

134. Finally, household and geographic targeting used as an instrument for poverty reduction in investment projects did not work well in the cases studied. Even in Viet Nam, where the government accurately identified poor communes and registered poor households, and where leakage of project benefits to the non-poor was relatively small, targeting projects did not lift the poor out of poverty in a sustainable manner. Instead of mitigating the key constraints to poverty exit in the particular project areas, the targeting approach narrowly focused on locating projects in poor regions or delivering short-term benefits to poor households. The OEM found invalid assumptions underlying the poverty targeting (para. 115). In the cases studied, the location of

⁸⁴ It is widely assumed that investments in rural roads have positive effects on rural poverty. However, many studies have shown that the impacts of rural roads may vary greatly depending on local conditions. An ADB evaluation of the effects of rural roads on poverty reduction found that they depended on local conditions, including climate, agricultural potential, spatial position and proximity to networks, world market commodity prices, social structure, and concentration of assets. The study found little evidence that roads directly reduced poverty; the main benefits of roads for the poor were indirect, consisting of better access to state services and improved provision of services to the village. See ADB. 2002. *Impacts of Rural Roads on Poverty Reduction: A Case Study-Based Analysis*. Operations Evaluation Department, IE-68. Manila.

⁸⁵ The add-ons observed by the OEM included the \$2 million credit line to provide small loans at subsidized interest rates to the poor and the \$2 million credit line for capacity building for PFIs under the RCP in Viet Nam (para. 69), as well as the local roads components under the two expressway projects in the PRC (para. 75).

⁸⁶ The problem of add-on components has been criticized internally in ADB (footnote 3).

projects did not guarantee significant impacts on poverty, as the solution to poverty in remote and poorly endowed regions seemed to lie largely outside of them (para. 115). Finally, by excluding non-poor participants, targeting projects isolated the poor from the most dynamic actors in the society and from the mainstream of economic growth. Without active participation by the non-poor in job creation, targeting projects provided only small and short-term benefits and failed to lift the poor out of poverty in the cases studied. Similarly, without economic growth in non-poor regions to generate significant employment, public investment in poor regions may not effectively reduce persistent poverty in poor regions.⁸⁷

135. The findings above should not lead to a simple rejection of all targeting approaches, which are effective in some cases, such as in welfare programs for channeling public subsidies to the unproductive poor. The OEM recommended using a decision tree analysis to distinguish the productive and unproductive poor. The latter should be supported by welfare programs long term, and targeting may effectively exclude non-poor participants (paras. 116–121). For investment projects aiming to lift the productive poor out of poverty, however, interventions need to be tailor-made to mitigate the most binding constraints to poverty reduction in the particular project areas. The narrow focus of the targeting approach on who benefits directly from the projects may distract project designers and implementers. Excluding non-poor participants from these projects may forego the opportunity of employment generation, which is very often led by the non-poor. In conclusion, the concept of poverty targeting may be attractive, as limited public resources should be used to help the poor. However, targeting approaches found ineffective in achieving poverty reduction should not be continued. To be effective, projects aiming to reduce poverty among the productive poor should target the key causes of rural poverty, instead of poor households or poor regions. Solutions effectively reducing poverty in the poor regions may require public investment in non-poor regions to promote economic growth and the participation of the non-poor to create jobs.

D. What Went Wrong and Why

136. While the role of agriculture in poverty reduction has changed significantly in many Asian countries where continued rural population growth intensified the shortage of farmland per capita, the design of agricultural and rural development (ARD) projects financed by ADB has not been adjusted accordingly. Some typical interventions used in integrated area development

⁸⁷ Analysts and policymakers are increasingly interested on linking the poor to economic growth. Several international organizations, including among others the World Bank and ADB, have implemented studies to better understand the country context and initial conditions affecting how efficiently growth reduces poverty and explore channels for the poor to participate in growth. See (i) World Bank. 2004. *Operationalizing Pro-Poor Growth*. A Research Project Sponsored by Agence Française de Développement, Department for International Development, Deutsche Gesellschaft für Technische, Kreditanstalt für Wiederaufbau, and Poverty Reduction and Economic Management. Washington, DC; (ii) Byerlee, Derek, Diao Xinshen, and Chris Jackson. 2005. *Agriculture, Rural Development, and Pro-poor Growth Country Experiences in the Post-Reform Era*. Agriculture and Rural Development Discussion Paper 21. Washington, DC: The World Bank; and (iii) Timmer, Peter. 2005. *Agriculture and Pro-poor Growth: An Asian Perspective*. Working Paper No. 63. Washington, DC: Center for Global Development. More specifically, several analysts have stressed the importance of linking small farmers and microenterprises with commercial firms and other dynamic economic actors as an effective strategy to improve the technology and marketing of their production, for example through contracting arrangements between commercial firms and farmers or through technology transfer from modern agricultural firms to small producers. Among others, see (i) De Janvry, Alain, and Elizabeth Sadoulet. 2004. (footnote 43); (ii) Damiani, Octavio. 1999. *Beyond Market Failures: Irrigation, the State, and Non-traditional Agriculture in Northeast Brazil*. Ph.D. dissertation. Cambridge: MIT; (iii) Ayako, A.B. et al. 1989. *Contract Farming and Outgrower Schemes in Kenya: Case Studies*. *Eastern Africa Economic Review*. Nairobi, Kenya. Other authors showed that local elites can play a positive role in poverty reduction projects and programs. Among others, see (i) Tendler, Judith. 1982. *Rural Projects Through Urban Eyes. An Interpretation of the World Bank's New-Style Rural Development Projects*. World Bank Staff Working Paper No. 532. Washington, D.C: The World Bank; (ii) Tendler, Judith. 1993. (footnote 20)

projects (an ARD model popular in the 1980s and 1990s) continue to be the main components in many ARD projects today, such as

- (i) infrastructure investment, including constructing or upgrading rural roads, irrigation facilities, and markets;
- (ii) support for agricultural production, including supplying new seed and other farm inputs, training, and farm extension; and
- (iii) social services, including constructing or upgrading village clinics and drinking water systems.

More recent ARD projects have included components for beneficiary participation and community development, engaging NGOs as project facilitators, organizing beneficiary groups, conducting consultation workshops, preparing village development plans, and providing many training courses for both project implementers and beneficiaries. Many projects have included these standard components as the primary interventions to reduce rural poverty without first conducting a careful diagnosis of the key causes of poverty in the particular project areas, and how the project interventions would mitigate them.⁸⁸ Typically, projects focused on being located in poor regions or on the number or percentage of beneficiaries who were poor or female, assuming that this would automatically ensure poverty reduction.

137. In recent years, a trend has emerged in ADB to include these add-on components in projects to make them pro-poor.⁸⁹ Many expressway projects have added components to upgrade rural roads in poor counties. Some even included subcomponents for ethnic minority development, which was the mandate of local governments and not of the project implementing agency, which had no expertise to properly address these issues. Instead of being driven by demand from borrowers, the inclusion of the add-ons seemed to be supply-driven by ADB to meet its desire to address social issues, or to show its efforts to satisfy demands from donor countries. Since the add-ons did not mitigate the key constraints to poverty reduction in the particular project areas, their impact was more rhetorical than real.

138. Due partly to internal demand in ADB for direct and quantifiable indicators, many projects measured their impacts on poverty reduction by project inputs, activities, or short-term outputs, which were direct and quantifiable but not very relevant to poverty exit.⁹⁰ Such indicators typically included the number of beneficiaries who were poor or female, of beneficiary groups and group members, of training courses or trainees, of kilometers of rural roads upgraded, of irrigation or drinking water systems constructed, or of short-term jobs, mostly in earthworks, created by subproject construction. These indicators distracted project staff from a sharp focus on the objective of sustainable poverty reduction. To measure poverty exit and its sustainability, key indicators may include changes in (i) rural employment; (ii) sources of household income and its levels; (iii) household capacity to cope with shocks; (iv) sustainability of natural resource base; and (vi) the prospect of the next generation escaping or remaining in poverty, such as their education level and potential employment prospects (Figure 1). Since these indicators are not necessarily quantifiable, substantial efforts are needed to develop practical and affordable methods to estimate these indicators using available sources of data.

⁸⁸ The lack of sound analysis at the project design stage was criticized by a recent ADB study, which found that many ADB projects were proposed without a clear understanding or careful analysis of the issues to be addressed by the project investments. Many projects addressed the symptoms or effects of a problem instead of its primary causes. See ADB. 2004. *Economic Analysis Retrospective: 2003 Update*. Manila.

⁸⁹ The problem of add-on components has been criticized internally in ADB (see footnote 3).

⁹⁰ The problem of inappropriate design of monitoring indicators has been criticized internally in ADB. ADB. 2006. *Guidelines for Preparing a Design and Monitoring Framework*. Manila.

139. One cause of these problems seems to be a corporate culture in ADB that may be more responsive to donor countries than to clients from borrowing countries. Furthermore, the incentive structure in ADB is largely upward, by which staff behave responsively to their supervisors, who in turn behave similarly to the Board of Directors that approves projects. While no written guidelines in ADB require add-on components in projects, a large portion of projects have included them,⁹¹ due probably to the observation that add-ons frequently received praise from Board members, leading to a belief of some ADB staff and their supervisors that adding pro-poor components would enhance the chances of project approval. By contrast, there are insufficient incentives for ADB staff to conduct vigorous fieldwork at the grassroots to gain a thorough understanding of the local realities in the project areas and design tailor-made interventions accordingly.⁹² Many ADB missions have spent most of their time in meetings with government officials in capital cities and insufficient time at the grassroots, and have relied on consultants for most of the fieldwork. The lack of flexibility in ADB's internal procedures is another problem, as it is very difficult for project designers to seriously reconsider the appropriateness of a project that has already been programmed.⁹³

E. Recommendations

140. The unsatisfactory results of many ARD projects in the past have fueled a debate in ADB on whether it should withdraw its investment from agriculture and rural areas. The SES authors do not support withdrawal because rural areas continue to be important for poverty reduction. Instead of repeating the less relevant ARD projects, however, it is necessary to explore alternative fields where ADB interventions may contribute to effectively reducing rural poverty. The following alternatives may therefore deserve exploration.

- (i) Instead of focusing on poor regions, locate infrastructure projects in regions naturally attractive to private investors, such as lowlands adjacent to commercial centers, areas well-connected by transportation networks, or areas well-endowed with natural resources and ideal for commercial agriculture, even if they are not poor.
- (ii) Design projects to enhance the capacity of the poor to capture opportunities, such as projects that facilitate the orderly migration of surplus rural labor to regions with dynamic growth, reduce migration costs, or improve rural households' access to financial services to enable private investment, self-employment, or job creation.
- (iii) Help governments design programs to reduce household vulnerability, such as access to affordable health services to all rural residents, or projects facilitating households' recovery from shocks, such as timely access to unsubsidized loans with maximum flexibility and long maturity.
- (iv) Design projects that break the vicious cycle of inherited poverty by providing low-cost loans for parents to invest in their children's education, including in particular

⁹¹ In the transportation sector in the PRC, for example, 20 of the 23 expressway projects financed by ADB from 1995 to 2004 included add-on components to construct or upgrade local roads, according to data summarized from various ADB project documents.

⁹² One excuse commonly used in ADB for the lack of vigorous fieldwork has been "insufficient time and resources." This excuse is invalid because less-than-relevant project interventions, arising from insufficient understanding of the key causes of poverty in the project areas, may waste much more time and resources than are needed for the fieldwork. ADB should allocate sufficient staff resources for vigorous fieldwork at the grassroots.

⁹³ For example, at the design stage of one project, it is very difficult to change an irrigation project to a microfinance project, even if the project designers find that the lack of access to financial services is the key constraint in the project areas, because the irrigation project has been included in ADB's project pipeline for 3 years by the time of project design. There is no easy solution to this problem, which requires serious efforts from both ADB and national governments.

post-compulsory education, which may provide access to better-paid jobs for the next generation.

141. With a view toward bringing about the required changes in ADB's operations aiming to reduce rural poverty, the following issues are proposed for discussion:

- (i) Given the declining role of agriculture in poverty reduction in areas with a severe shortage of farmland and a large labor surplus, and the finding that many conventional ARD projects located in such areas provided only temporary benefits for the rural poor without lifting them out of poverty, should ADB continue investments in rural infrastructure, farm production, and community development regardless of their relevance to the causes of poverty in particular projects areas?
- (ii) Given the finding that a great majority of the poor—especially those from remote and poorly endowed regions—select rural–urban migration as their primary strategy to rise out of poverty, should ADB continue to ignore migration in its operations? Alternatively, should ADB allocate sufficient resources to study the positive and negative impacts of migration and search for feasible measures to facilitate orderly migration and reduce migration costs, with a view toward maximizing the positive impacts of migration on poverty reduction and minimize its negative impacts?
- (iii) Given its overarching goal of reducing poverty, should ADB measure its success by the number of poor households reached by projects, or should it assess the impact of projects by the number of households that sustainably rise out of poverty? Moreover, given the finding that some infrastructure projects, such as expressway projects, provide a solid basis for long-term economic growth and thereby contribute significantly to job creation, although the impacts are indirect and unquantifiable as they occur well outside the project areas, should ADB insist that all projects be evaluated by direct and quantifiable indicators regardless of their nature? Alternatively, should ADB allocate resources to develop practical approaches to evaluate projects with mainly indirect and less quantifiable impacts, and develop specific methods to measure the number of poor households that sustainably rise out of poverty (para. 138)?
- (iv) Given the finding that upgrading isolated roads in remote and poorly endowed regions does not attract private investment, should ADB continue to locate infrastructure projects in these regions to satisfy its pro-poor stance? Alternatively, should ADB aim to maximize job creation for surplus rural labor migrating from poor regions and invest in areas with high potential to generate large numbers of jobs, even if these regions are not poor?⁹⁴
- (v) Given the high cost of reducing remaining hardcore poverty (including those with very low human capital or chronic illness, or those living in remote villages where low population density and the high cost of road construction make investment not worthwhile), should ADB focus on reducing hardcore poverty by locating projects in poor regions, or should it recommend that government welfare programs take care of the hardcore poor while designing projects to mitigate household vulnerability, which has been found to be a major cause of new poverty affecting many of the near poor? If the latter is the better choice, what would be the most effective interventions to reduce household vulnerability?

⁹⁴ ADB's enhanced PRS clearly states that "geographically targeted projects must also address significantly the constraints responsible for the backwardness of the areas. Mere location of projects in such areas will not be sufficient" (footnote 4). However, the tendency of locating projects in poor regions instead of focusing on easing key causes of poverty seems to continue.

- (vi) Should ADB continue the practice of adding pro-poor components to investment projects to address social issues, or should it design standalone projects to tackle squarely the key causes of poverty in particular project areas?

142. Two follow-up actions are proposed (Table 4). Also The SES has highlighted a number of areas where further study could yield useful information to improve the effectiveness of ADB's poverty reduction efforts, including the role played in poverty reduction by (i) migration,⁹⁵ (ii) local elites, (iii) commercial agriculture, (iv) the state and the private sector, and (v) contextual conditions. (See Appendix 6 for further details.)

Table 4: Actions Recommended

Action	Responsibility
1. An informal working group of staff in the agriculture divisions of regional departments and others should be set up and tasked with, among other things, reviewing the findings of this study as a step toward redefining the role of agriculture in poverty reduction. The output of this exercise, which may include a strategy statement and an action plan, should feed into the proposed review of ADB's Long-Term Strategic Framework. Issues that should be discussed are outlined in para. 141.	Agriculture and environment divisions
2. To raise the issue of road network planning in the PRC, some of the issues identified in this report could be assessed more deeply in the Sector Assistance Program Evaluation in the Transport Sector of the PRC.	Operations Evaluation Department, Economic Research Department, Regional and Sustainable Development Department

ADB = Asian Development Bank, SES = special evaluation study.
Source: Operations Evaluation Mission.

⁹⁵ Potential problems of migration were briefly discussed in para. 88. Due to time and resource constraints, the OEM did not conduct an in-depth analysis of the positive and negative impacts of migration, which may require a standalone study, including substantial fieldwork in urban areas, to fully understand the various impacts of migration on urban areas and recommend solutions accordingly.

BASIC QUESTIONNAIRES FOR HOUSEHOLD INTERVIEW

1. Fieldwork carried out by the Operations Evaluation Mission (OEM) used mixed methods to collect data, including in particular many in-depth interviews with a wide range of informants. In addition to consulting many project staff in the Asian Development Bank (ADB), the OEM visited 75 villages in Malaysia, People's Republic of China (PRC), and Viet Nam, and conducted 608 interviews. The interviewees included project implementers in government agencies and financial institutions, field staff working directly with beneficiaries, local governments, village leaders, and ordinary residents in project areas—both poor and not, those who benefited from projects and those who did not. Among the poor, the OEM interviewed not only those that rose out of poverty, but also those that remained in poverty and those that slipped into poverty due to misfortune.

2. Most of the household interviews were carried out in interviewees' houses in the villages or at their workplaces, such as farms, shops, or other enterprises. The interviews aimed to understand

- (i) the life history of the interviewees and their families,
- (ii) their initial conditions,
- (iii) the impacts of specific poverty reduction interventions (including projects financed by ADB) on their selection and implementation of an avenue out of poverty, and
- (iv) the results of the poverty exit and its sustainability.

Specifically, the questionnaires included questions aiming to find out

- (i) if the interviewees were poor or not based on income and non-income dimensions,
- (ii) what their situations were 5–10 years ago and how they had evolved,
- (iii) their current sources of income and household resources (physical, financial, natural, human, and social assets) and their evolution,
- (iv) the context and conditions they faced, and
- (v) the strategies they had implemented to rise from poverty.

3. The actual questions asked in each interview differed because they depended on the issues that emerged in the course of the interview. Nevertheless, the OEM used the following questions to guide each interview and ensure that basic information was obtained.

A. General Family Characteristics

4. How many people are in the household and what are their relationships? How old is each family member? How long have they lived in that house? Where did they reside before? If they migrated from outside the village, where did they live before, when did they move to this village, and why?

B. Initial Conditions and Resources

5. The following questions aimed to learn details about the family's past:

- (i) What were the basic household characteristics in the past (5–10 years ago)? Had they lived somewhere else?
- (ii) What type of capital or assets did the household have? Did they have land? If yes, how large was it and under what type of tenure? What forms of financial assets (cash, savings, and jewelry) did they have? Did they have access to formal or informal credit? What level of education and type of skills did the

- household members have? Were they members of any formal or informal organization? What type of social connections did they have?
- (iii) What were their sources of income? What were the main characteristics of their activities (farming, off-farm activities, wage labor, and migration)? How did they see themselves compared with others in their village? Did they consider themselves poor?

C. Current Conditions and Resources

6. The same questions were asked as above, but about current conditions and resources.

D. Identification of Household Strategies to Rise from Poverty

7. How did the household rise from poverty? In the last 5–10 years, what were the critical strategies that the household members implemented to rise from poverty? Did family members migrate to obtain land or employment somewhere else? Did they diversify their sources of income and, if so, how (e.g., through employment on other farms or away from agriculture)? Did they improve their agricultural production through new crops or technologies?

E. Role of Context, Including Government Policies, Programs, and ADB Projects

8. How did the household identify and implement their strategies to rise from poverty? Did they take advantage of government policies, programs, or projects? In what ways did these government interventions help? Did government interventions provide land or other natural resource assets? Did they provide housing or other physical assets? Did they improve the human capital of the household members by, for example, providing access to health services, education, or training? How did the household members know about the government policies, programs, and projects? How did migrant members of the family, if any, migrate to other places? What were the most critical difficulties that they faced, and how did they cope with them? If any household member belongs to any formal or informal organization, how did the organization help them?

CASE STUDY: VIET NAM
Rural Credit Project (Loan 1457[SF]-VIE)
Rural Infrastructure Sector Project (Loan 1564-VIE)

A. Introduction

1. Selection of the Projects for Case Studies

1. The Rural Credit Project (RCP) and Rural Infrastructure Sector Project (RISP) in Viet Nam were selected as case studies for their poverty reduction objectives and good performance. The RCP was financed by a loan of \$50 million from Asian Development Bank (ADB) to channel subloans to rural borrowers through branches of AgriBank and people's credit funds (PCFs). The RISP was financed by another ADB loan of \$105 million to finance investment in rural roads, markets, irrigation, and water supply systems through the Ministry of Agriculture and Rural Development (MARD). At the time of the fieldwork, both projects had been completed. AgriBank was implementing a follow-up project with ADB,¹ and the ministry was preparing another rural infrastructure project to be financed by ADB.

2. Fieldwork of the Operations Evaluation Mission

2. From 21 April to 19 May 2005, an Operations Evaluation Mission (OEM)² made six trips to Viet Nam in areas under these two projects. During the 1 month of fieldwork, the OEM visited 39 villages in six provinces, including Lang Son in the northeastern mountains, Bac Giang on the outskirts of Red River Delta, Quang Nam in the central region, Tra Vinh on the Mekong River Delta, and, finally, Son La and Dien Bien in the northwestern mountains. In these areas, the OEM visited 21 subprojects, which represented 12% of the 180 subprojects completed under RISP.

3. A second OEM visited Viet Nam from 1 to 16 September 2005 to conduct post-evaluation of the RCP. The OEM visited 12 villages in three provinces, including Dak Lak in the Central Highlands, Phu Yen in the south coastal region, and Dong Nai in the southeast region. In addition to meetings in the central offices of the participating financial institutions (PFIs), the OEM visited 14 of their local branches.

4. To compare areas with and without ADB-financed projects, the OEM interviewed households in control areas, such as villages that had not benefited from the project investment, or areas proposed for infrastructure investment from future ADB projects, where conditions were considered similar to a typical RISP subproject area before the interventions. For the RCP, the OEM interviewed farmers who borrowed from AgriBank or PCFs as well as those who did not borrow.

5. All together, the OEM visited 51 villages in nine provinces in Viet Nam and conducted 299 interviews in addition to meetings in Hanoi with the central Government agencies. The interviews included (i) in-depth interviews³ with 161 rural households (91 men, 55 women, and 15 couples), out of which 33 were poor; (ii) in-depth interviews with eight migrants who had

¹ ADB. 2000. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan and Technical Assistance Grant to the Socialist Republic of Viet Nam on the Rural Enterprise Finance Project*. Manila (Loan 1802-VIE, for \$80 million, approved on 12 December).

² The OEM comprised a senior evaluation specialist from ADB as the mission leader, one international consultant, and two local interpreters.

³ Each of the in-depth interviews lasted from 20 minutes to over 1 hour.

moved from rural areas to cities (including five women); (iii) brief interviews with 30 traders in markets (including 29 women); (iv) detailed discussions with 41 local government officials (one district official, 18 commune officers, 18 village leaders, and four staff—all women—working in commune clinics); (v) interviews with 59 field staff working in rural financial institutes or other government agencies (24 from AgriBank, 18 from PCFs, two from Viet Nam Bank for Social Policies, two from the State Bank of Viet Nam, five from water supply companies, five from irrigation management companies, two from market management offices, and one from a health insurance company). Table A2 provides a list of subprojects and villages visited.

Table A2: List of Subproject and Villages Visited

Province	District	Commune	Village	Subprojects/PFIs
1. Lang Son	Bac Son	Bac Son	Tien Dao I Nao Rao	1. Bacson–Vu Lang–Nga Hai roads 2. Water supply for six places in five districts
		Ye Binh	Cang Co Quy Xa (hamlet) ^a	
	Van Quan Hun Lung	Quyiet Than	Lang Ray Kep 1 ^b	3. Quyiet Than dam and Chien Thang reservoir 4. Lengthening of canals under the Quyiet Than irrigation system
2. Bac Giang	Viet Yien Lang Giang Yen Dung	Hong Thai	Duclien (hamlet)	1. Hong Thai and Bao Son pumping stations 2. Water supply for Kep, Luc Nam, Bich Dong, and Thang towns 3. Ben Tuan–Dong Xuyen road, Viet Tien–Song Van, Cao Thuong–Tan Soi roads 4. Voi Moc market 5. Improvement of canals under Hong Thai–Bao Son pumping stations
		Song Khe	Bac ^b (hamlet) Song Khe ^b	
	Luc Nam	Dong Hung Cuong Son	Quanh (hamlet) Xom Tan Luc ^b	
	Hiep Hoa Thang	Dan Thang	Thang town Hung Thinh	
		Mai Anh	Mai Ha (hamlet)	
3. Quang Nam	Thien Phuoc	Sau Binh Duong	Hoe Thon Nam	1. Road No. 613 in Thanh Binh district 2. Tra My market 3. Road No. 614 and No. 615 4. Tien Phuoc market 5. Phuoc Ha and Ho Giang irrigation schemes
		Tin Cam	Hai No. 2 Tien Cam	
	Que Son Than Binh	Que Thuan Binh Duong	Que Mot Village No. 2 Village No. 5	
	Que Lam	Tien Cam	Lanh An	
4. Tra Vinh	Can Long	Tan Binh	Trao	1. Inter-commune Road No. 2, Cang Long district 2. Inter-commune Road No. 17, Cau Ngang district 3. National Road No. 53, Hiep Thanh, Duyen Hai District 4. Long Huu water supply
	Cau Ngang	Kim Hoa Truong Tho		
		Kim Hoa Vhi Truoy Nhi Truong Long Toan	Ben Chuoi (hamlet)	

Province	District	Commune	Village	Subprojects/PFIs
	Duyen Hai	Long Huu		station
5. Son La	Mai Son	Lot	Naxi	1. Muong Chanh, Chieng Chung, Ta Lai, Muong Khoa and Chieng Di irrigation scheme
		Chieng Chung	Na Si (hamlet) Khoa Ham Ten (hamlet)	
		Chieng Rong	Na Khoang Rie	
6. Dien Bien Phu	Dien Bien Phu	Keo Lom	Tia Ghenh	1. Pom Lot–Na Son road (in Dien Bien District), Thanh Luong–Hua Pe road (in Dien Bien Dong District) 2. Then Thau irrigation scheme and nine small irrigation schemes 3. Pa Thom road, proposed for investment in next phase ^c 4. Xuan Lao irrigation scheme, proposed for investment in next phase (Tuan Giao District) ^c
	Dien Bien	Pe Thom Nua Ngam	Ta Let Pasa Lao ^b	
	Tuan Giao	Chieng Sinh	Cong village Van No. 2 Van No. 1 Van No. 3	
7. Dak Lak	Krong Ana	Hoa Hiep	Lo 3 Lo 2	1. State Bank Branch, Buon Me Thuot City 2. AgriBank Provincial Branch, Buon Me Thuot City 3. Hoa Hiep AgriBank Branch, Krong Ana District 4. Central Credit Fund Branch, Buon Me Thuot City 5. Hoa Khanh People's Credit Fund (PCF), Hoa Khanh Commune, Hoa Khanh District 6. Phuoc An PCF, Phuoc An township, Krongpak District
	Hoa An Krong Pak	Hoa Khanh Phuoc An	No. 3 Group 1	
8. Phu Yen	Tuy An	An Ninh Dong	No. 1	1. AgriBank Provincial Branch, Tuy Hoa City 2. AgriBank District Branch, Tuy An District 3. AgriBank District Branch, Tay Hoa District 4. Viet Nam Bank for Social
	Tuy Hoa	Binh Tien Phu Vang	Phuvang No. 9	
	Tay Hoa	Xuan Thanh	Thanh An	

Province	District	Commune	Village	Subprojects/PFIs
				Policy Provincial Branch, Tuy Hoa, Phu Yen
9. Dong Nai	Bien Hoa Dinh Quan	Ha Thi Phu Loi Phu Cuong	No. 6 Road 2, group 1 Thong Nhat	<ol style="list-style-type: none"> 1. State Bank Branch, Dong Nai Province 2. AgriBank Provincial Branch of Dong Nai, Bien Hoa City 3. AgriBank Bien Hoa Industrial Zone Branch, Bien Hoa City 4. Dai Loi PCF, Phu Loi Commune, Dinh Quan District 5. Phu Tuc PCF, Phu Cuong Commune, Dinh Quan District

No. = number, PCF = people's credit fund, PFI = participating financial institution.

^a Hamlet is a subunit under a village, counted as village in this report.

^b Nonproject commune or village.

^c Subprojects proposed for next ADB-financed projects, included in the study as control groups.

Source: Operations Evaluation Mission.

B. Results of Poverty Exit

1. Poverty Reduced

6. The OEM was impressed by the significant reduction in rural poverty achieved in Viet Nam in the past 2 decades. In most villages visited, the poverty rate had fallen from 60–80% in the early 1990s to 10–20% at the time of the OEM visit in 2005. Only in some mountainous regions did poverty remained high—up to 57% in a poor commune dominated by ethnic minorities near the border with the Lao People's Democratic Republic. Most interviewees said that their life was much better than it was 5 or 10 years earlier and that they considered themselves no longer poor.

7. The OEM noted, however, that the official poverty line in Viet Nam is low,⁴ and the poverty definition used by interviewees was also narrow. Some interviewees said that they were no longer poor because they no longer suffered from hunger. While some households still encountered food shortages for 2–3 months in a bad year, they borrowed from others and repaid after the rice harvest, or they covered the food shortage by working as day laborers. They said this was a big improvement over the past, when they could not borrow because most households in their villages were also poor, and they could not find wage employment, so they had to dig up wild plants in the woods to survive. These interviewees used hunger as a major indicator of poverty, which had been eradicated in the villages visited.

8. Housing conditions are another indicator, albeit less accurate. Within the same village, poor households tend to have poorer houses compared with the better off, but this indicator

⁴ The official poverty line in Viet Nam increased substantially in August 2005 from Đ100,000 (\$6.3) to Đ200,000 (\$12.6) per person per month for rural areas and from Đ150,000 (\$9.5) to Đ260,000 (\$16.5) per person per month for urban areas (General Statistics Office of Viet Nam).

varies by region. In some mountain villages visited, almost all households, including the poor, lived in wooden or concrete houses. In some villages located in lowlands (such as Tra Vinh), the OEM observed better-off families living in thatched houses, reportedly by preference. Improved living standards were also reflected by more varied and better food, more clothes, better furniture, and television and motorcycle ownership.

9. While most interviewees have risen from poverty (by both their own definition and official poverty lines), the OEM visited households that remained poor. Some said that their life had improved little or not at all. These often included households headed by women, with many young children, and of young couples recently separated from their parents with little farmland. Young couples usually had young kids, which made it difficult for the parents to migrate or search for off-farm employment outside their villages. These couples had farms too small to support a family of four (a couple and two kids) living on agriculture (para. 16).

2. Sustainability of Poverty Exit

10. While most interviewees had risen from poverty, the sustainability of their non-poor status remained a major concern for two reasons. First, the poverty definition is narrow and, in the areas visited, many rural households seemed to be near poor. Many interviewees considered themselves average because they did not officially qualify as being poor. According to the definition used by various government poverty reduction programs, poor households are those that have been voted as poor by village assemblies using the poverty line defined by the Government (footnote 4). These families usually had little or no land, little furniture, no large animals (pigs, cows, or buffaloes), and extremely poor housing. Households officially designated as poor received government assistance such as free health services and exemption from school fees. In almost all areas visited, commune heads and village leaders were able to say precisely how many households were in their communes or villages and precisely how many of them were poor, reflecting a high awareness of officially defined poverty. In sharp contrast, when the OEM asked how many households in their villages were better off, a typical answer was that no one was better off, as everyone was average except for the poor. This observation seems to be consistent with official statistics. In 2003, the nationwide \$1-a-day poverty index using purchasing power parity was 10.6%, and the \$2-a-day poverty was 53.4%.⁵

11. Second, the OEM found that a high proportion of the households interviewed were vulnerable to slipping back into poverty, and this issue has not received sufficient attention. So far, most government efforts have focused on reducing remaining poverty and paid much less attention to dealing with household vulnerability. The OEM interviewed some households that had become poor due to misfortune and identified the following shocks as threats to the sustainability of poverty exit. The first threat was serious illness of family members. When a household member suffered a one-time illness or accident, the cost to the family was usually a high medical bill and related expenses. The OEM found that, in such cases, most households could recover by themselves by working harder and reducing consumption, if they had timely access to credit at affordable cost, such as commercial interest rates instead of the high rates that moneylenders charge, and if the credit was of long maturity so that they had sufficient time to recover. In the case of repeated or chronic sickness, such as a kidney problem, however, some households reverted to poverty as high debts built up. The OEM interviewed households that had sold animals and farmland to repay their debts and became landless poor, but these cases were few in the villages visited.

⁵ Viet Nam Development Report. 2004: Poverty. Joint donor report presented at the Viet Nam Consultative Group Meeting, Hanoi, December 2003. www.worldbank.org.vn/news/VDR04%20Poverty.pdf, page 15.

12. A more common cause of household vulnerability was investment failure resulting from (i) animal deaths due to disease, (ii) price fluctuations, and (iii) natural disasters. Animal deaths, reported by many households interviewed, were due primarily to epidemic outbreaks that affected ducks, chickens, pigs, cows, fish, and prawns. In one village in Tra Vinh, a man said that he became poor after four instances of investment failure, losing 500–600 ducks each time to an epidemic outbreak. He sold land to repay the loan he had taken to make the duck investment. In Quang Nam, one woman said that she no longer dared to raise pigs after the repeated death of her pigs. In that area, the OEM was told that animal diseases were common during floods in the rainy season. While large animals such as pigs and cows could survive if vaccinated in time, there was little preventive treatment for poultry in the areas visited. In Tra Vinh, outbreaks of prawn disease were cited as the most serious threat—much worse than the frequent price fluctuations. As one interviewee put it: “You may become rich quickly by investing in prawn farming. But you may become poor after three investment failures.”

13. Price fluctuations affected mostly untraditional agriculture, defined in this report as new varieties of crops, fruits, animals, or other farm commodities newly introduced to an area. Cases observed included the fruit trees litchi and longan, a new variety of prawn introduced in the areas visited in Tra Vinh, and coffee in the Central Highlands. In Bac Giang, the OEM was told that litchi prices fell by 90%, from Đ15,000–Đ16,000/kilogram (kg) in the peak years of 1995–1999 to Đ1,500 in 2002–2005. One migrant interviewed in Ho Chi Minh (HCM) City said that he was encouraged by the high price of longan (Đ6,000/kg) in 2000 and borrowed Đ20 million from AgriBank to plant longan trees. As the longan price fell by two-thirds, to Đ2,000, in 2004–2005, he lost Đ5 million in 1 year. He borrowed Đ20 million from a moneylender to repay the AgriBank loan, which was due at that time without the possibility of extension. He paid the moneylender Đ120,000 per day for 3 days and took from AgriBank a second loan of Đ20 million to repay the moneylender. At the time of the interview, he was still Đ20 million in debt to AgriBank. He migrated to HCM City and relied on the long-distance fruit trade to repay the debt.

14. In areas visited in Dak Lak, a coffee-producing province in the Central Highlands, the high price of coffee in the early 1990s attracted numerous migrants from all over the country. As coffee production increased sharply by 90% in that area, its price fell from Đ40,000–Đ45,000/kg in the peak years of 1995–1996 to Đ4,000/kg in 2001, far below its breakeven level of Đ11,000–Đ12,000/kg. As a result, many farmers suffered losses and were unable to repay their loans to AgriBank. While most farmers survived the crisis with assistance from the Government,⁶ some failed to manage it, especially those who had invested in coffee after its peak years and therefore had not accumulated savings from coffee profits before the crisis. Some of them cut down coffee trees and shifted to growing maize.

15. Many visited villages suffered from natural disasters, including droughts, floods, tornados, and storms. Some mountain villages also experienced hail and frost. When serious disasters occurred, the Government provided free assistance, such as a grant of Đ1 million (\$65) for families whose houses were completely destroyed by a tornado in 2004, and Đ500,000 for those whose roofs were destroyed. However, not all losses were covered by government assistance. In one mountain village in Dien Bien, the OEM was told that 14 households had become poor after their lands were buried by landslides caused by a severe storm. That village

⁶ With the help of a Government-backed rescue package involving a moratorium on principal and interest payments for a period of 3 years, most borrowers were able to continue their coffee operations. According to the AgriBank branches visited, most outstanding loans for coffee had been repaid by the end of 2004, following a rise in coffee prices to above breakeven levels.

was small, with only 101 households. Although the village head persuaded some families to contribute about 100 square meters (m²) each, each of the 14 families received only 300–400 m² of land, which was too small to support a family by agriculture.

16. Finally, another major factor determining the sustainability of a family's rise from poverty are the employment prospects of its rising generation. In most villages visited, with a few exceptions, farmland was distributed equally to all households in the early 1990s. The land allocated to each family was tiny—500 m² per capita of lowland in villages visited in Lang Son and Bac Giang; 250–300 m² in villages in Son La and Dien Bien, and the worst case of only 160 m² in a mountain village in Dien Bien. Since the early 1990s, there has been no more additional land for distribution. Thus, if the grown children of a family remain in the village and rely on agriculture, they would receive an even smaller plot of land from their parents. In some villages visited, young couples were among the poorest if they did not have the chance to migrate or obtain off-farm employment. In these areas, the OEM observed widespread cultivation of maize and cassava on steep slopes, some as steep as 45 degrees, and was told that soil degradation was a serious problem, threatening the sustainability of the natural resource base.

17. Most families understood very well the critical need that the rising generation leave agriculture. Many interviewees, including the poor, expressed their strong willingness to invest in their children's education. When asked how far, a common answer was that they would support their children in school as far as they could go. Unfortunately, the OEM observed many cases of school dropouts. The young migrants interviewed in HCM City said that dropout rates in their high schools were as high as 50%, largely due to parents' financial difficulties. In one mountain village, whose secondary school is located in the district town about 30 km away, the OEM was told that no poor household in the village could afford the cost of supporting one student in secondary school. While poor families enjoyed 50–100% exemption from school fees, other costs, including uniforms and school boarding expenses, were too heavy a burden on them.

C. Poverty Exit Strategies

18. The OEM observed significant variation in the poverty-exit strategies adopted by households. These closely related to regional disparities, which affected the options available to rural households.

19. **Agricultural Intensification.** Many interviewees adopted this strategy, including (i) adopting improved crop varieties, (ii) increased use of pesticides and fertilizer, and (iii) investment in irrigation to enable a second rice crop each year. Utilization of improved rice and maize seed was reported by many households. The seed was provided by government agencies and reportedly contributed to better production. Among the measures above, irrigation had the largest impact because sufficient water supply was the most important condition for high and stable yields. It was also a condition for effective utilization of fertilizer because the impact of fertilizer is marginal without water. In a number of cases, the OEM observed irrigation investments by private households or communities. In Lang Son, the OEM visited a village without an ADB project but located next to an irrigation system rehabilitated by the ADB-financed RISP. This village did not benefit from the RISP because its farmlands were higher than the irrigation canal, but some households used pumps purchased at their own expense for irrigation, which enabled them to intensify rice production from single to double cropping. In Bac Giang, the OEM found two cases where village leaders took loans and invested in small pump stations. Later, they sold village-owned land to repay the loans. These village investments were

supported by the farmers interviewed because they allowed a significant increase in rice production.

20. The importance of irrigation, however, did not guarantee significant impact from any particular irrigation project. The OEM found that the real impact of irrigation subprojects varied significantly among the cases studied, depending on the capacity of the water source in the dry season as well as the reliability of operation and maintenance (O&M) funds after project completion. In some cases studied, the impact of the irrigation subprojects seemed to be marginal for two reasons. First, the capacity of the water source was small, and the irrigation subprojects mainly benefited farmlands next to the irrigation canals, which accounted for only a small portion of the farmland in the villages.⁷ Due to insufficient water in the dry season, many farmlands did not receive sufficient water even after the irrigation investment. Second, while the small area of farmland that received water realized significant yield increases in terms of percentage, the absolute amount of the rice increment per household was small largely because of the tiny area of lowland available per household. In these cases, the OEM asked beneficiaries if they would have been willing to pay for the irrigation investment if the subprojects had not been free to them, and the answer was no.

21. **Agricultural Diversification.** Compared with intensification, agricultural diversification played a more important role in poverty exit, having been adopted by a larger portion of the households interviewed. The OEM found that, to a certain degree, this strategy was a result of farming according to household resources available rather than preference. For example, in mountainous Son La and Dien Bien, lowlands suitable for rice production were extremely limited, so farmers had no choice but to cultivate maize and cassava on steep slopes, though they preferred rice. In the sand belt in Quang Nam, farmers grew peanuts and sesame because the sandy land was not suitable for rice. In a village in semi-mountainous Quang Nam, households grew rice on tiny plots of lowland, planted ginger and fruit on the uplands, raised animals, and collected forest products. In these cases, diversification was a response to context, village traditions, and family resources. In Bac Giang, the OEM visited a village with high population density and a tradition of conducting petty trade, where many farmers were part-time traders. In one village located in a lowland area, almost all families were engaged in the traditional activity of making baskets for harvesting shrimp. One household ran multiple businesses, including rice, tobacco, pigs, chickens, a small rice mill, a tiny winery, and a small shop that earned less than \$1 per day.

22. **Untraditional Agriculture.** This strategy was usually adopted by a few aggressive farmers with great success and then followed by many others who did not have the same fortune. In Bac Giang, a farmer invested in litchi trees in the early 1990s and received sizeable profit during the peak years when few people produced litchi and its price was up to Đ16,000/kg. Sharply reduced litchi prices in the early 2000s (para. 13) brought big losses for the latecomers who planted litchi trees at the end of the 1990s. When a new variety of prawn was introduced in Tra Vinh in the 1990s, some households became rich from it, but others failed because they were unable to manage price fluctuations or the frequent outbreak of prawn disease. A similar

⁷ In Bac Giang Province, for example, an irrigation subproject reportedly increased the system's command area from 180 ha to 250 ha. In an upstream village that benefited from that subproject, the OEM found that only 4 out of the 42 ha (less than 10%) of paddies had actually benefited from the subproject. Land in that village—both irrigated and not—was distributed equally to all households. In two households visited, two-fifths of their land received water with or without this ADB-financed project, and another two-fifths did not receive water with or without the project. Only the remaining one-fifth received water as a result of the project, enabling rice production to increase from one to two crops per year. The increment in production was small, about 100 kg of rice for each household. In 2004, there was no increment in rice production because the land did not receive sufficient water.

case was the boom of coffee production in the Central Highlands, where the early investors earned sizable profits and the latecomers suffered losses due to sharply reduced coffee prices.

23. **Off-Farm Employment.** The availability of off-farm employment varied significantly across the regions visited, reflecting village traditions as well as the conditions surrounding rural households. In mountainous Lang Son, the only off-farm employment available was carrying wood as porters. In the lowlands of Bac Giang and Quang Nam, many rural households engaged in trade on a tiny scale in local markets. In Tra Vinh, booming prawn farming increased demand for farm labor, with many casual laborers collecting day wages, including landless poor. In the minority-dominated villages of Son La and Dien Bien, interviewees reported almost no off-farm jobs in their villages. Low population density in the remote mountain villages, and the self-sufficient economy—with even cloth made at home using traditional looms—restricted trade and other off-farm employment.

24. **Migration.** This was a common strategy to rise from poverty in the lowlands visited, especially in southern Viet Nam, which was experiencing fast economic growth. In Tra Vinh, many households in the villages visited had family members working in HCM City or other urban centers. Migrants interviewed in HCM City said that almost all young people in their villages had migrated, because there were no jobs at home. In the lowlands visited in Quang Nam, interviewees said that it was easy to find jobs as maids or construction workers in Da Nang, a large city about 60 km from their villages. In the provincial town of Lang Son, day laborers from villages about 15–20 km away came to town early in the morning and waited for employment, which was reportedly increasingly available thanks to a small boom in private house construction as many families received resettlement compensation resulting from a road project. Migration was rarely observed from the mountain villages, however, where even high school graduates returned to farming after leaving school. Interviewees said that they did not know how to migrate because they had little contact with people outside their communes.

25. **Transfers and Remittances.** Remittances did not play a big role in poverty reduction in the areas visited. While migration was common in southern Viet Nam, remittance from migrants was neither significant nor frequent. Due partly to the shortage of jobs for all migrants, and partly to the relatively short history of migration, many migrants had jobs with low salaries, earning barely enough to cover the high urban cost of living. It was said that only young girls regularly sent money home, and only before they got married. They worked as maids with a monthly income of Đ500,000 (\$32) or so. Some sent home Đ400,000 (\$26) monthly because they lived with their employers and had few living expenses. Other remittances were small and limited. A few interviewees received temporary support from relatives in times of difficulty, such as food shortage or sickness. More often, interviewees said that they turned to moneylenders in times of emergency. Transfers from governments was also limited. In a few villages visited, local authorities reported providing free houses to poor households, but far fewer than demanded by eligible applicants. In one commune with 795 poor households, only 100 received free houses. In another village visited, only two households received free houses.

26. **Pluriactivity.** Multiple sources of income were essential to almost all rural households, as no interviewee relied on a single source of income, except those who migrated to cities and worked in factories. The most common mix was crop production, combining lowland rice and upland grains, or animal-husbandry. The latter seemed to be a most common strategy to rise from poverty, especially in areas with little hope of migration and few off-farm employment opportunities.

D. Household Resources

27. Household resources included physical, financial, natural, human, and social capital in the cases studied, and the following factors had significant impact on households' selection of poverty exit strategies.

28. **Farmland.** Almost all households interviewed had a few plots of farmland. Their total area, however, was too small to support a family relying on agriculture without off-farm income. In most villages visited, farmland was distributed to all households in the village on a per capita basis in the early 1990s following the policy reform in 1986. Since then, no land has been distributed to the rising generation because no additional land exists. In many cases, grown children received only a small plot land from their parents after marriage, as the household's original land allotment was simply divided. While the area of upland was large in some mountain villages visited, land without water had low value and productivity. Some interviewees with relatively large areas of upland remained poor.

29. **Houses.** All interviewees—both poor and not—had houses, though of varying size and quality. While the size and quality of houses reflected living standards, they were more the result of poverty rather than its cause. The OEM observed many new houses built by households after they had risen from poverty and become better off.

30. **Equipment.** Only a few families owned farm machinery such as small milling equipment, probably because of the tiny size of subsistence farms visited. More common were motorcycles, seemingly the most common transportation mode in both urban and rural Viet Nam. In many villages visited, motorcycles were used in trade. In some remote villages, high school students went to school by motorcycle.

31. **Farm Animals.** Animals were common in the villages visited. In areas short of farmland and with little off-farm employment, cattle and buffalo rearing was the most common strategy for rising from poverty, and most interviewees had one or two large animals. Interviewees reported, however, that expanding animal production was constrained by insufficient resources such as grasslands. Animals were a common form of household savings that could be sold to meet emergency needs such as medical expenses. The distress sale of animals brought losses to some households due to low prices at less-than-optimal times of sale, especially when the animals were still small.

32. **Savings and Other Financial Assets.** Few households interviewed kept savings account in banks or PCFs except for large traders or shop owners. Many interviewees said they had no savings or other financial assets. In a few cases, the OEM found that households bought jewelry as savings. Finally, some better-off farmers said they used spare money for lending to others instead of depositing it in banks. Several factors seemed to underlie the seeming lack of demand for bank deposit services in the rural areas visited, including (i) insufficient public confidence in banks, (ii) a shortage of cash in many rural households, and more importantly, (iii) farmers' lack of ready access to formal credit when needed, especially in times of emergency. That is why some interviewees preferred to lend their extra money to others than put it in banks.

33. **Household Size and Demographic Features.** This seemed to be a key determinant of rural poverty in the areas visited. Having a lot of children⁸ was cited by many interviewees as a factor contributing to poverty, as young children prevented parents from migrating or searching for off-farm employment away from the village, and children's education means heavy costs to cover school fees, uniforms, and boarding expenses. Finally, grown children demanded land from parents, resulting in less land per household for parents and children alike if children remained in the village and relied on agriculture. When the OEM asked about the impact of migration, most interviewees said its best feature was allowing grown children to take care of themselves without demanding land from their parents.

34. **Human Capital.** The OEM found that aspects of human capital important to poverty exit included not only the physical health of family members but also their schooling, skills, and personal characteristics. The combination of these factors defined a household's labor assets. In the cases studied, substantial disparities existed in the lowlands regarding schooling, unlike in mountain villages, especially those dominated by ethnic groups, where little schooling was the rule. In the lowlands visited, most adults, both men and women, finished at least elementary school, and many completed the 9 years of compulsory education. In the minority-dominated villages, however, the illiteracy rate was high, especially among women. Many men had only 2–3 years of education, and most women and some older men did not speak mainstream Vietnamese, or Kinh.

35. The OEM found that, for formal employment such as in government offices or foreign-invested factories, formal schooling was crucial, because the minimum requirement for these jobs was graduation from junior high school, or 9 years of schooling. Graduating from senior high schools (12 years of schooling) may provide access to better-paid jobs initially and better chances of promotion later. For informal employment or self-employment, such as farming, trade, construction, housework, and other services, a high-school education did not seem to make a big difference. A more important factor determining the success or failure of informal employment seemed to be personal characteristics. While almost all interviewees worked hard, their different capacities for managing risk and uncertainty seemed to underlie their success or failure in self-employment or finding off-farm jobs.

36. **Social Capital.** For migration, social capital, especially connections in cities, seemed to be most crucial. In the lowlands visited, such as Bac Giang, Quang Nam, Tra Vinh, Fu Yen, and Dong Nai, migration was relatively easy because many rural households had relatives, friends, or other fellow-villagers working in HCM City, Hanoi, Da Nang, or other towns and cities. It was reported that these social connections provided information about job openings and offered temporary housing for new migrants during their initially days in cities, thereby reducing the cost and risk associated with migration and job hunting. In contrast, many interviewees in mountain villages said that no one had migrated from their villages. The lack of social connections seemed to have discouraged migration from those areas.

⁸ While most households interviewed had four members (a couple and two kids), the OEM visited families with 5–6 children in a few cases. In mountain villages dominated by ethnic minorities, the OEM observed large families of up to 14 members, with 3–4 generations living in the same house.

E. Context and Conditions

37. Context and conditions influenced options available for poverty exit in a particular area and affected households' selection of poverty-exit strategies.

38. **History and Culture.** The OEM found in the cases studied that the most important factor in history and culture was village tradition, which varied significantly across regions. In lowlands with high population density, many villages had a tradition of trade, handicrafts, or migration to urban areas. These traditions were absent in the villages visited in remote mountainous areas, where most interviewees said that they did not know how to make a living other than by farming. In areas dominated by ethnic minorities, the OEM found extremely low levels of education in both children and adults, especially among females, the underlying causes being cultures that little value education and the language barrier, as schools were taught in Kinh, which was difficult for minorities. In conjunction with topography, the language barrier contributed to isolating households in remote mountain villages and made it more difficult for them to search for off-farm employment outside their region.

39. **Gender.** In the lowland areas visited, men and women appeared to play equal roles in family decisions. During interviews, women often more actively answered questions than men, reflecting their full knowledge of family business and confidence in household management. In the minority-dominated mountain villages, however, men usually dominated conversation during the interviews, while women sat outside the room. This might have been partly due to the language barrier, because many minority women did not speak fluent Kinh due to their lack of education. In a few cases when the minority women spoke Kinh, they actively answered questions.

40. **Government Policies.** Policy reforms have played key roles in reducing poverty in rural Viet Nam in the past 2 decades. The most important reforms have included the following:

- (i) The program of *Doi Moi* (literally “change and newness”) in 1986 marked the start of the transition from central planning to a market economy.
- (ii) Resolution 10 of the 1988 land law granted land-use rights to individual households with 15 years of secure tenure and automatic renewal. After that, agricultural markets were liberalized, and investment decisions were left to households. As a result, agricultural production increased rapidly after 1988, and Viet Nam went from being a net rice importer to the world's second largest rice exporter.
- (iii) The 1993 land law granted to households the right to transfer, exchange, inherit, rent, and mortgage land. The land law was implemented by issuing land-use certificates, alternatively known as land tenure certificates or red books, which greatly facilitated rural lending.
- (iv) A new policy in 1989 that allowed individual households to borrow from AgriBank. This was cited by the AgriBank branches visited as a major factor contributing to the 20–30% growth per annum in rural lending over the past decade. The OEM noted that the increased supply of rural credit, and easy access to it for most rural households, played a key role in enabling self-employment, including in particular livestock rearing, which was what many interviewees used as an avenue out of poverty.

41. **Macroeconomic Growth.** Economic growth in urban areas, including in particular foreign direct investment (FDI) in HCM City, played a critical role in reducing rural poverty by creating many jobs for young migrants from rural areas. National economic growth did not,

however, seem to facilitate poverty exit in the mountain villages visited, where few people, even those with a high-school education, migrated to urban areas, apparently for lack of social connections in cities.

42. **Local Economic Growth.** Economic growth in provincial or district towns provided employment for households in nearby villages, though on a limited scale in the areas visited. Many households living within 3–5 km of towns engaged in marketing and trade. Some young males living in villages within 15–20 km of towns commuted to them early in the morning to wait for day labor. In the villages visited in Quang Nam, many farmers, both women and men, went to Da Nang, a large city about 60 km from their villages, to work as maids or in construction. In addition, many households had family members who seasonally migrated to provincial or district towns for temporary construction work. The impact of local growth, however, seemed to be marginal in mountainous regions, which remained unattractive to private investors even with good roads, due probably to the high cost of conducting commerce in remote areas.

43. **Geographic Location and Topography.** The geographic location and topography of a village played a crucial role in determining the options available for households' rise from poverty. In the lowlands visited, many households adopted multiple strategies, including (i) agricultural diversification, growing, for example, rice, coarse grains, tobacco, peanuts, fruit, as well as engaging in animal husbandry and aquaculture; (ii) off-farm employment such as trade and day labor, and (iii) migration to urban areas. As in the mountain villages, farming in the lowlands was restricted by the shortage of arable land per capita. However, households in the lowlands engaged in more off-farm activities made possible by higher population density; proximity to cities; quick, easy, and low-cost travel to commercial centers; and, more importantly, access to formal and informal urban jobs in manufacturing, construction, housekeeping, and other sectors. These options were largely unavailable to rural households living in remote mountain villages. In the mountainous areas visited in Lang Son, Son La, and Dien Bien, the OEM found little private investment. The good roads from Hanoi to the capitals of these provinces had very little traffic.

44. **Infrastructure.** The impact of good roads is manifested in the lowlands, where investment in national highways attracted FDI and other private investors. The expansion of industrial zones created thousands of jobs for the youth migrating from rural areas. The infrastructure in mountainous areas, such as the good roads from Hanoi to Lang Son, Son La, and Diem Biem did not seem to have had the same impact. Despite the roads' good quality, the mountainous regions remained unattractive to private investors, apparently because of their low population density and limited commercial activity.

45. **Population Density and Local Markets.** One major disadvantage in the mountainous regions was their low population density, which meant small local markets and little trade. Most visited households were largely self-sufficient, with little farm surplus to sell or cash to spend. In minority-dominated villages, the OEM observed households using traditional looms to make cloth, primarily for family use. The lack of marketing and trade reinforced the isolation of mountain people, who lived by subsistent farming.

46. **Access to Education.** While education is available to all citizens in Viet Nam, the cost of education and the location of schools restricted poor households' access to secondary education in some villages visited. While government policies exempted poor households from school fees, other costs, especially uniforms and boarding expenses, remained a heavy burden on poor parents. In a remote commune where a secondary school was located in the district town about 30 km away, high boarding costs kept poor parents from sending their children,

making secondary education a luxury affordable to only the better-off families (one family reportedly paying Đ5 million, or \$320, per year for their son's attendance in that school). In other cases, the OEM was told that dropout rate was high among senior high school students from rural areas, largely because of their parents' financial difficulties. In the minority-dominated areas visited, the OEM found high dropout rates even in primary schools. In one female-headed household, the OEM found a girl of 14 years in grade 4 whose younger sister, aged 9, had never been to school. At the time of the interview, the mother was planning to have the older daughter drop out of school to allow the younger one to go, because she could not afford to send both girls to school.

47. **Access to Health Services.** Health service cards were issued to poor households and households living in poor communes in the areas visited. Card holders were entitled to health services free of charge. In many cases, the OEM found that this policy had positive impacts, as the cards served as free health insurance and thereby reduced the cost of medical services for the poor. However, the policy was far from being a comprehensive safety net for the poor, because certain medicines and services—such as treatment following traffic accidents, expensive operations, and, in some communes, hospitalization—were not covered. Some poor households said that they used private doctors instead of government clinics even when they had free medical cards because their sick patients could not stand the 3–4 hours of waiting time to be treated. Some said they bought medicines at their own expense instead of using the free services from government clinics, even when they had the medical cards, to get better quality. In one case, a kidney patient said he paid Đ600,000 (\$40) to get treatment from a private doctor instead of using his free medical card because he could not afford the time for the long process of getting treatment approvals from village, commune, and district authorities. Finally, the actual implementation of this policy was restricted by the budgetary resources available to particular communes. In one poor commune visited, though all households were entitled to free health services, the commune had a monthly budget for health services of only Đ40 million (\$2,580), which was allocated on the basis of Đ10,000 (\$0.65) per capita per month. As a result, restrictions on demand were imposed. The first visit to the commune clinic was free, along with 5 days' worth of medicine, but subsequent visits and medicine supplies had to be paid for. In many other cases, the OEM was told that poor households borrowed from relatives and moneylenders to pay medical expenses that were not covered by the medical cards. In one case, while a patient was hospitalized free of charge, her family had to borrow from moneylenders to pay for moving the patient from the village to the district hospital, as well as for the food and lodging for a daughter who stayed in the hospital to take care of the patient. In two cases, households became poor as high debts piled up after borrowing from moneylenders to pay medical and associated expenses. One female-headed household sold land to repay the debt after her mother was hospitalized. Another poor interviewee said that, as he could not afford to send his wife to hospital when she was serious ill, she stayed in bed for almost a month before recovering by herself. He said that no one would lend him money because he already had high debts.

48. **Access to Credit.** In the areas visited in northern Viet Nam, the OEM was impressed by farmers' easy access to unsubsidized loans from AgriBank, which made loan application and approval simple, easy, and relatively quick for most rural residents. Most of the interviewees had taken loans from AgriBank or other PFIs, such as PCF or the Viet Nam Bank for Social Policies (VBSP). Most of the loans were used for animal rearing, which helped many families rise from poverty. The loan processing time was reportedly short, ranging from 3–5 days in the best cases to 2 months in the worst, with most interviewees reporting a period of 10 days or 2 weeks. Most borrowers used their land-use certificates, or red books, as collateral, which were kept by the PFI until the loans were fully repaid. A shortage of credit remained common, however, in the

central and southern areas visited, where demand for large and longer-term loans was high due to the prevalence of commercial farms growing coffee, sugarcane, and fruit.

49. The repayment rate was high at 95% or above, according to both loan officers and borrowers interviewed. This finding from the grassroots was consistent with nationwide statistics provided by AgriBank's headquarters in Hanoi. The good performance seemed to be attributable to multiple factors. First, commercial lending in Viet Nam, unlike the subsidized loans under some poverty reduction projects run by governments and funding agencies, was collateralized with red books, which provided borrowers with a strong incentive to repay loans, because they would not have access to new loans until they fully repaid their current loans and got back their red books. Second, local authorities were strong in rural Viet Nam, which provided strong support for rural lending by government banks. Finally, semi-official organizations, such as farmers' and women's associations, often facilitated rural lending, especially in government lending programs for the poor (paras. 59–60).

50. In spite of the achievements above, the OEM found the following weaknesses in current rural lending in the areas visited. First, due to a shortage of long-term funds, the AgriBank branches visited restricted demand for long-term loans by setting maximum lending terms, such as 12 months for short-term loans and 3 years for medium-term loans, with no provision for loans longer than 3 years.⁹ Since many farmers took AgriBank loans for animal rearing, they said that the best term for them would be 5–6 years: 2 years to raise a calf to maturity, another 2 years for the cow to produce a calf, and 2 more years to raise the calf so they could sell it as a big cow for a good return. Since AgriBank did not provide long-term lending, some borrowers agreed to take a short- or medium-term loan and requested an extension at the end of the loan period. In many cases, AgriBank permitted extensions for periods not exceeding half of the original term. To cope with this problem, a number of interviewees said that they borrowed from a moneylender at high interest to repay their loan to AgriBank and then took a second loan from AgriBank to repay the moneylender. Such transactions wasted money and time but enabled borrowers to effectively extend loans to continue their businesses. If AgriBank, after assessing a client's capacity to repay, granted him or her the second loan, it might have been better if AgriBank had allowed him or her to extend the loan for as long as the reassessment demonstrated good repayment capacity and low risk of default.

51. Second, the OEM observed a lack of flexibility in actual lending practice in some cases. In Bac Giang, some borrowers reported a ceiling of Đ5 million (\$320) for the first loan. In Quang Nam, a ceiling of Đ4 million (\$260) was imposed on loans for trading activities. These loans were considered too small to be useful by the interviewees. In some cases, borrowers were told to pay interest charges either by the month or by the quarter, which discouraged some farmers from borrowing, because they did not have monthly or quarterly income to meet the payment requirement. They said that, since they borrowed for animal rearing, they could repay all interest charges and principal at the end of the loan period when they sold the animal. This option was not allowed in many cases interviewed, though this practice might not represent a formal policy of AgriBank. In the villages visited in Phu Yen, borrowers enjoyed flexibility in loan repayment, permitted to repay any amount of principal and interest at any time on or before the due date.

⁹ The only exception was subsidized loans from VBSP, which used government or funding agency funds to run lending programs for the poor, including loans with a maturity of 5 years. The supply of the subsidized loans, however, was limited. At the time of the OEM visit, VBSP covered only 6% of the formal credit market in rural Viet Nam.

52. Third, group lending was imposed in some remote areas visited, where borrowers were required to form a group of 5–20 members to gain access to loans from AgriBank or VBSP. According to the loan officers interviewed, the primary benefit of group lending was low administrative costs to AgriBank, because the group leader would collect monthly or quarterly interest payments from all members and submit the payments to a loan officer (loan officers interviewed strongly preferred group lending). Group lending also imposed strong peer pressure for borrowers to repay, because group leaders and other members were held accountable for default by any member. While some weak members appreciated group lending, the OEM noted complaints from some strong borrowers, who said that the long time needed to form a group, up to 2 months in some cases, meant missing the best business opportunities and reduced the usefulness of the loans. Combined liability also discouraged them from participating in group lending.

53. Fourth, the OEM observed unmet demand for credit for education and emergencies. The OEM noted that many households, including the poor, would like to invest in their children's education for as far as the children can go. These parents understood the importance of education for the young generation's access to formal employment, which was their hope for a permanent exit from poverty. They were, however, constrained by their inability to cover high school-related costs. As some good students may find, after graduating from high school, formal employment, as in foreign-invested factories, long-term loans to parents to enable education investment for children may effectively and sustainably reduce rural poverty.

54. Lending for emergencies was another area not served by formal financial institutions. When asked about their coping strategies in times of emergency, most interviewees said that their options were to (i) sell animals, even with less-than-optimal timing and at depressed prices; (ii) borrow from relatives and friends without interest but with limited loan size; and (iii) borrow from moneylenders at high interest. The last option was typically used when the first two options were eliminated. The OEM interviewed households who sold land at depressed prices¹⁰ to repay the high debts that had accumulated quickly after borrowing from moneylenders. While borrowers clearly knew the high cost and risk of borrowing from moneylenders, they had no other choice because moneylenders were the only source of money available on the spot or within a same day, conveniently in a same village, and offering maximum flexibility, with no restriction on loan size or maturity and repayable in any amount at any time.

55. The OEM found that borrowing from moneylenders was common in many villages visited. Households borrowed frequently and repeatedly for various purposes—for food in times of food shortage, emergency medical payments, and repaying loans from AgriBank when no further extension was allowed. Moneylenders were better-off households in the villages, or farmers who had recently sold cows or buffaloes and therefore had extra money. In a few cases, even loans from friends and relatives were at a monthly interest rate of 2–3% if the loans were long term. To a certain degree, informal lending from moneylenders provided the safety net of last resort for rural households, albeit at a high price for borrowers. In one village, the OEM found that the interest rates charged by moneylenders were only slightly above the commercial rates charged by AgriBank and PCFs largely because of stiff competition among the numerous moneylenders in that area (para. 62).

56. Finally, subsidized loans to poor households were provided mainly by VBSP but also by AgriBank in some cases under special programs financed by funding agencies. Lending rates

¹⁰ While the land price was about Đ4 million per 1,000 m² in many areas visited, a number of poor households interviewed in Tra Vinh said that they sold land for Đ2 million per 1,000 m² under time pressure.

were 0.45% or 0.50% per month under these programs, compared with commercial rates of 1.15% per month from AgriBank and 1.35% from PCFs. The OEM observed a mixed performance from lending programs for the poor. In some cases, the repayment rate was reportedly high due to careful loan appraisal by loan officers as well as strong support from local authorities, which put heavy pressure on borrowers to repay loans. In these cases, the subsidized loans without collateral enabled poor households to raise cows, pigs, or buffaloes, contributing to their climb from poverty. The OEM observed cases where borrowers repaid the subsidized loans, rose from poverty, and continued livestock production using their own savings. In other cases, however, the OEM observed significant leakage of the subsidized loans to the non-poor, including village leaders. In a few cases, repayment rates were poor, and the farmers' and women's associations that had been involved in the lending programs collapsed. Borrowers no longer had access to formal credit due to their bad debts.

57. **Local Institutions.** In the areas visited in rural Viet Nam, local authorities were powerful, especially the chairmen of the people's committees of communes and the village leaders. The commune is the lowest level of government in rural Viet Nam; village leaders are elected by villagers and receive a monthly allowance from the government. In the cases studied, village leaders played a key role in identifying poor households based on criteria set by government programs. The identification process involved several steps, including self-assessment by all households, checks and confirmation by village leaders, and approval votes by village assemblies. Finally, village leaders submitted to communes a list of households qualified to be labeled poor. After approval by commune and district authorities, the officially identified poor would receive a poor household certificate and health service card, which entitled them to free schooling and health services. Poor households were identified yearly, with the process taking more than 3 months in some cases observed.

58. Most interviewees said that the most powerful person in their village was the village head, who connected villagers to various government agencies, explaining to them government policies and defending village interests when necessary. In two non-project villages, the OEM observed cases in which village heads took loans to invest in village infrastructure with strong support from villagers (para. 19).

59. Local authorities played an active role in facilitating rural lending by AgriBank and VBSP. First, all borrowers had to submit to banks an official permit issued by their commune authorities to officially confirm their permanent residence in the communes. This simple procedure reduced the risk of borrowers running away without fully repaying their loans. The OEM was told that no farmer could afford to offend local authorities, because they needed official help to receive certificates for free schooling and medical care and permits for other needs as well, such as migrating to urban areas. Second, village leaders played a key role in urging households to pay irrigation fees and interest charges and repay loans. In one village, however, the OEM observed how the excessive power of local authorities can do harm. A village head and a commune officer forced a poor household to take subsidized loans for them when the poor needed their permit to borrow from the subsidized lending program. In the end, the officers failed to repay the loans due to investment failure, making the poor bear the bad debt and lose future access to formal credit.

60. In all villages visited, the Government supported identical mass organizations such as associations of farmers, women, veterans, and youth, as well as fathers' foundations. Farmers' and women's associations were active in lending programs for the poor run by AgriBank and VBSP. They identified poor households, recommended borrowers, facilitated the formation of borrower groups, helped people fill in application forms, channeled loans to borrowers, and

collected interest payments from borrowers. In some cases, the associations received a commission of 3% of the interest payments they collected. The role of these organizations was minimal in AgriBank's commercial lending, though some loan officers consulted them when they needed information about specific borrowers.

61. PCFs were supported by the Government and operated only in populous areas near towns. In Tra Vinh, the OEM visited a PCF located in a district town. The PCF was formed by 17 traders and large farmers and had about 100 savers and 790 borrowers. Most of the savers were traders or better-off farmers, while the borrowers were low-income households in towns as well as farmers in nearby villages. The savers used the PCF to gain high returns for their spare money, and the borrowers appreciated the quick and easy access to loans, albeit at a monthly interest rate of 1.35%, higher than AgriBank's 1.15%.

62. The OEM did not find active informal institutions in most villages visited, probably due to the existence of strong local authorities and government-supported mass organizations. Only in one village in Bac Giang did the OEM observe informal credit groups organized by farmers. Each of the groups had 60 or more members. Each member contributed monthly Đ200,000 (about \$13) for 72 months and was entitled to a loan of up to Đ12 million (about \$774). Members of these groups were better-off families with large savings, many of them with multiple businesses including trade, small agro-processing, farming, and livestock. Moneylenders were active in that village, and competition among them resulted in an interest rate of 1.50% per month, only slightly higher than the AgriBank's commercial rate of 1.15% per month.

63. **Project Interventions.** Projects from various government agencies, nongovernment organizations, and aid agencies influenced the context in which rural households rose from poverty. For example, health service cards issued to poor households reduced medical costs for them. Under Program 135, the central Government allocated a small annual grant of Đ50 million, or \$3,200, to each poor commune. Some poor communes used the grant to build schools, clinics, bridges, or small irrigation projects. In one case, a poor commune used 2 years of the annual grants to build a 1 km road. Such a short road did not seem to contribute significantly to poverty reduction in that commune. The OEM also visited villages with reforestation programs financed by international agencies or nongovernment organizations that paid wages to participants for 3 years for tree planting and maintenance, earning extra income for those families.

64. The OEM observed strong positive impact of the RCP financed by ADB. Loans from ADB were the only source of long-term funds in the AgriBank branches visited, enabling them to provide medium-term loans of 3 years. The easy access to formal credit from AgriBank enabled many poor households to rise from poverty by raising animals—the most common strategy in areas severely short of farmland and off-farm employment. Lending from PCFs, while at a monthly interest rate higher than AgriBank's, was appreciated by borrowers due to its convenience and flexibility. Loan processing in PCFs reportedly took only 2–3 days. Repayment could be made earlier than the original plan if borrowers preferred. Loans could be applied to nonproductive uses such as school fees or motorcycles. In some PCFs, no-collateral loans were available at a high monthly interest rate of 1.7%, which was still lower than the 2–3% most moneylenders charged.

65. The impact of the RISP, however, was marginal in the cases studied. The OEM visited 12% of the subprojects completed under the RISP, including rural roads, markets, and irrigation and water supply systems. The road subprojects upgraded previously gravel inter-commune roads to a paved surface 6 meters wide and 32 centimeters thick. In most cases, the OEM

observed light traffic on the improved roads. While households along the roads appreciated the public investment that was free to them, the actual benefits seemed to be insignificant, mainly making travel on foot or by bike or motorcycle less difficult. While some interviewees (especially commune officials) reported rising prices for farm outputs after road improvement because more buyers came to the villages, the OEM noted that most households had little surplus to sell, as they had barely enough farmland for self-sufficiency. In some mountain villages visited, cassava was the only commodity sold by households. Even with a large price increase from Đ700–Đ800 (\$0.05)/kg to Đ1,200 (\$0.08)/kg after road improvement, the low-value cassava did not contribute significantly to poverty reduction. Furthermore, interviews with households about 1 km away from the roads found no impact at all, as buyers did not visit those villages even after the project investment. In these cases, the positive impact of the road subprojects appeared to be limited to a few families who opened small shops on the roadsides, as well as reduced travel difficulty for other households living along the roads.

66. Most of the project roads observed by the OEM did not link to commercial centers. In two cases, the OEM observed upgraded roads ending at a river or next to a wetland that needed a bridge. Interviewees said that if the subproject design had included a budget for bridge construction, the investment could have linked the upgraded rural roads to a national highway, and the roads would have attracted substantial business. According to project staff, however, no such budget was available under the RISP, which focused on upgrading rural roads in poor regions instead of improving road networks. Overall, the OEM found that the improved rural roads provided convenience for a small number of residents along them, but did not promote economic growth or stimulate business, due largely to the relatively isolated location of the project roads. Small populations in the subproject areas failed to attract commercial users of the roads even after their improvement.

67. The irrigation subprojects visited by the OEM suffered more problems. In Lang Son, an irrigation management company collected only 20% of the irrigation fees due at the time of the OEM visit. Some beneficiaries with farmlands located upstream of the irrigation system refused to pay because they received water with or without the ADB-financed project. Some said that they suffered from the project because water from the canal overflowed on their lands several times. In one village at the tail of the system, a canal constructed about 1 year previously had not yet brought any water to that village. The reasons were (i) insufficient water flow to the tail largely because of waste of water in upstream, including overflows and excessive water use by some upstream users for power generation or fish ponds, and (ii) the lack of a water-user group to take care of water allocation in the tail village. The village head and farmers interviewed in the tail village said that they did not know who financed the canal construction or when they would receive water. No one had informed them that they should form a water-user group to receive water. They were not in a position to complain because they did not pay for the investment. In Bac Giang, an irrigation project improved 9 km of canal, which reportedly increased the command area from 180 ha to 250 ha. In an upstream village about 1 km from the reservoir, the OEM found that only 4 ha out of the 42 ha, or less than 10%, of the paddy land in that village benefited from the subproject. Land in the village—both irrigated and not—was equally distributed to all households. In two households visited, two-fifths of their land received water with or without the project, and another two-thirds did not receive water with or without the project. Only the remaining one-third of their land received water as a result of the project, enabling a second rice crop per year. The increment in production was small, about 100 kg of rice for each household. In 2004, there was no rice increment because the land did not receive sufficient water.

68. Similarly, the drinking water subprojects visited did not seem to have a large impact on poverty reduction. These subprojects were located in district towns, where most clients were not poor. In Tra Vinh, the OEM visited a drinking water system completed in early 2004 in a district town with 2,476 households. The system was designed to supply water to 600 households, but only 288 households, or 48%, were connected to the water system at the time of the visit in May 2005, more than a year after subproject completion. The primary reason was insufficient demand. Since most households in the subproject area had their own wells before the project, some did not want to pay the connection fee of Đ400,000 (\$26) even when the water pipe passed in front of their houses. The quality of the water from their wells was as good as that from the project well, all of them deep. The primary benefit of the subproject was the convenience of running water enjoyed by the households that paid the connection fee.

69. The 12% subprojects visited by the OEM might not have been representative, as they were not randomly selected. However, aggregated data provided by the central project management unit of the RISP seemed to confirm OEM's findings. According to their data, irrigation fees to be collected as of May 2005 satisfied 25-90% of the O&M cost of the irrigation schemes. The collection of irrigation fees in lowland provinces was better than in mountainous areas, where the rate of collection reached only 30%. For drinking water supply systems, the total number of households connected reached just 60% of designed capacity.

F. Issues, Underlying Causes, and Alternatives

1. Poverty Reduction and Household Vulnerability

70. While rural poverty has been reduced substantially in the areas visited, the definition of poverty was low, and many of the non-poor interviewed seemed to be near poor. They may easily slip back into poverty when encountering such misfortunes as sickness of family members or investment failure due to price fluctuations, outbreaks of animal disease, or natural disasters. Finally, the employment prospects of the rising generation strongly affects the sustainability of a rural family's rise from poverty. Many of the rural areas visited suffered severe shortages of farmland and local off-farm employment. In these areas, the rising generation may easily become poor if most of them remain in the village and rely on agriculture.

71. The OEM found that most households could recover from one-off sickness or investment failure by themselves if given timely access to unsubsidized credit that was long term enough and affordable—that is, at commercial instead of moneylender interest rates. Given the hard-working culture in rural Viet Nam, these households could recover by reinvesting, working harder, and reducing consumption. Free or subsidized assistance from governments or funding agencies, such as medical service cards, subsidized loans, or free houses, while bringing short-term benefits appreciated by recipients, may not be the best solution in the long run. As the subsidies attracted non-targeted participants more powerful than the poor, the OEM observed leakage in the subsidized lending program, with loans going to village leaders and other non-poor who could afford commercial interest rates. In the villages visited, the supply of free houses was far below the number of eligible applicants, due primarily to budget constraints for the government program. In the long run, free money may have more negative impacts as beneficiaries and local authorities develop a culture of dependence, as has been observed in many developing countries with a long history of free assistance from funding agencies.

72. A better alternative to assist the poor and the near poor at times of misfortune may be to provide unsubsidized credit in a timely manner, with simplified procedures, short processing times, long maturity, and maximum flexibility in repayment arrangements. This should be doable,

as evidenced by real cases observed by the OEM. In Dak Lak, a visited PCF provided quick loans within 1 day for emergencies, which led to the disappearance of moneylenders in that area. In Fu Yen, an AgriBank branch allows repayments in any amount at any time on or before the due day, and this flexibility was highly appreciated by the borrowers interviewed. With concerted efforts, such good practice could be replicated in more areas to maximize the positive impacts that formal credit could have in reducing household vulnerability and rural poverty. At the initial stage of replicating this practice, emergency loans could be limited to former or existing clients of AgriBank or PCFs. Since AgriBank or PCFs already know their clients, or keep their land-use certificates as collateral, the lending risk should be manageable. If successful, this practice may encourage more rural households to borrow from AgriBank or PCFs in order to have timely access to formal credit in times of emergency.

73. Since most formal financial institutions currently do not provide emergency lending, the quick and flexible loans from moneylenders are rural households' last resort in times of emergency. It seems that outlawing moneylenders will not bring their disappearance as long as demand for their services is not met by formal financial institutions. On the contrary, banning or tightening control of moneylenders would increase their operational costs, resulting in higher interest charges to borrowers. Concerns about the harm done by moneylenders should be addressed with measures specifically targeting the harm, not by simply banning moneylenders.

74. Meanwhile, long-term loans may be provided for rural parents to invest in their children's education. Since private investment in education will benefit not only the investors and their children but also society by breaking the vicious cycle of inherited poverty, interest subsidies could be considered to encourage education investment, including in particular post-compulsory education, which creates access to formal employment.

75. Finally, public investment to control animal disease should receive sufficient attention. Given the serious impact of epidemic outbreaks on rural poverty, providing sufficient funds to accelerate research on controlling animal disease and provide free preventive treatments to all rural households seems to be an intervention effective for poverty reduction, as it addresses one of the most critical causes of household vulnerability, affecting many rural poor and near poor.

2. Public Investment in Rural Infrastructure

76. From a review of project documents, the performance of the RISP was impressive. It targeted poor regions and provided rural infrastructure—roads, markets, and irrigation and drinking water systems. It met all physical targets at a cost lower than estimated at appraisal. It used the cost savings to construct additional roads, irrigation canals, and water systems.

77. Field examination of subprojects and in-depth interviews with households, however, revealed the project investment to be less than relevant to poverty reduction in the subproject areas visited. For example, the RISP upgraded inter-commune roads from dirt or gravel to a paved surface, providing convenience to residents along the roads but not attracting private investment to the subproject areas or stimulating economic growth. Interviews with local residents found that the key constraints in those areas were a severe shortage of farmland, a growing labor surplus, and a lack of sufficient local off-farm employment to absorb the surplus labor. Without creating long-term jobs to ease the population pressure on farmland, the road investment did not seem to be relevant and worthwhile at a time that the urgent need was more employment. Furthermore, the OEM noted that households in the subproject areas had little surplus production to sell. Given the low population density in the remote areas and the lack of

commercial users of the roads, dirt or gravel roads may well serve the current needs. With the exception of government agencies, most road users traveled on foot or by bike or motorcycle, which could manage dirt or gravel roads even in the rainy season, albeit with difficulty. The small convenience for a few residents along the roads should not have been the priority of public investment. Much more poverty reduction might have been achieved if scarce public resources had been used to improve infrastructure in areas that were naturally attractive to private investors, such as lowlands adjacent to commercial centers, or areas well connected to highways or road networks, where improved infrastructure could elicit large inflows of private investment to generate long-term jobs. Through migration, surplus laborers from poor regions may leave poverty behind by finding employment in more prosperous regions.

78. The irrigation and water supply subprojects inspected by the OEM suffered more problems than the roads, including insignificant benefits from the irrigation investment and insufficient demand for drinking water to economically justify the investments. Many interviewees reported insufficient water supplies in the dry season even after the irrigation investment, which improved water availability but not significantly (para. 67). In the long run, financing of O&M will become another major concern. Even with free investments paid for by the central Government, the irrigation and water supply companies visited could not self-finance their operations, requiring staff salaries to be paid by district governments. As the water systems age, the cost of O&M will increase, and the problem of inability to collect the full amount of user fees will threaten their sustainability.

79. This analysis should not lead to the conclusion that all investment in rural infrastructure is not worthwhile or unnecessary. Whether or not a particular investment is worthwhile depends on its real benefits and costs. As this depends on local realities, there is no standard answer. The OEM asked local leaders and beneficiaries if they would have invested in the infrastructure subproject if they had had to pay the costs. In most RISP subproject sites visited, the answer was no. In one commune with an irrigation system invested by the RISP, the commune head said that their urgent need was to build 17 footbridges. Since there was no free money from external sources to finance footbridges, the commune head said that they would like to take loans to build them and repay the loans by collecting annual fees from households. His only request was the provision of a long-term loan at low interest. Since he could collect only small fees from each household every year, it might take 10–15 years to repay the loan. In a non-project village, interviewed farmers expressed their strong willingness to invest in a small irrigation system at their own expense if a long-term loan were available at affordable interest rates. These interviewees had farmland next to a stream with sufficient water, but a lot of money was needed to build a concrete dam to effectively use the water. In another case, the owner of a large rice mill said that he would like to invest in a bridge if a long-term loan were available, as the investment would help him expand his business by significantly reducing transportation costs and attracting more clients. Finally, the OEM observed cases of private investment in irrigation facilities, village roads, or small bridges by farm households or community leaders. Some of these investments were financed by loans from AgriBank, with a maturity of only 3 years. These cases seem to support the hypothesis that farmers, individually or collectively, would be willing and able to pay for infrastructure investments that bring them more benefits than costs, if they had access to long-term loans at low interest.

80. The information critical to determining the worthiness of a particular investment is available only in the particular subproject area. The grant nature of funding agency-financed projects unfortunately prompts local authorities and beneficiaries to welcome any investment

that is free to them.¹¹ The executing and implementing agencies also have strong incentives to construct as many subprojects as their budget allows, regardless of the worthiness of the investment from the viewpoint of the public, because their budget allocation is linked to physically completing subprojects.

81. To ensure that only truly worthwhile investment in rural infrastructure receives public assistance, a better alternative may be to make long-term loans available to private entities, individuals, or beneficiary representatives for investment. While interest rates could be subsidized to encourage private investment in small-scale village infrastructure (which can be seen as semi-public goods), borrowers should be required to repay the full amount of the loans. This policy will serve to test of the worthiness of the investment: If the investment is truly worthwhile, its costs can be fully recovered from its benefits, and beneficiaries should be able to fully repay the loans. In most cases, unwillingness to pay for the investment provides good evidence that it lacks worthiness.

82. This special evaluation study (SES) notes that this new idea needs pilot testing before actual implementation. Moreover, efforts are needed to search for appropriate mechanisms to deliver long-term loans and collect repayment. Given the long-term sustainability of its operations in rural Viet Nam, AgriBank may be an ideal mechanism for such lending. The OEM visited an AgriBank branch in Fu Yen, which provided 11 loans for village infrastructure investment, with borrowers being individuals (usually commune heads) who used their names to borrow on behalf of many beneficiaries. For lack of long-term funds, however, the maturity of the infrastructure loans was only 3 years.

3. The Role of Rural Credit in Reducing Poverty and Vulnerability

83. In the areas visited, rural households' access to credit played a crucial role in reducing poverty and household vulnerability for the following reasons:

- (i) Many households borrowed formally to raise animals, which made a big difference in their cash income because they had previously been subsistence farmers, suffering severe shortages of farmland and off-farm employment, and unable to migrate as they had no social connections in cities.
- (ii) Borrowing money was a typical household coping strategy in times of emergency, such as a family member falling seriously ill, especially when they had no animal to sell.
- (iii) Many poor households interviewed said that they borrowed frequently in times of food shortage and repaid after the rice harvest or when they received wages.
- (iv) When investment failed, many households coped with the crisis by borrowing and reinvesting.
- (v) In one case, the OEM observed a widow who borrowed to support her daughter's completion of high school, with the hope that the daughter might find a good job after graduating and repay the loan.

84. Suppliers of rural credit in the areas visited included (i) formal financial institutions such as AgriBank, VBSP, and PCFs and (ii) informal players such as relatives, friends, and moneylenders. For investment, most rural credit came from formal financial institutions. For

¹¹ Farmers may support even a bad project that is free to them, as long as they benefit a little from the investment, because a little is better than nothing when it is free. See ADB. 2005. *Effectiveness of Participatory Approaches: Do the New Approaches Offer an Effective Solution to the Conventional Problems in Rural Development Projects?* Available: www.adb.org/Documents/Reports/Evaluation/sst-reg-2005-01.pdf

emergencies, however, most borrowers turned to informal sources, including in particular moneylenders, who seemed to be the only source that provided the urgently needed funds on the spot or within a same day without requiring collateral and with maximum flexibility in terms of loan size and repayment scheduling. However, the high interest charged by moneylenders resulted in distress sales of farmland by some borrowers—a major factor underlying poverty reversion.

85. The OEM was impressed by the success achieved by AgriBank. In the areas visited in northern Viet Nam, rural credit from AgriBank was readily available to most rural households, including mainly near poor families and some poor as well. Success seemed to be attributable to a number of factors. First, the fairly egalitarian distribution of farmland in rural Viet Nam and the issuance of land-use certificates meant most rural households had red books¹² to offer as collateral to formal financial institutions. The red books were kept by banks and returned to borrowers only after they had fully repaid their loans. This requirement provided strong incentives for repayment and reduced lending risk. Second, local authorities were actively involved in the lending programs run by government banks. Since local authorities were powerful in rural areas, their involvement contributed to the collection of repayments in most of the cases studied. Third, most villages visited had a strong culture of repaying debts, with borrowers willing to repay when loans resulted in successful investment, even if they did not plan to borrow again. Many interviewees took only one loan from AgriBank and relied on their own savings for continued investment, reportedly in line with a culture of unwillingness to be exposed to credit risk unless absolutely necessary.

86. The OEM observed the following areas that need improvement. First, loan processing time varied significantly, ranging from 3 days in the best case to 2 months in the worst, for group lending, with most interviewees reporting a processing time of 10 days or 2 weeks. This delay was acceptable to most borrowers for investment. In emergencies, however, none could afford to wait so long. This explained the observation that most borrowers turned to moneylenders in times of urgent need. While a long processing time may be unavoidable for the first loan, as a formal financial institute such as AgriBank needs to carefully assess a new borrower, efforts may be made to simplify lending procedures to existing clients for emergencies. These clients are already known to AgriBank, and their red books are kept by AgriBank as collateral. Discussions with AgriBank staff resulted in the hypothesis that, with concerted effort, timely provision of emergency loans to existing clients is possible, with processing time reduced to 1–2 days. If this can be implemented, AgriBank could contribute significantly to poverty reduction by reducing the high costs to rural households of loans for emergencies. To start with, emergency lending could be restricted to existing clients who suffer a one-off shock, because lending to families with chronic patients could be highly risky. Even with this limitation, emergency lending could potentially save many near poor from slipping back into poverty.

87. Second, while AgriBank management in Hanoi assured the OEM that their lending policies allowed maximum flexibility, actual implementation of policies varied significantly in the areas visited, reflecting the discretionary power of loan officers at the grassroots. The OEM observed cases of setting maximum loan size, requiring lending to groups only in remote areas, limiting loan extension, and restricting loan use to productive investments. The last restriction denied borrowers' demand for loans for other purposes such as education investments and coping with emergencies, and thereby missed the opportunity to mitigate two critical causes of rural poverty. Maximizing the role that formal credit plays in poverty reduction requires removing

¹² With the exception of some young couples, who received land from parents without a separate red book, because splitting a red book required bureaucratic procedures that reportedly took a long time.

these restrictions. Formal financial institutions should be encouraged to provide unsubsidized loans to most rural borrowers based on demand and repayment capacity as well as the availability of funds. No restrictions should be imposed on loan use, size, length of maturity, or the number of extensions.

88. Third, given the need for rural infrastructure development and the shortage of grants from government or funding agencies, demand exists for long-term loans for private investment in small-scale rural infrastructure. High demand was observed in villages that had no access to free money from external sources. In a few cases, rural households contributed cash to upgrade small roads and bridges, but in most areas visited, farmers could not raise sufficient funds by themselves for infrastructure improvement. Providing long-term loans to finance such improvements, to be repaid by beneficiaries later, may accelerate rural development by alleviating the constraint of insufficient funds for rural infrastructure development. So far, lending for rural infrastructure improvement has been limited. While some visited AgriBank branches expressed interest in such lending, their lack of long-term funds was a major constraint.

89. Finally, two policy distortions continued to restrict the commercial operations of formal financial institutions. First, existing government regulations required financial institutions that provided loans to households living in remote areas do so at subsidized interest rates.¹³ While the interest subsidies were funded by the Government, reimbursement was reportedly delayed, sometimes by 1–2 years. This policy might have reduced AgriBank's incentive to expand lending in remote areas. Second, loans provided by VBSP were capped by the Government at highly subsidized interest rates of 0.45–0.50% per month, compared with 1.15% per month by AgriBank and 1.35% by PCFs. This regulation hurt VBSP's incentive to mobilize deposits, as interest rates for deposits were higher than the subsidized lending rates. The OEM feels, and international experience indicates, that interest subsidies are unnecessary and hurt the sustainability of financial institutions—and, therefore, hurt borrowers as well in the long run. International experience also shows that poor people can and are willing to pay commercial interest rates, their priority being easy and rapid access to credit, especially in times of urgent need, rather than low interest rates. Subsidized interest rates can therefore have the opposite effect of that intended by government policy by reducing the incentive and capacity of financial institutions to expand the supply of credit to the poor, thereby forcing the poor to borrow from moneylenders at interest rates significantly higher than commercial ones.

90. In the long run, both AgriBank and VBSP have to rely primarily on mobilizing deposits instead of borrowing from funding agency projects or governments, if they intend to sustain their operations on a commercial basis. To encourage savings mobilization and provide strong incentives to expand and sustain lending to the poor, it may be better if the Government allows AgriBank and VBSP to lend to poor borrowers on a commercial basis, charging interest rates high enough to cover their operational costs and lending risk. If any need exists to subsidize poor borrowers, interest coupons could be issued by the Government and distributed directly to those for whom an interest subsidy may be justified.¹⁴ The poor would take commercial loans and pay the interest charges with interest coupons; banks would issue commercial loans to the poor and collect the coupons, which would be reimbursed by the Government.

¹³ Areas in Viet Nam are divided into three zones. The current policy requires 15% interest subsidy for borrowers living in zone 2 and 30% subsidy for those in zone 3.

¹⁴ For some poor who never borrow and therefore do not yet understand the potential benefits of investment, interest subsidies for the first loan may have certain positive effects.

91. Compared with the current practice of using government funds to provide cheap loans to the poor, interest coupons may have the following advantages. First, since AgriBank and VBSP would use their own funds for lending to the poor and receive interest coupons in payment for their interest charges, scarce Government funds would be used for interest payments instead of for providing loans. Limited government funds would thus be leveraged into larger banking resources for lending to the poor. Second, since banks would use their own funds for lending to the poor, they would be more careful in appraising loans and more vigorous in collecting repayment than in the current practice of using Government funds for lending to the poor, where all lending risks and losses are covered by the Government. Moreover, when facing difficulties repaying loans, borrowers may place a priority on repaying commercial loans with a high interest rate than to cheap loans from governments. By providing appropriate incentives to both financial institutions and borrowers, this new policy may significantly reduce the risk of lending to the poor. More importantly, by allowing banks to lend to the poor on a commercial basis, this new policy may sustain poor people's access to formal credit in the long term. This SES highlights the need for careful design and pilot testing of such a new policy, which should be followed by rigorous evaluation of the pilot results before replication.

4. Household and Geographic Targeting

92. Targeting has been widely used for poverty reduction in Viet Nam. In the areas visited, the OEM observed the following methods of household targeting: (i) issuance of health service cards to poor households; (ii) issuance of poor household certificates to exempt the poor from paying school fees; (iii) provision to poor households of free houses, seed, and mosquito nets; and (iv) provision of subsidized credit. Geographic targeting was also observed, including (i) rural infrastructure improvement through government projects such as the RISP financed by ADB and (ii) limited annual grants to poor communes under Program 135 financed by the Government.

93. The OEM was impressed by the accurate identification of poor communes and poor households in rural Viet Nam. In the areas visited, communes and households identified as poor were indeed the poor ones. The following factors seemed to have contributed to this success. First, the selection criteria set by the central Government seemed to have been implemented strictly at the grassroots by strong local governments and village leaders. Second, since only a few households were identified as poor in any one village, most villagers had little chance of being selected. With no conflict of interest, most households might have been happy to help the authorities identify the poorest in their villages. Third, despite the complicated theories and methods used to calculate income poverty or measure other dimensions of poverty, in practice, it was rather easy to identify who were the poor at the grassroots. In all villages visited, most interviewees—including village leaders and ordinary households—knew who the poor were in their villages.

94. Success in identifying the poor did not guarantee, however, the success of poverty targeting, if success is measured by the number of poor households that rose from poverty. The OEM observed various problems in targeting programs. In the case of household targeting, the primary weakness was the small coverage of the targeting program, due primarily to limited budgetary resources for program operation and, consequently, supply being far outstripped by demand stimulated by the grant nature of the program benefits. In the areas visited, only a few villages provided free houses to the poor, and the actual coverage was about 10% or less of eligible applicants. The free health service cards were distributed to all poor households or all households in poor communes. However, certain treatments and certain medicines were not covered by the program. A more binding constraint was the budget actually allocated to a

particular commune. In one case, the budget was allocated on a basis of Đ10,000 (\$0.65) per capita per month. To operate the program within a given budget, restrictions on demand were imposed, including providing medicines on a first come, first served basis, which denied latecomers, who might have had the most dire need for help.

95. In the case of geographic targeting, the primary weakness was less relevant investment financed by projects. The OEM found that many subprojects under the RISP provided small benefits to a few residents in the subproject areas but failed to mitigate the key constraints that held rural households in poverty. Typically, the rural roads that were upgraded neither stimulated economic growth nor brought in business. Even with good roads, poor mountainous regions remained unattractive to private investors, when investments in lowlands brought in much higher returns.

96. In both household and geographic targeting, leakage of project benefits, including subsidized loans, to the non-poor was observed despite the accurate identification of poor households and poor communes. The *Viet Nam Development Report 2004* provided more data on the percentage of beneficiaries who were non-poor under various targeting programs. Leakage was estimated at 25.1% under the subsidized lending programs, 28.6% under the healthcare cards, 30.2% under the education fee exemption, and 44.8% under Program 135, which has provided annual grants to poor communes since 1998.

97. A major cause of the above problems seems to be incorrect assumptions underlying the targeting approaches, including that (i) poor people live in poor regions, (ii) money or public investment flowing into poor regions will automatically lead to poverty reduction, and (iii) the solution to poverty reduction in a poor region is within that region.

98. The OEM found inconsistencies between these assumptions and the observed realities. First, a bulk of poor people in Viet Nam live in less poor regions. Despite the high poverty incidence in the poor, remote regions, the absolute number of poor people in them was relatively small because of their low population density. A recent study on the spatial patterns of poverty in Viet Nam concludes that “most poor people live in less poor areas.”¹⁵ Second, available studies showed that locating a development project in a poor region did not guarantee significant impacts on poverty reduction, if the project interventions did not mitigate the key constraints on poverty reduction there.¹⁶ Finally, the solution to poverty reduction in the poor regions visited by the OEM seemed to lie largely outside those regions, where the primary causes of poverty included a severe shortage of farmland, a large and growing labor surplus, and insufficient local off-farm employment to absorb the surplus labor. The rural infrastructure completed under RISP did not address these key issues and did not make a significant difference in poverty reduction in the areas visited. A more effective and long-term solution to poverty in those regions seemed to be migration of the surplus rural labor out of agriculture and away from the poor regions, so that the remaining farmers might cultivate sufficient farmland to make a decent living. This approach requires (i) fast economic growth in non-poor regions to fuel the creation of large numbers of long-term jobs outside of agriculture and (ii) the orderly migration of surplus rural labor out off poor regions.

99. Based on its findings in the field, the OEM developed the following hypothesis. Targeting may be effective in welfare programs to channel public assistance to a desired group by

¹⁵ Minot, N. (IFPRI), B Baulch (IDS), and M Epprecht (IFPRI). 2003. *Poverty and Inequality in Viet Nam: Spatial Patterns and Geographic Determinants*. Washington, D.C. (page 71).

¹⁶ ADB. 2002. *Project Performance Audit Report on the Second Barani Area Development Project in Pakistan*. Manila.

excluding the undesired groups. Extending its use to investment projects aimed at poverty reduction, however, does not seem to be appropriate. For effective poverty reduction, project interventions need to be tailor-made based on a thorough understanding of the primary causes of poverty in the particular project areas. The targeting approaches, by focusing narrowly on accurately identifying the poor and excluding the non-poor, ends up separating the poor from the most dynamic actors in society, isolating them from the mainstream of economic growth, which is often led by the non-poor, and leaving them to rely on government subsidies or external assistance. History shows that large-scale poverty reduction has been achieved by economic growth, not by targeting programs. As concluded by the *Viet Nam Development Report 2004*, the spectacular success in reducing poverty in Viet Nam “took place in the absence of a mechanism to measure poverty or target the poor based on international standards” (footnote 6, page xvi).

100. Instead of narrowly focusing on locating projects in poor regions by geographic targeting, or on benefiting the poor by household targeting, a more effective way to reduce persistent poverty in poor regions may be infrastructure investment in areas naturally attractive to private investors, with a view toward creating a lot of long-term jobs. Meanwhile, special programs may be designed to facilitate the orderly migration of surplus rural labor from poor regions to the places where the jobs are. This may be a better approach for ADB assistance.

101. As a key constraint to labor migration was poor households’ lack of social connections in cities, especially those living in remote regions without a history of migration, special programs may be financed by ADB to help a first batch of young people migrate from poor, remote regions to cities. These programs may

- (i) encourage factories and companies to hire qualified young people such as high school graduates from remote areas by offering government assistance for their recruitment;
- (ii) select, with assistance from schools and local authorities, high school graduates as participants from remote villages currently without migrants; and
- (iii) provide temporary housing for these young migrants for their initial days in cities.

It is reasonable to assume that, if these young migrants settle down successfully in cities, they will become social connections assisting their fellow-villagers’ migration to cities in the future, so assistance need be given to only the first batch of migrants from a particular remote village currently without migrants. Government programs do not need to provide training, which can be and is effectively arranged by employers, who know their training needs best.

CASE STUDY: PEOPLE'S REPUBLIC OF CHINA
Chengdu–Nanchong Expressway Project (Loan 1638-PRC)
Southern Yunnan Road Development Project (Loan 1691-PRC)

A. Introduction

1. Selection of the Projects for Case Studies

1. Two projects in People's Republic of China (PRC) were included in the study: (i) the Chengdu–Nanchong Expressway Project, financed by Loan 1638-PRC for \$250 million and approved in 1998, and (ii) the Southern Yunnan Road Development Project, financed by Loan 1691-PRC for \$250 million and approved in 1999. Both projects had been completed. The former was located in Sichuan Province and rated highly successful by the project completion report prepared by Asian Development Bank (ADB). The latter was located in Yunnan Province and rated successful by the project completion report prepared by ADB.

2. Fieldwork of the Operations Evaluation Mission

2. An operations evaluation mission (OEM)¹ visited areas under these two projects from 20 July to 16 August 2005. In Sichuan Province, the OEM visited the 208 kilometer (km) project expressway as well as two of the five local roads upgraded under that project (supposedly to be financed by the ADB loan, see para. 64). For comparison, the OEM also visited local roads in two counties upgraded without assistance from the project, as well as National Highway G318, which was replaced by the project expressway. In project and non-project areas, the OEM conducted in-depth interviews with 42 rural households in eight villages that belonged to seven townships in six counties. In addition, the OEM briefly interviewed 14 shop owners in small towns and held lengthy discussions with four owners and/or managers from three private companies that invested in the project areas. In addition to meetings with the Sichuan Provincial Communication Bureau (the Executing Agency of the project) and the Chengdu–Nanchong Expressway Corporation, the OEM held discussions with county transportation bureaus, poverty reduction and development offices, business bureaus, and township and village leaders.

3. In Yunnan Province, the OEM visited the 147 km project expressway and National Highway G213, which it replaced. In addition, the OEM visited many local roads, including those connecting two counties and those running from counties to townships, from townships to administrative villages, and from administrative villages to sub-villages, or so-called "natural villages" under administrative villages. These roads were all developed without ADB financing, though some were included in the ADB project as add-on components. In project and non-project areas, the OEM conducted in-depth interviews with 51 rural households in eight villages that belonged to eight townships in five counties. In addition, the OEM briefly interviewed six migrants who had migrated from poor villages and were working in shops and restaurants in Simao City, which is located near an exit of the project expressway. In addition to meetings with the Yunnan Provincial Communication Bureau and the Yuangjiang–Mohei Expressway Corporation, the OEM held intensive discussions on rural poverty issues with various government agencies including the Provincial Poverty Alleviation and Development Office, Provincial Education Bureau, Provincial Health Bureau, Provincial Treasury Bureau, Labor and Social Protection Bureau, and Provincial Civil Affairs Bureau, which is in charge of welfare programs for the most needy in rural areas. In the five counties visited, the OEM held in-depth

¹ The OEM comprised a senior evaluation specialist from ADB as mission leader, one international consultant, and two interpreters. In addition, one local consultant participated for 15 days of the fieldwork.

discussions with county heads and poverty reduction officials, as well as with village and township leaders and field staff who worked directly with farmers. Finally, the OEM interviewed 11 managers or staff members of agricultural companies in project and non-project areas whose investments included tobacco, tea, sugarcane, coffee, and rubber.

4. Altogether, the OEM visited 16 villages and conducted 204 interviews during its fieldwork in the PRC, including (i) in-depth interviews with 93 rural households, (ii) individual discussions with 76 government officials (13 from provincial agencies, 30 from municipalities and counties, and 33 from townships and villages), (iii) individual discussions with 15 managers or staff members from commercial companies or financial institutions, and (iv) brief discussions with 14 shop owners and six migrants working in shops and restaurants. To understand the role of ADB projects in households' rise out of poverty, the OEM visited areas both close to and far from expressways and local roads. Table A3 provides a list of areas visited.

Table A3: Project Areas Visited

Municipality	District/County	Township	Village	Sub-village
A. Sichuan Province				
Suining	Daying	Yufeng	Yuyin	
	Shehong	Dayu	Wujiaqiao	
	Pengxi	Mingfeng	Kuantai	
Nanchong	Gaoping	Yong'an	Qianjin	
	Nanbu	Shuangfeng	Caojiawo	
	Jialing	Datong	Longtaisi	Sufenba
B. Yunnan Province				
Yuxi	Yuanjiang	Mili	Mengpeng	Halou
		Wazhi	Nibai	Dulongyi
	Mojiang	Shuanglong	Lali	Kala
		Longba	Lushui	Lushui
			Hapulu First	Damiduo
Simao	Pu'er	Dehua	Pojiao	Wotuo
	Cuiyun	Yixiang	Yingpanshan	
	Menglian	Mangxin	Bangshun	

Source: Operations Evaluation Mission.

B. Results of Poverty Exit

1. Poverty Reduced

5. Poverty was reduced substantially in the areas visited. In Sichuan, poverty was estimated by some interviewees at less than 3% in the better-off areas and less than 10–20% in the poorer villages. The definition of the poor that they used was people with enough to eat but no cash in hand. The poorest households could not afford electricity and used oil lumps even when electricity was available in their villages. Poverty incidence seemed to be higher in the

villages visited in Yunnan, which was dominated by mountainous regions with 25 ethnic minorities. While hunger poverty was not observed, the OEM visited hardcore poor who lived on less than CNY668 per capita per year,² and other poor who lived on less than CNY924 per year. In addition, there were many low-income or near-poor households in the poor regions visited in Yunnan, who relied mainly on grain production without cash crops or off-farm incomes. These people reportedly could not afford to pay medical bills and had little capacity to cope with shocks, and so were at high risk of returning to poverty.

6. Non-income dimensions of poverty were also observed, including a shortage of drinking water, poor housing conditions, long distances to travel to primary schools and clinics, lack of all-season roads, and isolation from the dynamic growth of the outside world. Even where government clinics were available in all townships and counties, many poor households interviewed said that they could not afford the fees and used private village doctors who charged less.

2. Causes of Remaining Poverty

7. Rural poverty had various causes. Some of the hardcore poor interviewed lacked capacity to help themselves, such as the disabled, the aged in their 70s–80s, people lacking family labor, or households with at least one chronically or seriously sick member. For the poor able to work, the causes of poverty seemed to include the following: (i) a severe shortage of land, where farmland per capita was inadequate or merely sufficient for self-consumption, with little surplus for sell; (ii) a poor external environment in remote mountainous regions with small local markets and expensive access to outside markets; and (iii) low human capital due to limited education, difficulty in speaking Mandarin Chinese, lack of aggression or ease of contented, or lack of courage to face exposure to the outside world. This last cause seemed to be common among the poor minority households visited in Yunnan.

3. Sustainability of Poverty Exit

8. While the majority of the rural households had risen from poverty in the areas visited, risks remained that may threaten the sustainability of that exit. The following risk factors seemed to be most relevant:

- (i) First was serious sickness of family members, which led to high bills for medical services and related expenses, such as the cost of family members' staying in the hospital to take care of the sick and, in some cases, the loss of family labor. While only a few interviewees actually suffered from serious sickness, it was one of the most common concerns of many.
- (ii) Second was natural disasters such as droughts, floods, and epidemic outbreaks of animal or crop disease. Unlike in other parts of the PRC, this risk was relatively low in the areas visited in Sichuan and Yunnan, which are particularly suitable for agricultural production, with a mild climate and relatively good soil.
- (iii) Last was the employment prospects of the rising generation. Even in areas currently with sufficient farmland per capita, if most of the young remained in the village and relied on agriculture, the labor-to-land ratio would deteriorate, and the shortage of farmland for the new labor might eventually lead to cultivating steep slopes and therefore threatening the sustainability of natural resources. This last risk was less a concern in the areas visited in Sichuan, where most of the young generation had migrated to coastal provinces. In the areas visited in Yunnan,

² After the OEM fieldwork, the official poverty line for hardcore poor was raised in 2006 to CNY683.

however, migration to other provinces was less common due to many factors, including (a) limited education and language barriers among minorities, (b) lack of social connections in cities, and (c) a culture of reluctance to go far from home and for being less aggressive and easily contented.

C. Poverty Exit Strategies

9. Farmers in the areas visited adopted various strategies to escape poverty. These varied among households and across regions, as discussed below.

1. Migration

10. In the villages visited in Sichuan, migration was the primary strategy to escape poverty used by the great majority of households in the past 10–15 years. In many villages, almost all families had at least one young member who had migrated. Most of the migrants went to coastal provinces, while the remaining worked in inland provinces or autonomous regions such as Xinjiang, Qinghai, and Guizhou. Almost all migrants worked in non-agriculture sectors such as manufacturing, construction, and services. Due to a long history of migration in Sichuan, most rural households had contacts in other provinces such as relatives, friends, or other fellow-villagers, who provided information about job opportunities for those still in the villages. Most migrants sent back remittances two or three times a year, averaging CNY1,000 per year in the cases studied, and brought additional cash with them when they visited home during holidays. They helped with additional cash when their families faced emergencies, especially the sickness of a family member. In Sichuan, the OEM interviewed some migrants who had returned to their hometowns and invested in agriculture or rural industries and/or services, using savings from wages accumulated when they worked as migrants.

11. The situation was rather different in areas visited in Yunnan, where migration was less common for several reasons. These included (i) limited education, with school dropout rates high among the minorities even in elementary schools; (ii) language barriers, as many minority people could not speak fluent Mandarin; (iii) lack of social connections in cities because very few people had migrated in the past; and (iv) a culture of being reluctant to go far from home and being less aggressive and easily contented. These factors combined to make young people reluctant to migrate, leaving households with few alternative strategies to rise from poverty. Nevertheless, seasonal migration within the county or in neighboring counties was observed, mostly during winter when there was no farm work.

12. The OEM observed the following positive impacts of migration:

- (i) It enabled a rise from poverty for the migrants themselves, who had been surplus labor in their villages before migrating.
- (ii) It reduced the financial burden on the migrants' parents. Many parents interviewed said that at least they did not need to support their children after they migrated.
- (iii) It reduced population pressure in villages.
- (iv) Remittances from migrants became a main source of cash income for families that remained in the villages and were crucial to cover education fees, the construction of new houses, weddings and funerals, medical services, and medicines, especially for households that relied on subsistence farming with little cash.

- (v) Remittances increased the cash available in villages, enabling informal lending among villagers, as poor people were able to borrow more easily when periodic remittances increased their repayment capacity.
- (vi) Savings from wage earning enabled some migrants to return home and start a new business, which generated employment for themselves and for others (para. 10).

2. Government Organized Migration and Resettlement

13. Cases were observed in the PRC in which government interventions aim to facilitate the migration of rural labor out of surplus areas. In a migration program in Menglian County, Yunnan, the county government had agreements with local governments in Shanghai and Guangdong Province to help its migrants to those destinations. Under that program, the Menglian government helped migrants by subsidizing transportation, while the Shanghai and Guangdong governments helped migrants make contact with potential employers. At the end, participating companies offered the first job for migrants, who received low wages as interns for their first year but gained experience. In Sichuan, some local governments offered training courses for potential migrants. In one visited village with 120 households, the county government provided training to 10 villagers willing to migrate to other provinces. With a view to providing new skills to facilitate job hunting, each month-long training course focused on a particular set of skills, such as electronics or wine making. Nine of the 10 participants migrated in 2004 or early 2005 and reportedly found jobs related to the training they received, and the last participant stayed in the county and got a job in a winery.

14. Though well intentioned, these government interventions were not free of problems. First, the interventions were costly for both participants and governments. In one village, the OEM was told that 15 people had applied for a migration program but eventually only one participated, because the other 14 could not afford the CNY480 fee required even after being partly subsidized by the county government. Second, some participants not seriously interested in migration were attracted to the program because it provided a free medical check up. These people returned home shortly after migrating. Third, some participants were interested in migrating but preferred destinations other than the ones arranged by the programs. The OEM interviewed a female participant who left her factory in Shengzhen, where she worked as a program participant, after only 6 months. After returning to her village, she planned to migrate again but at her own expense and to her choice of destination. Many other participants left the Guangdong factory jobs to which they were assigned under the program and later moved to Shanghai instead of returning to their villages. In spite of these problems, the migration programs seemed to have achieved the objective of facilitating surplus labor migration from poor regions, although not to the cities intended.

15. The OEM also observed resettlement programs organized by governments, frequently for an entire village that was displaced by government infrastructure projects. In Yunnan, a program organized by local governments imported settlers from a mountainous region with a harsh climate to areas with good farming conditions and a labor shortage. Under that program, land was given on concessionary terms to a private company for tea production, which hired the settlers who participated in the program. The program provided settlers with construction materials for building new houses as well as stipends to cover basic living expenses during the first few months, at a cost of about CNY10,000 per settler. The tea company provided each participant with an area of tea to manage and harvest, paying them CNY2 per kilogram (kg) of tea surrendered. Most settlers ended up better off than they had been in their home villages. Later, other households migrated to the tea areas without government help, sometimes with

help from earlier migrants. The OEM was told that about 20% of the government-sponsored settlers returned home after a while for various reasons, while all those who had migrated at their own expense remained.

16. In Menglian County, Yunnan, a coffee company supported by local governments hired migrants from poor regions as farm laborers, who were organized by the company into various specialized production teams, each with about 100 migrants. The company provided the new workers with construction materials to build houses, a stipend to cover living costs for the first 3 months, and a small parcel of land to grow grain for home consumption. In addition, each household received 5 mu (one-third of a hectare) of land for coffee production. The program reportedly worked well, and the migrants interviewed were better off than they had been. While government-organized migration and resettlement helped the settlers rise out of poverty, the programs' cost per participant was high, and the number of households rising out of poverty was relatively small.

3. Agricultural Intensification and Intensification

17. In the areas visited, agriculture provided an avenue out of poverty in the early stages when farmland per capita was sufficient. The household responsibility system, adopted in the late 1970s, distributed land-use rights to individual households and provided strong incentives for farmers to increase production. Nationwide, total agricultural net value increased by 55% from 1978 to 1985, and agricultural productivity increased by 40%.³ Substantially increased agricultural production resulted in the first large-scale poverty reduction in the PRC in the early 1980s. Many interviewees said that they rose from poverty during that period.

18. Higher grain production in the mid-1980s allowed the Government to relax controls on grain production and marketing. As it did so, while increasing farmgate prices, many farmers diversified away from grain production to cash crops, which brought better market prices. Agricultural diversification was therefore adopted as another avenue out of poverty.

19. As the production of cash crops, fruit, fish, and animal products burgeoned, their market prices have dropped significantly in many places in the PRC, especially since 2000. Typically, the first batch of farmers who adopted a new crop earned a sizable profit. Many of the latecomers, however, did not enjoy the same fortune. In particular, many of those who followed the new practice at a very late stage, when prices had fallen sharply, suffered significant losses.

20. Agricultural intensification and diversification continued in the 1980s and 1990s. In particular, hybrids of rice, maize, and potato substantially increased crop yields. However, input costs also increased as the use of purchased inputs such as fertilizer and other chemicals intensified and their prices rose. Further intensification of agricultural production over already high yields proved expensive. In spite of higher crop yields, agricultural intensification was not an effective strategy for poverty reduction in the later stage due to the high cost of inputs. Few farmers interviewed managed to rise from poverty through intensified agriculture at this stage.

³ Lin, Justin Y. 1993. *Cooperative Farming and Efficiency: Theory and Experience from China*, edited by Csaba Csaki and Yoav Kislev. *Agricultural Cooperatives in Transition*. Boulder: West View Press, 207–226.

4. Contract Farming

21. A more recent change in cropping patterns has occurred in Yunnan since the late 1990s and early 2000s, as contract farming with private or government-owned commercial firms played a lead role in introducing new crops and reorganizing the value chain from production to processing and marketing. Commercial firms signed contracts with individual small farmers, provided them with technical assistance and farm inputs, and purchased their production. This model became quite common in several counties visited in Yunnan for producing tobacco, tea, coffee, and sugarcane.

22. For tobacco production, the processing firm Yuxi Hongta Tobacco Group Limited, which is part of the larger Hongta Group conglomerate, decided to expand tobacco cultivation to mountainous regions in southern Yunnan Province, the biggest tobacco-producing province in the PRC. Until the early 2000s, tobacco was concentrated in the center of the province, close to the main processing facilities in Yuxi County. Partly as a result of expressway construction, which sharply reduced transportation time and cost for farmers selling fresh produce in Kunming, many tobacco producers decided to shift to growing flowers, which have much higher value. In addition, the tobacco company found that climate and soil conditions in the mountain regions in southern Yunnan were exceptionally good for tobacco.

23. The OEM visited commercial tea-producing companies in two counties. In Menglian County, a private company had contracts with individual households that had their own small tea plantations. The company provided farmers with technical assistance and farm inputs, purchased their production, and deducted the input costs from the crop payment after the harvest. In Cuiyun District, a commercial company obtained long-term concessions from the local government to invest in new tea plantations on public lands. It signed contracts with rural households for them to manage a small area of tea, about 2.5 mu per laborer, who received a management fee of CNY30 per mu per month during the first 2 years, when there was no harvest, and thereafter CNY1–CNY2 per kg of tea leaves harvested.

24. Sugarcane cultivation observed in a village in Menglian was somewhat different. A private processing firm was the main buyer for small farmers, and two private intermediaries, called “bosses,” became the major actors organizing small producers. The private firm signed a single contract with each boss, who then obtained loans to provide farmers with inputs, purchased sugarcane from them, and sent it to the firm’s processing facilities. Once the firm received the sugarcane, it paid the bosses, who then paid individual farmers. Many farmers relied on their bosses for other credit needs as well, including loans for emergencies.

25. In the cases above, commercial firms and private bosses played a key role in agricultural diversification and poverty exit. Compared with small individual farmers, commercial firms had better access to financial resources and agricultural technology and stronger capacity to operate in the changing commodity markets. In some cases, the OEM observed that prices paid to farmers for their crops were very low, in particular for tea, and the implied interest for the loans to farmers was too high in the case of sugarcane. The situation observed by the OEM is similar to what critics of contract farming have reported in several other studies. However, the OEM noted that almost all interviewees said that they were better off now than they had been before becoming contract farmers. Furthermore, the experience of contract farming in other countries shows that low prices paid to farmers was a common problem at the beginning of contract farming, because commercial firms tend to enjoy monopolies that leave farmers little negotiating power. However, experience also shows that high profits tend to attract more commercial firms, giving farmers more options and enhancing their capacity to negotiate better prices for their

crops. As time passes, farmers may gain negotiating experience and form organizations for collective bargaining, which may help them get better prices.

5. Off-farm Employment in Rural Areas

26. Off-farm employment was rather limited in many poor villages visited. In Sichuan, township and village enterprises played a primary role in absorbing surplus rural labor in the 1980s and 1990s. This has largely ceased at the current stage, as these enterprises became uncompetitive with large manufacturing enterprises after the economic reforms improved efficiency in urban areas. In the areas visited in Sichuan, the local industries employed only a small number of nearby farmers. Many interviewees said that wages offered by the local industries were much lower than what migrants could earn in coastal provinces. Only in villages adjacent to cities did the OEM observe farm households engaged in services. In contrast, small towns and cities visited in Yunnan absorbed a relatively large number of migrants from villages within the same province, especially in the service sector. One factor underlying this observation was a culture in Yunnan in which farmers were reluctant to go far from home. Because of insufficient social connection in cities, rural households in Yunnan had fewer migration opportunities than their peers in Sichuan.

D. Household Resources

27. Household resources include physical, financial, natural, human, and social capital. In the areas visited, the following household resources had the largest impacts on poverty reduction.

28. **Farmland.** While the quantity and quality of farmland per household was homogeneous within the same village, great variation was found across regions, depending on population density and land quality. In Sichuan, population density was high, so each household received only tiny plots of between 2 and 5 mu, or 1,300–3,300 square meters—barely sufficient for subsistence, with little or no surplus for marketing. Thus, if the rising generation stayed in the village, they would not find it possible to live by agriculture, as their parents would not be able to give them land without compromising their own welfare. In most cases, young people had no choice but to migrate in search for jobs. This is an important reason why migration to coastal provinces started as early as in the late 1980s in the villages visited in Sichuan.

29. In contrast, Yunnan had a much lower population density, with more land available per household. In the villages visited, each household had between 20 and 30 mu, and even 50–60 mu per household in some areas, where farmers were allowed to open new land on their own. In addition, the soil quality was good in Yunnan, and the altitude of 1,000–1,500 meters was ideal for such cash crops as tobacco, tea, sugarcane, and coffee. This made possible introducing cash crops, which became the main avenue out of poverty among households in the villages visited.

30. **Physical Assets.** All households interviewed had houses, though the quality varied significantly, reflecting living standards. In the villages visited in Sichuan, building or improving houses seemed to be the highest household investment priority, using remittances sent by migrants. In most villages visited in Sichuan, most of the houses in the villages had been improved in the last few years, as almost all households had at least one migrant. It seems that the quality of houses was more the result of poverty alleviation than a cause. In villages visited in Yunnan, the quality of houses was substantially lower, reflecting lower living standards, the absence of remittances, and lower capacity to save.

31. **Equipment.** In Sichuan, agriculture was mainly for subsistence, so households made almost no investment in equipment. Many families had motorcycles, which were used for family transportation rather than income generation. As with houses, the availability of equipment was more the result of poverty reduction than a factor affecting it or the avenue chosen out of poverty. In the tobacco villages visited in Yunnan, the most important household investment was a small device used to measure the temperature and humidity in the tobacco-drying room.

32. **Savings and Other Financial Assets.** Most rural households interviewed in Sichuan had savings accounts in rural credit cooperatives (RCCs). Most of the savings came from remittances from migrants and served mainly for school fees for children or to deal with emergencies, especially for paying for medical services and medicines. The OEM found only a very few cases of savings being used for investment in agricultural production.

33. In contrast, most households in the villages visited in Yunnan did not have savings accounts in RCCs. Some households had borrowed from RCCs in the past without repaying in full, so they were afraid to open savings accounts because the RCC might seize their savings. In these villages, pigs or other animals were the more common form of savings. In Yunnan, household savings came from selling such cash crops as tobacco, tea, and sugarcane, instead of from remittances. They were used mainly for improving houses, building drying rooms for tobacco, and paying medical bills. Household savings were rarely used for purchasing inputs, which were provided by the private companies or bosses, who deducted their cost from payments made to farmers for their crops.

34. **Human Capital.** The OEM observed substantial disparities in schooling in the villages visited in Sichuan and Yunnan, which related to topography (lowlands versus mountainous areas) and ethnicity. In Sichuan, the villages visited were in lowlands with good roads linked to townships and county cities. Most households valued education and invested in their children's education. Most adults, both men and women, had completed primary school, and many were secondary school graduates. A few households even had children attending university in Chengdu, the provincial capital.

35. In contrast, the villages visited in Yunnan were located in mountainous areas, and many of them had poor communications and roads, and so difficult access to townships and larger cities. Ethnic minority groups were dominant, and most households did not value education. While most adults had a few years of primary schooling, many had not finished the 6 years of primary education, and some adults, especially women, were illiterate. In most villages visited, the ethnic minority people could not speak Mandarin, though in villages with two or more minorities, Mandarin was used as the common language.

36. Finally, personal characteristics affected the selection of poverty exit strategies and their success. While almost all households visited were hardworking, other personal characteristics were important in determining capacities to migrate and find off-farm employment.

37. **Social Capital.** For migration and off-farm jobs, social networks and connections in the outside world—relatives, friends, or other fellow-villagers in cities or other provinces—seemed to be most critical. In the villages visited in Sichuan, migration to coastal provinces started in the late 1980s or early 1990s, so most households had relatives who had migrated and worked in industries or construction there. Migration therefore became an easy decision, as social connections helped new migrants with information about job opportunities and provided them

with accommodation for the initial days after their arrival at cities. The social connections substantially reduced the risk and cost of migration.

38. In the absence of social connections, as was observed in the villages visited in Yunnan, the risks felt by potential migrants (most of whom had no experience of living and working in the outside world) and the actual costs of migration were high, because migrants had to pay for a place to stay and look for a job by themselves. County governments in Yunnan tried to solve this problem by collaborating with local governments in Shanghai and Guangdong. These efforts consisted of training potential migrants, subsidies to cover transportation costs, and assistance in finding jobs through contacts established between the Shanghai and Guangdong governments and companies located there. The results of their efforts, however, were mixed (paras. 13–14).

E. Context and Conditions

39. The conditions faced by the poor played a key role in determining the options available to them for escaping poverty and influenced their selection of strategies.

40. **History and Culture.** The OEM found that history and culture varied significantly across regions and influenced poverty exit strategies. Villages visited in Sichuan had a history of migration since the late 1980s because population density was high and households had insufficient land. In contrast, most villages in Yunnan were located in mountainous areas without a tradition of migration, and most interviewees considered migration highly risky. In addition, villages in Yunnan were dominated by ethnic minorities mostly unable to speak fluent Mandarin. This language barrier added further difficulty to migration, and the few people who migrated had gone to small towns within the same county where they had no language problem.

41. **Gender.** Men and women in the villages visited in Sichuan appeared to play an equal role in family decisions. In most cases, the OEM found couples that had migrated together. Occasionally, the OEM observed families in which the woman migrated and the man stayed at home to farm and take care of the rest of the family. In many of the interviews in these areas, women were as active, or more so, in answering questions than men, reflecting their knowledge about household decisions. In contrast, men usually dominated the conversation in the minority-dominated villages in Yunnan. This seemed at least partly because of the language barrier, as women in these villages tended to be less educated than men and less able to understand Mandarin.

42. **Policies and Politics.** Government policies strongly influenced the choices available to rural households in the selection of poverty-exit strategies, as well as their success or failure. The OEM identified a number of important policy reforms in the PRC that have brought large-scale poverty reduction in the PRC (paras. 69–71).

43. **Macroeconomic Growth.** The PRC experienced rapid economic growth in the past 2–3 decades, especially in the coastal provinces particularly attractive to private investors, both domestic and foreign. The rapid growth of the national economy played a critical role in reducing rural poverty by creating many jobs for young migrants from rural areas. This was particularly relevant for the households visited in Sichuan, as almost all of them had at least one member who had migrated to a city or another province. In contrast, national economic growth did not seem to have a significant impact on poverty reduction in the mountainous villages visited in Yunnan, where few people migrated to urban centers.

44. **Local Economic Growth.** In Sichuan, economic growth in county cities or townships provided employment for some households living nearby. However, the impact of local growth on poverty reduction seemed to be limited. In these areas, most interviewees stressed that the wages offered by local factories were very low, about half of what was paid for similar work in coastal provinces. Since most households had the option of migration, employment in local industries was not particularly attractive. This was not the case in Yunnan, however, where many interviewees preferred to work in industry or services in small towns close to home. The OEM interviewed some young women who had migrated from villages to county cities or townships and worked in restaurants or shops. They seemed to be satisfied with their off-farm jobs. In addition, the OEM interviewed a few males who migrated seasonally within the same county to work in agriculture, for example digging holes to plant rubber. The wages they earned were low but still better than subsistent farming at home.

45. **Geographic Location and Topography.** The geographic location and topography of villages seemed to be important factors determining the choices available to rural households for escaping poverty. In the lowlands visited in Sichuan, households adopted poverty exit strategies based on intensifying and diversifying agriculture between the late 1970s and the mid-1980s. After that, migration to urban areas or other provinces became the main household strategy to escape from poverty. In contrast to the cases observed in Viet Nam, trade and other off-farm activities in rural areas were not important poverty exit strategies in the areas visited in Sichuan, in spite of very high population densities. Some households did invest in small shops or restaurants in small towns near their villages, but they did so after they had risen from poverty, mostly with savings accumulated when they worked as migrants outside of agriculture. After years of migration, they returned home for personal reasons, such as the need to take care of aged parents, and used savings to start their own businesses in their hometowns.

46. In contrast, the villages visited in Yunnan were located in mountainous areas with relatively abundant land and a climate suitable for a number of cash crops, such as tobacco, tea, sugarcane, and coffee. Population density was relatively low in these areas, which had poor roads, difficult communications, and minority residents with little education. These factors discouraged private investment in manufacturing and enhanced the comparative advantage of commercial agriculture over manufacturing. The OEM noted that county governments in Yunnan focused on attracting private firms to invest in commercial agriculture in their counties and developed measures to facilitate contract farming. This influenced farmers' selection of agricultural diversification as their main poverty exit strategy.

47. **Infrastructure.** Despite the belief that infrastructure investment automatically has a direct and significant impact on poverty reduction, the OEM found that the real impact of infrastructure investment on poverty reduction varied across regions depending on local conditions in the particular area. In the villages visited in Sichuan, the OEM found a weak relationship between investment in an expressway or local roads and rural households' rise from poverty. In these villages, most households escaped from poverty through the migration of younger members to cities or other provinces. Their ability to migrate was due to (i) the many jobs created by rapid economic growth in the PRC in the past 2–3 decades, (ii) an integrated labor market nationwide, and (iii) easy access to information about job opportunities arising from the long history of migration in rural Sichuan, where almost all villages had people working as migrants outside their province. The OEM noted that the lack of good infrastructure in the poor regions did not stop people migrating out of their villages, as long as jobs were available in the outside world where they had social connections. Despite the view that expressways enable or facilitate migration, interviewees said that they never used expressways; most migrants traveled

by train, which was cheaper. Indirectly, however, expressways had a significant impact on poverty reduction because of their great contribution to overall economic growth in the PRC.

48. Similarly, the real impact of rural infrastructure investment on poverty exit varied across regions depending on local conditions. The OEM observed in some regions only marginal impact on poverty reduction arising from investment in rural infrastructure, including roads and small irrigation systems. Most households rose from poverty through migration, and the infrastructure investment brought them with only small benefits. In Yunnan, however, the OEM observed significant impacts from rural roads and irrigation systems. These areas had high potential for developing commercial crops, especially tobacco, tea, and sugarcane. In some villages visited, most households rose from poverty by growing these crops, which were promoted by commercial firms that signed contracts with farmers and purchased their production. In these areas, good roads were critical to attracting commercial firms to engage in contract farming. The OEM interviewed technicians from a tobacco company, who stressed the availability of all-season roads as critical to their selecting a particular village for contract farming tobacco. Without good roads, they observed, transporting tobacco leaves might be delayed by days during the raining season, causing heavy losses to the company. In the sugarcane farming discussed in para. 24, the private boss financed the construction of a dirt road connecting the sugarcane fields to the village and the township road, charging farmers for construction by deducting an annual fee from his payments to farmers for their crops.

49. **Access to Education.** In the areas visited, education was available to all rural households. The cost of education and the location of schools, however, restricted poor children's access to education in some cases, especially to secondary schools, which were usually far from remote villages with low population densities and so entailed costly school boarding. Although students in the 9 years of compulsory education did not pay school fees, other school-related costs, including books, supplementary fees, and boarding expenses, placed a heavy burden on rural households. Recognizing these problems, a new policy of the central Government now exempts rural households in poor regions from paying book fees and supplementary fees and subsidizes boarding costs. It was too early to assess the impact of this new policy, which was just being implemented at the time of OEM visit. In some villages in Yunnan, the OEM found dropout rates high even among primary school students, largely because of the low value placed on education, language barriers, and costs.

50. **Access to Health Services.** While government hospitals, village clinics, and private doctors were readily available in all villages visited in Sichuan and Yunnan, the high costs of medicine and medical services were primary concerns named by most interviewees, including both poor and non-poor households, as the latter could easily become poor from misfortunes such as a serious illness afflicting family members. In one township hospital visited, the OEM noted that public investment in upgrading office buildings and equipment had only a marginal impact. Due to the high costs of the medical services, that hospital had few visitors even after the upgrade. Many interviewees said that they used simple medical services provided by private doctors in their villages instead of government hospitals, because village doctors charged much less. This issue has been brought to the attention of the central Government, which initiated new programs to mitigate this key concern of most rural households (para. 71, [ii]–[iii]).

51. **Access to Financial Services.** Farmers' difficult access to formal financial services was a frequently raised concern in the PRC and other countries. The OEM found, however, that the real situation varied significantly across regions. In the villages visited in Sichuan, most rural households had savings accounts in RCCs and received loans from them for various purposes, such as renovating houses, dealing with health problems, paying for children's education, and

purchasing inputs or equipment. Borrowing for agricultural activities was the least common situation, probably due to the small size of family farms and the largely subsistence nature of farming, especially in Sichuan. The requirements for obtaining loans from RCCs varied among regions. In Sichuan, the OEM visited one branch of an RCC that had provided loans of up to CNY100,000 for business or housing investments. These loans required collateral, preferably real estate in towns, valued higher than the loan. Loans of less than CNY20,000 were provided without collateral. About 70% of the loans were for less than 1 year, usually only a few months. The annual interest rate was 6%, paid quarterly. Default rates were low. Most rural households also borrowed from relatives and friends, especially for dealing with health problems and paying for their children's education. The poorest households had little repayment capacity and difficulty gaining access credit, either formal and informal.

52. In the villages visited in Yunnan, most rural households had access to formal credit. However, some interviewees could not borrow from RCCs because they had not repaid their previous RCC loans. In these areas, the main source of rural credit was the commercial companies and private bosses that contracted farmers to cultivate the cash crops tobacco, tea, sugarcane, and coffee. The bosses provided inputs to farmers and deducted repayment from revenues payable to the farmers after the harvest. They also provided credit for other purposes, such as medical bills, house renovation, and motorcycle purchases, with implicit interest charges paid by deducting them from harvest payments.

F. Issues, Underlying Causes, and Alternatives

1. Expressways and Poverty Reduction

53. Not all expressway projects have a direct impact on poverty reduction even when they are located in poor regions, because expressways are closed to local traffic except near exits. The OEM observed poor villages that remained poor even when they are located next to an expressway. They did not benefit directly from the expressway except from the resettlement program, which compensated their losses caused by expressway construction. In Sichuan, the project expressway had little direct impact on poverty reduction in the project areas, where most poor rise from poverty by migration and employment outside poor regions.

54. In minority-dominated Yunnan, migration was less common due partly to the language barrier and a culture of reluctance to go far from home. In the areas visited, many poor rise from poverty by engaging in commercial agriculture. In these areas, the project expressway had a direct impact on poverty reduction, as it facilitated moving some cash crops from non-poor areas to poor ones. A typical case was tobacco production, which had traditionally been located in central Yunnan, near the tobacco company in Yuxi City and in areas with good infrastructure. After the construction of expressways, including the project expressway, some of the old tobacco areas shifted to growing flowers, which had higher value, because the expressways enabled quickly transporting fresh flowers from farms to large cities. Consequently, the tobacco company in Yuxi shifted its investment focus to southern Yunnan, including some poor regions previously dominated by grain production. Some of the new areas rose from poverty after a few years of growing tobacco. Factors underlying the shift also included the high potential for commercial agriculture in southern Yunnan because of relatively abundant land, good soil, and a climate ideal for a number of cash crops.

55. Indirect impacts of expressways on poverty reduction, however, were significant, as observed by the OEM in all areas visited. In Sichuan, most of the households interviewed rose from poverty through the migration of some family members to non-poor regions and work

outside agriculture. The migrants escaped poverty and send home remittances to support their families. Migration became a major household strategy to escape poverty due primarily to two factors. First, many jobs became available following continued economic growth in the PRC in the past 2–3 decades, including formal employment such as in factories and informal jobs in construction and services.⁴ Second, the labor market in the PRC has become increasingly integrated as large-scale labor migration became prevalent in the past 1–2 decades. As a major portion of the national trunk highway system, the project expressways in Sichuan and Yunnan contributed to national economic growth and job creation in the PRC. Through labor migration, the benefits of national economic growth spread over the country as surplus labor from poor regions found employment in other regions with dynamic growth.

56. These findings suggest that evaluating the social and economic benefits of expressway projects, including in particular their poverty impacts, should go beyond the limits of conventional methodology, which narrowly focuses on increases in traffic volumes and reductions in travel time and costs in the project areas.⁵ The OEM found that the actual benefits of expressways go well beyond the areas in which they are located. The indirect impacts of expressways, although difficult to quantify, are much larger than such direct benefits as toll collections. That is why governments are willing to invest in expressways even in areas with low traffic, where the financial and economic internal rates of return (IRRs) are low and toll collection is insufficient to recover all costs, including operation and maintenance (O&M), investment, and related financial charges. If an expressway in these areas is a necessary part of the national trunk highway system, its investment is justified by its contribution to the system and macroeconomic growth, not by rising traffic volume in the project areas. A thorough understanding of this may reduce pressure on project staff to over-estimate traffic volume in project areas to produce IRRs acceptable for project approval. ADB post-evaluation studies have frequently found that IRRs estimated for projects were high at appraisal and low at evaluation.

2. Local Roads and Poverty Reduction

57. A typical justification for public investment in rural roads is the assumption that improved rural roads will reduce shipping times and costs for agricultural goods, improving farmgate prices and thereby reducing rural poverty. In the two projects examined in the PRC, the expected benefits of local roads included (i) improving the flow of goods, services, information, and tourists; (ii) facilitating farmers' access to markets and reducing transportation costs for products and inputs; (iii) greater economic diversification; and (iv) facilitating labor mobility. Indirect social benefits included increases in primary and secondary school attendance rates and improved access to health facilities and other public services.

58. The OEM found the assumptions above overly simplified and not always valid. In areas visited in Yunnan, the OEM observed that upgrading isolated roads to poor, small villages located in remote and poorly endowed mountainous regions had a marginal impact on poverty reduction. Poor resource endowment and adverse farming conditions meant the poor in remote villages had little surplus to sell and the improved roads, while making walking more convenient, did not mitigate lack of employment, the key cause of poverty, and therefore did not substantially change villagers' circumstances. A better alternative could have been upgrading

⁴ While construction and services are formal sectors, many migrants worked in them informally without a written contract.

⁵ ADB measures the benefits of road projects by a set of indicators typically including, among others, changes in (i) traffic volume and toll collection, (ii) passenger fares and freight rates, and (iii) accident and death rates. Estimating these benefits is limited to the areas crossed by project roads.

roads in other parts of the county that had high potential for commercial agriculture, such as areas adjacent to towns, or large villages in lowlands with sufficient land and favorable conditions, such as sufficient water, even if they are not poor. If the lack of an all-season road was the only constraint to commercial agriculture in non-poor areas, and if half of the farmland in these areas could shift from grain to cash crops after road development, demand for labor would stimulate seasonal migration of the poor from nearby poor villages to work in cash crop production, thus generating employment for surplus labor from poor villages.

59. The OEM found that the real impact of local roads on poverty reduction depends on local realities. In areas with high potential for commercial agriculture, where land is relatively abundant, the climate is particularly suitable for certain cash crops, water is sufficient, and the only key constraint is the lack of all-season roads, upgrading rural roads is worthwhile, as it may contribute significantly to poverty reduction. In Yunnan, the OEM observed a private boss who financed the construction of a dirt road to facilitate transporting sugarcane. While the terms he negotiated with farmers for repaying the road investment over 16 years seemed high to the OEM, interviewed farmers all accepted the terms because the alternative of not having the road would have been worse, as they would have had to rely on growing grain and remained poor.

60. In contrast, isolated roads in remote and poorly endowed areas short of arable land per capita had little real impact on poverty reduction, particularly if the roads did not link to growth centers or road networks. These roads provided small benefits to the residents along the roads, but did not generate conditions sufficient to lift them out of poverty. The remoteness of these areas and their low population densities made commercial firms uninterested in promoting cash crops because scale was insufficient to justify their investment. In these areas, the OEM found few commercial users of the roads upgraded by projects. As no private company invested in these remote areas, poverty reduction would be difficult without creating long-term jobs for surplus labor. As the villages and households remain poor after the project investment, road maintenance is another major concern after project completion, when no more free money comes from external sources. It seems that upgrading roads in these remote and poorly endowed villages should not have been the priority of poverty intervention at the current stage, when public resources are insufficient. The same funds might have brought more poverty reduction if they had been used to mitigate the key causes of poverty in the project areas through job creation.

3. Add-on Components in Expressway Projects

61. Both of the two expressway projects examined by the OEM included a component to upgrade rural roads located in poor regions. Even in the case where improved local roads had a direct impact on poverty reduction, the ADB requirement of including local roads in expressway projects had many negative effects, as observed by the OEM.

62. First, it disrupted the government planning process for local road development in the PRC, where the central and provincial governments are responsible for the construction and O&M of expressways and national highways, while county governments are in charge of local roads, including financing, construction, and O&M, with technical and financial assistance from the central and provincial governments. In the areas visited, all local governments had their own plans—long, medium, and short term—for local road development. Typically, the priorities in local road development plans included (i) linking the county capital to growth centers via expressways or major highways, (ii) using the expressway or highway sections that pass through their county as the spine of a road network in their county, and (iii) upgrading the local road network piece by piece as resources permit. Improving local roads occurred in the

following order: (i) county to county, (ii) county to township, (iii) township to village, and (iv) village to sub-village. The local road component in the ADB-financed expressway projects, however, had different priorities. To maximize poverty reduction impacts, consultants from ADB deliberately selected areas with the most poor beneficiaries, including remote sub-villages with low population densities and low economic returns for road development.

63. Second, the ADB requirement caused distortions by changing priorities in local road development. The ADB projects required the completion, within the project implementation period, of both the expressways and the local roads included in the projects. To comply with this requirement, local governments had to adjust their investment plans to make counterpart funds and other resources available for the “ADB roads,” which might not have been high priorities in their original plans. The adjustment was achieved at the cost of delaying investment in other roads that might have been more urgently needed or offered higher social and economic returns, though they might not be located in poor counties with a lot of poor beneficiaries.

64. Third, the ADB requirement resulted in inefficient use of human and organizational resources. Expressway investment and O&M in the PRC were implemented by expressway corporations that had specialized engineers. The ADB requirement made these corporations responsible for investment in local roads included in the projects in addition to expressways. This created inefficient use of human resources as professionals highly specialized in expressways supervised the development of rural roads. In addition, ADB insisted that, in Sichuan, at least 10% of its loan be used to finance local road improvement. The expressway corporation strongly resisted this requirement because it made the company repay the ADB loan without a mechanism for collecting tolls from users of local roads. Pressure from ADB to comply with loan covenants inhibited truth-telling at the grassroots. In fact, no ADB funds were used for local road improvement. Interviews carried out by the OEM with government officials in Sichuan and Yunnan showed that local roads under both projects would have been upgraded with or without the ADB projects, as they had already been included in the local government plans for upgrade before the projects, though with different priorities. The add-on components in ADB projects, at best, accelerated investment in these “ADB roads,” at the cost of distorting the original priorities for road development of the local governments.

65. In addition to complaints regarding local roads components, the OEM heard others from government officials about unreasonable requests from ADB that expressway projects include activities on AIDS control, women empowerment, or ethnic minority development. These add-on components, while satisfying ADB’s desire to address social issues, had certain negative effects. First, the expressway corporation lacked expertise to properly address these social issues, which were the responsibility of local governments. Second, the add-on components consumed time, money, and attention, and their inclusion in expressway projects distracted the executing agencies’ attention from their primary mandate of constructing high-quality roads at minimal cost. Third, the add-ons brought requirements for monitoring and evaluating the poverty impacts of the expressway project, for which a long-term international consultant and some short-term consultants had to be hired at high cost, primary to write monitoring reports for ADB.⁶ Scarce foreign currency could have been used to hire short-term experts needed to address critical issues that were beyond the capacity of local experts.

⁶ In fact, combining project monitoring with evaluation may not be appropriate. Monitoring is an ongoing activity during project implementation and should be conducted by the concerned executing agency based on its operational needs. Evaluation is an activity after project completion, when the executing agency has terminated its operation, and therefore should be conducted at a higher level, by the provincial or central government or ADB, who are more interested in the lessons identified in the evaluation than is the executing agency, unless the latter is assigned to implement another similar project.

66. If ADB is serious about getting real results instead of merely demonstrating its concern for rural poverty, standalone projects should be designed for rural poverty reduction. They should provide tailor-made solutions to local problems based on a thorough understanding of the key causes of poverty in particular project areas. The pressure for every project to include add-on components to obtain a direct impact on poverty reduction, and the practice of artificially inflating the number of poor beneficiaries in ADB projects to ensure their approval, has achieved more rhetoric than real results.

67. Instead of expecting every single project to have a direct impact on poverty reduction, it may be better to allow some projects, such as expressway projects, to focus sharply on promoting economic growth, which may significantly reduce poverty, albeit indirectly and unquantifiably. If this suggestion is acceptable, there is no need for such projects to set up a system to monitor and evaluate their direct impacts on poverty. Without pressure for every project to include add-ons or poverty impact monitoring, ADB nonconcessional loans, or ordinary capital resources (OCR), may still be attractive to many borrowing countries, including in particular middle-income countries like the PRC. The OEM found that ADB loans are attractive for their (i) long maturity of 25 years, (ii) relatively low interest rates, and (iii) other benefits associated with ADB's involvement in project financing, as domestic banks are more willing to finance a project that receives some financing from a reputable agency like ADB.

68. Consultations with government officials suggest that, without artificial burdens, some borrowers may be interested in taking OCR loans for projects that aim to spur economic growth, even if a small additional charge—say 0.5%—were levied on them. If this idea is acceptable, ADB may charge a small “poverty fee” on OCR loans for projects that aim to spur economic growth but do not include add-ons for poverty reduction or other social issues. Revenues collected from the poverty fee could be used to subsidize standalone projects for poverty reduction, such as those that provide low-cost loans for private investment in small-scale village infrastructure (see discussions in paras. 102–105 of the main text). Under these projects, participating financial institutions (PFIs) could use their own funds to finance infrastructure loans. Grants from ADB would be needed, however, to (i) provide interest subsidies that encourage private investment in rural infrastructure, (ii) partly cover the lending risks of PFIs in these operations, and (iii) partly compensate PFIs' administrative costs for this lending. This special evaluation study highlights that this suggestion needs pilot testing followed by vigorous evaluation of the pilot results before replication. Furthermore, setting the poverty fee rate needs intensive consultation and negotiation between ADB and the government agencies concerned, with the idea that the amount to be levied on OCR loans should not exceed the financial and non-financial costs currently imposed on borrowers by various ADB requirements.

4. Effectiveness of Government Interventions in Poverty Reduction

69. Government interventions to reduce poverty may be classified as (i) policy reforms and (ii) project investment. The OEM observed significant poverty reduction impacts from three policy interventions in the PRC. The first was the household responsibility system adopted in the late 1970s. By distributing land-use rights to individual rural families, this policy gave farmers substantial incentive to produce. In conjunction with progressive liberalization of government controls on agricultural marketing and prices, the policy reforms led to remarkable change in rural PRC. In 6 years, from 1979 to 1985, agricultural net value in the PRC increased by 55%, and agricultural productivity improved by 40%. At little financial cost to the Government, the policy interventions brought the largest poverty reduction in the history of the PRC. Many interviewees said that they escaped poverty during that period.

70. The second policy intervention that significantly reduced poverty was the relaxation of Government controls on labor migration since 1989. By allowing self-driven flows of surplus labor from poor regions to those with dynamic economic growth, mostly the coastal provinces, this policy enabled millions of migrants from poor regions to share the benefits of national economic growth. In addition, millions of relatives of the migrants also benefited, even those who remained in poor regions, as the migration reduced population pressure on the limited farmland, and remittances from migrants contributed to improving the living standards of their families. Again, the cost of this policy change to the Government was minimal.

71. The last policy interventions were the recent and ongoing policies that aim to address the so called *shan nong* issues, which refer problems and concerns of rural areas, farmers, and agriculture. These new policies include the following:

- (i) Elimination of agriculture taxes and other fees levied on farmers by local governments. This policy was announced by the central Government in 2003, to be implemented within 5 years. By late 2005, 27 of 31 provinces in the PRC had abolished agriculture taxes, and the rest, including Yunnan, had substantially lowered taxes and planned to eliminate them in 2006. All farmers interviewed greatly appreciated this new policy because, in the past, some of them had paid CNY150–CNY200 per capita, or CNY800–CNY1,000 (\$100–\$125) per household annually—a heavy burden on the poor and the near poor. Without targeting and leakage, this policy benefited all who had paid taxes and fees, with those who had suffered the most benefiting the most.
- (ii) The new rural health cooperative system, which was still in its pilot stage at the time of the OEM visit. While each province had its own specific policies affecting implementation of the system, the general idea was that participants, including all farmers in the pilot areas who chose to participate, would pay an annual contribution of CNY10 per capita to the system, which was matched by another CNY10–CNY20 from the central Government and CNY10 from the provincial government. It was too early to judge how well the new system operates, but rural households interviewed welcomed this idea as it addressed a key concern of most rural residents, poor or not.
- (iii) Subsidies on major medical bills for the hardcore poor. The so called “health salvation program” was also at pilot stage at the time of the OEM visit. The idea was to identify the most needy and issue them certificates that would entitle them to a 40% subsidy on their medical bills from major operations or being hospitalized. This program faced many operational difficulties, including in particular insufficient budgets to deliver the promised benefits, but its intention to address a key cause of poverty was appreciated.
- (iv) Exemption from book fees and other fees, as well as subsidies for school boarding costs during the 9 years of compulsory education. It was too early to evaluate this ongoing program, but its intention to address another key cause of rural poverty was much appreciated.
- (v) Minimal standard-of-living guarantees for rural residents, which provided cash to poor households to bring their annual incomes up to the official poverty line. After initial pilot testing in some provinces, this program was found to be unrealistic in poor regions, where local governments could not bear the financial burden. The OEM found that not all rural poor living below the poverty line needed subsidies. While those unable to work need welfare programs on a long-term basis, the productive poor could lift themselves out of poverty if the key causes of their poverty were mitigated or removed by project interventions.

72. In addition to policy interventions, the OEM studied the impact on poverty reduction of project interventions. In 1993, the PRC Government launched a large-scale program for poverty reduction, the 8–7 Program, which aimed to lift the remaining 80 million poor out of poverty during the remaining 7 years before 2000. Various projects were financed under that program, including (i) subsidized loans for poor households or enterprises that generate jobs for the poor; (ii) promoting agricultural production, including farm extension, input subsidies, and grants for small irrigation facilities; and (iii) rural infrastructure investment, including roads, electricity, drinking water systems, biogas for home cooking, and improved village paths and housing. Some of the infrastructure projects were implemented through a food-for-work mechanism, through which laborers from poor villages worked for in-kind payments.

73. In the early years, the 8–7 Program targeted poor counties. Nationwide, 592 counties were identified as “national poverty counties” and received annual grants from the central Government. In addition, some provincial governments identified their own “provincial poverty counties” and provided them with annual funds for poverty reduction. The number of the national poverty counties remained the same over the 11 years from 1994 to 2005, with only 25 counties leaving poverty—and being replaced by the same number of poverty newcomers. It appeared that the free grant from the Government provided a strong incentive for the national poverty counties to maintain their formal impoverished status. The OEM visited some of the national poverty counties and was impressed by the wealth displayed in the county capitals, which did not appear to be poor but retained the status that entitled them for the central Government grants.

74. In response to criticism about leakage from the targeting program, the Government narrowed the focus of targeting from counties to townships and villages. In 2005, the focus was further narrowed to sub-villages, called “natural villages” in the PRC, some of which have only 20–50 households. Meanwhile, the Government initiated a village program of poverty reduction and development planning that aimed to eliminate poverty in all villages, one by one, through an integrated intervention package. The new package was in fact a combination of earlier interventions, including rural roads, electricity, drinking water systems, village paths, small irrigation systems, farm extension, farm inputs, and subsidized loans. In the areas visited in Yunnan, this village program provided a grant of CNY200,000–CNY300,000 (\$25,000–\$37,500) to each participating village, allowing them to select interventions from a list of available options.

75. The OEM observed the following problems in the village program. First, the grant of CNY200,000–CNY300,000 provided small and temporary benefits to villagers but was too small to enable the sort of investment that could lead to significant poverty reduction. Second, providing even such a small grant to all poor villages in the PRC would place a huge financial burden on the Government, and the shortage of funding would seriously delay poverty reduction.⁷ A more serious concern is how ineffective the village program is in achieving its objective of poverty reduction. A recent ADB evaluation study⁸ found that free money from government projects encouraged beneficiaries to accept projects that brought them little benefit and did not lift them out of poverty. Similar cases were observed in Yunnan and Sichuan, where

⁷ In Mojiang County of Yunnan Province, for example, the OEM was told that about half of its 1,200 sub-villages were identified as poor. From 2003 to 2005, this county spent CNY6 million to implement the village program in only 30 poor sub-villages. Even assuming that the county can accelerate this process and cover 30 sub-villages in 1 year, implementing the village program in all 600 poor sub-villages will take 20 years.

⁸ ADB. 2005. *Special Evaluation Study on Effectiveness of Participatory Approaches: Do the New Approaches Offer an Effective Solution to the Conventional Problems of Rural Development Projects?* Manila. Available: www.adb.org/Documents/Reports/Evaluation/sst-reg-2005-01.pdf

projects brought little benefit to the poor because they did not mitigate the key causes of poverty.⁹ Moreover, government projects usually financed construction but not O&M, assuming that village leaders and communities would take care of project facilities. This assumption has not been supported in the cases observed, as poor communities usually had no financial resources and lacked strong incentives to take care of public facilities built by governments. A more commonly held belief seemed to be that those who invested should take care of the investment.¹⁰

⁹ In one model village visited in Yunnan, for example, all thatched roofs were replaced by concrete roofs financed by a grant from the village program. However, some poor households remained poor as the poor housing conditions were the result of their poverty, not its cause. In another poor village, the OEM found that some of the poorest households used oil lamps instead of electricity, even after their village was electrified by a project, because they could not afford electricity. In a poor township, the township clinic upgraded its buildings and equipment with free grants from a project, but few rural patients visited the clinic, as they could not afford its high charges for medicine.

¹⁰ In one village visited in Yunnan, for example, the OEM found that a drinking water system built through a free grant from a project a few years earlier had completely disappeared for lack of maintenance. Villagers returned to the old way of carrying water from afar.

CASE STUDY: MALAYSIA
Sabah Land Development Project (Loan 186-MAL)
Terengganu Tengah Township Development Project (Loan 344-MAL)
Second Terengganu Tengah Development Project (Loan 583-MAL)

A. Introduction

1. Selection of the Projects for Case Study

1. The Sabah Land Development Project (the Land Project) and two township development projects, the Terengganu Tengah Township Development Project and the Second Terengganu Tengah Development Project (the Township Projects), were selected as case studies for this special evaluation study (SES) in view of their expected roles in promoting rural development and reducing poverty. The Land Project, which was rated generally successful by the Asian Development Bank (ADB), aimed to develop land for palm oil production in Sabah, one of the poorest of Malaysia’s 13 states. The two Township Projects were located in a same district in the state of Terengganu. The first project constructed five new towns, and the second expanded them and established the sixth town. ADB rated both projects partly successful. Basic data of these projects are given in Appendix 5.

2. Fieldwork of the Operations Evaluation Mission

2. The ADB evaluation reports of the three projects above were used as supplementary information in preparing this SES. In addition, an Operations Evaluation Mission (OEM) visited Malaysia from 24 November to 14 December 2004 and conducted fieldwork in Sabah and Terengganu. During this period, the OEM held individual interviews with 29 government officers involved in implementing government policies, programs, or projects, including those working in federal, state, and village governments. Meanwhile, the OEM visited three of the six townships constructed under the two Township Projects and eight villages located in five land settlement schemes, interviewing 64 rural households, six managers of palm oil and wood processing industries, and four government employees at the grassroots: four teachers, one doctor, and one nurse. Table A4 provides a list of villages and projects visited.

Table A4: List of Villages and Projects Visited

State	District	Village	Projects
1. Terengganu	Dunggun	Pasir Raja	1. Trengganu Tengah Township Development Project 2. Second Trengganu Tengah Development Project
		Bandar Al Muktafi Billah Shah Ketengah Jaya	
2. Sabah	Beaufort	Buki Nuri Lumadan Kias	1. Sabah Land Development Project

Source: Operations Evaluation Mission.

B. Results of Poverty Exit

1. Poverty Reduced

3. While considering the official poverty line,¹ the OEM measured poverty in the villages visited using the local people's definition of poverty. According to interviewees, this has changed over time. Three decades ago, being poor meant not having enough food to eat. Today, it means a family lacking a stable income. In all areas visited, the OEM observed dramatic reductions in rural poverty, including almost an absence of poverty in many villages. The OEM made a point of finding for interviews a few poor households, which included some with many children and some with very low human capital. This observation seemed to be consistent with official data, which reported rural poverty in Malaysia falling from 58.7% in 1970 to 12.4% in 1999, including only 2.4% in hardcore poverty, which was defined as people living on income equal to half of the official poverty line.² Living standards had improved significantly in the households interviewed, with many farmers owning large, comfortable houses, cars, trucks, motorcycles, televisions, and other appliances. Many interviewees said that they or their parents had been poor 2 or 3 decades earlier, with limited literacy and little land. Most of them had risen from poverty by receiving 6–10 acres (2.4–4.0 hectares) of land per family from government settlement programs.

2. Sustainability of Poverty Exit

4. The sustainability of poverty reduction was highly likely in the areas visited, with several factors contributing. First, most households had regular and reliable incomes. Almost all households interviewed had farmland that generated stable annual income for them. The government settlement programs had provided participants with modest houses as well as farmland under young rubber or oil palm trees. The land, trees, and houses were provided to participants as long-term loans at low interest, to be repaid by the participants over 20–25 years through deductions from payments for rubber or palm oil. The settlement programs also established processing plants that provided permanent jobs for low-skilled workers who migrated from poor areas 2–3 decades ago. In addition to farming, many rural households engaged in off-farm activities in transportation, construction, small shops, restaurants, or other services, available through the abundant job market in Peninsular Malaysia. Finally, plantation jobs were readily available in both Terengganu and Sabah, which seemed unattractive to locals, especially the young generation, who considered the pay too low and the work too hard. Many plantations, both large and small, used foreign labor from neighboring countries to fill the labor shortage.

5. Second, continued economic growth in Malaysia over the past 3 decades has created significant employment in cities, and most rural youth have received education largely free of charge. After graduating from secondary schools, most left villages to work in industry or services in urban areas. Their departure reduced population pressure on farmland for the remaining rural population, enabling them to make a decent living from agriculture.

6. Third, household vulnerability was low as generous government policies provided free or highly subsidized medical care for all citizens of Malaysia. This policy originated in colonial

¹ The official poverty line in 1999 was RM510 per household per month in Peninsular Malaysia and RM685 in Sabah, assuming two adults and three kids per family (ADB. 2004. Poverty and Development Indicators Database, 23 February. Manila).

² Economic Planning Unit, Prime Minister's Department. 2004. Malaysia: 30 Years of Poverty Reduction, Growth and Racial Harmony. Case study presented at the Shanghai Poverty Conference, Shanghai, March.

times with a narrow focus on urban centers but was expanded to cover all rural areas after independence. Fourth, as continued economic growth strengthened the financial capacity of the Government, and as rural poverty fell to a minimum, the Government was able to provide generous subsidies to the remaining hardcore poor, which accounted for only 2.4% of rural residents. The OEM interviewed some of the hardcore poor, who lived in big houses provided by the Government free of charge and received free medical services, free education for their children, and a monthly allowance for each child in school. Finally, since most rural youths now work outside agriculture, low population densities in rural areas put little pressure on natural resources, which seemed to be well protected.

C. Poverty Exit Strategies

7. Agricultural intensification and diversification did not seem to be an important strategy for escaping poverty adopted by the households interviewed in Malaysia. The OEM observed four types of poor households with different poverty-exit strategies and results. The first type were smart, hard-working, highly motivated, aggressive, and business-oriented, some having accumulated savings and purchased farmland for their children. This group found multiple jobs, including in particular employment outside agriculture. Without participating in government settlement programs, farmers in this group took advantage of (i) economic growth and jobs created by the private sector and (ii) education and training opportunities provided by the federal and local governments. The OEM interviewed some of these households in Terengganu, who took advantage of growth in the gas and oil industries in that state and worked part-time in construction in nearby towns, in addition to tending their oil palms or working in oil mills. In Sabah, some settlers bought trucks and transported oil palm products for others, in addition to tending their own small plantations.

8. Farmers in the second group were weaker, including laborers with fewer skills and less aggression. These people rose from poverty by participating in government land settlement programs or being employed by the palm oil mills set up by subsidiary companies owned by government agencies. The farmland and permanent jobs they received from the government programs provided them with a reliable source of regular income.

9. The third group included second generation settlers, who might have become poor if they had remained in villages, since there was no more land for distribution to the rising generation in most areas visited. This group rose from poverty by migrating to cities and finding employment in manufacturing or services. Their secondary education was provided by the Government largely free of charge, and they obtained better-paid jobs in the private sector, including in particular factories established by foreign investors. Rapid industrialization in Malaysia since the 1970s had brought large-scale rural–urban migration, and the rural population fell from 56.7% of the national total in 1980 to 38.2% in 2000.

10. The trend toward migration, however, was slow in Sabah, where potential migrants faced more difficulties and higher costs than did those in Terengganu. The manufacturing and service sectors in Sabah did not grow as dynamically as in Peninsular Malaysia because of the high costs of energy and transportation in that state, so off-farm jobs were not plentiful. While jobs were abundant in Peninsular Malaysia, migration from Sabah was relatively expensive. In Sabah, the OEM found that young people carefully calculated migration costs and risks before leaving their villages. The factors they considered included transportation costs, the risks and expenses of job hunting including housing and food for the first days in the city, wages, the urban cost of living relative to rural, and the possibility of unexpected difficulties. Finally, they

considered the government subsidies that they might receive if they remained in poverty, which probably provided a sort of incentive for staying in villages.

11. The last group, the weakest, remained in poverty despite favorable conditions. This group included the disabled who relied on welfare assistance, young school dropouts with many children, and those of very weak character with low human capital, lack of motivation, and ease of contentment. The choices of strategies for rising from poverty were limited for people in this group. Migration to cities and employment in manufacturing and services were difficult for them because they had few social connections outside their villages. They could not get high-paying jobs for lack of qualifications, and they were not interested in low-paying jobs considering the higher cost of living in cities, as well as the perceived uncertainties of job hunting in an unfamiliar city. They did not like plantation jobs that were readily available in their villages because of the low wages and difficult working conditions compared with factory jobs in cities. Finally, these people could as a last resort obtain free government subsidies, which were limited but seemed to be sufficient to support a low standard of living.

D. Household Resources

12. Household resources include physical, natural, financial, human, and social assets. In the cases studied, the rural poor had few resources other than their family labor. Initially, these poor had no land or only small parcels insufficient to support their families. By participating in government settlement programs, many of them received farmland as long-term loans repayable with income from future harvests. By providing the poor with a stable annual income, the farmland facilitated their sustainable rise from poverty.

13. Meanwhile, participants in settlement programs received from the government basic houses as another loan repayable over a long period. The OEM found that inadequate housing, equipment, and other physical assets were the results of poverty instead of its causes. After rising from poverty, most interviewed families improved the houses they had originally received through government programs and purchased furniture, televisions and other electronic goods, cars, trucks, and motorcycles.

14. In the cases studied, most of the poor had few savings or other financial assets for as long as they were poor. However, most accumulated savings after rising from poverty with stable income from their oil palm estates or wage jobs.

15. The largest variations observed among the poor related to their human and social capital. Initially, most of the poor had little education. Many of the first generation settlers had only elementary schooling, and some were even illiterate. In spite of this disadvantage, some poor had good human capital unrelated to schooling, such as the capacity to be self-taught, hard-working, devoted to their families, willing to take risks, highly motivated, and, finally, business-oriented. Some interviewees endeavored to accumulate savings and purchased additional farmland when available, which laid a solid foundation for their permanent rise from poverty—for themselves and their children as well. Some of the poor were, though little educated, particularly good at making social connections, which facilitated establishing their own businesses or finding jobs in cities.

16. The OEM made a point of interviewing households that remained in poverty and had limited household resources, such as families with little or no land. Some young couples inherited small parcels of land from their settler parents, which were insufficient to provide a decent living from agriculture. Some settlers sold the farmland received from the government

programs. These poor had few savings or other financial assets for lack of an income stable and sufficient enough to support large families. Most of the remaining interviewed poor had low human capital. Some went to school for years without learning much, and others dropped out for lack of interest in studying. Many had few if any social connections, which discouraged them from migrating to unfamiliar cities. These people were typically risk averse, less willing to try new jobs, or lacking motivation to work hard for a better living.

E. Context and Conditions

17. The context and conditions in which the rural poor lived influenced the options available to them to escape poverty, their selection and implementation of them, and the results. In the areas visited, the following factors seemed to be most critical to poor people's rise from poverty.

1. History

18. Malaysia's history has strongly influenced politics and government policies, which shaped the context and conditions faced by the rural poor. During British colonial rule, much of the economy was controlled by British capital invested in rubber plantations, tin mining, and timber production, most of the products of which were exported. Most of the labor in these activities were migrants from China or India who came to Malaya in the 19th and early 20th centuries. The rest of the economy consisted of subsistence farming and fishing carried out by Malays, who represented the great majority of the rural population at that time. In the urban areas, small processing industries and services were largely controlled by Chinese.

19. Malaysia was thus a multiracial and multiethnic society at independence, with more than half of the population being Malay, 37% Chinese, and 12% Indian. Most of the Malays lived in rural areas, as did tribal groups, who were the poorest in the country. The Chinese concentrated in urban areas and had substantially higher incomes. The Indians also concentrated in the urban areas, running small businesses or working as unskilled wage laborers.

2. Politics and Government Policies

20. The ethnic conflict that took place in 1969 had a dramatic impact on the design and implementation of Government policies in the last 3 decades. One of the most important results was a new economic policy that defined social unity as the sole goal of national development policies. With a two-pronged strategy to achieve national unity, the Government was strongly committed to poverty eradication and righting economic imbalances among racial groups. In this political context, a set of Government policies and projects were designed to reduce poverty and improve income distribution, including the provision of free or highly subsidized education and health services to all citizens and highly subsidized housing for low-income families together with supplies of water, electricity, and other basic services. Other programs distributed government-owned land to the landless poor and provided long-term, subsidized financial support for developing it. Price controls on rice and other essential foodstuffs were implemented, stabilizing prices for both rice farmers and consumers, and so dramatically reducing the potential distress price fluctuations could cause on poor and near-poor families. Finally, policies were implemented to reduce income inequalities between *Bumiputeras* (Malays) and other ethnicities, including preferential treatment for *Bumiputeras* in public sector employment, efforts to increased *Bumiputeras'* presence in private businesses, and greater access for them to education and training through fellowships.

21. Meanwhile, the country has been governed since the 1970s by a political coalition with strong leadership that provided continuity to the application of national strategies. Policies were implemented through national plans that ensured an active and direct role in the economy for the Government. This stable political context created a favorable environment that encouraged private investment and supported government priorities in terms of poverty reduction and equitable income distribution.

3. Economic Growth

22. Economic growth in Malaysia was led by the private sector. However, the Government played a key role in fostering an attractive environment for private investment. First, the sole goal of national unity and appropriate macroeconomic management have helped the country experience long-term stability over the past 3–4 decades, compared with some other Asian countries that suffered periodic turmoil. Political stability, social harmony, and continuity in Government policies played a critical role in attracting foreign direct investment to Malaysia. Second, the Government invested heavily in highways, electric power, telecommunications, and other basic infrastructure, which reduced transportation and energy costs and encouraged foreign companies to invest in the country. Third, with the explicit goal of attracting foreign direct investment, the Government created free trade zones and offered tax breaks for foreign investors. Finally, the Government ensured all citizens' easy access to education, which was provided free or highly subsidized. For the hardcore poor, an education allowance was provided to the parents to cover school-related expenses such as transportation. Many foreign companies were attracted by the low cost of educated labor in Malaysia, considering their good skills and training potential.

23. As a result, Malaysia experienced outstanding economic growth that reached an annual average of 6.7% during 1971–1990 and 7.0% during 1991–2000. The manufacturing sector led, dominated by textile processing in the 1970s and 1980s, and by electronics and high-tech industries since the 1990s. The boom of these industries provoked major changes in the labor market, which went from high unemployment to full employment and, more recently, labor shortages, especially in Peninsular Malaysia. In Sabah, however, unemployment remained a problem in some areas visited, where access to off-farm employment was not readily available, primarily because industries grew relatively slowly in Sabah, and migrating from Sabah to Peninsular Malaysia was expensive.

24. Rapid economic growth contributed significantly to poverty reduction in Malaysia. First, growth brought substantial tax revenues, with which the Government implemented a wide range of programs for poverty reduction. Second, private investment in manufacturing and services created employment for both urban and rural residents, and the resulting labor shortage fueled a slow but steady rise in wages. Industrial growth concentrated on the west side of Peninsular Malaysia, attracting Malaysian migrants from other states, including Terengganu and Sabah. In the past 2 decades, Terengganu also developed oil and gas industries, which attracted people from rural areas to work in them and related construction projects. However, industrial growth was slow in Sabah, due largely to high energy and transportation costs there. Nevertheless, this state shifted from relying mainly on timber to developing oil palm plantations, with some growth in palm oil processing as well as tourism-related services.

4. Rural Institution

25. The OEM did not find active informal organizations in the villages visited in Terengganu or Sabah. Instead, government agencies played key roles in the rural areas, especially in areas

with land settlement schemes. These agencies provided farmland, low-cost housing, and farm inputs to settlers at the beginning of the settlement programs. After 20–25 years, they also financed the investment costs of replanting oil palm or rubber trees. The land and land development, houses, farm inputs, and replanting financing were provided to settlers as long-term loans with subsidized interest charges. A new government program allowed aged settlers who did not want to continue managing their farms to turn over their farmland to government agencies, which directly managed the plantation operations, with participants receiving land dividends. The participants also had the option of working in the plantations as wage earners. Finally, the palm oil processing factories owned by subsidiary companies of the government agencies provided employment to workers, together with low-cost housing and insurance benefits.

26. At the grassroots, village heads played a major role. They received a government allowance and were mandated to report to governments village needs and to arbitrate conflicts among villagers. In some settlement schemes, cooperatives were organized with assistance from government agencies and engaged primarily in transporting harvests and transferring marketing revenues to members.

5. Government Projects

27. Government projects were commonly used as instruments to reduce rural poverty. The Government invested in basic infrastructure to attract private investment, which indirectly generated substantial employment and contributed to full employment in the country. Meanwhile, the universal provision of education and training opportunities enabled many young people to find high-paying jobs. Access to free or highly subsidized medical services for all citizens, both urban and rural, substantially reduced individual families' sickness-related risks. Government settlement schemes directly provided avenues out of poverty by distributing land. Among the many projects financed by ADB, the OED examined the Land Project in Sabah and the two Township Projects in Terengganu.

28. The Land Project was implemented from 1975 to 1982 and financed by a \$14 million loan from ADB. It was a part of a large government investment program in Sabah, which developed 125,000 hectares (ha) of land for rubber and oil palm production. The project was implemented by the Sabah Land Development Board, which developed around 4,300 ha of land under it. Targeting the landless poor, the Land Project provided farmland and houses to participants as long-term loans, repayable from revenues generated through palm oil production. In addition, palm oil processing factories generated employment, albeit on a relatively small scale.

29. The OEM visited the settlement scheme in Klias village of Sabah's Beaufort District, which was created in 1977 under the Land Project. At the time of the visit in late 2004, the village had 227 families farming 996 ha of land. Under the scheme, each family received 10 acres (4 ha) of land already planted with oil palms, together with a small wooden house with a living room, kitchen, bathroom, and two bedrooms. These assets were provided to participants as loans to be repaid over 20–25 years through deductions from palm oil payments to participants, who submitted their harvest to government marketing agencies.

30. While confirming the positive impact of the Land Project on poverty reduction, the OEM observed some weaknesses in it. First, the project design overestimated participant interest, with the actual participation of 681 families at the end of 1981 substantially below the target set

at appraisal of 4,314 families.³ Due to the shortage of eligible candidates, some non-poor also participated in the settlement schemes and benefited from the generous government subsidies, as observed by the OEM and reported by earlier reports from ADB. Second, 10 acres of oil palms is sufficient to lift a poor family out of poverty but too small to be economically efficient. The OEM observed low yields in the small estates run by settlers compared with the high yields achieved in large plantations run by commercial companies. Third, oil palms need replacing every 20–25 years, and most visited settlers could not finance the high cost of replanting. Moreover, as many of the first generation of the settlers grew old, and their children did not want to work in plantations, farm management deteriorated. To address these issues, the government agencies concerned initiated the new program to allow individual farmers to turn their land over to the government plantations and work for wages, if they so wished, while receiving regular dividends.

31. The two Township Projects were financed by two ADB loans of \$16 million and \$30.2 million as part of a master plan for developing the state of Terengganu. The first project was implemented from 1979 to 1984, and the second from 1983 to 1990, by the Terengganu Tengah Development Authority, a federal Government agency for regional development established in 1973 with a mandate in township development and maintenance. Both projects were located in Dungun District, an area dominated by rubber and oil plantations. The projects financed town development works, regional water supply, low-income housing, and feeder roads.

32. ADB post-evaluation studies rated the two projects partly successful. Among the many problems identified, the primary one was oversupply of infrastructure, especially in terms of water. With an anticipated population of 75,750, the six towns created by the projects reached an actual population of 35,109 by 1994, about 4 years after the second project ended, or less than half of the appraisal target. One major cause of the problem was the difficulty of selecting an appropriate site for township development, which demands accurate forecasts of future economic and population growth. These towns were created in the rural areas, but the rapid growth of oil and gas industries along the coast of Terengganu attracted young people from rural areas, beating out the small towns created by the projects in attracting wage workers. By the time of the OEM visit in 2004, the towns' population had increased significantly over figures reported by ADB in 1994. However, many town residents did not work there, living in the towns to take advantage of low-cost housing and commuting in their own vehicles to oil and gas jobs on the coast.

F. Issues for Discussion

1. Poverty Exit and Underlying Factors

33. Agricultural intensification and diversification—two policies promoted by governments in many developing counties—were not important strategies for rising from poverty adopted by the households interviewed in Malaysia. While many of the first generation to rise from poverty did so by obtaining farmland from government settlement programs, most of the second generation migrated to find employment outside agriculture. Many of the second generation might have become poor if they had remained in villages and relied on agriculture, as there was no more land to distribute to them. Today, agriculture remains critically important to Malaysia for food security and export earnings. Its role in providing avenues out of poverty, however, seemed to be limited. While higher crop yields increased farm income, government interventions to promote agricultural development helped mainly those with farmland instead of the landless

³ ADB. 1982. *Project Performance Audit Report on the Sabah Land Development Project in Malaysia*. Manila.

poor, because the higher crop yields did not generate significant employment. It is interesting that even in a country initially with relatively abundant land resources such as Malaysia, manufacturing and services were the sectors that provided employment for most of the second generation of rural residents, with jobs in agriculture sharply reduced in the past 3 decades. While many of the remaining poor lived in rural areas and relied on agriculture, it seemed that land-based agriculture could not provide them with avenues out of poverty because these poor had little land. Future efforts to eradicate the remaining poverty may have to focus on job creation outside agriculture.

34. Government interventions in Malaysia strongly shaped the context and conditions faced by the rural poor, influencing household strategies selected for escaping poverty and their results. To the surprise of the OEM, rural institutions, especially informal ones, did not seem to critically influence household strategies. The underlying factor seemed to be strong government interventions that provided the poor with farmland, housing, and investment financing, as well as taking measures, such as highly subsidized education and health services, to mitigate shocks. In terms of household resources, the most significant variations were found in human capital factors unassociated with schooling, as well as in social connections, which strongly influenced household decisions on migration, the most common strategy. A possible explanation is that initially all poor households had little physical or financial capital or formal education. Yet variations in social and human capital unrelated to schooling became important determinants in households' selection of strategies to escape poverty. This was so in Malaysia probably because migration to work outside agriculture played the most critical role in poverty reduction, fueled by continued economic growth and the availability of many jobs in cities, where employment depended heavily on personal characteristics and social connections.

35. Some of the avenues out of poverty were provided directly by government projects such as settlement schemes that gave farmland to participants, or the palm oil processing facilities that employed unskilled migrants from rural areas. By providing long-term employment, these projects effectively reduced poverty but apparently only for the first generation of the settlers, as no more state-owned land existed for distribution to the second generation of rural residents, especially in the Peninsular Malaysia. Moreover, the Government, increasingly concerned about inefficiency and the need to restore budgetary equilibrium, substantially constrained the creation of agro-processing facilities for unskilled laborers in rural areas.

2. Trade-Off Between Short-Term Inefficiencies and Long-Term Stability

36. Efficiency was not a stated objective of government policies in Malaysia. The OEM noted that strong government interventions to reduce social and economic imbalances among ethnic groups, and to curb income inequality, might have caused, to some extent, inefficiencies in the short run. However, racial harmony and social stability achieved through the principle of growth with equity encouraged foreign direct investment, created jobs, ensured continued economic growth, and resulted in greater efficiency in the long run. In addition, Government provision of free or highly subsidized medical services—though at the cost of a certain degree of inefficiency and placing a financial burden on the Government—prevented shocks such as serious illness of family members that might otherwise have drawn some weak individuals and the near-poor down into poverty. Over time, the costs of universally providing free or highly subsidized medical services seemed to have fallen to an extent, as some of the non-poor used private clinics instead of public hospitals, leaving public hospitals to low-income groups.

3. Eradication of the Remaining Hardcore Poverty

37. Despite the favorable context and conditions in Malaysia, including continued economic growth and easy access to education and health services, about 5% of the population remained poor in 2004, including the 2.4% of hardcore poor. Interviews with some of the remaining poor found that they faced less favorable conditions and had fewer household resources. First, their villages were located in remote areas with high transportation and communication costs, leaving them relatively isolated from the dynamics of the national economy. Second, they had little human capital, some having spent years in school without learning much, and some dropping out. Third, they had few or no social connections outside their villages and were discouraged from migrating to cities to search for work. Fourth, they seemed to be less aggressive and easily contented, more risk averse and less willing to face the unfamiliar world, and generally lacking motivation to work hard for a better living.

38. While public investment in education facilitated the rise of most of the poor, especially the young generation, out of poverty, formal education and schooling did not seem to be effective or sufficient for this weakest group, who might suffer learning difficulties or whose parents did not value education. It seemed that additional efforts were needed to help this group build human capital unassociated with schooling, such as character, and social capital such as connections in cities. One suggestion is to link this group to the more dynamic segments of the society through mentor programs run with financial incentives given to some aggressive non-poor, who would be encouraged to help the poor in their villages by assisting them in job hunting or coaching them in self-employment. With appropriate incentives, the non-poor may effectively contribute to reducing poverty in their communities.

BASIC DATA OF PROJECTS SELECTED FOR CASE STUDIES

Rural Credit Project (Loan 1457[SF]-VIE)

A. Project Design as stated in the report and recommendation of the President

Project Objective	The objectives of the project are to (i) increase incomes of rural people and expand productive employment by increasing the supply of short- and medium-term credit to the rural sector and (ii) strengthen the rural financial system to increase the diversity and competitiveness in the system and provide better services.
Project Scope	<p>The two components are as follows:</p> <ul style="list-style-type: none"> (i) Provide credit lines to the Viet Nam Bank for Agriculture to finance viable medium-term farm and nonfarm investments in the private sector, and to the Central Credit Fund (CCF) to finance short-term subloans made by the people's credit funds (PCFs) for viable economic activities in the private sector. (ii) Support the CCF, PCFs, and Viet Nam Bank for Agriculture to improve their institutional capacity to provide better rural financial services through staff training.
Expected Project Benefits	<p>The expected benefits are as follows:</p> <ul style="list-style-type: none"> (i) improved supply of medium- and short-term credit to rural entrepreneurs and farmers; (ii) improved income of the households receiving subloans; (iii) direct benefit for about 102,000 rural households, including about 25,000 poor members of PCFs; (iv) contribution to diversification of rural economic activities through the development of a wide array of agro-processing and other rural industries; (v) generation of about 63,000 person-years of productive employment, reducing acute underemployment in rural areas; (vi) significant poverty reduction due to growth and employment generated; (vii) improved access to longer-term funds and credit; (viii) better financial services in rural areas in general; (ix) poor members of PCFs enabled to use yield-increasing inputs such as better seed and fertilizer and to diversify their activities; and (x) benefits to low-income households, in particular those that currently lack access to saving facilities.
Project Cost	<p>Estimated at appraisal: \$75.8 million. Actual: \$72.3 million</p>

Financing Asian Development Bank (ADB) loan: \$50.0 million
 PFIs:^a \$15.0 million
 Subborrowers: \$10.8 million

B. Key Dates

Loan Approval 12 September 1996
 Loan Effectiveness 3 April 1997
 Project Completion Estimated at appraisal: December 2000
 Actual completion: December 2000
 Loan Closing Estimated at appraisal: 30 June 2001
 Actual closing: 30 October 2002

C. Executing Agency State Bank of Viet Nam

D. Project Preparation Technical Assistance (TA) 2286-VIE: Rural Finance (project preparatory technical assistance [PPTA])
 TA amount: \$586,000
 Date of approval: 12 January 1995
 TA 2991-VIE: Second Rural Credit (PPTA)
 TA amount: \$150,000
 Date of approval: 24 February 1998

E. Related Activities

Technical Assistance TA 3227-VIE: Strengthening Corporate Governance at Viet Nam Bank for Agriculture and Rural Development
 Approved amount: \$1.0 million
 Date of approval: 30 December 1999
 TA 3568-VIE: Support of Rural Business
 Approved amount: \$1.0 million
 Date of approval: 12 December 2000
 Loan Loan 1802-VIE: Rural Enterprise Finance Project
 Approved amount: \$80.0 million
 Date of approval: 12 December 2000

F. ADB Missions

Number of Loan Review Missions 5
 Inception Mission 25–27 November 1996

^a Participating financial institutions (PFIs) include State Bank of Viet Nam, Viet Nam Bank for Agriculture, CCF, and PCFs.

Last Review Mission	6 November 2002
Project Completion Report (PCR) Circulation Date	25 September 2003
PCR Rating	Successful

Rural Infrastructure Sector Project (Loan 1564[SF]-VIE)

A. Project Design as stated in the report and recommendation of the President

Project Objective	The objectives are to improve basic infrastructure in rural areas of Viet Nam to remove constraints on agricultural and off-farm production, and to generally improve standards of living. The project will provide funds to provincial governments to rehabilitate, upgrade, and build critical rural infrastructure works such as rural roads, bridges, culverts, markets, small-scale water resource schemes, potable drinking water facilities, storage areas, and community service buildings in accordance with general national and specific local priorities.
Project Scope	<p>Components include</p> <ul style="list-style-type: none"> (i) rural civil works, under which the funding of priority provincial subprojects will take place; (ii) project management, under which support will be given to help the national Government administer, guide, and monitor project implementation by the provincial governments; and (iii) subproject preparation assistance that will provide funding to provincial governments, especially in backward and isolated provinces.
Expected Project Benefits	<p>The expected benefits are as follows:</p> <ul style="list-style-type: none"> (i) acceleration of the Government's ongoing program of construction of critical public infrastructure in rural areas; (ii) reduced costs and travel time resulting in a large increase in local economic and social activity; (iii) optimized use of past investments resulting in large returns from relatively modest investments; (iv) reduced costs and time spent fetching drinking water, reducing unproductive labor and raising overall health standards; and (v) strengthened Government capacity to plan and implement its infrastructure development program and hence increased efficiency of investments made using the Government's own resources.
Project Cost	Estimated at appraisal: \$150.0 million
Financing	<p>Asian Development Bank (ADB) loan: \$105.0 million Caisse Francaise de Développement (CFD): \$15.0 million Government: \$15.0 million Beneficiaries: \$15.0 million</p>

B. Key Dates

Loan Approval	23 October 1997
---------------	-----------------

Loan Effectiveness	30 April 1998
Project Completion	Estimated at appraisal: 30 June 2004 Extended to: 31 December 2004
Loan Closing	Estimated at appraisal: 31 December 2004 Extended to: 28 September 2005
C. Executing Agency	Ministry of Agriculture and Rural Development (individual provincial governments will be involved as implementing agencies through their departments of agriculture and rural development and, in some cases, their departments of transport)
D. Project Preparation	TA 2635-VIE: Rural Infrastructure Sector (project preparatory technical assistance [PPTA]) TA amount: \$600,000 Date of approval: 28 August 1996
E. Related Activities	
Technical Assistance	TA 2838-VIE: Training for Rural Infrastructure Development TA amount: \$1.0 million Date of approval: 11 August 1997
F. ADB Missions	
Number of Loan Review Missions	12
Last Review Mission	27 September–2 October 2004

Chengdu–Nanchong Expressway Project (Loan 1638-PRC)

A. Project Design as stated in the report and recommendation of the President

Project Objective	The main objectives are to support the economic and social development of the eastern part of Sichuan, the Chengdu–Nanchong corridor, by alleviating transport bottlenecks on existing roads. A program of upgrading provincial and country roads will also help reduce poverty in the designated poor countries, in which the average income per capita is CNY1,123, only 54% of the national average.
Project Scope	<p>Components include</p> <ul style="list-style-type: none"> (i) construction of about 208 kilometers (km) of controlled-access toll expressway from the Chengdu outer ring road to the city of Nanchong, including interchanges with toll facilities, expressway links, and service and parking areas; (ii) reconstruction and/or upgrading of about 300 km of provincial and country roads in poverty counties; (iii) procurement of equipment for traffic monitoring and surveillance, toll collection, axle load testing, and road maintenance and inspection; (iv) land acquisition and resettlement of affected people; and (v) consulting services for construction supervision and training.
Expected Project Benefits	<p>The expected benefits are as follows:</p> <ul style="list-style-type: none"> (i) necessary conditions created to accelerate economic and social development in a poor area; (ii) measurable benefits in terms of savings in time and vehicle operating costs for existing and generated traffic, and avoided accident costs, generating a financial internal rate of return of 8.3%; and (iii) improved access to markets and social services for residents of numerous towns and villages along the route and in the designated poor areas in eastern Sichuan.
Project Cost	<p>Estimated at appraisal: \$667.2 million Actual: \$763.2 million</p>
Financing	<p>Estimated at appraisal: Asian Development Bank (ADB) loan: \$250.0 million Ministry of Communications: \$ 180.0 million State Development Bank: \$60.0 million Sichuan provincial government: \$177.2</p> <p>Actual:^a ADB loan: \$250.0 million</p>

^a Data taken from ADB. 2004. *Project Completion Report on the Chengdu-Nanchong Expressway Project in the People's Republic of China*. Manila.

Ministry of Communications: \$141.0 million
 China Development Bank (formerly State Development Bank):
 \$69.0 million
 China Construction Bank: \$97.0
 Sichuan provincial government: \$215.2

B. Key Dates

Loan Approval	10 November 1998
Loan Effectiveness	24 August 1999
Project Completion	Estimated at appraisal: 30 June 2003 Actual completion: 30 June 2003
Loan Closing	Estimated at appraisal: 31 December 2003 Actual closing: 24 August 2004

C. Executing Agency Sichuan Province through the Sichuan Provincial Communications Department

D. Project Preparation TA 2777-PRC: Chengdu to Nanchong Expressway (project preparatory technical assistance [PPTA])
 TA amount: \$600,000 (Japan Special Fund [JSF])
 Date of approval: 7 April 1997

E. Related Activities

Technical Assistance	TA 1972-PRC: Policy and Institutional Support in the Road Sector Approved amount: \$1.2 million (JSF) Date of approval: 9 November 1993
	TA 2178-PRC: Provincial Highway Network Planning Approved amount: \$600,000 (JSF) Date of approval: 29 September 1994
	TA 2573-PRC: Review of Highway Design Standards Approved amount: \$420,000 Date of approval: 24 May 1996
	TA 3086-PRC: Regional Road Sector Study Approved amount: \$1,185,000 (JSF) Date of approval: 13 October 1998

F. ADB Missions

Number of Loan Review Missions	7
Inception Mission	19–23 April 1999

Last Review Mission	13–21 August 2004
Project Completion Report (PCR) Circulation Date	17 December 2004
PCR Rating	Successful

Southern Yunnan Road Development Project (Loan 1691-PRC)

A. Project Design as stated in the report and recommendation of the President

Project Objective The objective is to support the economic and social development of the southern part of Yunnan Province by removing a major road transport bottleneck between Yuanjiang and Mohei, and to help create the conditions necessary to reduce poverty by providing better access to the economic mainstream for nationally designated poor communities. The project will also promote and extend sector reforms initiated under previous ADB-financed projects in areas related to (i) highway design standards and construction quality, (ii) road safety, (iii) pricing policy for road users, and (iv) mobilization of nongovernment financing. A long-term objective is to promote regional economic cooperation in the Greater Mekong Subregion (GMS) by improving a section of the road linking Kunming in the People’s Republic of China (PRC) and Chiang Rai in Thailand, and facilitating cross-border trade.

Project Scope Components include

- (i) construction of 147 km of a four-lane controlled-access toll expressway from Yuanjiang to Mohei, including interchanges, bridges tunnels, and service areas;
- (ii) upgrading about 540 km of feeder roads;
- (iii) procurement of equipment for traffic engineering and monitoring, toll collection, quality control, road maintenance and safety, tunnel ventilation and monitoring, and feeder road upgrading;
- (iv) land acquisition and resettlement of affected people; and
- (v) consulting services for project management, construction supervision, training, and project monitoring and evaluation.

Expected Project Benefits: Expected benefits include the following:

- (i) accelerated economic and social development in designated poor countries and townships of Yunnan Province;
- (ii) quantifiable benefits in terms of savings in time and vehicle operating costs for existing and generated traffic, and avoided accident costs, that produce an economic internal rate of return of 17.4%;
- (iii) improved access to markets and social services for the residents of the numerous towns and villages along the route and in the designated poor areas in southern Yunnan Province; and
- (iv) facilitated regional economic cooperation in the GMS.

Project Cost Estimated at appraisal: \$770.3 million
 Actual: \$985.5 million

Financing	<p>Estimated at appraisal: Asian Development Bank (ADB) loan: \$250.0 million Ministry of Communications: \$102.2 million Ministry of Finance: \$3.0 million Yunnan provincial government: \$258.5 million China Development Bank: \$156.6 million</p> <p>Actual: ADB loan: \$250.0 million Ministry of Communications: \$102.2 million Ministry of Finance: \$3.0 million Yunnan provincial government: \$473.7 million China Development Bank: \$156.6 million</p>
-----------	--

B. Key Dates

Loan Approval	24 June 1999
Loan Effectiveness	18 May 2000
Project Completion	Estimated at appraisal: 30 September 2003 Actual completion: 5 January 2005
Loan Closing	Estimated at appraisal: 31 March 2004 Actual closing: 5 January 2005

C. Executing Agency Yunnan YuanMo Expressway Corporation

D. Project Preparation TA 3039-PRC: Yunnan Road Environmental and Social Analysis (project preparatory technical assistance [PPTA])
TA amount: \$150,000
Date of approval: 7 July 1998

E. Related Activities

Technical Assistance	<p>TA 1972-PRC: Policy and Institutional Support in the Road Sector Approved amount: \$1.2 million (Japan Special Fund [JSF]) Date of approval: 9 November 1993</p> <p>TA 2178-PRC: Provincial Highway Network Planning Approved amount: \$600,000 (JSF) Date of approval: 29 September 1994</p> <p>TA 2573-PRC: Review of Highway Design Standards Approved amount: \$420,000 Date of approval: 24 May 1996</p> <p>TA 3086-PRC: Regional Road Sector Study Approved amount: \$1,185,000 (JSF) Date of approval: 13 October 1998</p>
----------------------	--

Loan Loan 1325-PRC: Yunnan Expressway
Approved amount: \$150.0 million
Date of approval: 29 September 1994

F. ADB Missions

Number of Loan Review Missions	4
Inception Mission	7–15 December 2000
Last Review Mission	17–21 January 2005
Project Completion Review	18–29 July 2005

Sabah Land Development Project (Loan 186-MAL)

A. Project Design as stated in the report and recommendation of the President

Project Objective	The objectives are to diversify the agriculture sector in Sabah and thus reduce heavy reliance on timber, and also to increase export earnings and improve the economic and social conditions of landless and other depressed population groups through their organized settlement in viable land development schemes.
Project Scope	<p>Components include</p> <ul style="list-style-type: none"> (i) land clearing and planting oil palms on some 31,000 acres (12,555 hectares) of land; (ii) construction of some 1,100 miles (1,770 kilometers) of roads; (iii) settlement of some 4,300 families including the provision of housing and social infrastructure facilities; (iv) expansion of one existing oil mill from 27 to 54 tons capacity and construction of a new mill with capacity of 9 tons; (v) construction of oil storage facilities; and (vi) studies of future land development in certain areas of Sabah and preparation of related projects for future implementation.
Expected Project Benefits	<p>Expected benefits include the following:</p> <ul style="list-style-type: none"> (i) the Government's plans supported to achieve high rates of growth in smaller agriculture through land development and to increase incomes of the rural population; (ii) production of about 85,000 tons of palm oil in 1980, resulting in foreign exchange earnings of \$19.0 million, and production by 1985 expected to rise to 123,000 tons for export earnings of \$29.5 million; and (iii) about 4,300 families, or over 20,000 people, settled in well-organized communities equipped with social infrastructure facilities and amenities.
Project Cost	<p>Estimated at appraisal: \$69.5 million Actual cost: \$37.4 million</p>
Financing	<p>Estimated at appraisal: Asian Development Bank (ADB) loan: \$14.0 million Government: \$55.5 million</p> <p>Actual: ADB loan: \$11.1 million Government: \$26.3</p>

B. Key Dates

Loan Approval	1 August 1974
---------------	---------------

Loan Effectiveness	29 April 1975
Project Completion	Estimated at appraisal: 30 June 1979 Extended to: 30 June 1981
Loan Closing	Estimated at appraisal: 30 June 1979 Extended to: 1 July 1981

C. Executing Agency Sabah Land Development Board

D. ADB Missions

Number of Loan Review Missions	6
Inception Mission	October 1973
Last Review Mission	November 1980
Project Completion Report (PCR) Circulation Date	11 December 1981
PCR Rating	No rating
Project Performance Audit Report (PPAR) Circulation Date	6 January 1983
PPAR Rating	Generally successful

Terengganu Tengah Township Development Project (Loan 344-MAL)

A. Project Design as stated in the report and recommendation of the President

Project Objective	The objective is to provide facilities in five towns being established as part of the Terengganu Tengah Development Scheme and to strengthen the Development Authority. The scheme aims to open up large areas of jungle land for agricultural development through economically viable farms; increase the value added in the rural areas through extension of processing activities; and provide physical facilities and social services to the work force at level higher than that normally available to the rural dweller.
Project Scope	<p>The components are</p> <ul style="list-style-type: none"> (i) town development works, comprising site formation, town roads, drainage, water reticulation, sewerage, and low-cost waste disposal in the five towns; (ii) regional water supply, comprising four water supply systems (including intake and treatment works, trunk water mains, and high ground service reservoirs) to serve five towns; (iii) low-income group housing and commercial buildings, comprising construction of 2,522 low-cost houses for low-income group families and 98 shop houses and 95 stalls in the five towns; and (iv) provision of services of five professional staff to Lembaga Kemajuan Trengganu Tengah for period of 1–2 years to reinforce its planning, coordinating, implementing, and monitoring capabilities.
Expected Project Benefits	<p>The expected benefits include the following:</p> <ul style="list-style-type: none"> (i) inducing migration into the vast, resource-rich Terengganu Tengah area both from within the state and from other states in Peninsular Malaysia; (ii) providing opportunities for improvement of incomes and living conditions of disadvantaged population groups; and (iii) facilitating the development of the rural economy in the state by establishing new growth centers and developing resource-based industries.
Project Cost	<p>Estimated at appraisal: \$40.6 million Actual cost: \$50.6 million</p>
Financing	<p>Estimated at appraisal: Asian Development Bank (ADB) loan: \$16.0 million Government: \$ 24.6 million</p> <p>Actual: ADB loan: \$16.0 million Government: \$ 34.6 million</p>

B. Key Dates

Loan Approval	29 June 1978
Loan Effectiveness	16 February 1979
Project Completion	Estimated at appraisal: 31 December 1981 Actual completion: 26 August 1984
Loan Closing	Estimated at appraisal: 30 June 1982 Actual closing: 6 June 1983

C. Executing Agencies	(i) Lembaga Kemajuan Trengganu Tengah and (ii) Public Works Department of the Ministry of Public Works and Utilities.
------------------------------	--

D. Related Activities

Loan	Loan 0238-MAL: Jerangau-Jabor Development Road Project Approved amount: \$23.7 million Date of approval: 13 November 1975
------	---

E. ADB Missions

Number of Loan Review Missions	7
Inception Mission	19–22 August 1978
Last Review Mission:	January 1984
Project Completion Report (PCR) Circulation Date	28 December 1984
PCR Rating	No Rating
Project Performance Audit Report (PPAR) Circulation Date	4 September 1986
PPAR Rating	Partly Successful

Second Terengganu Tengah Development Project (Loan 583-MAL)

A. Project Design as stated in the report and recommendation of the President

Project Objective	The objectives are to continue the participation of the Asian Development Bank (ADB) in one of Malaysia's regional development schemes, the Terengganu Tengah Development Scheme, consisting of the provision of additional development and settlement-related infrastructure, and training and professional services for the development authority.
Project Scope	The components include <ul style="list-style-type: none"> (i) town development works, (ii) a feeder road network, (iii) a regional water supply, (iv) low-cost housing and shop houses, and (v) training and institutional support.
Expected Project Benefits	The expected benefits include the following: <ul style="list-style-type: none"> (i) growth of the rural economy in the state of Terengganu by helping establish new growth centers and develop resource-based industries in the region and (ii) opportunities for improving the income and quality of life of a large number of disadvantaged, unemployed, and landless people.
Project Cost	Estimated at appraisal: \$77.1 million Actual cost: \$39.5 million
Financing	Estimated at appraisal: Asian Development Bank (ADB) loan: \$30.2 million Government: \$46.9 million Actual: ADB loan: \$16.8 million Government: \$22.7 million

B. Key Dates

Loan Approval	28 September 1982
Loan Effectiveness	24 May 1983
Project Completion	Estimated at appraisal: 31 December 1986 Extended to: 31 July 1990
Loan Closing	Estimated at appraisal: 31 December 1986 Extended to: 12 July 1989

C. Executing Agencies (i) Terengganu Tengah Development Authority and

- (ii) Public Works Department of the Ministry of Public Works and Utilities.

D. Related Activities

Loan
 Loan 344-MAL: Terengganu Tengah Township Development Project
 Approved amount: \$16.0 million
 Date of approval: 29 June 1979

E. ADB Missions

Number of Loan Review Missions	8
Inception Mission	20–25 June 1983
Last Review Mission	14–22 September 1988
Project Completion Report (PCR) Circulation Date	29 December 1992
PCR Rating	No Rating
Project Performance Audit Report (PPAR) Circulation Date	26 January 1996
PPAR Rating	Partly successful

ISSUES DESERVING FURTHER STUDY

1. In addition to providing insights and lessons, the special evaluation study (SES) has identified a number of important issues that deserve further study to gain an in-depth understanding.

A. Migration and Poverty Reduction

2. The SES found that the great majority of the rural poor in the areas visited selected rural–urban migration as their primary strategy to rise from poverty. This finding suggests that, in the context of the declining importance of agriculture as a major source of household income, due to the worsening shortage of farmland per capita and the rapid economic growth that has generated job growth in cities, continued public investment in agriculture and in poor regions, while bringing small and temporary benefits to the poor at high costs to governments, may not provide a long-term solution to persistent rural poverty. To the contrary, public support to improve labor mobility and lower migration costs, along with measures that promote economic growth and job creation in non-poor regions, may help sustainably reduce poverty.

3. However, rural–urban migration has been criticized by many analysts, who argue that it transfers rural poverty to urban centers without solving the problem, because migrants may be unemployed or receive low wages and live in poor conditions in the cities. To avoid these problems, some governments have implemented measures to help migrants, including training programs for potential migrants, or agreements with potential employers to hire migrants. In the cases studied under the SES, however, the results of these interventions were mixed. At high cost to the governments concerned, they were neither necessary nor sufficient for successful employment of migrants in cities. Foreign-invested factories require potential employees to have graduated from high school, and training for new workers is usually provided by employers, who know best their training needs. For informal employment as casual labor in construction or services, learning by doing is the most common practice. Social connections and personal characteristics are more important than training. In the cases studied, government-organized migration did not fit well the preferences of individual migrants, some of whom left their assigned employers or destinations.

4. Many questions regarding migration remain unanswered. For example, how can social connections in cities be established for the poor living in remote, isolated villages? How can labor mobility be improved and migration costs reduced? The conventional wisdom is that public investment in roads, highways, and better transportation is key, and that lifting government restrictions on migration will help. The SES found, however, that most migrants used cheap railways instead of expressways, and poor roads in their regions did not stop migration. Lifting government restrictions on migration is necessary but not sufficient, as few households in remote mountain villages visited had social connections in cities, and most ethnic minority people were not fluent the language used in cities.

5. The SES found that many rural households carefully calculated the costs and risks before selecting migration as their avenue out of poverty. In particular, the presence or absence of social connections in cities, such as relatives, friends, fellow-villagers, or other acquaintances, is a crucial factor influencing their decision, because connections could provide job information and reduce uncertainty. In many cases, social connections also provided initial accommodation in cities for newcomers, thereby substantially reducing migration costs. More in-depth studies are needed to obtain a thorough understanding of (i) how migrants found job information, (ii) where they stayed after arriving at cities, (iii) what costs were involved in migrating and job

hunting, (iv) how migrants found or lost jobs, (v) how they live when unemployed, (vi) what were the harshest difficulties they encountered, and (vii) how they handled vulnerabilities. A thorough understanding of these issues may contribute to better design for future interventions aiming to reduce poverty.

B. The Role of Local Elites in Poverty Reduction

6. While targeting approaches used in poverty reduction projects or programs make deliberate efforts to exclude non-poor participants, the SES found examples where non-poor participants—commercial companies, large farmers, village leaders, and other local elites—played a positive role in reducing rural poverty. In some counties visited in Yunnan, People's Republic of China (PRC), local governments were able to attract private companies that invested in agro-processing facilities in their counties to promote the cultivation of high-value crops. These companies signed contracts with small farmers to purchase their products and provided them with seed, training on production technologies, and field assistance from extension workers. In some cases, the contract farming also involved the participation of village elites, who organized farmers, acted as their bosses, provided them with credit for production (and for living expenses when necessary), and charged them management fees. In one village, a member of the local elite even financed constructing a dirt road necessary to transport sugarcane from the fields to the processing factory and started charging farmers an annual fee that, in 17 years, would repay the investment cost. While the charges seemed unreasonably high, interviewed farmers appreciated the investment, which enabled them to shift from growing grain to cash crops with higher returns. In these cases, local elites played a positive role in reducing poverty in their villages. These findings suggest that poverty reduction needs the participation of local elites. Due to their better financial and managerial capacities, many local elites are in a better position than the poor to generate employment. Poverty reduction projects or programs may need to design appropriate incentives to encourage local elites to participate under certain conditions—conditions that need to be better understood through in-depth investigations of real cases under different contexts. Only then can project designers offer appropriate incentives and effective interventions.

C. The Role of Commercial Agriculture in Poverty Reduction

7. Urbanization and demand from international markets have created new opportunities to increase farm income by growing high-value crops, such as organic vegetables and fruits or high-quality animal products. These commodities require producers to meet health standards, as well as requirements regarding labeling, certification of origin, and standardized delivery demanded in contracts with supermarkets. Many success stories tell of smallholders producing untraditional exports in Latin America and Africa, and the SES observed a few cases in Yunnan that included growing tea and flowers. Available studies on the so-called “new agriculture” suggest that, while capturing these opportunities may not be easy for small-scale farmers for many reasons, including institutional frameworks required to achieve competitiveness and demanded scales of delivery, and that high-value agriculture may not solve all the problems underlying rural poverty, farmers who grow high-value crops improved their income substantially compared with those who continued to grow traditional crops. In addition, high-value crops often demand much more labor than traditional crops and therefore raise demand for wage labor in rural areas. Since the new agriculture may provide one alternative for generation employment under certain conditions, it may be necessary to understand better the conditions under which high-value products can be developed; what difficulties small farmers may face when they grow new crops; and what role commercial firms, projects, or policies can play in promoting new agriculture.

D. The Role of the State and the Private Sector

8. All three countries covered by the SES—including in particular Viet Nam and the PRC—were characterized by the strong role of the state and the relatively recent development of the private sector in commercial agriculture. In the areas visited, the OEM observed very few cases of agro-processing firms promoting contract farming with small farmers or investing in high-value crops grown on their own land. Other countries in Asia are likely to have differences in government, the private sector, and the relationship between them. It may be relevant to test the findings in the SES in countries with different contexts.

E. The Role of Different Contexts

9. The SES found that the strategies adopted by rural households to rise out of poverty were strongly influenced by the resources they had as well as the contexts they inhabited, which determined the options available for escaping poverty. The following characteristics of the context seemed to have a strong impact on what poverty exit strategies they selected:

- (i) **The degree and pace of industrialization.** The three countries covered by the SES were characterized by rapid industrialization during the last 2–3 decades. As industry grew so quickly, demand for labor could not be met by urban workers alone, creating opportunities for many people to migrate from rural areas to cities and work in industry.
- (ii) **Population density and farmland per capita.** Most of the rural areas visited had high population densities. As populations continued to grow, shortages of farmland per capita intensified in these areas, making it difficult for rural families to live by agriculture alone. This was a major factor underlying the widespread adoption of migration as a primary strategy to rise from poverty.
- (iii) **Agro-ecological endowments such as climate and natural resources.** Many areas visited were poorly endowed with natural resources, providing few opportunities for developing commercial agriculture, even after public projects improved rural roads.

10. Since the cases studied by the SES were not representative of the whole range of different contexts found in Asia, its findings and lessons need to be tested in countries and regions with various features.