

# MEMORANDO

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**FECHA:** 10 de enero de 2006

**A:** Oficina de la Vicepresidencia Ejecutiva

**VIA:** Máximo Jeria, Gerente  
Departamento Regional de Operaciones II

**DE:** John Horton, RE2/EN2 (*Original Firmado*)  
Jefe de Equipo de Proyecto

**ASUNTO:** HAITI. PROGRAMA DE DESARROLLO DE CADENAS RURALES PRODUCTIVAS (HA-L1003)  
Documento Conceptual de Proyecto.

Sírvase encontrar adjunto para su distribución al Comité de Préstamos, los siguientes documentos de la operación de la referencia: Documento Conceptual de Proyecto, Anexos y Acta del Comité de Revisión Gerencial.

Para efectos de la política sobre disponibilidad de información (GN-1831-3), se informa que el documento no contiene material confidencial, por lo que no requerirá tratamiento especial.

El Documento Conceptual de Proyecto fue considerado por el CESI el 2 de diciembre de 2005 y los comentarios serán incluidos en el Informe de Proyecto. El Documento Conceptual de Proyecto será publicado en el Internet una vez sea aprobado por el Comité de Préstamos.

Para cualquier pregunta adicional, estaré disponible en la extensión 1934.

Adjunto

Distribución Autorizada

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Oficina de la Vicepresidencia Ejecutiva

Vo.Bo.                     (*Original Firmado*)                      
Robert N. Kaplan, Jefe División  
RE2/EN2

Vo.Bo.                     (*Original Firmado*)                      
Lionel Y. Nicol, Subgerente RE2/RE2

## HAITI

### PROGRAMA DE DESARROLLO DE CADENAS PRODUCTIVAS RURALES (HA-L1003)

#### ACTA DEL COMITÉ DE REVISIÓN GERENCIAL (CRG) DEL PCD 22 DE NOVIEMBRE DE 2005

##### I. INVITADOS

Gerencia Planificación (DEV-MGR); Subgerencia de Planificación y Gestión de Cartera (DEV-PLN); Guillermo Calvo (RES); María Eugenia Nepote-Cit (LEG/OPR2); Joel Korn, Renato Puch, Alberto Gómez Gaviria (RE2/RE2); Robert N. Kaplan, John Horton, Diego Arias, George Alexandrou, Carlos Pineda (RE2/EN2); Marcelo Antinori (RE2/FI2); Helge Semb, Bárbara Szaszkievicz, Víctor Mosquera (RE2/OD3); Jorge Sapoznikow (RE2/SC2); Héctor Salazar (RE2/SO2); Asunción Aguilá (RE1/EN1); Alvaro Llosa (RE3/EN3); Janine Ferretti (SDS/ENV); Mark Wenner (SDS/RUR); Pietro Masci (SDS/IFM); Emilio Cueto, Anna Cecilia McInnis, Denis Corrales, Marion Le Pommellec (COF/CHA).

##### II. PARTICIPANTES QUE PRESENTARON COMENTARIOS

Mark Wenner (SDS/RUR); Hector Malarín (RE1/EN1); Emilio Cueto (COF/CHA); Anna Cecilia McInnis (COF/CHA); y Sergio Ardila (RE2/EN2), quien lo presidió a solicitud de Robert N. Kaplan (RE2/EN2). **Participantes del Equipo de Proyecto:** Maristella Aldana (LEG/OPR2); Marion Le Pommellec (COF/CHA); Diego Arias (RE2/EN2); y John Horton, jefe de equipo (RE2/EN2). **Comentarios recibidos antes del CRG:** Hector Malarín (RE1/EN1); COF/CHA; Elisa Fernández (RE2/SO2); George Alexandrou (RE2/EN2); Jacques Roumani (DEV/PMP); Sabine Engelhard (DEV/PRM); y Gustavo Subiela (DEV/FMR) los cuales fueron atendidos y se encuentran incorporados como temas tratados en el CRG. Se recibió también una comunicación de Francisco Basilio de Souza (RE3/EN3) quien no tuvo observaciones. Para los efectos del CRG, actuó como Secretario el Sr. Diego Arias (RE2/EN2).

##### III. TEMAS TRATADOS EN EL CRG Y SU CONCLUSIÓN

1. **Marco de referencia:** Se pidió al equipo revisar el marco de referencia para sintetizar la problemática con mayor atención a los aspectos institucionales, legales, de política agrícola, de relación con otros proyectos del Banco, y de descripción de la lógica de selección de los cuatro centros de investigación y extensión. El equipo estuvo de acuerdo con los comentarios y sugerencias y revisará la sección del marco de referencia del PCD.
2. **Capacidad institucional y de ejecución:** Se pidió al equipo explicar más claramente los aspectos institucionales y de ejecución de los componentes, la relación entre la unidad de ejecución y el resto del MARNDR, la presencia local del proyecto, el status laboral (consultor o funcionarios) de los miembros de dicha unidad ejecutora, y las actividades de capacitación del MARNDR en cuestiones de adquisiciones. El equipo estuvo de acuerdo con los comentarios e incluirá la información adicional en el PCD. El equipo a su vez realizó que, como parte de la preparación de proyecto, se realizará un análisis institucional justamente enfocado en estos asuntos.
3. **Marco lógico y beneficios:** Bajo este tema se discutió: i) la necesidad de revisar los indicadores del marco lógico y su relación con los beneficios expuestos; ii) la necesidad de revisar la sección de supuestos; iii) la necesidad de tener indicadores intermedios y de medición de aspectos de competitividad; y iv) la necesidad de discutir el marco lógico con los actores y participantes del proyecto. El equipo estuvo de acuerdo en hacer más claro y detallado, en la medida de lo posible, el marco lógico y su relación con la sección de beneficios.

4. **Riesgos:** Se solicitó al equipo presentar el riesgo de inestabilidad política como uno de transición gubernamental e institucional y de apropiación y retraso del proyecto. Se levantó la importancia de la sostenibilidad y mantenimiento por MARNDR de las inversiones previstas, y el equipo se comprometió a destacar dicho riesgo y las medidas para mitigarlo. También se pidió contemplar la inclusión del riesgo de duplicación de esfuerzos con otros donantes dado las varias áreas en las cuales el proyecto pretende trabajar. El equipo estuvo de acuerdo y brindará más detalle sobre este riesgo en el PCD.
5. **Temas de género y participación comunitaria:** Se pidió al equipo describir la importancia de la mujer dentro de los beneficiarios del proyecto y considerar incluir indicadores para tal efecto. El equipo destacó la relevancia del análisis de beneficiarios "stakeholder analysis" en relación a la participación activa femenina, y también estuvo de acuerdo en incorporar en el PCD revisado información sobre este punto.
6. **Lecciones aprendidas:** Se solicitó al equipo precisar más lecciones aprendidas, citando referencias más concretas del Banco o de otros donantes. El equipo estuvo de acuerdo e incluirá esta información en el PCD.
7. **Descripción de los objetivos, componentes y actividades:** Se solicitó al equipo revisar los textos de las secciones de objetivos, componentes y actividades, asegurándose que: i) estén en línea con lo expuesto en el marco lógico; ii) se precisen los indicadores de medición de cada uno; y iii) se presente con más detalle en cada componente las relaciones con otros componentes y con otros proyectos (como el de apoyo institucional). El equipo estuvo de acuerdo y revisará dicha sección en el PCD.
8. **Presupuesto:** Se pidió revisar la tabla de presupuesto, en particular en lo referente a la nomenclatura, las líneas y categorías y el monto para administración, auditoría y evaluación. El equipo estuvo de acuerdo y revisará la tabla de presupuesto en el PCD.

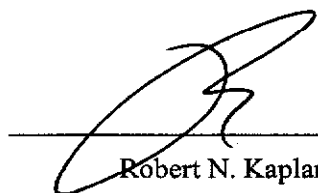
#### IV. TEMAS NO RESUELTOS

Todos los temas fueron tratados y resueltos. No se dejaron temas pendientes para el Comité de Préstamos.

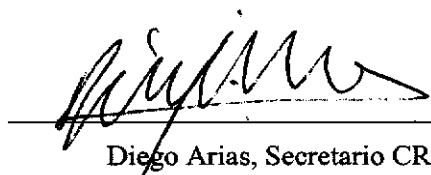
#### IV. CONCLUSIONES Y RECOMENDACIONES

Una vez sean incorporados los comentarios recibidos, el PCD será enviado para consideración del Comité de Préstamos.

Asimismo, el Presidente del CRG solicitó a COF/CHA el envío de una comunicación ratificando su no-objeción y acuerdo con la operación para continuar con el procesamiento de la misma.



Robert N. Kaplan, Presidente



Diego Arias, Secretario CRG



Sergio Ardila

Sin objeción vía e-mail fechado 11/29/2005

**Emilio Cueto, Representante COF/CHA**

# MINUTE OF THE COMMITTEE ON ENVIRONMENT AND SOCIAL IMPACT (CESI)<sup>i</sup>

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Meeting CESI 48-05 December 2, 2005

## HA-L1003. Haiti: Rural Supply Chain Development Program

### PCD Review

Participants: Robert Montgomery, President; Joseph Milewski, Secretary; Pablo Cardinale, PRI; Luis Miglino, RE3/EN3; David Noe, RE2/EN2; Carlos Viteri, SDS/IND; Javier Cuervo, RE3/EN3; Felipe Albertani, SDS/ENV; Helena Landazuri, RE1/EN1 (Written Comments); John Horton, team leader.

1. **Type of assessment required:** Environmental analysis
2. **Next action:** Send the Loan Document with the ESMP for the verification of the CESI Secretariat with a transmission memorandum outlining where in the documents and how the issues raised in this minutes were addressed.

3. **Agreements reached:**

The investments foreseen under the proposed loan operation will concentrate on strengthening the public capacity to advance the emergence of competitive rural supply chains. This entails increasing the availability and transfer of improved rural production and processing technology, reducing current and future losses caused by plant and animal diseases while increasing quality traceability, and improving the ability of the MARNDR and the private sector to prioritize investments in support of efficient rural supply chain development.

**Recommendations:**

**(i) Impacts of rehabilitation works.** Localized environmental impacts might arise from the rehabilitation of the field stations in Component 1. The Committee recommends that proper steps be taken to mitigate such impacts during construction.

**(ii) Implementation of protocols.** The team's strategy to mitigate the impacts will be to adopt the same protocols and measures that have been developed for 2 similar projects: 1460/SF-HA and 1646/SF-HA, under execution. Following the recommendation by the Committee to have the effectiveness of these measures reviewed during the preparation of this operation, the team proposes that the COF/CHA environmental /natural resource specialist do an assessment of the effectiveness of the implementation of the protocols and that the results be incorporated into the Project Report and/or operational manual, including any corrective adjustments that might be required.

Approved \_\_\_\_\_ **Robert Montgomery, Chair, PRI**

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<sup>i</sup> We kindly request project teams to follow the CESI procedures in the preparation of PDCs and other documents. The procedures can be found at: <http://manuals/go.cfm?do=Page.View&pid=1794>.

# PROJECT CONCEPT DOCUMENT (PCD)

## HAITI

January 3, 2006

### I. BASIC DATA

<b>Project Name:</b>	Rural Supply Chain Development Program		
<b>Project number:</b>	HA-L1003		
<b>Outline:</b>	April 7, 2005		
<b>Project Team:</b>	Division Chief: Robert Kaplan (RE2/EN2); Team Leader: John Horton (RE2/EN2); Diego Arias (RE2/EN2); Denis Corrales (COF/CHA); Marion Le Pommellec (COF/CHA); Maristella Aldana (LEG/OPR2); and Marcela Peñaloza (RE2/EN2).		
<b>Borrower:</b>	Republic of Haiti		
<b>Executing Agency:</b>	Ministry of Agriculture, Natural Resources and Rural Development (MARNDR)		
<b>Financing Plan:</b>	IDB: FSO	US\$12.6 million	
	Total:	US\$12.6 million	
<b>PTI/SEQ:</b>	Sector Automatic Classification, Smallholder Agriculture		
<b>Tentative dates:</b>	Analysis Mission	April 2006	
	Loan Committee	May 2006	
	Board	June 2006	

### II. FRAME OF REFERENCE

#### A. The Haitian rural economy

- 2.1 Haiti's rural economy has declined dramatically by any standard over the last two decades. As recently as 1990, the agricultural sector that forms the backbone of the rural economy generated nearly 40% of the gross domestic product (GDP), whereas today it contributes no more than a quarter of the GDP. Agricultural exports fell from 28% of total exports in 1981 to only 6% in 2004. Yet Haiti remains a predominantly rural country, accounting for nearly 5 million of its population of 8 million, with a shrinking productive capacity to sustain those living in the countryside or to fulfill its potential contribution to the national economy.
- 2.2 The government has pursued sound macroeconomic policies, substantially reducing its budgetary deficit and pursuing monetary and exchange rate policies to contain inflation with some degree of success. However, chronic underinvestment in the rural economy (e.g. infrastructure, public services and programs) and ineffective natural resource

management has steadily depleted the rural productive base. The budgetary allocation to core MARNDR functions, already low, averaging US\$ 8 million during the period from 1996-2001, has dropped below US\$ 3 million. The budgetary allocation to MARNDR now represents a mere 2.7 % of total government investments. Trade liberalization in the 1990s included no transitional or pro-active export measures, suddenly making Haiti one of the most open markets in all of Latin America, yet leaving the rural economy without the means to adjust or to facilitate labor market shifts.

- 2.3 Most of Haiti's rural dwellers live in extreme poverty, 59% earning less than US\$1 a day according to the most recent national household survey.<sup>1</sup> Although most rural Haitians consider themselves to be farmers, the majority of their income (60%) derives from sources other than agriculture. Their survival strategies primarily depend on remittances from family members abroad or in the capital, on the sale of their labor to works projects or seasonal labor opportunities elsewhere in the country, handicrafts, petty commerce and extractive activities such as producing charcoal and quarrying sand or gravel. Demographic pressures meanwhile tend to induce farmers to shift from perennial cash crops such as coffee to annual food crops, further exacerbating soil depletion and poor water retention.<sup>2</sup>
- 2.4 Typical rural producers use no improved planting materials, simply using seeds saved from the previous crop, in degraded soil without pest controls or inputs other than hand tools. Those farmers who participate in programs in Haiti that do provide access to improved germplasm (selected seeds, cuttings or budwood) in conjunction with soil conservation measures demonstrate dramatic productivity and income increases. Most rural producers are confined to stagnant technologies and little or no protection against the spectrum of animal and plant pests or diseases. Of the fifty MARNDR research and training centers that existed in the late 1980s, 11 remain at least partially operational, largely based on fee-for-service income or through alliances with non-governmental programs. Typically possessing experimental farms, basic labs and equipment, classrooms, dormitories, and technical staff, they conduct limited work on demand, but without any consistent strategic focus or inter-center synergy. A central challenge facing the MARNDR remains how to prioritize its scarce resources for public investment and how to engage in public-private partnerships so as to leverage its contribution to disseminating technologies and lowering risks.
- 2.5 A series of disasters has aggravated this vulnerable situation over the past two decades, including political upheaval, catastrophic floods and mudslides related to land use practices, destruction of the traditional pig population following African swine fever in the 1980s, the trade embargo of the 1990s and the on-going spread of coffee borer beetles (*scolyte*). Another pest, the pink hibiscus mealy bug (*cochenille rose*), first detected in the Caribbean in 1994, now attacks various horticultural crops in Haiti even threatening mangos, a top export crop. The public capacity to respond to plant and animal health

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<sup>1</sup> The "Enquête sur les Conditions de Vie en Haïti" (ECVH) began in 2001 and published its findings in 2003 under the auspices of the Institut Haïtien de Statistique et d'Informatique (IHSI).

<sup>2</sup> Mats Lundahl explains the process by which demographic pressures have led to substituting labor-intensive food crops for land-intensive perennial crops. ("Sources of Growth in the Haitian Economy", Mats Lundahl. Washington, IDB, June 2004.)

threats remains weak, even though the costs of targeted prevention and control are modest compared to the risks of economic havoc if not treated effectively. The principal opportunity to expand coverage lies in intensified collaboration with the existing voluntary network of rural veterinary disease prevention organizations, *Groupements de Santé de Bête* (GSB), established after the IDB financed swine repopulation program in the 1980s and 90s. MARNDR's Tamarinier central laboratory and core staff represent a solid asset that will remain underutilized unless connected to field centers and targeted sanitary prevention programs.

- 2.6 The steady decline in productivity of staple crops grown by small-scale producers around Haiti has been compounded by more dramatic stress or actual collapse of a number of the pillars of export-oriented supply chains. Coffee, long the leading export and an important source of wealth and savings, has shrunk to a fraction of previous levels.<sup>3</sup> Haitian handicrafts widely appreciated in markets throughout the region have failed to recover significant volumes following the embargo of the mid-1990s. Distinguished as a premier producer of essential oils to various market niches since the 1950s, Haiti remains the world's largest exporter of vetiver essence, but produces only a trickle of lime oil and sandalwood and precariously hangs on to the export of the bitter orange essence used to flavor leading brands of orange liqueurs. One sisal processing plant clings on where there were four even ten years ago, principally producing natural fiber baler twine for the hay producer market in North American.<sup>4</sup> Seafood exports, once important, barely register any volume, no longer meeting clearance requirements for entry to Europe. The mango industry offers a robust basis for sustainable and expanded growth as well as deepening of the diversification into other fresh and processed horticultural products. Yet it too faces imminent challenges requiring action now to remain competitive with other producer countries.
- 2.7 **Existing Haitian Precedents.** Examining major supply chain groups that have demonstrated concrete achievements in Haiti provides a basis to extract lessons learned and advance the process of conceptualizing practical interventions.
- a. **Dairy.** Since 2001 dispersed producers raising typically one or two dairy cattle have joined forces with a Haitian NGO, Veterimed, to produce and market a high-quality yoghurt sold in the capital through convenience stores using a single brand label.<sup>5</sup> The technical expertise provided on animal health care, processing and food safety, in combination with a central quality control and packaging function, has enabled them to achieve sales margins that make their venture commercially viable. Producers from an increased radius continue to join the network and total sales volumes have increased consistently.
- b. **Tree Horticulture.** The wages paid by small-farmers to rural technicians trained to graft improved mango varieties is double the prevailing rural labor rate and the

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<sup>3</sup> Coffee exports fell from 27,000 MT in 1993 to 11,000 MT today.

<sup>4</sup> Sisal production remained around 8000 MT throughout the 1980s and up until the embargo of the mid-90s. Today it is 2000-3000 MT annually.

<sup>5</sup> The yoghurt enterprise, Lèt Agogo, received the 2005 Social Innovation Award grand prize for entries from all of Latin America from ECLAC (CEPAL) and the Kellogg Foundation.



demand for these services continues to grow. Furthermore, the demand for their services to graft improved avocado and citrus varieties diversifies their opportunities and calendar as farmer clients become familiar with these new technologies and their performance. Upstream, this chain generates jobs and business opportunities for nurseries and technicians to produce the budwood required, currently available from non-governmental research programs. Downstream, the chain has created jobs for semi-skilled labor as well as technicians in numerous packing houses, and one major frozen fruit processing plant starting up operations currently.

- c. **Essential Oils.** A dozen distillers of vetiver essential oil centered in the south of Haiti around Les Cayes produce barrels of this input to the European perfume industry sold for no less than US\$32/pound. However the leading Haitian producer of vetiver oil distills up to a dozen differentiated vetiver oil types, the top grade selling for US\$167/pound. Meanwhile this benchmark producer has begun to encourage the entire local industry to diversify into new lines such as patchouli oil and ylang ylang essence, and has begun to collaborate with agronomic researchers to adapt and multiply appropriate plant varieties.
- d. **Coffee** is perhaps the best known differentiated small-holder supply chain from the developing world. Haiti has managed to develop a high quality variety with a registered trademark, “Haitian Bleu”. Yet the coffee world market continues to differentiate its line of specialty categories to include social and environmental characteristics, ranging from gourmet and organic coffees to shade tree grown, sustainable and fair trade distinctions. The MIF-financed quality coffee project in Haiti (ATN/ME-9333-HA) will advance this effort on a pilot basis laying the foundation for broader national interventions.

2.8 **Lessons Learned.** Examination of what has succeeded and failed in Haiti, both from the perspective of supply chain analysis and from an analysis of project interventions reveals some lessons consistent across the spectrum. Those chains that prevail share the active participation of a “chain captain”, typically a marketer, processor or an exporter, with assured market links and willingness to work with the dispersed even fragmented supply systems that characterize Haiti. These chain captains typically have limited capacity or financial commitment however to invest in infrastructure, technology or human resource development that constitute public goods.

2.9 Analysis of what has worked to fill that public good gap has generated a high degree of consensus between the MARNDR, the Bank and other lenders or donors. Particularly since 2004, as part of the Interim Cooperation Framework process, many of the elements of this consensus have been documented.<sup>6</sup> The most effective rural innovation initiatives in Haiti have been decentralized, building upon significant regional and agro-ecological differences or emergent productive clusters. They have actively involved the local population and instilled a sense of ownership by the community. Successful efforts to

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<sup>6</sup> The Compte Rendu of the Workshop on Research and Extension, February 2005 is exemplary, focusing on technology generation and transfer lessons learned.

mobilize rural beneficiaries generally have promoted an active partnership with a broad range of actors (local officials and community leaders, NGOs, private sector and universities). Private sector associations have emerged over the last 20 years to advance the most dynamic of these rural chains, notably mango, livestock, essential oil and coffee. Success in sustaining those efforts in Haiti has occurred when the beneficiaries have perceived tangible evidence of the interdependence between increased household income and enhanced natural resource endowment, as well as evidence of a long-term commitment on the part of those promoting the initiatives.

- 2.10 The history of IDB-financed projects in rural areas demonstrates a progression toward projects with a more systematic mobilization of beneficiary groups, emphasis on a heightened degree of ownership and commitment to maintenance, and improved linkage to natural resource management. A long series of earlier infrastructure-driven projects such as those in the Artibonite dominated the Bank's rural portfolio from the 1970s on (473/SF-HA, 690/SF-HA, 845/SF-HA). The Agricultural Intensification Program (1490/SF-HA) that began implementation in 2004 focuses more squarely on raising household income through intensification. The Ennery-Quinte Agricultural Intensification Project (1646/SF-HA), approved in 2005, takes an even more participatory approach to extend intensification and to link it directly to watershed management improvements in a predominantly hillside area.

## **B. Strategy of Haiti for the agricultural sector**

- 2.11 The country's current National Agricultural Policy prepared by the MARNDR in 2004 stresses three main thrusts: (i) bolster rural infrastructure; (ii) support development of agribusiness chains ("*filières*"); and (iii) consolidate the emergence of input and service providers. The proposed project is consistent with Haiti's National Agricultural Policy, aiming precisely at enhancing the competitive base of the principal chains, in some cases focusing on issues specific to one or more chains but more typically focusing on those key areas that cut across all or most of the chains that make up the rural economy. This in turn favors the emergence or expansion of commercial input and service providers as foreseen in the strategy. This proposed project approach seeks to enhance the capacity of the sector authorities to prioritize infrastructure investments, most notably rural roads, to leverage significant resources already available to finance that infrastructure. Similarly the proposed approach would reinforce the capacity to prioritize and monitor other strategic public investments such as plant and animal health protection and generation and transfer of production and marketing technologies.

## **C. Strategy of the Bank in the sector**

- 2.12 The Bank's 2005-2006 Transition Strategy for Haiti stresses the importance of revitalizing agriculture within the third pillar of the Interim Cooperation Framework (ICF), focusing on promotion of economic recovery. The Bank, within the framework of the 2005-2006 Transition Strategy and the ICF, is supporting the MARNDR to implement programs that will extend the intensification process initiated through the Agricultural Intensification Program based in the Artibonite (1490/SF-HA) to other geographic areas, such as Ennery-Quinte (1646/SF-HA). The Watershed Management

project (HA-0033) also under preparation will build upon this approach to link conservation solutions with sustainable intensification options for smallholders in various selected watersheds. As envisioned in the Bank's 2005-2006 Transitional Strategy for Haiti and the ICF, the present proposed operation (HA-L1003) will extend support across the entire rural economy, providing a strategic boost to productivity and risk management of rural supply chains with competitive potential.

- 2.13 Key amongst the other Bank financed projects that complement the Rural Supply Chain Development program are the Road Rehabilitation and Maintenance Program (991/SF-HA) and the Transportation Infrastructure Rehabilitation (1638/SF-HA), since access to markets and inputs is vital to the expansion of all the rural chains. This operation will enable the MARNDR to enhance its capacity to provide technical input to the decision-making process for the prioritization of rural road segments in the national network. The Program for the Rehabilitation of Basic Infrastructure (1493/SF-HA) under execution is designed to attend to the demands for specific complementary infrastructure needs such as those that may emerge in the course of the project.
- 2.14 **Coordination with the international community.** The ICF-Agriculture thematic group, including representatives from the IDB, the World Bank, the FAO, the European Commission and bilateral donors, laid the broad lines of the operations to enable the MARNDR and its partners to translate its strategy into a program. Following on that collaboration, the IDB and the World Bank technical teams both initiated substantial rural economy sector analysis studies in which there has been a high degree of collaboration and coordination. The work funded through ATN/FC-9052-HA has concentrated directly on the rural supply chains and cross-cutting issues, while the World Bank's sector analysis has emphasized a spatial approach, each complementing the other. The IBRD Multi-Sector Support to Productive Initiatives operation to be presented for approval in 2006 will concentrate on infrastructure investments.

#### **D. Conceptualization of the Program**

- 2.15 Today rural Haitian households clearly possess little skill specialization or other capital resources that enable them to add value to their output through labor or land productivity, whether for home consumption or for sale. Many will continue to seek their way out through emigration to the capital or beyond, precisely in the hopes of finding improved remuneration for their labor. The degree to which Haitians living in rural areas will be able to generate increased household income in the future depends significantly on their ability to increase their productivity. While their income currently depends on various sources, the mainstay of the rural productive economy predominantly remains agricultural. This production is largely undifferentiated at present, creating few opportunities for skilled labor, for added value or market differentiation.
- 2.16 Hence the development of rural competitive supply chains takes on strategic importance, offering increased efficiency and added value through skill specialization at various links along the chain and an increased ability to target market segments offering a price premium for specific characteristics. The development of these chains would stimulate the demand for increased off-farm and non-farm services and inputs such as machinery,

repair, transportation, packaging, marketing and financial services, providing additional jobs and better paying opportunities for specialized skills particularly among the rising generations. This approach would capitalize on the marked increase in literacy achieved over the past fifteen years, rising from a third to half of all Haitians even in rural areas, with higher levels amongst the young.

- 2.17 The successful emergent chains (parag. 2.7) reveal the potential to increase productivity and labor specialization, to add value and to seize increased market differentiation. With this conceptual framework and precedents in mind, the Bank undertook a rural productive sector analysis that examined the panoply of rural supply chains such as they exist today, to identify promising areas for interventions along those chains. Simultaneously the sector analysis team included specialists in major cross-cutting areas looking for commonalities and priority investments.
- 2.18 The preliminary conclusions of the sector study (ATN/FC-9052-HA) and strength-weakness-opportunity-threat analysis reveal good potential for a considerable range of chains, some particularly for export markets, some for local markets and some for both. Several common factors emerge as the prime strategic levers for the chains to achieve significant productivity and income gains. These prime levers may be summarized: 1) identification, adaptation and dissemination of improved genetic planting material, with special emphasis on those with resistance and tolerance to endemic threats and those that correspond to favorable off-season calendars; 2) organizational or financial schemes that increase access to improved inputs, including appropriate processing and packaging technologies; 3) diversification and market differentiation within chains to maximize value-added and lower risk (such as essential oils, handicrafts, coffee and export horticulture); and 4) improve coverage of priority plant and animal health protection consistent with a program of product traceability that serves to strengthen certification and market differentiation as well.
- 2.19 Following the lessons learned that private sector chain captains typically have driven successful innovations in Haiti, transmitted through decentralized programs near clusters of production activity, has led to two basic design features. First, the platforms to launch national rural innovation and risk reduction programs should be located in areas corresponding to promising clusters, and should encourage active participation from private and non-governmental service providers. Second, programs should encourage direct participation of those closest to the market, both in identifying programmatic areas and in participating in the governance structure along with MARNDR staff including the *Direction Départementale Agricole* (DDA). After a detailed analysis of the 11 partially or fully operational MARNDR research and extension Centers around the country, the technical team in consultation with the MARNDR identified 4 as most relevant to priority supply chains: Dondon in the North, Savane Zombi in the Southeast, Baptiste in the Central Plateau and Lévy in the South. These Centers will serve as hubs for interventions in technological innovation and animal and plant health risk reduction.

### III. THE PROJECT

#### A. Objectives and description

- 3.1 **Objective.** The broad objective of the proposed operation is to increase Haitian rural household income. The specific objective of the operation is to enhance the competitiveness of rural supply chains with sustainable growth potential.
- 3.2 **Description.** The investments foreseen under the proposed loan operation will concentrate on strengthening the MARNDR capacity to advance the emergence of competitive rural supply chains. This entails increasing the availability and transfer of improved rural production and processing technology, reducing current and future losses caused by plant and animal diseases while increasing quality traceability, and improving the ability of the MARNDR and the private sector to prioritize investments in support of efficient rural supply chain development.

#### B. Structure of the Program

- 3.3 The Rural Supply Chain Development Program is comprised of four components summarized below.
- 3.4 **Component 1: Agricultural Adaptive Research and Transfer (US\$6 million).** This component will finance the targeted rehabilitation of four selected existing research and extension centers (Dondon, Baptiste, Savane Zombi and Lévy) and the development of high priority public-private programs of adaptive research and dissemination. This will involve civil works repairs, updated equipment and staff training to enable them to implement the types of priority programs anticipated in each of the agro-ecologic hubs. It will also involve technical assistance focused on several inter-related activities: 1) Management consulting services to develop effective means to involve both private and public sector managers in priority-setting and oversight of each Center; 2) Research and extension expertise to support priority lines of adaptive research programs, whether by the centers or through competitive funds; and 3) Research evaluation expertise to install effective monitoring and evaluation of the programs, and dissemination of results from activity 2) above.
- 3.5 **Component 2: Animal and Plant Health Protection and Traceability (US\$3 million).** This component will invest in bolstering the national system for detection and control of priority animal and plant health diseases and pests while laying the basis for public and private certification and quality traceability systems.
- 3.6 **Animal and Plant Disease and Pest Prevention and Control.** Investments will include technical assistance, training, equipment and construction related to animal and plant disease or pest detection, surveillance, quarantine and control functions. These investments will enable the MARNDR to fulfill its core public competencies through prevention and control campaigns for priority plant and animal health risks such as anthrax, swine and avian flu, and control of mealy bug, medfly and coffee borer beetles.

This entails establishment of clear norms and procedures, training of inspectors and quarantine officials, building or refurbishment of quarantine stations, purchase of equipment and design of programs to be executed in conjunction with the existing voluntary GSB network of rural veterinary disease prevention organizations, and the MARNDR DDA offices.

- 3.7 **Compliance, Certification and Traceability Systems.** This component will also provide technical assistance primarily and some equipment to enable the MARNDR to demonstrate compliance with various sanitary, environmental and other quality norms both at a national and production zone level. This assistance, in conjunction with private accredited Haitian and international certification bodies, will establish traceability systems including designations such as pest-free zones, organic production status and other national and international quality assurances in collaboration with supply chain associations and producer groups.
- 3.8 **Component 3: Strategic Management of Public Investments in Rural Supply Chains (US\$1.5 million).** This component will strengthen the MARNDR capacity to compile, analyze and disseminate strategic information, monitor and evaluate programs, and prioritize specific public investments within key areas such as infrastructure, watershed management, technology transfer and sanitary campaigns in support of competitive rural supply chains. It will involve technical assistance, training and some equipment to strengthen the capacity of the MARNDR to conduct analysis of macroeconomic, trade and sector trends as inputs to establish sector priorities for public investment and donor coordination. The specific program activities will first strengthen the core capacity of the existing studies and statistics unit<sup>7</sup> to compile, analyze and disseminate information bearing on the market and competitive position of supply chains, including international sanitary and trade norms. Key amongst the equipment will be the installation of Geographic Information System (GIS) based analysis and reporting capacity. Secondly, the institutional strengthening will enhance the unit's ability to monitor and evaluate ongoing programs, building a capacity to coordinate with the various DDAs and to out-source some decentralized functions to non-governmental providers.
- 3.9 **Component 4: Public-Private Coordination and Market Linkage (US\$0.5 million).** The final component will establish the institutional base within the MARNDR to coordinate with initiatives of private chain associations, donors and NGOs seeking to link rural producers to new market opportunities, create profitable new business alliances and to forge national competitiveness strategies for various supply chains. This component will finance technical assistance and some training and equipment to set-up a unit for the duration of the project to coordinate between the MARNDR and the chain associations as well as with the various non-governmental market-linkage and business development services. A proposed parallel TC is expected to provide complementary additional resources to strengthen program activities of key chain associations (such as those representing mango, livestock, vetiver and coffee chains) that generate their own core funding. These expanded association services will range from pro-active

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<sup>7</sup> The unit is the MARNDR/ "Unité de Programmation, Suiivi et Evaluation" (UPSE).

identification of market and “sourcing” opportunities, to helping the private sector to develop business plans and to identify private financial resources including buyer and supplier credit. The TC will also provide assistance to strengthen the basic legal framework and management of the associations.

### C. Cost and financing

- 3.10 The following table presents a preliminary distribution of the estimated costs to implement this rural supply chain development project. These costs will be estimated with greater precision during the analysis of the operation.

<b>Table III-1. Costs and Financing (in thousands US\$)</b>				
<b>Category or Component</b>	<b>BID/FSO</b>	<b>Local</b>	<b>TOTAL</b>	<b>Share</b>
<b>I. Administration and supervision</b>	<b>1150</b>	<b>0</b>	<b>1150</b>	<b>9%</b>
<b>II. Components</b>	<b>11,625</b>	<b>0</b>	<b>11,625</b>	<b>92%</b>
1. Agricultural Adaptive Research and Transfer	6,000	0	6,000	52%
2. Animal and Plant Health Protection and Traceability	3,000	0	3,000	26%
3. Strategic Management of Public Investments in Chains	1,500	0	1,500	12%
4. Public-Private Coordination and Market Linkage	500	0	500	4%
<b>III. Financial Costs</b>	<b>300</b>	<b>150</b>	<b>450</b>	<b>4%</b>
<b>IV. Total Costs</b>	<b>12,450</b>	<b>150</b>	<b>12,600</b>	<b>100%</b>

## IV. EXECUTION OF THE PROGRAM

### A. The borrower and executing agency

- 4.1 The Borrower will be the Republic of Haiti. The Republic of Haiti will implement the Program and perform its obligations under the loan agreement through the MARNDR.

### B. Execution and administration of the Program

- 4.2 The MARNDR is currently utilizing resources provided by ATN/FS-9368-HA to design and launch an executing unit to administer this investment program directly within the *Direction Générale Adjointe à la Production et aux Marchés Agricoles*. That executing unit will be officially attached to the *Direction Générale* of the Ministry and hire its operational staff as consultants financed by the project. The institutional analysis conducted by the project team during preparation will emphasize the adequacy of the procurement and reporting mechanisms and identify any specific training needs in these areas. This analysis will draw on the lessons learned of the established executing unit of the Bank financed Intensification projects in the same Ministry (1490/SF and 1646/SF).
- 4.3 The central program executing unit will coordinate investment activities directly with the four primary field centers (Dondon, Baptiste, Savanne Zombi and Lévy) and in

collaboration with the corresponding DDA in the respective Departments and with the MARNDR national research service, the *Centre de Recherche et Développement Agricole* (CRDA). The unit will coordinate closely with the *Direction Générale Adjointe de l'Unité de Protection Sanitaire* regarding component 2 activities and with the *Direction Générale Adjointe d'Evaluation et Suivi* regarding component 3 and 4. An Operating Manual will guide the implementation of the investment program.

### C. Execution period and disbursement schedule

- 4.4 Project implementation will extend over a five-year period. The estimated schedule of disbursements is presented in table IV-1.

Table IV-1. Estimated schedule of disbursements						
Source	Year 1	Year 2	Year 3	Year 4	Year 5	Total
IDB	15%	30%	25%	15%	15%	100%

### D. Monitoring and evaluation

- 4.5 The project implementation unit will collect information tied to indicators forming the base of the monitoring and evaluation system. The national ECVH survey results published in 2003, complemented by the 2005 Livelihood survey completed by the IBRD in the micro-regions surrounding major MARNDR research and training field centers, and the 2005 IDB analysis of existing supply chains, provide the major inputs to the baseline under preparation. Key indicators include measures of production volumes, numbers of producers, household income and value-added for selected supply chains, measurements of disease and pest prevalence, implementation records of MARNDR investments, and a registry of new market links achieved. The mid-term and final evaluations will focus on both impact measurements and methodological lessons learned.
- 4.6 The ultimate impact of the benefits stimulated by the proposed investment program should be manifest in the quality of life of the beneficiaries. While measurement of these improvements remains more qualitative, the baseline information from the 2005 Livelihood survey will be updated during the mid-term and final evaluations to permit useful comparisons especially with regard to household income.

## V. DEVELOPMENT IMPACT

### A. Benefits and beneficiaries

- 5.1 Increases in rural household income constitute the primary benefit stream targeted by the project. These benefits derive from increases in net value-added in rural supply chains by the program's investment. Increases in value-added along the chain will not be limited to rural households however, since actors all along that chain will benefit, including input suppliers, transporters, merchants, processors and exporters. The analysis of these benefits will include disaggregation by estimating the impact on employment generation attributable to the program. Furthermore benefits to the surrounding communities are necessarily diffuse, thus quantification of the number of beneficiaries and level of



benefits similarly will require simple modeling of various supply chains comparing estimates generated by the recent IDB supply chain analysis. The economic analysis will measure rates of adoption of technological innovations. Given the predominance of female-headed households in rural Haiti, the social impact analysis will consider the distribution of benefits according to gender.

- 5.2 Reduction of current and future economic losses caused by pests, diseases or contaminants and the increase in value-added due to the availability and improvement of quality compliance, certification and traceability systems will drive a significant portion of the project's economic benefit stream. These benefits will be estimated first based on projected changes in the prevalence of these losses compared to the current baseline. The other significant portion of economic benefits to be generated by project investments emanates from the results of the project's research and extension activities. The project will also improve the efficiency of public and private investments achieved by the project's interventions in strategic management and market linkage. These gains will be monitored but will likely prove elusive to quantify ex-ante by any rigorous analysis.

## **B. Expected results**

- 5.3 Successful outcomes are expected to include the consolidation and diversification of an array of rural supply chains improving the income and quality of life of project beneficiaries across Haiti. The selected existing MARNDR centers for adaptive research and extension are expected to be able to continue their work indefinitely with core budgetary resources, attracting additional collaborative funding from non-governmental sources (research centers, universities, NGOs, private sector) in response to specific future needs of the supply chains targeted by their private-public boards. The core animal and plant protection services should demonstrate an increased effective coverage and an elevated capacity to continue their work, driven by the priority needs of the chains. MARNDR is expected to demonstrate an improved basic strategic management capability to direct investment, financed both by its budgetary resources as well as from program resources from bilateral and multilateral development organizations. Similarly MARNDR should be able to demonstrate an enhanced capacity to coordinate with non-governmental programs offering the rural clientele access to services to identify new market opportunities, business plan development or matching with financial resources.

## **C. PTI/SEQ classification**

- 5.4 The project qualifies as a poverty-targeted investment according to the Bank's Eighth Replenishment agreement (document AB-1704), as amended by document GN-1964-3 of June 3, 1997, since the Sector Automatic Classification applies as a Smallholder Agricultural project.

## **D. Environmental and social impacts**

- 5.5 The strong interdependence of long-term commercial viability and of natural resource conservation in the Haitian context means that those rural supply chains identified as holding the greatest prospects tend to offer positive environmental profiles. This is most

notably the case with perennials such as coffee, mangos, cocoa and other tree crops that currently account for four-fifths of current total rural exports. Furthermore additional anti-erosive crops and livestock management have been identified as high priority areas for adaptive production and processing research. This reflects the dual advantages of commercial potential and direct contributions to watershed protection, a central feature of the Ennery-Quinte PIA (1646/SF-HA) and the Watershed Management project (HA-0033) currently under design, both of which will generate increased demand for adapted cultivars and know-how. This places a high priority on established perennial crops (fruit trees, coffee, cocoa), anti-erosive crops and livestock management for which the industrial potential exists but remains to be expanded (ex. castor oil, jatropha, aloe vera, bamboo, lemon grass) and agro-forestry, hedgerow, fodder and forage alternatives.

- 5.6 It is noteworthy that these perennial crops and livestock are currently raised without the use of chemical pesticides or other environmentally hazardous inputs. In the case of mangos, at least one zone has already been officially certified as organic by an accredited third party entity. The project support to traceability systems will facilitate the move to certify additional areas and additional products.
- 5.7 Potential areas of environmental risk may arise from the introduction of chemical inputs, particularly in the case of annual horticultural crops. In these cases the research centers will be required to adopt the same protocols for handling and application included in the Environmental and Social Management Plan (ESMP) of the Agricultural Intensification Program in the Artibonite (1490/SF-HA) and the Ennery-Quinte area (1646/SF-HA). These same measures will be incorporated into the Operating Manual of this project both with regard to the Centers' direct activities and as part of their extension efforts to producers in the surrounding areas.
- 5.8 A major additional positive environmental impact anticipated under the program derives from the reduction of risks from priority animal and plant pests and diseases. These sanitary problems represent a significant environmental hazard targeted by specific interventions. A new risk that could arise is the expanded use of biocides with negative environmental impacts. This risk will be mitigated through the incorporation in the Operating Manual of the protocols on handling and use of these substances that exists within the ESMPs of the other agricultural projects financed by the Bank in Haiti.
- 5.9 Positive social benefits generated by the project include pro-active involvement of community beneficiaries as part of the operations of the Centers, the vaccination and other campaigns and identification of market-linkage opportunities. These beneficiaries generally have only experienced limited direct interaction with MARNDR programs over the past two decades. To facilitate monitoring social inclusion and active participation including women, project preparation will include a Stakeholder Analysis focused on the communities around the Centers. This will build on beneficiary surveys undertaken in 2005 by the World Bank as part of the analysis of several of the same Centers. The results of the Stakeholder Analysis will assist in the design and evaluation of extensions and dissemination of results to all beneficiaries. No negative social impacts have been identified within the project design.

## **VI. RISKS AND ISSUES**

### **A. Civil unrest and commercial disruptions**

- 6.1 Civil insecurity, peaks in crime or politically motivated violence pose an exogenous threat to any major project in Haiti currently. Delays in the national electoral process and transition to a new government in 2006 could delay the start-up and efficient implementation of the project. Any political upheaval or other eventualities that might lead to significant departures of those MARNDR career technical staff working on the design and start-up of the implementation unit would represent a setback for the smooth inception of the project. Precisely to avoid the risk of abrupt management changes, the team and the MARNDR management are already establishing the executing unit through an ongoing TC. Furthermore this unit is attached to the General Direction to insulate the project from potential future internal restructuring of the Ministry particularly given that the new sub-directorate did not exist at the time of the March 1987 Organizational Law (*Loi Organique*) currently in force, and as such may be subject to future changes.

### **B. Economic instability, budgetary commitment and rural finance**

- 6.2 The low levels of national budgetary allocation to MARNDR activities over the last two decades has created the strong tendency to fund program activities with external program resources and to under-fund staff positions and particularly field personnel, relative to the prevailing wages of comparable technical responsibility in the private sector. The long-term sustainability of the investments proposed here in technology transfer, sanitary controls and strategic management, depend on maintaining funding levels of core staff functions consistent with effective continued operation. Cognizant of this risk, the team is endeavoring to design technical assistance that does not substitute for the core staff functions, but rather complements and reinforces core capacity at a level that is expected to be sustainable under likely budgetary levels, but with the design of an exit strategy approaching project completion and beyond.
- 6.3 Continued economic contraction in Haiti would undermine market demand, resources to mobilize supply and fiscal resources for budgetary support to the public administration. A significant contraction in the Dominican economy or disruptions of cross-border trade would cause significant repercussions, since it possesses characteristics as an important trading partner that would be hard to replace by markets with higher logistical and consumer acceptance hurdles. Even without a downturn, a risk remains that the scarcity of credit or other private financial resources available to smallholders constrain the expansion of otherwise competitive activities. While significant improvement in rural micro-finance is a long-term challenge beyond the scope the project, component 4 activities will proactively promote identification of sources of financing. Furthermore, strengthening the competitiveness of supply chains will increase the opportunities for micro-financiers to find “bankable” projects.

**C. Natural disasters**

- 6.4 The outbreak of significant plant or animal disease or pest represents a real threat, as occurred in the case of African swine fever in the 1980s. Less drastic diseases or infestations represent serious threats to individual crops or classes of crops, as is the case of the mealy bug or coffee borer beetle. The design of this operation seeks to diminish these risks directly and can likely manage them, though a catastrophic outbreak of avian flu, medfly or the like would surpass the national capacity in the short or medium term.
- 6.5 Catastrophic events such as observed following Hurricane Jeanne in September 2004 demonstrate the risk of the most devastating possible events. The current vulnerable state of many of Haiti's 30 watersheds means that even lesser storms wreak floods and mudslides. The only mitigating force is to address watershed management directly, a priority identified in the Bank's Haiti program. Although Haiti has not experienced significant seismic events in recent memory, the risk does exist and would prove catastrophic particularly in coastal areas. This risk is not specific to the project and no mitigation is proposed.

**D. Exceptions to Bank policies**

- 6.6 No exceptions to Bank policy are proposed.

**VII. PROGRAM PREPARATION AND ACTION PLAN**

- 7.1 The in-depth sector analysis of rural supply chains and corresponding crosscutting issues (ATN/FC-9052-HA) has provided a sound and broad technical basis for the design of this loan operation. The parallel sector study financed by the IBRD emphasizing analysis of micro-regions has provided detailed inputs regarding the capabilities of several relevant research and extension Centers. An additional TC (ATN/SF-9368-HA) has provided resources for the design and start-up of the project implementation unit and monitoring and evaluation system. This will also allow for a close collaboration between MARNDR staff and the technical specialists who will be designing the draft Operating Manual.
- 7.2 The team plans final appraisal of the project in April 2006 with the participation of MARNDR senior staff of the new administration. This will enable the operation to be presented to Loan Committee in May and for consideration of the Board in June. Meanwhile the project team has identified a tentative funding source for a parallel TC in conjunction with Component 4. This TC would mobilize complementary resources and expertise to work directly with the private sector actors to develop market linkage opportunities, business plans and financing options.

## RURAL SUPPLY CHAIN DEVELOPMENT PROGRAM (HA-L1003)

### LOGICAL FRAMEWORK

OBJECTIVES	ACTIVITIES	INDICATORS	VERIFICATION.	RISQUES
<p>Goal :</p> <p>Increase rural household income</p>		Income disaggregated by type of economic actor	Measurement of changes in areas surrounding selected MARNDR research and training centers compared to baseline conducted by 2005 IBRD Livelihood survey.	<p>Downturn in economic conditions nationally and in demand in the principal importing countries.</p> <p>Acute political and social instability.</p> <p>Natural disasters.</p>
<p>Objective:</p> <p>Enhance the competitiveness of rural supply chains with sustainable growth potential.</p>		Increase in value-added in selected activities.	Sector study baseline (ATN/FC-9052).	<p>Insufficient budgetary resource commitment to assure the core MARNDR functions.</p> <p>Scarcity of micro-finance resources undermines the growth of competitive supply chains.</p>
<p>Component 1 :</p> <p>Adaptive research and transfer of technology</p> <p>Outcome: Adoption of improved technologies by economic actors (producers, processors, marketers, exporters).</p>	<p>Sub-component 1: Consolidation of core functions of selected centers.</p> <p>A1 : Selective physical rehabilitation of centers (Baptiste, Dondon, Levy, Savane Zombi)</p> <p>A2: Reinforce training and equipment in the centers.</p> <p>Sub-component 2: Mobilization of priority programs</p> <p>A1 : Establishment of mixed public-private management mechanisms</p> <p>A2 : Definition of priority programs and implementation modes</p> <p>A3 : Program implementation</p> <ol style="list-style-type: none"> <li>a) Direct execution by Centers</li> <li>b) Request for proposals, and monitoring and evaluation of results</li> <li>c) Dissemination of results</li> </ol>	Changes in the number of users of proposed technologies and demonstrable impact.	Mid-term and final evaluations	Resistance of the population to undertake new initiatives

OBJECTIVES	ACTIVITIES	INDICATORS	VERIFICATION.	RISQUES
<p>Component 2 :</p> <p>Protection and sanitary surveillance</p> <p>Expected outcome: reduction in losses and risk of losses tied to plant and animal health pests and diseases, including certification of these and other quality characteristics.</p>	<p>A 1 : Implementation of plant and animal health surveillance system particularly in collaboration with GSB voluntary network.</p> <p>A 2 : Launch prevention/ protection campaigns for selected diseases/pests such as: anthrax; swine fever: Newcastle disease; coffee borer beetle ( scolyte) and pink mealy bug</p> <p>A 3 : Implementation of a system of traceability, quality control and certification</p>	<p>Changes in incidence of known plant and animal pests and diseases as well as in the occurrence of outbreaks of new ones.</p> <p>Norms, procedures and institutional arrangements in place for certification.</p>	<p>Plant pathology and veterinary expertise confirmation of evolution of rates of prevalence monitoring baseline.</p> <p>Recognition by official national and international certifying bodies.</p>	<p>Sudden outbreaks of exotic or overwhelming levels of plant or animal sanitary crises overwhelm the national response capability.</p>
<p>Component 3 :</p> <p>Strategic management of MARNDR investments</p> <p>Expected outcome : improvement in the effectiveness of public investments in rural areas</p>	<p>A 1 : Reinforcement of MARNDR macro and sector analytic capacity</p> <p>A 2 : Monitoring and evaluation programs</p> <p>A 3 : Establishment of priority sector investments, such as : infrastructure (irrigation, roads); sanitary programs; natural resource management; generation and transfer of technology; and interface with private supply chain initiatives</p>	<p>Public investment decisions taken on the basis of technical reports and the recognized quality of UPSE outputs</p>	<p>Reports produced by UPSE and midterm and final evaluations</p>	<p>Inability to retain qualified professionals over the long term.</p>
<p>Component 4 :</p> <p>Public-private coordination and support to supply chain market linkages</p> <p>Expected outcome: implementation of new economic activities with lower transaction costs and greater equity</p>	<p>A1 : Partnerships/ alliances with supply chain associations in establishing chain strategies and coordination and technical support to their consolidation of the associations legal framework and management systems</p> <p>A2 : Linkage to supply chain associations in their program of activities anticipated with the parallel TC-funded programs, such as:</p> <ul style="list-style-type: none"> <li>- sourcing initiatives</li> <li>- support to business plan preparation</li> <li>- support of market studies</li> <li>- contract farming schemes</li> <li>- mediation</li> <li>- identification of sources or mechanisms for financing</li> </ul>	<p>Evidence of legal framework (ex. completion of charters or draft laws) and of effective management systems.</p> <p>Chain strategies articulated by associations in collaboration with MARNDR, including market strategies.</p> <p>New market opportunities identified.</p> <p>Sources or mechanisms for micro-financing identified.</p>	<p>Project records.</p>	<p>Insufficient disposition of private partners to participate.</p>

**RURAL SUPPLY CHAIN DEVELOPMENT PROGRAM  
(HA-L1003)**

**ESTIMATED PREPARATION COST**

<b>1. MISSIONS (US\$30,000)</b>		
Orientation Mission	10 person-weeks	
Analysis Mission	3 person-weeks	
Negotiation Mission	2 person-weeks	
<b>2. ADMINISTRATIVE RESOURCES FOR OFFICE WORK</b>		
Team Leader	16 person-weeks	
Team Members	8 person-weeks	
Attorney	2 person-weeks	
<b>3. CONSULTANTS (US\$160,000)</b>		
Financed by Administrative Budget during design and appraisal:		US\$60,000
Financed by ATN/SF-9368 for start-up preparation:		US\$100,000