Report and Recommendation of the President to the Board of Directors

Project Number: 41461
September 2010

Proposed Loans
Socialist Republic of Viet Nam: Sustainable Rural Infrastructure Development Project in Northern Mountain Provinces

Asian Development Bank
CURRENCY EQUIVALENTS
(as of 2 September 2010)

Currency Unit – dong (D)
D1.00 = $0.00005141
$1.00 = D19,450

ABBREVIATIONS

ADB – Asian Development Bank
ADF – Asian Development Fund
CPMU – central project management unit
DARD – Department of Agriculture and Rural Development
ha – hectare
km – kilometer
MARD – Ministry of Agriculture and Rural Development
PPMU – provincial project management unit
SCCF/GEF – Special Climate Change Fund of the Global Environment Facility
TA – technical assistance

NOTE

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

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**PROJECT AT A GLANCE**

1. **Project Name:** Sustainable Rural Infrastructure Development Project in Northern Mountain Provinces  
2. **Project Number:** 41461-01-3

3. **Country:** Viet Nam, Soc Rep of  
4. **Department/Division:** Southeast Asia Department  
   Agriculture, Environment, and Natural Resources Div

5. **Sector Classification:**  
<table>
<thead>
<tr>
<th>Sectors</th>
<th>Primary</th>
<th>Subsectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and natural resources</td>
<td>✓</td>
<td>Agriculture and rural sector development</td>
</tr>
</tbody>
</table>

6. **Thematic Classification:**  
<table>
<thead>
<tr>
<th>Themes</th>
<th>Primary</th>
<th>Subthemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic growth</td>
<td>✓</td>
<td>Widening access to markets and economic opportunities</td>
</tr>
<tr>
<td>Capacity development</td>
<td></td>
<td>Institutional development</td>
</tr>
<tr>
<td>Social development</td>
<td></td>
<td>Human development</td>
</tr>
</tbody>
</table>

6a. **Climate Change Impact:**  
   - Adaptation: High  
   - Mitigation: Low

6b. **Gender Mainstreaming:**  
   - Gender equity theme  
   - Effective gender mainstreaming: ✓  
   - Some gender benefits:  
   - No gender elements: 0

7. **Targeting Classification:**  
<table>
<thead>
<tr>
<th>Targeted Intervention</th>
<th>General Intervention</th>
<th>Geographic dimensions of inclusive growth</th>
<th>Millennium Development Goals</th>
<th>Income poverty at household level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>✓</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td></td>
<td>Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National</td>
<td></td>
<td>Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. **Location Impact:**  
   - Rural: High  
   - Urban: Low  
   - National: Low  
   - Regional: |

9. **Project Risk Categorization:** Low

10. **Safeguard Categorization:**  
    - Environment: B  
    - Involuntary resettlement: B  
    - Indigenous peoples: B

11. **ADB Financing:**  
    | Sovereign/Nonsovereign | Modality | Source | Amount ($ million) |
    |------------------------|----------|--------|--------------------|
    | Sovereign | Project loan | Asian Development Fund | 108.0 |
    | Total | | | 108.0 |

12. **Cofinancing:**  
    No Cofinancing available.

13. **Counterpart Financing:**  
    | Source | Amount ($ million) |
    |----------------|-------------------|
    | Government (including contributions of beneficiaries) and sponsors | 30.0 |

14. **Aid Effectiveness:**  
    | Parallel project implementation unit | No |
    | Program-based approach | No |
I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on proposed loans to the Socialist Republic of Viet Nam for the Sustainable Rural Infrastructure Development Project in Northern Mountain Provinces.¹

2. The proposed project will rehabilitate and upgrade deteriorated but critical rural infrastructure in 15 mountainous provinces of northern Viet Nam.² These provinces have a combined population of 12.2 million people and are among the poorest in the country. Overall poverty rates average about 27%, but are considerably higher in more isolated areas, where poverty levels may be 50%–60%. One of the main reasons for these high levels of poverty is limited access to productive assets and infrastructure (such as irrigation water systems), and physical isolation. The project will focus on improving small- to medium-scale irrigation and/or drainage systems, rural roads, and district and commune markets. The project will include 40–45 subprojects. Rehabilitation and upgrading of rural infrastructure is expected to have a positive impact on the lives and livelihoods of the population in the project area, providing easier access to inputs (including irrigation water), markets, health services, higher levels of education, and employment opportunities, while reducing production and marketing costs.³

II. THE PROJECT

A. Rationale

3. The majority (84%) of the population of the northern mountain provinces live in sparsely populated villages, dispersed where land is suitable for agriculture. The incidence of poverty remains consistently higher than in other parts of Viet Nam. While poverty has been reduced nationwide, from 28.9% in 2002 to 16.0% in 2006, and 11.0% in 2008, equivalent figures in the northern mountain provinces were 47.9% in 2002, 32.3% in 2006, and 27.0% in 2008. These figures reflect the more difficult environment and terrain, and the lack of commercial opportunities, arable land, and water resources. Poverty rates among some ethnic minorities in the project area are 70%–80% due to lower levels of access to rural infrastructure, limited opportunities for commercial activity, relatively lower education and skill levels, and low population densities.

4. The 15 northern provinces are comparatively underdeveloped in national terms; this is reflected in the physical infrastructure. While the government and international development partners have invested in rural infrastructure since 1995, a huge backlog of unimproved infrastructure remains. Much of the existing infrastructure is in poor condition due to age, inadequate design and construction, and insufficient maintenance. Nationwide, only two-thirds of the 3 million ha provided with irrigation facilities is currently being irrigated. In the project area, irrigation schemes supporting over 200,000 ha are in need of rehabilitation. Within these schemes, of the 50,000 kilometers (km) of primary and secondary irrigation canals, only 16,270 km or 32% are lined, leaving the majority in need of lining to reduce water loss. Improving irrigation water management is critical to food security in the face of increased food demands and the effects of climate change.

5. In the case of rural roads, only 11.0% in the Northeast and 6.6% in the Northwest are either concrete-surfaced or sealed. This compares with 44.5% in the more developed region of the Red River Delta and 28.0% in the South Central Coastal region. The north has

¹ The design and monitoring framework is in Appendix 1.
² The provinces are: Bac Giang, Bac Kan, Cao Bang, Dien Bien, Ha Giang, Hoa Binh, Lai Chau, Lang Son, Lao Cai, Phu Tho, Son La, Thai Nguyen, Tuyen Quang, Vinh Phuc, and Yen Bai.
predominantly earth and gravel roads, which are particularly unsustainable in hilly and mountainous terrains, where intense rainfall accelerates their deterioration leading to unaffordably high maintenance and repair costs. Furthermore, the distances faced by northern communities to the nearest all-weather road are much higher than elsewhere, averaging 4.4 km in comparison to 1.7 km in the Red River Delta. Distances are a key obstacle to accessing a range of services, including health services. For example only 23% of communities in the Northwest have access to a doctor compared with a national average of 60%. The quality of transport infrastructure is crucial to reaching medical attention, an especially important consideration for the welfare of women and children.

6. In this environment, rural infrastructure is not only a necessary prerequisite to stimulate private investment but it provides a foundation for rural development. Irrigation development enhances agricultural productivity and provides options for farmers to diversify production into higher-value goods, thereby enhancing household incomes. However, investments in agriculture leading to surpluses will not be made if the produce cannot be cost-effectively moved. Rural roads enhance access to markets, commercial opportunities, and input supplies for agricultural production, while also providing access to education and health services. Furthermore, many members of northern farming households are seeking off-farm employment to offset the cyclical costs and unpredictable returns of farming. Access to off-farm employment opportunities also requires good transport facilities.

7. The government’s draft socioeconomic development plan 2011–2016 indicates the intent to prioritize upgrading rural infrastructure to serve the dual objective of social and economic development. This includes upgrading irrigation for water supplies, aquaculture, double cropping in paddy areas, and the expansion of irrigated areas for cash crops. It also includes developing rural transport to move agricultural surpluses and improve social conditions. The project design is therefore based on (i) an identified demand to rehabilitate and upgrade priority rural infrastructure to reduce the high and persistent poverty levels in the northern mountain provinces, thereby improving access to productive resources, services and socioeconomic opportunities, (ii) the government and Asian Development Bank (ADB) strategies of providing rural infrastructure as a means to achieve poverty reduction as described in the government’s national socioeconomic development plan and other related documents, as well as ADB’s country strategy and program, and (iii) the successful design, implementation experience, and relevant lessons from earlier ADB-funded rural infrastructure projects. Lessons were incorporated from six successfully completed ADB projects implemented by the Ministry of Agriculture and Rural Development (MARD), particularly the Rural Infrastructure Sector Project, which had similar objectives and outputs to the proposed project.

B. Impact and Outcome

8. The intended impact of the project is to bring about sustained socioeconomic development in the 15 northern mountain provinces of Viet Nam, while the intended outcome is to increase access to, and use of priority rural infrastructure by the poor and ethnic minorities in the project area.

C. Outputs

9. The outputs will be (i) rehabilitated and upgraded priority rural infrastructure in all 15 participating provinces, and (ii) improved institutional and local capacities for project management and for rural infrastructure use and sustainability.

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1. Rural Infrastructure Improvement

10. Rural infrastructure activities will include (i) irrigation rehabilitation and upgrading, (ii) rural road and market improvement, and (iii) special initiatives to ensure the poor participate equitably and safely in subproject benefits.\(^6\) Using the provincial development plans as a basis, the top five subprojects for each province were pre-screened and prioritized during project preparation activities.\(^7\) Each of the participating provinces will implement two or three of the top priority subprojects. The final list of subprojects will be determined after the feasibility studies, using rigorous eligibility safeguard, technical, economic, and social criteria.\(^8\) The top priority subprojects feature irrigation and drainage schemes with an aggregate command (or drainage) area of approximately 12,400 ha and road links of an aggregate length of approximately 600 km.

2. Improved Capacities for Project Management and for Rural Infrastructure Use and Sustainability

11. Capacity building activities will cover line agency staff and other stakeholders involved in project implementation as well as those people responsible for the operation and maintenance of infrastructure managed by the DARDs. They will be implemented through (i) training workshops at national and provincial levels; (ii) the preparation of training materials and the delivery of the same; (iii) overseas study tours to better appreciate how implementation issues are dealt with in other countries of the region; (iv) the provision of consulting services to support project implementation and to oversee the training program; (v) follow up training impact surveys to assist in improving the impact of the training methods, and (vi) on-the-job training during implementation activities.

12. This component will equip project implementation staff with the necessary skills and knowledge of government and ADB procedures to recruit the various consulting services, manage construction contracts, satisfy progress reporting obligations to the government and ADB, and conduct sound financial management of imprest accounts. It will also provide support to meet incremental staff costs, vehicles, office equipment, air and land travel, per diem, office operating costs, and, where necessary, the rehabilitation of government office facilities for project use.

13. In addition, it will include the training of staff from agencies responsible for the operation and maintenance of the improved infrastructure using whole-life asset management planning. The project will support the development of a district database of infrastructure assets managed by the DARDs and assistance in the preparation of whole-life maintenance plans. Capacity building activities will also include measures to increase road safety awareness for vulnerable road users along rehabilitated and upgraded rural roads.

D. Investment and Financing Plans

14. The project is estimated to cost $138 million (Table 1).

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\(^6\) Such activities will include intensified agriculture extension activities, market training (including numeracy and language training) and the provision of footpaths and trails leading off from subproject roads.

\(^7\) List of Eligible Subprojects (Appendix 2).

\(^8\) Project Administration Manual (Appendix 2).
Table 1: Project Investment Plan
($ million)

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Rural infrastructure improvement</td>
</tr>
<tr>
<td>2.</td>
<td>Capacity building</td>
</tr>
<tr>
<td>3.</td>
<td>Project management</td>
</tr>
<tr>
<td>Subtotal (A)</td>
<td>132.96</td>
</tr>
<tr>
<td>B.</td>
<td>Contingencies</td>
</tr>
<tr>
<td>C.</td>
<td>Financing Charges During Implementation</td>
</tr>
<tr>
<td>Total (A+B+C)</td>
<td>138.00</td>
</tr>
</tbody>
</table>

* a Includes taxes and duties of $12.054 million to be financed from government resources.
* b In mid-2010 prices.
* c Physical contingencies computed at 5% for all expenditure categories, except civil works given the sector approach being applied. Price contingencies computed at 2.5% on foreign exchange costs and 6.5% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.
* d Includes interest charges. Interest during construction under ADF regular terms has been computed at 1.0% during the grace period and 1.5% thereafter. Interest during construction under the ADF hard-term facility has been computed at 2.2% for the entire loan period.

15. The government has requested (i) a loan in various currencies equivalent to SDR 54,116,000 from ADB’s Special Funds resources (regular terms) and (ii) a loan in various currencies equivalent to SDR 17,159,000 from ADB’s Special Funds resources (hard-term facility) to help finance the project. The regular Asian Development Fund (ADF) loan will have a 32-year term, including a grace period of 8 years, an interest rate of 1.0% per annum during the grace period and 1.5% per annum thereafter, and such other terms and conditions set forth in the loan agreement. The ADF hard-term loan will have a 32-year term, including a grace period of 8 years, and an interest rate of 2.2% per annum.

16. ADB’s total contribution to the project cost will thus be $108.00 million, 78.3% of total project cost. The bulk of the proceeds of these loans (excluding the funds for national capacity building and project coordination) will be passed to the 15 participating provincial governments by the national government as a grant.

17. The balance of the project cost, $30.00 million equivalent, or 21.7% of total project cost, will be funded by the government from its own budget and will cover taxes and duties, staff salaries, and the recruitment of national safeguard consultants for subproject feasibility studies, detailed design, bidding document preparation, and construction supervision. Taxes and duties on civil works, and vehicles and equipment to be used in the provinces will be funded by the participating provinces. The financing plan is in Table 2.

Table 2: Financing Plan

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount ($ million)</th>
<th>Share of Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Development Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Development Fund regular terms</td>
<td>82.00</td>
<td>59.4</td>
</tr>
<tr>
<td>Asian Development Fund hard-term facility</td>
<td>26.00</td>
<td>18.8</td>
</tr>
<tr>
<td>Government of Viet Nam</td>
<td>30.00</td>
<td>21.7</td>
</tr>
<tr>
<td>Total</td>
<td>138.00</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: Bank charges related to operations of imprest accounts will be financed from the respective loan proceeds. Source: ADB estimates.

E. Implementation Arrangements

18. MARD will be the executing agency and will delegate responsibility for overall project
coordination to its Agriculture Projects Management Board, which will establish a central project management unit (CPMU) responsible for national project management and coordination.

19. Consistent with the government’s desire to decentralize project implementation to the provinces, the provincial people’s committees will be the implementing agencies, acting through their provincial departments of agriculture and rural development (DARDs). Each DARD will establish a provincial project management unit (PPMU). The PPMUs will be responsible for the day-to-day management of subproject implementation in the provinces, and will carry out feasibility studies and implement the subprojects.

20. The project will coordinate closely with existing local administrations, using the commune people's committee as the point of liaison. PPMUs will work in close cooperation with commune personnel, who will be responsible for ensuring coordination of day-to-day activities between the project and commune authorities. This will include organizing public consultations and also providing assistance to the commune supervision board to ensure commune participation in subproject design and implementation. A budgetary allocation has been made to assist in meeting facilitation and coordination costs in each of the participating districts where subprojects are to be implemented.

21. The subprojects will be implemented in two phases. In the first phase, each province will implement their top two priorities. In the second phase, remaining resources will be allocated to the provinces for the construction of additional subprojects as they successfully complete first phase subprojects. Better performing provinces will have a chance to implement additional subprojects. Further implementation arrangements including subproject implementation procedures and feasibility criteria are summarized in Table 3 and described in detail in the project administration manual.

Table 3: Implementation Arrangements

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation period</td>
<td>January 2011–December 2016 (6 years)</td>
</tr>
<tr>
<td>Estimated completion date</td>
<td>31 December 2016</td>
</tr>
<tr>
<td>Management</td>
<td></td>
</tr>
<tr>
<td>(i) Executing agency</td>
<td>Ministry of Agriculture and Rural Development</td>
</tr>
<tr>
<td>(ii) Key implementing agencies</td>
<td>Provincial people’s committees for Bac Giang, Bac Kan, Cao Bang, Dien Bien, Ha Giang, Hoa Binh, Lai Chau, Lang Son, Lao Cai, Phu Tho, Son La, Thai Nguyen, Tuyen Quang, Vinh Phuc, and Yen Bai provinces</td>
</tr>
<tr>
<td>(iii) Implementation unit</td>
<td>Central project management unit to be located in Ha Noi (30 staff)</td>
</tr>
<tr>
<td></td>
<td>Provincial project management units to be located in each provincial capital (minimum 10 staff each)</td>
</tr>
<tr>
<td>Procurement</td>
<td></td>
</tr>
<tr>
<td>National competitive bidding</td>
<td>150 contracts $93.47 million</td>
</tr>
<tr>
<td>Shopping</td>
<td>48 contracts $2.00 million</td>
</tr>
<tr>
<td>Government procedures</td>
<td>425 contracts $10.89 million (wholly funded from the government’s own resources)</td>
</tr>
<tr>
<td>Consulting services</td>
<td>Quality- and cost-based selection (80:20) 347 person-months $4.00 million</td>
</tr>
<tr>
<td>Consultants’ qualification selection</td>
<td>7 contracts $0.60 million</td>
</tr>
<tr>
<td>Advance action</td>
<td>Consultant selection procedures for loan implementation consultants will be undertaken up to the short-listing stage prior to loan effectiveness.</td>
</tr>
<tr>
<td>Disbursement</td>
<td>The loan proceeds will be disbursed in accordance with ADB’s Loan Disbursement Handbook (2007, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.</td>
</tr>
</tbody>
</table>

Source: ADB estimates.

9 The commune supervision boards will include at least one women’s representative.
10 Project Administration Manual (Appendix 2).
III. DUE DILIGENCE

A. Technical

22. The subprojects involve the rehabilitation and upgrading of existing rural infrastructure. The technology for undertaking such works is within the capacity of the provincial government agencies assigned to implement them, although, due to the mountainous terrain, greater attention to design and implementation quality will be needed. The focus of the civil works implementation will be on quality rather than maximizing coverage, and designs will be based on appropriate standards to ensure sustainability.

23. The main policy concern for rural infrastructure is the issue of sustainability. The key problem with achieving sustainability is the lack of maintenance capacity, including defined organizational responsibilities and accountability, as well as a stable and adequate flow of funds. The government has a financing mechanism for irrigation maintenance. However, it does not generate adequate funds. To make full use of the limited funds, the capacity building component includes training in operation and maintenance for the end users of the upgraded infrastructure and an asset management initiative for irrigation schemes. This will lead to a more efficient and cost-effective use of the funds. Operation and maintenance budgets are inadequate to cover all roads under provincial responsibility. However, the participating provinces have committed to providing funds for maintenance of the roads to be upgraded by the project. Also, to reduce future maintenance burdens the project aims at initial robust design and ensuring good construction quality. In the near future, the government plans to establish a road fund that will include a dedicated percentage for rural roads. The project will register the road improvements with the provincial departments of transport to ensure their inclusion in the maintenance program. The project will coordinate with the local districts and communes to establish market management arrangements for market improvements.

B. Economic and Financial

24. Based on the economic analysis of two representative subprojects (irrigation and rural roads), the project will generate a satisfactory economic return from the investments. Better water management and infrastructure will lead to incremental productivity increases and diversification into produce that yield higher returns. Rehabilitated rural roads will reduce vehicle operating costs, reduce travel times between destinations, and induce increased crop production due to higher farm-gate prices for agricultural produce and improved access to production inputs. The estimated economic internal rates of return for the representative subprojects are 13.0% for irrigation and 13.4% for rural roads. In each case, the benefits are robust to commodity price decreases, to decreasing utilization rates and to increased investment cost.

25. Financial benefits to households will be significant in terms of the opportunities created. Individuals will not contribute to investment costs but will only contribute direct inputs to production, and will enjoy the direct and indirect benefits. The distribution analysis confirms that the poor will benefit significantly and proportionally from subproject investments.\(^\text{11}\)

C. Governance

26. All procurement to be financed by ADB loan funds will be carried out in accordance with ADB’s Procurement Guidelines (2010, as amended from time to time). MARD has indicated that it will ensure that all accounts administered by the CPMU and PPMUs are consolidated and audited annually by auditors acceptable to ADB. The project will strengthen the capacities of CPMU and PPMU staff in financial management procedures to allow the efficient operation of

\(^{11}\) Economic and Financial Analysis (Appendix 2).
advance accounts and the reporting of financial performance to the government and ADB. Implementation of the project will be consistent with the government's requirement for provincial implementation under national coordination. Where possible, the involvement of district and lower level administrations and communities will be sought to effect their participation in design and construction monitoring. The project will also establish a website to (i) disclose implementation progress and bid notifications and their results, and (ii) provide a grievance mechanism against any corrupt practice.

27. ADB’s Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and MARD. The specific policy requirements and supplementary measures are described in the project administration manual.12

D. Poverty and Social

28. Poverty levels among direct beneficiaries of subprojects range from 25% to 60%. The majority of subprojects have a poverty level of over 40%, compared with an overall national figure of 11% in 2008. As evidenced by past successful ADB interventions, improving access to resources, inputs, services and market opportunities, the project is expected to have a significant impact in reducing poverty throughout the subproject areas and beyond. Direct beneficiaries will include residents in the subproject areas. The rural road improvements will also generate indirect beneficiaries by increasing the overall catchment area and efficiency of the rural transport networks. The project is classified as “effective gender mainstreaming” under ADB’s gender mainstreaming categories. The majority of women in the project area are active in agriculture but also undertake about 80% of domestic chores. The project will provide women in the target communities with improved infrastructure that will enable increased productivity and incomes, empowerment through participation in project decision-making, reduced work burdens, off-farm income earning opportunities, and improved access to educational, health and social services. To ensure benefits accrue to women, a gender action plan has been prepared.13

E. Safeguards

29. Environment (category B). The project is unlikely to cause significant environmental damage since the subprojects are mainly limited to improving existing infrastructure. Moreover, subprojects have been screened to exclude those that may cause significant damage. The environmental assessment and review framework provides guidance for the government to carry out an appropriate level of environmental assessment and to take measures to deal with these impacts.14

30. Involuntary resettlement (category B). No resettlement is expected because the majority of infrastructure, irrigation, and roads will be improved along existing rights of way. As a result, the main concern will be the provision of compensation for roadside trees, crops or small structures. The absence of major resettlement issues was one of the eligibility criteria used in selecting subprojects. The government and ADB have agreed on a resettlement framework along with procedures and an outline format for a resettlement plan.15 Compensation, allowances, operation and administration costs, surveys, monitoring, and reporting will be financed from government counterpart funds. A qualified institution or firm acceptable to ADB will be contracted by the government to conduct independent external monitoring and evaluation of the resettlement process and impacts.

12 Project Administration Manual (Appendix 2).
13 Gender Action Plan (Appendix 2).
14 Environmental Assessment and Review Framework (Appendix 2).
15 Resettlement Framework (Appendix 2).
31. **Indigenous peoples** (category B). Ethnic minorities are expected to be among the major beneficiaries of the project. The government and ADB have agreed on an indigenous peoples planning framework. For most subprojects, where the majority of beneficiaries are from ethnic minorities and where subproject impacts are expected to be wholly positive, measures to improve the welfare of indigenous peoples and protection of their rights are included in the subproject design. In other subprojects, combined resettlement and ethnic minority development plans will be prepared. An important aspect of the project will be the use of the commune supervision board to ensure local peoples’ participation in subproject design and construction supervision. This will ensure that specific local concerns among ethnic minorities are addressed during implementation.

**F. Risks and Mitigating Measures**

32. The integrated benefits and impacts of the project are expected to outweigh the costs. Major risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.\(^{16}\)

<table>
<thead>
<tr>
<th>Risks</th>
<th>Mitigating Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited economic development potential in subproject areas</td>
<td>Subprojects have been prescreened to ensure technical and initial economic viability during the preparation phase. Feasibility studies including economic and financial analyses will be undertaken prior to implementation.</td>
</tr>
<tr>
<td>Insufficient operation and maintenance leading to premature asset deterioration</td>
<td>Participating provinces have committed to provide adequate operation and maintenance funding as a condition for selection of subprojects. Robust designs and good quality control will reduce the maintenance burden. Maintenance capacity building will be supported for irrigation subprojects. The project will have close coordination with the authorities responsible for management of the road improvements.</td>
</tr>
<tr>
<td>Catastrophic climatic events interrupting implementation or damaging infrastructure</td>
<td>The use of robust designs and good construction quality control will reduce the vulnerability of the rural infrastructure to catastrophic climatic events.</td>
</tr>
<tr>
<td>Limited implementation capacities at the provincial level to meet all ADB and project requirements.</td>
<td>Project preparatory TA will provide start-up support, and loan implementation consultants will provide capacity building and training. The implementation will be phased, rewarding better-performing provinces in the second phase with additional resources. This will be an incentive for good performance and delivery.</td>
</tr>
</tbody>
</table>

Source: Project design and monitoring framework – Asian Development Bank.

**IV. ASSURANCES AND CONDITIONS**

33. The government has assured ADB that implementation of the project shall conform to all applicable ADB policies including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the project administration manual and loan documents.

34. The government has agreed with ADB on certain covenants for the project, which are set forth in the loan agreements.

\(^{16}\) Risk Assessment and Risk Management Plan (Appendix 2)
35. As a condition of disbursement of funds to individual provinces, the government has agreed that no disbursement shall be made to a province until a PPMU has been established within the DARD of that province.

V. RECOMMENDATION

36. I am satisfied that the proposed loans would comply with the Articles of Agreement of the Asian Development Bank (ADB) and, acting in the absence of the President, under the provisions of Article 35.1 of the Articles of Agreement of ADB, I recommend that the Board approve

(i) the loan in various currencies equivalent to SDR54,116,000 to the Socialist Republic of Viet Nam for the Sustainable Rural Infrastructure Development Project in Northern Mountain Provinces from ADB’s Special Funds resources (regular terms), with an interest charge at the rate of 1.0% per annum during the grace period and 1.5% per annum thereafter; for a term of 32 years, including a grace period of 8 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan agreements presented to the Board; and

(ii) the loan in various currencies equivalent to SDR17,159,000 to the Socialist Republic of Viet Nam for the Sustainable Rural Infrastructure Development Project in Northern Mountain Provinces from ADB’s Special Funds resources (hard-term facility), with an interest charge at the rate of 2.2% per annum; for a term of 32 years, including a grace period of 8 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan agreements presented to the Board.

C. Lawrence Greenwood, Jr.
Vice-President

29 September 2010
## DESIGN AND MONITORING FRAMEWORK

<table>
<thead>
<tr>
<th>Design Summary</th>
<th>Performance Targets and Indicators with Baselines</th>
<th>Data Sources and Reporting Mechanisms</th>
<th>Assumptions and Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impact</strong></td>
<td>From baselines in 2011:</td>
<td></td>
<td>Assumption</td>
</tr>
<tr>
<td>Sustained socioeconomic development in the 15 northern mountain provinces of Viet Nam</td>
<td>1. Reduction of the number of poor households in the project area from 26% to 15% by 2020.</td>
<td>Project-funded baseline surveys and PBME studies. Commune statistics, committee for ethnic minority affairs, general statistics office. (1-3)</td>
<td>Government continues to place a high priority on economic growth and poverty reduction in the region</td>
</tr>
<tr>
<td></td>
<td>From baselines in 2011 in subproject areas of influence:</td>
<td></td>
<td>Risk</td>
</tr>
<tr>
<td></td>
<td>2. Average household income raised 45% by 2020, by household type (ethnic minority, poor, sex, age), if necessary, using proxies for household income based on expenditure measures in baseline survey</td>
<td>PDoE and PDoH (4.)</td>
<td>Limited economic development potential in subproject areas</td>
</tr>
<tr>
<td></td>
<td>3. Value of goods traded in the market increased by 100% by 2018.</td>
<td></td>
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<td></td>
<td>4. By 2018, increases of: 50% attendance at secondary schools by girls; and, 100% visits to health clinics by women and children.</td>
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</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>From baselines in 2011 in subproject areas of influence:</td>
<td></td>
<td>Assumptions</td>
</tr>
<tr>
<td>Increased access to and use of priority rural infrastructure by the poor and ethnic minorities</td>
<td>1. <strong>Irrigation</strong></td>
<td>Project-funded baseline surveys and PBME studies. DARD statistics (1.1–1.2)</td>
<td>Stream of benefits continue over the economic life of the improved assets</td>
</tr>
<tr>
<td></td>
<td>1.1 Rice yields per ha in irrigation command areas increased by 25% immediately after commissioning and no later than 2017.</td>
<td></td>
<td>Poorest segments of the population have the capacity to benefit from the improved assets</td>
</tr>
<tr>
<td></td>
<td>1.2 Cropping intensity in irrigation command areas increased by 30% after commissioning and no later than 2017.</td>
<td>DARD statistics (2.1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. <strong>Roads and markets</strong></td>
<td></td>
<td><strong>Risks</strong></td>
</tr>
<tr>
<td></td>
<td>2.1 Producer surplus increased by 20% by 2017 - induced by increased farm-gate market prices for agricultural produce and greater access to production inputs.</td>
<td>DARD statistics (2.1)</td>
<td>Insufficient operation and maintenance leading to premature asset deterioration</td>
</tr>
<tr>
<td></td>
<td>2.2 Travel indicators: VOC reduced by 60%; travel time reduced by 50%; traffic volume increased by 200% by 2017.</td>
<td>PDoT statistics (2.2–2.4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.3 Within one year of subproject completion: Average increase in annual traffic 8% in tons and 7% in ton-km, of which 60% will be agricultural surpluses.</td>
<td></td>
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<tr>
<td></td>
<td>2.4 Within one year of subproject completion: Average increase in passenger volumes: 12% in passengers and 10% in passenger-km.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Design Summary

### Outputs
1. Priority rural infrastructure rehabilitated or upgraded

- From baselines in 2011:
  1.1 12,400 ha of irrigated land either receiving water in a timely manner and in the quantities required, or being drained of surplus flood water in a timely manner within 12 months after commissioning but not later than 2016
  1.2 600 km of rural road grades IV, V, or VI rehabilitated by 2016
  1.3 10 rural commune markets upgraded or established by commissioning but not later than 2016
  1.4 All market improvements include facilities for women by 2015
  1.5 The works generate a minimum of $4.5 million worth of employment, of which 30% is for women by 2015

### Assumptions and Risks

**Assumptions**
- Provincial plans from which the subprojects are selected represent the intended beneficiaries’ true priorities

**Risks**
- Catastrophic climatic events disrupting implementation or damaging infrastructure

## Performance Targets and Indicators with Baselines

### Outputs
1. Priority rural infrastructure rehabilitated or upgraded

- From baselines in 2011:
  1.1 12,400 ha of irrigated land either receiving water in a timely manner and in the quantities required, or being drained of surplus flood water in a timely manner within 12 months after commissioning but not later than 2016
  1.2 600 km of rural road grades IV, V, or VI rehabilitated by 2016
  1.3 10 rural commune markets upgraded or established by commissioning but not later than 2016
  1.4 All market improvements include facilities for women by 2015
  1.5 The works generate a minimum of $4.5 million worth of employment, of which 30% is for women by 2015

### Data Sources and Reporting Mechanisms

- Project-funded baseline surveys
- Project implementation monitoring and PBME studies
- Provincial statistics

## Assumptions and Risks

**Assumptions**
- Provincial plans from which the subprojects are selected represent the intended beneficiaries’ true priorities

**Risks**
- Catastrophic climatic events disrupting implementation or damaging infrastructure

## Activities with Milestones

### 1. Priority rural infrastructure rehabilitated or upgraded

1. CPMU design first set of baseline surveys including household, origin/destination, traffic characteristics, and market by month 12
   - Surveys to include disaggregated gender and age data and analysis

2. PPMUs carry out feasibility and safeguard studies for 45 subprojects by month 21 for phase 1, and month 36 for phase 2 subprojects
   - Feasibility studies to include consultations with women and women’s groups. Pro-poor, female, and children inclusion measures are identified

3. PPMUs prepare 150 detailed design bidding documents and supervision contracts tendered by end of month 30 for phase 1, and month 44 for phase 2 subprojects.
   - The detailed designs address the pro-poor, female, and children inclusion measures

4. PPMUs implement and supervise resettlement plans by end of month 30 for phase 1, and month 44 for phase 2 subprojects

5. PPMUs award construction contracts for 45 subprojects by end of month 45 for phase 1, and month 51 for phase 2 subprojects.
   - PPMUs encourage contractors to include local labor of which women will provide a minimum of 30%.

6. PPMUs undertake implementation monitoring, contract supervision

### Inputs

<table>
<thead>
<tr>
<th>Total costs: $138 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB ADF (regular):</td>
</tr>
<tr>
<td>$82 million</td>
</tr>
<tr>
<td><strong>Item</strong></td>
</tr>
<tr>
<td>Civil works</td>
</tr>
<tr>
<td>Vehicles and equipment</td>
</tr>
<tr>
<td>Consultants</td>
</tr>
<tr>
<td>Training</td>
</tr>
<tr>
<td>Study tours</td>
</tr>
<tr>
<td>PPMU operations</td>
</tr>
<tr>
<td>Interest</td>
</tr>
</tbody>
</table>
Appendix 1

and progress reporting from month 20 to month 66. The commune supervision board monitors labor conditions and reports to authorities any noncompliance

2. Improved capacities for project management and for rural infrastructure use and sustainability

2.1 Provide training in ADB procedures to CPMU and PPMU staff by the end of month 3 (CPMU to arrange)

2.2 Provide safeguards training including gender sensitivity, HIV awareness, and ethnic minority sensitivity to PPMU staff by end of month 9 (CPMU to arrange)

2.3 Complete training needs assessment surveys centrally and in the provinces (to be arranged by CPMU after initial training activities by end of month 30). The training shall include all female staff

2.4 CPMU to arrange national (12 occasions) and international (one occasion) study tours for selected participants to demonstrate project management approaches and maintenance planning of rural infrastructure by end of month 42

2.5 Establish management structures 3 months after loan effectiveness, including the commune supervision board, which will include representatives of the Women's Union. At least 33% of the membership will be women

2.6 Open national and provincial imprest accounts and establish initial deposits of advance loan funds 3 months after loan effectiveness

2.7 Recruit loan implementation consultants 9 months after loan effectiveness

2.8 Develop a system and provide training for PPMU and CPMU to monitor contracts by end of month 18

2.9 Submit physical and financial progress reports in a timely manner

2.10 Maintain and operate the CPMU

2.11 Maintain and operate the 15 PPMUs

2.12 Engage suitably qualified nongovernment organizations and implement safety awareness training campaigns in communities living along rehabilitated roads. CPMU to arrange upon completion of each rural road rehabilitation; to be completed by end of month 42

2.13 Develop and initiate asset management activities by the end of month 45. Aim to include women in 50% of decision and implementation roles such as domestic water user groups, market management committees and irrigation associations.

2.14 Operations and maintenance funding allocated to maintain rehabilitated infrastructure after commissioning and beginning in month 42

<table>
<thead>
<tr>
<th>ADB ADF (hard-term):</th>
<th>Amount&lt;br&gt;$'000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td></td>
</tr>
<tr>
<td>Civil works</td>
<td>24,478.5</td>
</tr>
<tr>
<td>Interest</td>
<td>1,521.5</td>
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</table>

<table>
<thead>
<tr>
<th>Government: $30 million</th>
<th>Amount&lt;br&gt;$'000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td></td>
</tr>
<tr>
<td>Resettlement</td>
<td>2,477.2</td>
</tr>
<tr>
<td>Preparation studies</td>
<td>9,799.2</td>
</tr>
<tr>
<td>Operations and maintenance management</td>
<td>5,184.0</td>
</tr>
<tr>
<td>Tax and duties</td>
<td>12,053.7</td>
</tr>
</tbody>
</table>

ADB = Asian Development Bank, CPMU = Central Project Management Unit, DARD = Department of Agriculture and Rural Development, ha = hectare, km = kilometer, PDoT = Provincial Department of Tourism, PDoE = Provincial Department of Education, PDoH = Provincial Department of Health, PPMU = Provincial Project Management Unit, VOC = vehicle operating costs.

Note: Numbers may not sum precisely because of rounding.

LIST OF LINKED DOCUMENTS
http://www.adb.org/Documents/RRPs/?id=41461-01-3

1. Loan Agreement (Regular Term)
2. Loan Agreement (Hard Term)
3. Sector Assessment (Summary): Agriculture and Natural Resources
4. Project Administration Manual
5. Contribution to the ADB Results Framework
6. Development Coordination
7. Economic and Financial Analysis
8. Country Economic Indicators
9. Summary Poverty Reduction and Social Strategy
10. Gender Action Plan
11. Environmental Assessment and Review Framework
12. Resettlement Framework
13. Indigenous Peoples Planning Framework
14. Risk Assessment and Risk Management Plan

Supplementary Documents
15. List of Eligible Subprojects