

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**PARAGUAY**

**SOCIAL ENTREPRENEURSHIP PROGRAM**

**EXECUTIVE SUMMARY**

**CORPORATE RESPONSIBILITY IN HERB AND SPICE PRODUCTION  
BY SMALL PRODUCERS**

**(PR-S1007)**

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## I. PROJECT OVERVIEW

### A. Executing agency

1.1 Hierbapar.

### B. Amount and source of financing

	<u>IDB US\$</u>	<u>Hierbapar US\$</u>	<u>Total US\$</u>
Reimbursable financing:	335,000	120,000	455,000
Technical cooperation:	<u>220,000</u>	<u>125,000</u>	<u>345,000</u>
Total:	555,000	245,000	800,000

Source of funds: Net income of the Fund for Special Operations

### C. Terms and conditions

Amortization period:	10 years
Grace period:	3 years for the principal
Interest rate:	4% annual
Currency:	Local currency guaraníes

### D. Statement of nonobjection

1.2 Hierbapar has submitted an application for reimbursable financing and nonreimbursable technical-cooperation funding under the Social Entrepreneurship Program. The Government of the Republic of Paraguay gave its no objection to the financing of this project through Official Letter 1-125 of the Ministry of Finance, dated 9 June 2006.

### E. Problem to be addressed

1.3 The cultivation of herbs and spices in Paraguay is very important both because of socioeconomic considerations and cultural connotations. Since the country has a hot climate nearly all year long, people drink *tereré*,<sup>1</sup> using *yerba mate*, which is an infusion made of various mixed herbs and cold water. Besides *tereré* and *mate*,<sup>2</sup> Paraguayans are accustomed to consuming herbs and spices as a natural way to counteract illness and stay healthy. In the homes of campesino families and even in urban areas, herbs and spices are home-grown for the household's own consumption. Recently, these crops have been improved and their marketing and sale has been increasing, due in part to the expansion of and boom in supermarkets

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<sup>1</sup> *Tereré* is an infusion made from mixing cold water and yerba mate. A traditional custom for Paraguayans is to add herbs to water, which is brewed to the taste and needs of the person drinking it. It is normally consumed among friends, at social gatherings and at work.

<sup>2</sup> *Mate* is an infusion made from mixing hot water and yerba mate.

throughout the country, as well as to the availability of herbs at points of sale in the interior of the country, which now sell these products fractionated and packaged for mass consumption.

- 1.4 Thus, the herb and spice sector has been growing steadily in recent years, attracting strong interest from producers. Places such as the Central, Cordillera, and Paraguari departments produce 60% of the herbs and spices in Paraguay. However, high concentration in the cultivation of lemon verbena and stevia,<sup>3</sup> produced by multinational chains and large producers on their own farms, has resulted in weak backward linkages with farmers, limiting the possibilities of the local economies to profit and benefit from this growth.
- 1.5 According to information gathered in market studies and the press, there is a national and international market that is increasingly interested in this type of product, with particular interest in the organic certification of herbs, spices and infusions. The United Nations reported that in 2003 consumption of natural and aromatic herbs totaled US\$30 billion, and in 2004, this figure rose 16% to US\$35 billion.<sup>4</sup> In Paraguay, annual sales of herbs and spices are estimated at around US\$5 million, 50% in bulk and 50% packaged for the end consumer.
- 1.6 Hierbapar is a family-owned company that has been engaged in the bulking, processing and distribution of herbs, spices and tea since 2000. It markets and sells the products of nearly 500 families, who work in coordination with micro-processors in the various rural production areas. Hierbapar is currently investing in the promotion and dissemination of alternative herb and spice crops in different parts of the country, and is specifically working with social, technical and educational assistance in a production basin in the Lima district in the department of San Pedro. This activity, geared toward working with vulnerable groups in rural areas and providing economic and technical support for rural agricultural schools, earned it recognition as one of five Paraguayan companies with demonstrated social responsibility work, a competition that was organized by the United Nations Development Programme in which more than 500 Paraguayan companies competed.
- 1.7 The project will be executed by Hierbapar, which is carrying out a series of activities supporting producers and the farming community, using its own resources, that exemplify its social responsibility: (i) it is developing training programs in the production of alternative crops and herbs, which will be offered in the localities where the producers are located; (ii) it is funding a radio-broadcast educational program in the area; and (iii) it is co-funding courses at the local technical school, in cooperation with professors in the area, so that they can be

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<sup>3</sup> Stevia is known locally as Ka'a He'e, and is a product that is starting to gain a great deal of importance in Paraguay and the world for being a natural sweetener that is a sugar substitute.

<sup>4</sup> Source: 2004 United Nations report.

offered during non-conventional hours to meet the needs of producers. In addition, Hierbapar's executives are using part of their time to carry out these activities in the Lima district, more than 250 kilometers outside of Asunción.

- 1.8 In the last two years, Hierbapar has noticed great interest among hundreds of rural producers in expanding and professionalizing their production of herbs and spices. Around the year 2000, when Hierbapar began its activities, it had only five herb suppliers, and sold to one supermarket in Asunción. Today, it has monthly sales of nearly US\$30,000 with more than 100 points of sale and over 60 product varieties, including lemon verbena, burro's tail, mint, stevia, chamomile, oregano and salvia. At the same time, it has been expanding its work with small producers, organizing them for more efficient bulking, quality control and distribution. At least 150 of the families it works with are members of five producers associations that receive inputs, technical advice and seeds from the company.
- 1.9 Despite producers' growing interest in being part of the herb and spice value chain, there are several problems or obstacles to overcome so that the production and marketing of these products can have a sustained, widespread impact for small producers. These include the following:
  - 1.10 Although some of these are "traditional" crops in Paraguay, there is a shortage of skills, training, organization and "technification" of the small rural entrepreneurs, for growing herbs and spices. For example, in regard to the productive aspects of these spices, (i) there is no proper identification, acclimatization and domestication of the spices that would allow for rapid propagation of production; (ii) there is very little technical research concerning best practices in medicinal plants and herbs; (iii) there are no national or regional surveys on the intent to plant these products; (iv) there are no improved seeds and seedlings for adaptation and dissemination in the field; and (v) there is a shortage of specialized techniques in the area of herbs and spices. In addition, the lack of timely financing for field production also limits the supply of products of acceptable quality, continuity and variety.
  - 1.11 Furthermore, in order for the products (most of which reach the end consumer with little processing) to attain a competitive and sustainable level, minimum quality standards mandated for hygiene, safety, constant supply of production and customer service must be met. To do this, there must be bulking, production and marketing infrastructure and equipment that are competitive on a regional level and can provide added value to the end herb product, thereby guaranteeing long-term sustainability in the market. Most of the herbs and spices are packaged by hand with little added value, and therefore cannot compete with foreign brands and imported products which come into the country already well-packaged with plastic labels and bar codes.
  - 1.12 Lastly, producers are unfamiliar with the market, and strategic coordination of production with commercial companies is lacking. Government entities'

ineffectiveness in promoting this area, and the lack of communication and education about the herb and spice market, its potential and its main characteristics in the country limit the development of these crops. The inadequate commercial image of the product and lack of international certifications also limit product growth in other potential markets.

- 1.13 **Beneficiaries.** The project seeks to benefit some 1,000 families by expanding the marketing and sale of herbs and spices in Paraguay. An estimated 40% of these families will be from the department of San Pedro, where the company hopes to take a technical, educational and organizational approach. In total, more than 250 additional families will benefit from the company's work. On average, these families have less than 4 hectares of production, with 2 of them being dedicated to cash crops such as cotton and sesame, 1.5 hectares to products for their own consumption such as cassava and corn, and in some cases, less than 1/10 of a hectare to herbs and spices such as chamomile, burro's tail, peperina, yerba mate and oregano. The annual income of these families is estimated at around US\$800. Many of these families live in poverty, with limited educational opportunities, no viable production alternatives, and high levels of migration to urban areas in search of jobs. The project will also benefit Hierbapar, in that its sales, efficiency and quality of production will improve its market positioning. One of the project's strategies is to work in a coordinated manner with rural agricultural schools and, accordingly, it is hoped that many of the project's direct beneficiaries will be young men and women in these rural areas.

## II. THE PROJECT

### A. Objectives

- 2.1 The project seeks to improve the quality of life and boost the income of herb and spice micro-producers in the Central region of Paraguay. Its purpose is to expand and improve the production and marketing of herbs and spices, sustainably increasing their supply at the national and regional level with a strong link between small producers and the end-consumer market.
- 2.2 The project's specific objectives are to: (i) obtain increased yields (kilos per hectare) for herb and spice producers, so that they can better use their land resources by incorporating good cultivation practices; (ii) succeed in forming grassroots organizations around the production of herbs and spices, so that there are entities that represent producers, allowing them to negotiate better commercial conditions for their crops and better educational and technical assistance opportunities; and (iii) increase Hierbapar's capacity to offer bulking, processing, marketing and technical training services to small producers of herbs and spices in order to connect them with local and regional markets in an ongoing, sustained manner.

## **B. Description**

- 2.3 To achieve these purposes, a total of US\$800,000 will be invested, which will be financed in two components: a reimbursable-financing component in the amount of US\$455,000, of which US\$335,000 are Bank funds and US\$120,000 (total amount in cash) are the local contribution, and a nonreimbursable technical-cooperation component in the amount of US\$345,000, with an IDB contribution of US\$220,000, and the local counterpart provided by Hierbapar in the amount of US\$125,000 (with US\$100,000 in cash and US\$25,000 in kind). Hierbapar will execute both components.
- 2.4 **The reimbursable-financing component** will be used as follows: (i) working capital in the amount of US\$30,000 to provide advances for planting stock, seeds, inputs and basic tools for producers; (ii) investment for an herb and spice fractionation and packaging plant in the amount of US\$129,000; (iii) procurement of specialized packing, packaging and fractionation equipment in the amount of US\$231,000, in order to increase installed capacity geared to the local, regional and international market; and (v) purchase of equipment, furniture, software and a vehicle to strengthen the marketing systems of Hierbapar and the producers in the amount of US\$65,000.
- 2.5 Hierbapar's contribution of US\$120,000 will be used for the following: (i) working capital for financing, in the amount of US\$15,000; (ii) purchase of land and construction of the plant in the amount of US\$29,000; (iii) matrices and masters for machinery in the amount of US\$19,000; and (iv) US\$57,000 for some of the software and hardware and office equipment, as well as vehicles for bulking herbs in the San Pedro area and for product distribution at the points of sale.
- 2.3 The loan will be in local currency and will have a real annual interest rate of 4%, payable over a term of 10 years, with a three-year grace period for the principal. Interest will be paid every six months on balances. Although the loan amount is high compared to the company's net worth, the financing will be disbursed over a three-year period, which is the estimated time frame in which the company's assets and net worth are expected to increase. This growth will also come from the expansion of the company's operations and the capitalization of profits.
- 2.6 This interest rate is justified for two main reasons: (i) Hierbapar does not qualify for commercial or industrial loans from local banks. The fact that Hierbapar depends 80% on the supply and work of small producers of herbs and spices in Paraguay has an impact on the perception of it having a high transaction and business risk; and (ii) Hierbapar's shareholders share an educational and social vision and commitment to disadvantaged segments of society, and recognize that there are high costs and expenses involved in maintaining this vision, particularly with respect to working with hundreds of small producers. This fact has a direct impact on the profitability of the operation, which does not allow the company to pay the local financial system's commercial interest rate. Lastly, it is important to note that

this subsidized rate will be passed on to the small producers in the form of expanding the project's activities, such as field work with rural youth and families, the implementation of new, good cultivation practices, the implementation of sophisticated machinery and equipment, and reinforcement of the producers' organizational structure.

- 2.7 It should also be mentioned that Hierbapar's working capital, to be used to provide advances in the form of inputs to the small producers benefiting from the project, will earn interest at a rate of 2% per month in dollars (or the equivalent in local currency). This rate was set in order to cover operating costs, fund a reserve for bad debts and leave a small margin to capitalize this fund.
- 2.8 **The technical-cooperation component** will be used to strengthen the chain of cultivation, bulking and fractionation of herbs and spices, for the benefit of the producers. The actions and activities under this component, *inter alia*, seek to: (i) improve the quality of the producers' herb and spice crops; (ii) pass on technical and business skills to the producers for managing their crops; (iii) create educational centers, by setting up a technical school which replicates the model of various local agricultural schools in the region<sup>5</sup> (iv) offer on-site processing instruction to incorporate the concepts of quality and traceability in post-harvest management; (v) strengthen the organization of producers in production committees to ensure better coordination of training, production and marketing; and (vi) strengthen Hierbapar's capacity to improve its supply chain, its bulking and marketing processes, and its distribution systems.
- 2.9 The technical-cooperation component is divided into the following categories: (i) technical assistance in the production of herb crops; (ii) strengthening of cultivation and marketing systems for herbs and spices; (iii) strengthening of the association of producers in Production Committees; (iv) strengthening of the executing agency's management capacity; and (v) evaluations, audits and support for the project's management. A breakdown of these categories and the component activities can be found in the Plan of Operations for the technical-cooperation component, in the project's technical files.

### C. Sustainability and results of the financial analysis

- 2.10 The sustainability of this project is based on three primary factors which, if maintained over time, will ensure the attainment of its objective: (i) consolidation of Hierbapar in the national and regional herb and spice market. The company has been in the business for several years and has demonstrated financial and commercial soundness, by gradually increasing its sales, market position and relationship with producers. The sustainability of the impact on producers will

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<sup>5</sup> In addition, Hierbapar is currently working with the Carumbey Agricultural School and hopes to work with five other technical schools in the area.

occur to the extent the market for their products expands through their partnership with the company; (ii) coordination between the company and other local entities representing the sector. To date, the company has maintained a close relationship with the communities in the Lima region of the department of San Pedro, where around 3,000 families live, and it works closely with the university's School of Agronomy, the Carumbey Agricultural School and the Municipality of Lima. The company sponsors a daily radio program on the regional FM station "Corazón del Norte" [Heart of the North], in which local professors, students, guests and specialists instruct producers, provide information on production techniques and share their experiences and technical know-how about the cultivation of herbs, spices and condiments. The company also sponsors an internship program where top graduates from the agricultural school go to the central office in Asunción to learn about the processing and marketing of herbs. This close cooperation with all these players will also be a factor for the sustainability of the technical assistance and noncommercial services provided by the company; and lastly, (iii) the continuous growth in the demand for herb and spice products, marketed through the points of sale, is the driving force that will allow investments in production and marketing to be maintained and increase the impact that is already being seen with herb producers.

- 2.11 The financial analysis is two-fold. First, although the financial projections for the project show a decrease in Hierbapar's profits during the first three years, starting the fifth year and in the long run they will increase from 5% to 10% of sales during the life of the loan. During the first three years of the project, there will be a series of one-time expenses which will take time to recover with the corresponding increase in revenues, including an increase in the categories of depreciation, administrative expenses due to increased staff, and the gradual increase in the percentage of use of new machinery and equipment for processing (from year 1 to year 3 it is estimated that 40% to 80% of the capacity of the machinery and equipment will be used). These projections are based on growth trends in conservative sales, which include an average growth rate of 12% in the local market through increased sales in supermarkets currently not covered, where Hierbapar is the leader, the penetration of other points of sale not serviced to date, and the development of new products intended for potential orders from international customers, the first market tests for which were done in the United States. Hierbapar's debt-equity ratio (long-term liabilities/total equity) supports the solvency of the project, starting from a peak when the third disbursement is effected in the third year (1.48) and steadily decreasing in the following years from paying off the loan and reinvesting Hierbapar's profits, to 1.34, 1.07, and dropping to 0.06 at the end of the loan.
- 2.12 In addition, this project seeks to increase producers' productivity so that they will achieve average yields of over 60% of the theoretical optimum for herbs and



spices.<sup>6</sup> This increase in the yields of herbs and spices is expected to be achieved with the implementation of improved seeds, specialized production techniques, on-farm technical assistance and demonstration farms organized around the agricultural schools the project seeks to support. Higher yields will translate into an actual increase in the producers' total revenues of up to 30%, at the average market price. This is the price paid not only by Hierbapar, but also by informal buyers and other companies that work in the market.<sup>7</sup> A detailed analysis of these estimated yields for producers is found in Document 3 in the technical files.

#### **D. Expected results and benefits**

- 2.13 The benefits of the project are: **1. Producers and microentrepreneurs:** It is expected that: (i) 1,000 producers and microentrepreneurs will market and sell their herbs and spices to Hierbapar by the end of the loan; (ii) at least 400 producers in the San Pedro area will have planting stock from improved seedlings and will cultivate herbs with higher levels of productivity and quality; (iii) the existing producers committees will be strengthened and the project will work with at least 10 new committees; (v) average productivity per hectare per year will reach 60% of the theoretical optimum (this is the average for the seven main crops); (vi) at least 400 producers from the San Pedro area will have, on average, around 1/10 hectare of land planted with at least one herb or spice crop per year; (vii) at least 300 students will receive instruction at the agricultural school each year; and (viii) at least 50 of Hierbapar's producers will have received organic or fair trade certification. **2. Hierbapar:** (i) the fractionation and packaging plant will operate with modern machinery; (ii) the San Pedro vocational farm will become a development model in the area, serving more than 1,000 students, professors and joint land owners in the area; (iii) Hierbapar's sales will increase from US\$350,000 to US\$570,000 by the end of the third year and it will obtain a 4% return on equity; (iv) the products will start to be sold on the international market, reaching US\$80,000 in sales by the end of the third year; (v) the company will have organic certifications of the plant's quality processes and fair trade certification; and (vi) the portfolio of customers will increase in the local market from 100 points of sale to 250.
- 2.14 The beneficiaries of the project are mostly low-income rural families whose primary economic activity is agriculture, and who seek to diversify their sources of income through herbs and spices. The executing agency works with 60 different herb and spice products, and although the technical-cooperation component is geared towards seven main products, Hierbapar will continue marketing the other products on a smaller scale, many of which are very specialized products grown by the same producers.

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<sup>6</sup> The main project products and the theoretical yield optimum are described in detail in the Plan of Operations for the technical-cooperation component.

<sup>7</sup> A description of the herb and spice market is available in the project's technical files.

- 2.15 It is important to mention that herb and spice producers currently receive better and more stable prices than other buyers in the value chain. This is partly due to the low number of middlemen involved when working with Hierbapar and to the company's purchasing and quality conditions. The project seeks to expand this favorable linkage for producers, and both the quantity and prices to be paid will be reported in the progress reports.<sup>8</sup> However, even after implementing this project, Hierbapar will not have the capacity to market all of the herbs and spices grown by the producers, and in this respect, producers will have the opportunity to sell their crops to other participants in the herb and spice chain, such as private buyers, industries and Hierbapar's competitors.
- 2.16 To ensure that the benefits of increased levels of marketing reach the producers, Hierbapar has pledged to purchase a minimum of 20% of the total herbs and spices it markets, from producers in the district of Lima region. This will be a condition for keeping the loan's interest rate at 4%. If there is an unjustified deviation from this minimum purchase percentage, the interest rate may be raised by up to an additional 4%. This condition will be verified through the semiannual reports submitted to the Bank by Hierbapar, which will provide details on the company's purchase volumes and the percentage of purchases from the project area.

#### **E. The Bank's strategy**

- 2.17 project activities are consistent with the priorities set forth in the Bank's new strategy with Paraguay because: (i) it will provide financial and nonfinancial services (technical assistance in quality and training) to the productive activities of small producers and an SME to *improve their productivity and competitiveness* and increase their participation in higher value markets; (ii) it will create opportunities to *increase the incomes* of very low-income campesino families; and (iii) it will support efforts to *reduce poverty*, by increasing job opportunities in the San Pedro area, especially in the Lima district, and tripling direct labor in the herb fractionation and packaging plant in Asunción.

#### **F. Coordination with other international donor agencies**

- 2.18 Hierbapar will be the executing agency responsible for the coordination, administration of resources and implementation of the project's activities. The program Paraguay Vende [Paraguay Sells], financed by the United States Agency for International Development, has supported Hierbapar in its coordination and consulting work with technical schools in the area, and has supported it with technical and commercial advice to improve its processes. This support will end in November 2006.

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<sup>8</sup> The technical files contain a projection of the average prices paid by Hierbapar as well as quantities.

## **G. Summary of the environmental and social review**

- 2.19 **Environmental impact:** The Committee on Environment and Social Impact (CESI) requested clarification of the following main points related to the project: (i) the potential environmental impact of putting an herb processing plant into operation; (ii) the proposed mechanisms and indicators for monitoring potential environmental impacts; and (iii) clarification of which indigenous peoples will participate in the project and inclusion of traditional knowledge in the context of the operation. In this respect, it was shown that the effect on both the cultivation and fractionation of herbs in the plant and the risks of environmental pollution are practically nonexistent, emphasizing the generation of fine dust from handling dry leaves, the effects of which will be mitigated using infrastructure and safety equipment for the plant's employees. The impact on farm property is also nonexistent, since there will be no deforestation of any additional areas for these crops, production of which will not cover 1/10 hectare. There is rational and minimal use of water due to the small area of land involved. In regard to indicators for monitoring these issues, it has been recommended that the semiannual reports include information on the occurrence of illnesses directly related to these processes and the increase in herb yields due to better use of factors of production such as water and maintenance. The project's technical files provide more details on the environmental aspects of the project and the Plan of Operations for the technical-cooperation component provides a description of the ethnic and indigenous groups who will participate in the project as well as the benefits.
- 2.20 **Social impact:** The presence and participation of community groups organized around the project, which will teach environmental conservation, maintenance and protection actions, represent reliable elements that will guarantee the effectiveness and efficiency of the project from an environmental standpoint. This project, because of its significance to the community, will directly promote the participation of rural women in the management of the products and points of sale, as well as their participation in the cultivation, harvesting and drying of organic products. In addition, the project seeks to include rural youth in the processes related to cultural dissemination and the provision of assistance to the agricultural schools in the area. The project will engage the rural population in protecting their culture and identifying with the environment, thereby ensuring that they remain in their natural places of origin, creating community roots and an enterprising culture. One additional consideration is related to the creation of direct and indirect jobs, both with producers in the area and with the workers and managers of Hierbapar's fractionation plant.

## **H. Special conditions**

- 2.21 Before receiving the first disbursement of funds from the **reimbursable-financing component**, Hierbapar will submit: (i) a proposal on the acquisition or construction of the processing plant, which will indicate the pros and cons of each option and the

possible impact of the option selected on project implementation; (ii) evidence that the person in the company responsible for executing the project has been selected, with whom all communication with the Bank will be conducted; and (iii) Hierbapar's business plan, updated for 2006.

- 2.22 For the first disbursement of the **technical-cooperation funds**, Hierbapar will submit: (i) a work plan for the first 12 months of the project, including a timeline of activities and a timeline for achieving the performance indicators, which will allow the project's progress to be monitored and controlled; and (ii) the terms of reference for hiring the consulting services to be provided during the following six months.
- 2.23 As a condition for executing the financing, the following requirements must be met: (i) Hierbapar may not distribute any type of profits generated by the company to its shareholders during project execution, or starting in the fourth year, whichever of the two is greater; and (ii) Hierbapar may not disperse more than 60% of the loan without having disbursed at least 30% of the technical-cooperation funds.

## **I. Reports, evaluations and audits**

- 2.24 **Reports:** Hierbapar will deliver semiannual progress reports on the project to the Bank's Country Office. The reports will include an analysis of the achievement of performance indicators, the problems that have arisen in execution, the actions taken to resolve them and projections for the following six-month period. It will also include a minimum of the following: (a) **for the reimbursable-financing component:** (i) details on progress made in building the fractionation plant or purchasing the building; (ii) a report on the use of resources in these works, with the respective legal vouchers; (iii) a report on investments made in equipment; (vi) a summary of Hierbapar's contribution to the project, both in cash and in kind; (vii) a report on products, volumes and market prices paid to producers for their crops; (viii) a report on lending rates charged by Hierbapar for advances and loans to producers; and (ix) monitoring to check the project's indicators; and (b) **for the technical-cooperation component:** (i) a summary of the consultants' work and technical assistance provided; (ii) a summary of the results obtained through participation in national and international trade fairs; (iii) information on new certifications obtained by the producers' organizations with the support of the technical-cooperation component; (iv) a summary of the outcome of the monitoring of the environmental and social considerations indicated in this document; (v) information on possible incidents of illness in plant workers which may be attributed to the production or processing of herbs; (vi) a report on progress and the scope of activities at the technical agricultural school to be set up in San Pedro; and (vii) a technical report on progress made in productivity, yields and expansion of the production of the crops supported by the project.
- 2.25 The project includes two evaluations, to be conducted by individual consultants selected and hired by the Bank's Country Office in Paraguay, using technical-

cooperation resources. There will be a midterm evaluation 18 months after the first disbursement, and another 36 months after the first disbursement. The first evaluation will measure at least the following: (i) progress made in boosting producers' income and in the quality and productivity of production; (ii) the degree of achievement of the project performance indicators; (iii) the lessons learned and recommendations for improving the project; (iv) any cases of illness that may be attributed to the production or processing of herbs; and (v) the executing agency's institutional capacity.

- 2.26 In addition to the items indicated for the first evaluation, the final evaluation will measure and document: (i) the project's effects on the groups investigated in the initial evaluation; (ii) the outcomes of the fulfillment of the project's objectives; (iii) the lessons learned; and (iv) the sustainability of the project. Part of the consultant's work in on-farm technical assistance, which will be contracted using technical-cooperation resources, will be to prepare a baseline against which the outcome and impact will be subsequently measured, by means of these evaluations.
- 2.27 **Audits.** Annual audits will be conducted for both components of the project, and will be paid for using technical-cooperation resources, including the cost of a final audit of the technical-cooperation component after its execution period has ended.

## **J. Project risks and mitigants**

- 2.28 **Market:** Although available market information indicates that the demand for herb and spice products is expanding, it is important to consider that in general, the herb market operates with a large proportion of bulk sales (commodity), which is a highly volatile market that depends on a large number of suppliers and consumers who have different conditions. Although it would be difficult to mitigate this risk, one of the proposed actions has to do with increasing the number of customers, which is to be supported using technical-cooperation resources, through attendance at international trade fairs, thereby allowing diversification of sales and innovation of products moving towards tea bags. In addition, the strengthening of the local market will provide the company with the necessary sales volumes needed to explore the international market with better prospects and cover the local counterpart's contributions with the reinvestment of profits, so as to mitigate the exchange risk assumed with the debt in U.S. dollars. **Climate:** There is also a climate risk in this project, since this can affect the levels of production and yields of the beneficiaries. The climate risk also has a secondary effect on the prices paid and received by the producer. Although this risk is difficult to control, the project has the advantage of working in several micro-climates with different levels of rainfall and planting and harvesting seasons. In addition, the characteristics of the herbs and spices in the areas covered by the project have proven to be very resistant to sudden and severe climate changes, and this resistance capacity is expected to increase much more with the introduction of new varieties and production systems to be provided by the project.

**K. Exceptions to Bank policy**

2.29 None.