I. Project Context

Country Context

Vietnam has achieved an impressive record of economic growth and poverty reduction. Over the last two decades, Vietnam's GDP grew about 7 percent a year, and the poverty rate declined from around 60 percent in 1993 to nearly 12 percent by the end of 2011. The structure of the economy has transitioned from an agricultural base to one increasingly concentrated in industry and services. The number of private sector firms grew from 35,000 in the year 2000 to over 600,000 firms in 2011. Vietnam is currently one of the leading exporters of several major agricultural commodities, including rice, coffee, tea, cashews, and farmed fish. In manufacturing, it has established a specialized niche in a range of goods such as garments, furniture and electronics. The labor force profile has also been significantly upgraded, with the coverage of secondary education approaching 80 percent and tertiary education coverage doubling within a decade to about 20 percent of the age group.

In spite of these achievements in the past, Vietnam has reached a stage where the sources of growth of the past two decades may no longer be available. The tighter integration with an increasingly volatile world economy and crises associated with climate change pose new threats to Vietnam. One particularly worrying issue for Vietnam is the possibility of getting stuck in a middle income trap. Recent research (Hidalgo et. al, Science, 317, 2007, pp. 482-487) has shown the important link between the complexity of an economy's production capabilities and its development record –
economies with a diversified product base are able to generate more economic growth with greater resilience to shocks. Vietnam's export basket shows a plateauing in the growth in the diversity of product categories and of varieties within a category. The total factor productivity in Vietnam, in both levels and growth rates shows mediocre performance. While Foreign Direct Investment (FDI) has continued to grow through the recent financial crisis, the FDI has not translated into technological improvements at a systemic level. Universities and research institutes have been modernized in the recent past, and technology-oriented private enterprises have grown, but the science and technology sector has a long way to go to become an engine of growth.

II. Sectoral and Institutional Context

Global benchmarking indicators point to a weak innovation performance of the country. Vietnam ranks 115 out of 146 countries according to the KAM Innovation Index and 51 out of 125 countries according to INSEAD’s Global Innovation Index. To help improve the low performance regarding Science, Technology and Innovation (STI), a comprehensive set of reforms has been introduced in Vietnam in the past 10 years. One of the first measures was the Law on Science and Technology (2000) that defines the legal framework for STI, including the provision of a central role for the Ministry of Science and Technology (MOST) in the state management of Science and Technology (S&T). Key laws were also introduced regarding Intellectual Property (2005), Technology Transfer (2006) and Law on High Technology (2008). A number of decrees and prime ministerial decisions were also promulgated in this period.

The STI sector in Vietnam is marked by minimal involvement of the private sector, low and inefficient investment by the state, and poor STI output relevant to the needs of the Vietnamese economy and society. Only about 20 percent of firms in the 2010 General Statistical Office (GSO) survey of 8,000 enterprises declared to have undergone successful technology improvement over the last few years, and only 15 percent report having undertaken Research and Development (R&D) expenditures. The state sector includes about 650 science and technology organizations or Government Research Institutes (GRIs) in different ministries and government agencies. There are about 260 basic research institutes and 390 applied research institutes. Basic research institutes are managed mainly by the Vietnam Academy of Science and Technology (VAST) and the Vietnam Academy of Social Sciences (VASS) and the Ministry of Education and Training (MOET). Applied research institutes belong to line ministries such as the Ministry of Agriculture and Rural Development (MARD), Ministry of Industry and Trade (MOIT), and the Ministry for Natural Resources and the Environment (MONRE). A few GRIs are also managed by Provincial People's Committees (PPC). The budget for the GRIs is transferred through MOST to the line ministries.

In order to encourage the GRIs toward economic and social relevance, the Government of Vietnam (GOV) introduced Decree 115 in 2005. This decree defined the legal framework for the conversion of GRIs from traditionally managed institutions dependent on the state-budget, to market-driven and self-financed autonomous institutions. GRIs could be converted, restructured by merging, or closed down, depending on their strategic conversion plan. These conversion plans were prepared by the GRIs and submitted to the state organization (National Ministry or PPC) to which each GRI pertained. Nearly half of the GRIs have had their conversion plans approved and are now in the process of implementing those plans, with some of the GRIs further ahead than others regarding conversion.

Quite a few GRIs have made the transition to market orientation, with reduced dependence on the state budget. A number of GRIs have also been absorbed into other GRIs as part of re-organization
for improved efficiency. Progress has also been made in the implementation of some of the other laws and decrees that are directed towards modernizing and revamping the STI sector in Vietnam. However, some key weaknesses do remain: (a) the private sector continues to display low levels of innovation including FDI firms, very few of which have established R&D units or ancillary suppliers within Vietnam; (b) the amount of investment in R&D at about 0.2 percent of GDP is still way below the 2020 target of 1.5 percent of GDP; and (c) the institutional mechanisms to implement the new STI regime are still underdeveloped, with poor capabilities for monitoring and evaluation regarding STI output.

III. Project Development Objectives

The project development objective is to support science, technology and innovation in Vietnam by improving the utilization of global scientific and research networks, enhancing the effectiveness of project-aided Research and Development (R&D) institutions, and encouraging the development of innovative technology enterprises.

IV. Project Description

Component Name

Component 1: Knowledge and Policy Development
Component 2: Supporting Government Research Institute (GRI) Reform and Enterprise Innovation
Component 3: Project Management and Policy Research Program on Project Activities

V. Financing (in USD Million)

<table>
<thead>
<tr>
<th>For Loans/Credits/Others</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>BORROWER/RECIPIENT</td>
<td>10.00</td>
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<tr>
<td>International Development Association (IDA)</td>
<td>100.00</td>
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<tr>
<td>Total</td>
<td>110.00</td>
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</table>

VI. Implementation

The executing agency will be MOST with a Central Project Management Unit (CPMU) established and staffed to coordinate the overall project and implement its activities. A Project Steering Committee (PSC), chaired by Minister, MOST, and including representatives from MOST, MPI, MOF, SBV and other concerned ministries and sectors will provide guidance and oversight. The PMU will be headed by a Project Director appointed by Minister, MOST. The CPMU will be staffed with a Project Director, a Deputy Project Director, a Chief Accountant, a Financial Management Specialist, a Procurement Officer, a Project Officer, a Training Officer and a Project Coordinator. The CPMU will include representatives from the various MOST line departments involved in the project activities, including the Department of International Co-operation; the Department of Planning and Finance and the Department of Organization and Personnel. The CPMU office will also include seconded staff from other line departments, consultants, and administrative staff. When needed, specific technical task forces will be set up within the CPMU office with membership drawn from relevant MOST departments and agencies and consultants.

The CPMU will be supported by Subsidiary Project Management Units (SPMUs) in cases where such an arrangement will improve implementation efficiency – for example in the case of the National Science and Technology Information Agency (NASATI) and of large research institutions with sufficient capacity and experience in procuring equipment. The specific details of the division
of responsibilities between the CPMU and SPMUs will be detailed in the Project Implementation Manual. Subsidiary sub-project agreements will be signed between the CPMU and SPMUs after a financial management (FM) and procurement assessment conducted by the CPMU determines compliance with participation conditions specified in the PIM. The division of responsibilities will take the following form: contracts for more than a specified amount will be subject to prior review by the CPMU; internal audit responsibility will be retained by the CPMU, and there will be a set of corrective and remedial actions in case of non-compliance by the SPMU.

Incremental operating costs financed under the project will be used mainly for finite objectives – for example in the case of seminars or workshops associated with establishment of policies regarding attraction of foreign talent. In case the operating costs are for purposes expected to continue after the project, the GOV will finance an increased proportion towards the later years of the project so as to support sustainability of project financing.

VII. Safeguard Policies (including public consultation)

<table>
<thead>
<tr>
<th>Safeguard Policies Triggered by the Project</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Environmental Assessment OP/BP 4.01</td>
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<td>Natural Habitats OP/BP 4.04</td>
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<td>Forests OP/BP 4.36</td>
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<td>Pest Management OP 4.09</td>
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<td>Indigenous Peoples OP/BP 4.10</td>
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<tr>
<td>Projects in Disputed Areas OP/BP 7.60</td>
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</tbody>
</table>

VIII. Contact point

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