

INTER-AMERICAN DEVELOPMENT BANK
MULTILATERAL INVESTMENT FUND

PARAGUAY

**FRUIT AND VEGETABLE FARMING AS AN OPPORTUNITY FOR
ACCESS TO HIGH-VALUE MARKETS AND SUSTAINABLE SUPPLY**

(PR-M1025)

DONORS MEMORANDUM

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Paraguay's rural sector is dualistic in the sense that it follows both an agro-export model, which is facilitating accelerated agricultural growth, and a conventional agricultural model, characterized by a lack of competitiveness and market access. Thus, there is extensive mechanized agriculture facilitating the export model for commodities such as soybeans on the one hand, and a family farming model that is the primary source supplying fruits and vegetables for the domestic market and even some exports such as banana and pineapple on the other hand. Family farming in Paraguay is still very socially and economically important since it generates about 32% of the gross value of current agricultural production. However, significant deficits in terms of technical assistance, agricultural technology, and access to credit perpetuate an inefficient model of production. This panorama is in turn accompanied by increasing rural poverty, with rural dwellers continuing to represent a majority, at 54%, of the total low-income population. Declining competitiveness has led to an increase in rural migration and social conflicts. Thus, there is an obvious need to reassess family agriculture as a valid economic alternative for ensuring social stability and promoting a strategy for overcoming rural poverty.⁹

Despite these technical gaps in family farming, Paraguay has significant potential. In value chains in which farmers are the primary suppliers of raw materials for industry and have seriously addressed the issue of quality, they have succeeded in entering the market on a competitive basis. The agroindustrial chain for organic sugar is a successful system where the principal actors are family farmers.

This project will provide technical assistance on the issues of quality and productivity. A partnership between the company Abasto Norte and the farmer associations targeted by the project ensure that small fruit and vegetable growers have ongoing entry to the market and its supply chain. The company will provide a new laboratory facility to certify quality and guarantee access to high-value markets. The project's development of technical capacities and the partnership with Abasto Norte will facilitate the small farmers' successful entry into an increasingly demanding and competitive fruit and vegetable market, a market from which they are now being gradually excluded because they do not meet the minimum standards of quality and volume that local consumers require. In addition, the project will facilitate the connection with rural microcredit institutions in order to increase access to these services.

As a result of these actions, the project is expected to benefit more than 600 farming families grouped in seven to ten farmer cooperatives and associations. The project's geographic area of influence encompasses the Central, Cordillera, Caaguazú, southern San Pedro, northern Paraguari, and southeastern Presidente Hayes departments, where most of the country's fruit and vegetable growers are located.

CONTENTS

I.	EXECUTIVE SUMMARY.....	1
II.	BACKGROUND AND PROBLEM TO BE ADDRESSED	2
	A. Socioeconomic context	2
	B. Definition and causes of the problem	4
	C. Opportunity for systemic impact	5
	D. Proposed project.....	6
III.	OBJECTIVES, COMPONENTS, AND EXPECTED RESULTS.....	8
	A. Objectives.....	8
	B. Components and activities	8
	C. Expected outcomes	12
IV.	COST AND FINANCING.....	13
V.	EXECUTING AGENCY AND EXECUTION MECHANISM.....	14
	A. The executing agency.....	14
	B. Execution mechanism	14
VI.	MONITORING AND EVALUATION.....	16
VII.	BENEFITS AND RISKS.....	18
	A. Benefits.....	18
	B. Risks	18
VIII.	ENVIRONMENTAL AND SOCIAL STRATEGY	19

ANNEXES

Annex I	Logical framework
Annex II	Itemized budget
Annex III	QED

APPENDICES

Proposed resolution

INFORMATION AVAILABLE IN THE TECHNICAL FILES

Document I	Execution schedule
Document II	Procurement plan
Document III	Preliminary milestones table
Document IV	Operating Regulations
Document V	Itemized budget
Document VI	Cooperation agreement with the company Abasto Norte

ABBREVIATIONS

GAPs	Good agricultural practices
MIF	Multilateral Investment Fund
MMA	Municipal Market of Asunción
PSR	Project status report

PARAGUAY
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I. EXECUTIVE SUMMARY

Country:	Paraguay									
Executing agency:	Paraguay Vende, a nongovernmental organization									
Beneficiaries:	The direct beneficiaries of the project will be: (i) at least 10 farmer cooperatives and associations that will sell and distribute their production through the Abasto Norte market; (ii) 600 fruit and vegetable growers who will be trained in quality and production techniques.									
Financing:	<table><tr><td>MIF technical cooperation:</td><td>US\$ 956,621</td><td>70.8%</td></tr><tr><td>Local counterpart:</td><td>US\$ 371,067</td><td>29.2%</td></tr><tr><td>Total:</td><td>US\$ 1,327,688</td><td>100%</td></tr></table>	MIF technical cooperation:	US\$ 956,621	70.8%	Local counterpart:	US\$ 371,067	29.2%	Total:	US\$ 1,327,688	100%
MIF technical cooperation:	US\$ 956,621	70.8%								
Local counterpart:	US\$ 371,067	29.2%								
Total:	US\$ 1,327,688	100%								
Objectives:	The impact of the project is to help improve the economic growth of family-based fruit and vegetable growers in Paraguay. The outcome is to expand access for fruit and vegetable farmers to high-value markets, through the Abasto Norte Market.									
Execution and disbursement periods:	<table><tr><td>Execution period:</td><td>36 months</td></tr><tr><td>Disbursement period:</td><td>42 months</td></tr></table>	Execution period:	36 months	Disbursement period:	42 months					
Execution period:	36 months									
Disbursement period:	42 months									
Exceptions to Bank policy:	None.									
Bank country strategy for 2010-2013:	The project is consistent with the Bank's 2010-2013 country strategy with Paraguay and complements priority areas of support for the agribusiness sector through technical training and the adoption of more efficient technologies to regain sector competitiveness and promote access to markets for small farmers, thus helping to reduce extreme poverty in the countryside, where it is most prevalent.									

Special contractual clauses:	As a condition precedent to the first disbursement, the executing agency will deliver to the Bank's satisfaction: (i) the Operating Regulations approved by the project's advisory committee; (ii) the selection of the project coordinator; and (iii) the signed agreement on participation and financing between the executing agency and the Abasto Norte company.
Environmental and social review:	The project was submitted for the respective review process established by ESR (ESR 14-12) and was classified as a category "C" operation.

II. BACKGROUND AND PROBLEM TO BE ADDRESSED

A. Socioeconomic context

- 2.1 Paraguay's rural sector is dualistic in the sense that it follows both an agro-export model, which is facilitating accelerated agricultural growth, and a conventional agricultural model, characterized by a lack of competitiveness and market access. Thus, there is extensive mechanized agriculture facilitating the export model for commodities such as soybeans on the one hand, and a family farming model with deficits in terms of technical assistance, agricultural technology, and access to credit, on the other, perpetuating an inefficient model of production. Approximately 40% of the Paraguayan agricultural sector consists of small family subsistence farms of less than five hectares, and when farms with less than 10 hectares are added to this, 70% of the country's farms fall under this category. Only 15% of farmers with less than 20 hectares have access to credit. In terms of organizational level, less than 30% of farmers are organized. At the same time, the reality of Paraguayan family farms over the last decade points to a loss of soil fertility and deteriorating natural resources, factors that are reflected in low labor and land productivity.¹
- 2.2 However, family farming is the primary source supplying fruits and vegetables for the domestic market and even some exports such as banana and pineapple. Family farming in Paraguay is still socially and economically important since it generates about 32% of the gross value of current agricultural production, compared with 70% generated in 1991. Consequently, there is potential for improvement in terms of competitiveness. The production volumes of family farms with less than 20 hectares far exceed larger farms, which in many cases do not exceed 2% of the volume of production.²
- 2.3 **Fruits and vegetables.** Aggregate information on the domestic fruit and vegetable market in Paraguay is limited. Data are not consolidated, supermarkets

¹ National Agricultural Census, 2008.

² National Agricultural Census, 2008.

do not provide this information, and level of informality in the sector hinders good data collection on production and marketing, both for the domestic market or for exports and imports. However, based on information from the Ministry of Agriculture and Livestock and its Marketing Division, it has been possible to ascertain significant growth in fruit and vegetable imports, which are covering the shortfall in domestic supply. The causes of this growth are primarily related to insufficient volume and lack of quality in the country's production. Although small farmers are already integrated into the market, they are still far from reaching the potential technological and economic frontier. For example, between 1997 and 2009, trade through the Municipal Market of Asunción (MMA) fell from 287,235 tons to 208,566 tons of fruits and vegetables, while imports of these products sold through the MMA increased from 12% in 2006 to 31% in 2009. The country's total imports of fruits and vegetables, compared with the total sold through the MMA, increased from 12% in 1997 to 53% in 2009.³

2.4 An analysis of these figures and the sector monitoring performed over the past five years by Paraguay Vende and the executives at the company Abasto Norte lead them to point to various trends as being responsible: (i) deterioration in the terms and types of trade in the traditional municipal market, currently located in a highly congested urban area with limited possibilities for improved quality and sanitation; (ii) a lack of alternative marketing channels for fruit and vegetable growers; and (iii) a resulting loss of competitiveness for fruit and vegetable farmers compared with neighboring countries. These factors have in turn contributed to scarce formalization of fruit and vegetable marketing, which has remained in the hands of intermediaries whose objectives do not include improving production or differentiating production according to levels of quality and size, a key aspect in products of this kind.

2.5 **Generating business opportunities in the development of fruit and vegetable value chains.** In response to the potential economic opportunities present in the fruit and vegetable sector and decaying infrastructure at Mercado Abasto for meeting wholesale demand for fresh produce, Abasto Norte, a Paraguayan company, decided to pursue a private venture to develop an alternative wholesale market based on a variety of quality products at competitive prices.⁴ As its marketing strategy, the company seeks to distinguish itself by its supply of quality products and services in general terms, satisfying a more demanding market niche and supporting the development of fruit and vegetable growers, as a way to contribute to the country's economic and social development. Thus, the company launched construction of a commercial complex that offers small cooperatives,

³ Municipal Statistics Bulletin, Asunción, 2010, and the Mercado Abasto Information System of the Marketing Division of the Ministry of Agriculture and Livestock.

⁴ Abasto Norte opened in October 2010, starting its commercial activities in June 2012. Abasto S.A. is an enterprise that is part of the Zucolillo Enterprise Group, primarily focused on the construction and leasing of commercial centers and buildings with a significant flow of people. They also own Editorial Azeta (Diario ABC Color), the oldest newspaper with the widest circulation in the country.

- firms, and farmer organizations the opportunity to rent space for selling higher value products. The company's objective is to develop a better supply of products by supporting technical assistance and implementing a quality system that encompasses the entire process from the farm to the consumer, so that it will be able to provide a supply of products that is attractive to supermarkets, wholesale buyers, and final consumers in order to ensure the success of the tenants and, therefore, the venture in general.
- 2.6 In order to push ahead with this vision, Abasto Norte has partnered with the nongovernmental organization Paraguay Vende, which has significant experience in managing projects involving partnerships and technical assistance between firms and small farmers in the country from a value chain perspective. Past experiences with the United States Agency for International Development in value chains for sesame, sugarcane, cassava, pineapple, bananas, and tomato, with a beneficiary population of 16,500 individuals, allowed Abasto Norte to find the ideal partner for pursuing improvements in fruit and vegetable production from the farm to the point of sale.
- 2.7 The advantages of having a large quality-oriented marketing space for small firms, cooperatives, and farmer associations include: (1) its strong contribution to recognition of the key role played by farmer organizations and small farmers in local agrifood chains, who seek to obtain better prices for their products while guaranteeing quality standards; (2) its impact on the family farming sector as the principal grower of fruits and vegetables, in that it will reflect an increase in demand for products in this sector; and (3) its promotion of the development of a local supply chain, key to the success of the enterprise, which may reduce logistical costs, improve delivery times, and meet the growing local demand for quality products.

B. Definition and causes of the problem

- 2.8 **The problem.** Deteriorating local prices with respect to neighboring countries and worsening quality and sanitation in the municipal markets has steered domestic demand toward large supermarket chains or retail establishments where consumers pay higher prices. With the construction of a new produce market where the quality/price relationship and the possibilities for increasing commercial ties with the growing domestic market will be promoted, small farmer organizations and individual farmers now have an opportunity to redefine their position in the value chain, respond to new patterns of consumption favoring healthier products, and gain access to new markets by improving their economic opportunities through a form of sustainable income. However, the national fruit and vegetable production sector is part of a larger context of stagnation in local family farming and persistent rural poverty that has received little technical assistance in terms of quality and marketing strategies. The central problem that this project seeks to address is lack of competitiveness among local farmers so they can meet growing domestic demand for quality products and reach high-value commercial markets.

- 2.9 **Some of the causes of this problem are:** (i) **first**, farmers lack technical production skills that would allow them to introduce improvements to scale up production, sustain prices, and reduce high post-harvest loss percentages throughout the annual production cycle. There is presently an oversupply of products at harvest times, which produces a sharp decline in prices at the time of sale, permanently decapitalizing the farmer and making farming unprofitable; (ii) **second**, rural farmers are unaware of market requirements and there is a disconnect between the small farmer with low quality produce and a more demanding (individual and institutional) consumer as a result of growth in urban incomes in recent years; (iii) **third**, farmers cannot regularly meet supply and quantity requirements because they negotiate price with local shippers who bring produce to the city on consignment and pay very low prices with high post-sale wastage. Meanwhile, the municipal produce market encourages sales at variable prices, with no recognition of product safety and quality; (iv) **fourth**, rural farmers lack access to information and market signals such as price statistics and traceability, leading to a great disparity in information and values ultimately harming the farmer, who is highly manipulated by intermediaries and price-setting wholesale buyers; and lastly (v) **fifth**, the vast majority of low-income rural Paraguayans have insufficient access to credit to make technical improvements in their agricultural production.

C. Opportunity for systemic impact

- 2.10 Although there are other projects, such as the Ministry of Agriculture and Livestock's Paraguay Rural, which is helping small farmers to consolidate their organizations and develop production and basic infrastructure plans, and REDIEX, which is providing assistance with export plans, this project will focus more on the local market where there is significant demand for top-quality products that get better prices in the market, which is primarily met with imported products at present. It is anticipated that this project will lay the groundwork for improving the competitiveness of the sector in general so it is able to increase its supply of exports over the medium and long term.
- 2.11 In value chains in which farmers are the primary suppliers of raw materials for industry and have seriously addressed the issue of quality, they have succeeded in entering the market on a competitive basis. Among the best examples are growers and exporters of banana and pineapple to the Argentine market. The agroindustrial chain for organic sugar is another successful system where the principal actors are family farmers. Sugarcane, which is considered a commodity in neighboring countries and grown on vast tracts, is still harvested in Paraguay on small landholdings.
- 2.12 The project seeks to directly reach 600 rural farmers grouped in seven to ten farmer cooperatives and associations through training, technical assistance, and institutional strengthening. However, the training and knowledge imparted by the project will benefit a larger group, namely all of the country's fruit and vegetable farmers. The project's direct geographic area of influence includes the Central,

Cordillera, Caaguazú, southern San Pedro, northern Paraguari, and southeastern Presidente Hayes departments, where most of the country's fruit and vegetable growers are located.⁵

- 2.13 According to the World Bank's 2010 Paraguay Poverty Assessment,⁶ the total number of rural inhabitants with low incomes has declined in recent years. However, these rural dwellers continue to represent a majority, at 54%, of the total low-income population, and they account for 68% of Paraguayans living in extreme poverty. The same report indicates that farm work continues to be the economic mainstay, accounting for more than 40% of the source of income (in quintiles).⁷ Since the labor force is the main capital resource, enhancing technical capacities would transform the rural labor force into a key option for rising out of poverty and increasing employment levels. A robust rural economy focused on high-value products, the generation of productive capacity, and increased human capital could be part of a successful strategy for overcoming poverty.
- 2.14 The project will ensure that all training activities are sensitive to gender issues and directly relate to the needs of the group, so as to ensure maximum participation and benefit. Of the group of beneficiaries, women in charge of the business represent 20%. In this sense, the growing of fruits and vegetables is a viable employment option for increasing household income and is compatible with other domestic tasks performed by rural Paraguayan women inasmuch as the work can be done on a limited amount of land and close to home. To this end, the training to be offered on farming techniques will be adapted to the needs of women, including their leadership and entrepreneurship, and will increase their social capital for family farming. Specific results indicators on this issue will be taken into account for evaluation purposes and are included in the logical framework (Annex I). In addition, the baseline and the evaluation and monitoring indicators will take gender variables into account.

D. Proposed project

- 2.15 This project will provide technical assistance on the issues of quality and productivity as well as a system for obtaining access to market information that farmers will be able to use free of charge. A partnership between the company

⁵ Most beneficiaries are low-income inhabitants, belong to the average family farm category (41% of the total) with an average of five hectares, and sell 87% of their harvest, earning an average of US\$5 per day. They earn more than the threshold for rural poverty in Paraguay (\$90 per month) but less than average per capita income of US\$140. Paraguay: Household Survey. 2010. IDB/MECOVI. Income in dollar terms can be seen on the MIF site: <http://mif.iadb.org/poverty/home>. To view a map of the beneficiaries, see: <http://geocommons.com/maps/135257>

⁶ Paraguay Poverty Assessment. Determinants and Challenges for Poverty Reduction. Poverty Reduction and Economic Management Unit, Latin America and the Caribbean, World Bank, December 2010.

⁷ Agricultural wage earners represent less than 10% while the income of self-employed farmers represents more than 30% of the total source of income (in quintiles). Ibid.

- Abasto Norte and the small firms and farmer associations targeted by the project⁸ will ensure that small fruit and vegetable growers have access to the stable business of the wholesale produce market. It should be emphasized that this does not assume an exclusive relationship between the company and the beneficiary farmers and organizations but rather a supportive relationship of joint and shared planning of the supply of fruits and vegetables sold in the market. Prices will be set on the basis of supply and demand for similar products without any interference from Abasto Norte. The model is built on the rising local unmet demand for fruits and vegetables and by the company, which is seeking competitive tenants in terms of supply and quality.
- 2.16 With a view to improving the quality of produce, the company will provide a new laboratory facility to certify quality and guarantee access to high-value markets to those farmers who wish to take advantage of these services. The project's development of technical capacities and the partnership with Abasto Norte will facilitate the small farmers' successful entry into an increasingly demanding and competitive fruit and vegetable market, a market from which they are now being gradually excluded because they do not meet the minimum standards of quality and volume that local consumers require.
- 2.17 In addition, the project will facilitate the connection with financial institutions that provide rural and agricultural microcredit. Training and the development of business plans to increase production will allow credit institutions to more realistically evaluate farmers' borrowing capacity and their production, cost, and income projections.
- 2.18 The project contributes to the agenda of **Linking Small Producers to High-Value Markets**. The project will generate a methodology for access to markets, management, and sales to a market with greater purchasing power that now buys imported products and currently offers almost no local products. This project will increase opportunities for farmers to enter this type of market and will diversify their income, increasing the production of quality fruits and vegetables at the local level, products that also have great potential as exports in future.
- 2.19 **Lessons learned** from other projects have been taken into account for the design of this project. First, a market approach is essential and each intervention should start with analysis of the value chain, focusing on demand and the requirements of buyers and commercial actors. Second, higher quality standards for products have a positive impact on the entire production base, which is beginning to adopt these standards even when they are not part of a chain targeting the high-value market. Third, the development of an information technology system can lower technology costs and increase incomes by as much as 30%. Fourth, the

⁸ As of the end of the analysis mission, the companies and institutions renting space in the market with which the project would work on a preliminary basis are: Marta Ibañez, Central Paraguaya de Cooperativas, Ecotrading, Comité Central de Productores Orgánicos Arroyenses, Okamoto, La Colmena, and El Rey de la Fruta.

experiences of projects in the fruit and vegetable sector, as in the case of the nongovernmental organization Fintrac in Honduras and the Salcaja Cooperative in Guatemala, have shown that microfinance institutions offer greater flexibility and better terms to those individual growers who have a solid, well-defined business plan and ties to a value chain with a guaranteed market. Fifth, agricultural value chain projects must incorporate access to credit mechanisms to facilitate producer growth and sustainability.⁹

III. OBJECTIVES, COMPONENTS, AND EXPECTED RESULTS

A. Objectives

- 3.1 The general objective of the project is to help improve the economic growth of family-based fruit and vegetable farmers in Paraguay. The specific objective is to expand their access to high-value markets with better quality and higher volume, through the Abasto Norte Market.
- 3.2 The project will facilitate access by small farmers to the supply chain of the Abasto Norte market as a profitable line of business for both parties that provides channels for transmitting information on the importance of the quality and safety of fruit and vegetable products. Through this project, it will be possible to develop a standard certificate of quality at the local level ensuring basic elements of the traceability and safety of foods produced by the farmer organizations participating in the project. In order to sharpen the project focus and based on surveys conducted by the executing agency, the project will concentrate on the following products, which may change as the project proceeds: tomatoes, cucumbers, cabbages, peppers, bananas, pineapples, cantaloupes, and watermelons.
- 3.3 To this end, the project has four components designed to: (i) improve the techniques and productivity of the farmers through capacity-building to diversify their supply; (ii) ensure better product quality by implementing an “Abasto Norte” seal of quality; (iii) develop an information system on commercial market signals; and (iv) finance activities to capture the knowledge generated and disseminate the lessons learned from the project.

B. Components and activities

Component 1. Improved seasonality and diversity of products (MIF: US\$424,640; Counterpart: US\$121,667)

- 3.4 The objective of this component is to improve the sustainability and productivity of fruit and vegetable farmers. This will be achieved by training farmers on production diversification with niche products and increased yields per hectare based on sustainable and environmentally responsible techniques. For this,

⁹ Study on agricultural value chains conducted by Duke University for the Agenda “Assessment of five high-value agriculture inclusive business projects sponsored by the IDB in Latin America,” Center for Governance, Globalization and Competitiveness.

- demonstration plots will be established to provide training on the care and production of traditional products and new varieties such as arugula, which has a high-value niche market locally.
- 3.5 Although productivity gains and enhanced quality are critical to including farmers in the domestic market for quality fruits and vegetables, it is also necessary to improve the business management skills of small farms so they can successfully penetrate high-value markets and explore new forms of partnering and marketing. To this end, the project will work with farmer cooperatives and associations that will, in turn, establish commercial relationships with those small farmers to devise joint business plans with a view to making access to the Abasto Norte market contingent on quantity, quality, and consistency requirements. These plans will develop a growth and sustainability strategy for small farmers, establishing production and sales targets, costs, required investment of capital, and marketing strategies.
- 3.6 These business plans will be the principal basis for establishing relationships with local credit and microfinance institutions that can use this same information in their credit analyses of these farmers. The executing agency will facilitate the interaction between farmers and finance agencies to identify mutual production and investment targets consistent with the training and production levels achieved by the farmers.¹⁰ Another key activity of this component is joint commercial and financial planning with farmer organizations and Abasto Norte to have access to the market with permanent points of sale. It should be noted that the project will not impose or encourage an exclusive relationship for selling from the stalls at the Abasto Norte market. Farmers may sell their products through any other marketing channel. Nonetheless, Abasto Norte currently offers the best selling conditions and is expected to set standards in the future in the area of quality and competition, with other participants in the fruit and vegetable value chain adopting its practices.
- 3.7 The outcomes expected from this component are: (i) at least two new niche products are produced and sold by the beneficiaries; (ii) total production of the fruits and vegetables targeted in this project increases by 10%; (iii) 600 farmers receive training in diversification and productivity; (iv) at least seven firms or organizations establish commercial relationships with the farmers, send their production to the Abasto Norte market, and have a joint business plan incorporating the various participants in the chain; (v) three new institutions (cooperatives, associations, firms) have access to the market with permanent points of sale; and (vi) at least 50% of farmers have access to financing for their production.

¹⁰ The project has already had initial discussions with two microfinance institutions that would be able to issue credit to the farmers and their organizations once their business plans are ready.

Component 2. Improved product quality and quality seal (MIF: US\$177,822; Counterpart: US\$124,500)

- 3.8 This component will help farmers implement quality practices and processes needed to increase the value of fruit and vegetable products and adapt to market requirements. For this, farmers will be trained in good agricultural practices (GAPs) so as to increase production and improve food safety as well as environmental sustainability. These practices will focus on sustainability and quality along the entire fruit and vegetable value chain, but more specifically on issues related to production, processing, and storage of products and the reduction of post-harvest losses. Particular emphasis will also be placed on quality standardization topics (assigning grades based on quality and size) and on production, so as to ensure even levels throughout the production cycle and to become more competitive.
- 3.9 Although the country has safety and quality certifications, they are oriented to and primarily serve the meat and dairy industry and other export sectors. At present, there is no quality certification mechanism for fruits and vegetables. The proposed project will develop a quality seal in conjunction with Abasto Norte that will comprehensively incorporate elements of traceability and GAPs. This will be accompanied by training for beneficiary farmers and organizations to ensure that quality standards are fully geared to improvement processes at the farm level, so that certification can be achieved by farmers on the basis of real targets. Training sessions will take place at the level of farmer organizations and cooperatives as well as at the individual farm level. To this end, Abasto Norte will build and outfit a quality laboratory with trained personnel to verify and test the quality of products to receive the seal of quality. This laboratory will also serve as the clearinghouse for information on the different products originating from the Paraguayan countryside. Traceability mechanisms will be implemented, which are currently a very important requirement for large-scale buyers, with major implications that will boost competitiveness at the level of international trade at a later date. Traceability has in recent years become an essential requirement in fresh fruit and vegetable markets. Not only does it ensure food safety and quality, it farmers the opportunity to place their products in high-value niche markets that demand certainty as to origin and phases in the production process. Finally, and as part of the marketing and quality strategy, the project will finance international visits to countries in the region with similar experiences in incorporating farmers into produce markets, so as to establish “benchmarking” strategies and contacts with potential buyers or importers of Paraguayan fruits and vegetable that may be useful in a second phase of the project focused on exportation.
- 3.10 Some of the expected outcomes for this component are: (i) implementation and use of a quality seal; (ii) at least 50% of beneficiary farmers adopt GAPs; (iii) 50% of production meets the basic standards required for the seal of quality; (iv) the price differential based on quality reaches at least 20% at the farm level; and (v) there is a 20% reduction in post-harvest losses, from harvest to delivery

and sale. In addition, given that there has already been some experience exporting fruits to Argentina, it is expected that implementation of activities in this component will be able to expand on this export experience, quite possibly toward the end of the project, since the initial focus is on the local market.

Component 3. Market intelligence and dissemination in the mass media (MIF: US\$35,333; Counterpart: US\$36,300)

- 3.11 This component will facilitate the documentation and dissemination of information between farmers and farmer organizations and the anchor company, Abasto Norte. The project will finance the creation of an online platform that will primarily be used to collect data on quality, quantity, price, and volume that could be used for production planning by farmer organizations, individual farmers, and the company over the short, medium, and long term. This platform will be able to send text messages to the cell phones of growers on their farms and to farmer organizations regarding market trends as well as daily sales prices for the fruits and vegetables they grow, weather alerts, and reminders of scheduled production practices (such as applying fertilizers, pruning, etc.). Thus, the farmer will be able to continuously update market prices for his or her products, gain bargaining power, and follow step by step the production plan agreed on with agricultural specialists. In addition, in collaboration with the anchor company and its communications group, a public information campaign will be developed to promote and educate consumers on the advantages consuming locally grown fruits and vegetables, the impact on supply chains, and the value of the seal of quality in terms of consumer safety and the environmental impact of production.
- 3.12 The outcomes expected from this component are: (i) an online information and text messaging system accessible to farmers and consumers on market signals with respect to supply and demand, production advice, price trends, quality requirements, environmental hazards, weather alerts, etc.; (ii) illustrated manuals on good production practices printed and distributed for all fruit and vegetable crops covered by the project; and (iii) 300 newspaper articles on quality, the benefits of buying local products, and market information in the local media. Upon project completion, the company and the organization Paraguay Vende will be responsible for each one of these tools.

Component 4. Knowledge management and strategic communication (MIF: US\$32,000; Counterpart: US\$0)

- 3.13 The objective of this component is to capture, document, and disseminate lessons emerging from the project and the selected products in an effort to contribute to the development of the Paraguayan fruit and vegetable sector with small farmers and the strategies implemented to enter an area of wholesale marketing like a produce market. The project will capture lessons learned at different stages of the process.
- 3.14 The main target audiences for this project include: (i) other businesses associated with the food sector such as restaurants, supermarkets, hotels, and large produce

- market clients, farmers, and local farmer organizations for purposes of generating new business opportunities for farmer organizations; and (ii) other international and local donors that may collaborate help make the intervention sustainable.
- 3.15 So as to be able to meet the needs of the various audiences and support the key messages, the following knowledge products will be produced: (i) a case study describing the integration process and marketing model for small farmers through a produce market. This case study will take into account the creation of bonds of trust and the key instruments that helped farmers to achieve entry and access to the market, the importance of local demand, and other lessons learned from this process.
- 3.16 For purposes of disseminating the knowledge generated in this project, outcomes, and lessons learned, workshops and dissemination events organized by the executing agency and the MIF will be held for the target audiences of this project to publicize outcomes and lessons learned.
- 3.17 Project outcomes can be disseminated in specialized channels, including specific events such as Foromic, Cracking the Nut, FoodLab, and other events organized at the local level. Two workshop-type events will be organized by the executing agency and the MIF to strengthen this strategy and disseminate lessons learned at the local and international level.

C. Expected outcomes

- 3.18 In addition to the indicators specified for the project components, the following indicators will be used to measure project **outcomes**: (i) at least 10 businesses or business organizations (cooperatives and associations) establish partnerships with microfarmers for the sale of fruits and vegetables at Abasto Norte; (ii) in 50% of the 600 beneficiary families, women participate directly in running the business (business plan, access to and negotiation of credit, training); (iii) production increases by 1,870 tons over the baseline; and (iv) 600 families that grow fruits and vegetables have access to high-value markets.
- 3.19 **In terms of impact**, at the end of the project, the **net income** of the families growing fruits and vegetables that have adopted improved practices and techniques has increased by 20% over the baseline; net sales increase by at least US\$800,000 over the baseline; and the certificate of quality has consumer recognition in high-value markets.
- 3.20 **Alignment with the Bank's country strategy.** In coordination with the government of Paraguay, the Bank has identified three priority areas of support for the country, one of which is infrastructure, which encompasses the farm sector. This project complements those areas by supporting the agribusiness sector through technical training and the adoption of more efficient technologies to regain sector competitiveness and promote access to markets for small farmers, thus helping to reduce extreme poverty in the countryside, where it is most prevalent. This project also complements the recently concluded Program for

Modernization and Diversification of Small-scale Farming (1255/OC-PR), which provided irrigation and partial shade infrastructure for select farmers, which may be better utilized if there is a produce market where they can sell their products.

IV. COST AND FINANCING

- 4.1 **Cost and financing.** The total cost of the project is estimated to be US\$1,327,688, with the MIF contributing up to US\$956,621 in nonreimbursable financing and the executing agency contributing \$371,067.
- 4.2 The execution period will be 36 months and the disbursement period will be 42 months.

Budget in US\$

FRUIT AND VEGETABLE FARMING AS AN OPPORTUNITY FOR ACCESS TO HIGH-VALUE MARKETS AND SUSTAINABLE SUPPLY			
	MIF	COUNTERPART	TOTAL
COMP 1: IMPROVED SEASONALITY AND DIVERSITY OF PRODUCTS	424,640	121,667	546,307
COMP 2: IMPROVED PRODUCT QUALITY	177,822	124,500	302,322
COMP 3: MARKET INTELLIGENCE AND DISSEMINATION IN MASS MEDIA	35,333	36,300	71,633
COMP 4: KNOWLEDGE MANAGEMENT AND STRATEGIC COMMUNICATION	32,000		32,000
Project administration	179,200	33,600	212,800
Baseline, monitoring, and evaluation		40,000	40,000
Ex post reviews	10,000		10,000
Contingencies	4,453		4,453
SUBTOTAL	863,449	356,067	1,219,515
% of financing	70.80%	29.20%	100%
Institutional strengthening (training in financial management and/or procurement)	30,000	15,000	45,000
Impact evaluation 5%	43,172		43,172
Agenda	20,000		20,000
PROJECT TOTAL	956,621	371,067	1,327,688

- 4.3 **Sustainability.** The project emphasizes market access for small fruit and vegetable growers and training to improve the quality of their products so they can enter higher-value markets. Support will be provided through the connection with the Abasto Norte company, which seeks to meet growing local demand with quality products adapted to the requirements of urban consumers with rising

incomes. It is expected that by strengthening business capacities and facilitating access to credit with specialized entities, the project will enable small beneficiary farmer associations and cooperatives and farmers at the individual level to improve their working capital, current terms of trade, and long-term sustainability. With the components of training, seal of quality, access to information, and support for access to credit, the project will help small farmers gain access to the fruit and vegetable value chain, which in a second phase of the project could enable them to build their commercial network and expand their portfolio of fruit and vegetable exports to other countries in the region.

- 4.4 One year before the end of the project execution period, a sustainability workshop will be held with the participation of representatives from the MIF, the executing agency, and the anchor company, as well as other stakeholders considered key to the sustainability of the project. The objective will be to evaluate progress made and identify measures and actions needed to ensure the continuity of actions once the project funds are exhausted. The scope and organization of this sustainability workshop should be agreed upon with sufficient lead time.

V. EXECUTING AGENCY AND EXECUTION MECHANISM

A. The executing agency

- 5.1 The project will be executed by the nongovernmental organization Paraguay Vende, based in Asunción, Paraguay. Paraguay Vende was established in April 2010 as a non-profit organization that seeks to provide technical assistance to promote competitiveness and sustainable development through technical assistance to micro, small, and medium-sized enterprises. Its principal objective is to work to promote commercial value chains to help develop domestic production and reduce poverty, encouraging sustainable trade practices, through results-oriented technical assistance.
- 5.2 Paraguay Vende consists of a group of 15 national professionals and experts for developing value chain and inclusive business projects. It has experience in executing projects financed by multilateral and bilateral institutions related to: (i) implementing value chains and economic corridors; (ii) negotiating partnerships for global markets; (iii) generating commercial opportunities for rural microenterprises. Paraguay Vende has executed projects supporting rural farmers and the development of value chains. This is the case with the Paraguay Productivo project financed by the United States Agency for International Development and fully executed by the organization with a group of beneficiaries totaling 16,500 people.

B. Execution mechanism

- 5.3 **Advisory committee.** The project will have an advisory committee made up of representatives from the Abasto Norte company, the nongovernmental organization Paraguay Vende, and the farmer cooperatives or associations that

- will participate in the project. The MIF representative in the country will participate as a special guest but not as a permanent member of this committee. This advisory committee will be responsible for holding quarterly meetings to evaluate the status of the project, the fulfillment of targets and commitments by all parties, and the strategic administration of the project. The committee will not make final decisions on actions under the project but will share information, conduct discussions, serve as a reference, and engage in dialogue on the project's strategic actions. It may meet more frequently as requested by any of the parties.
- 5.4 **Execution unit.** For implementation of this project, Paraguay Vende will establish a project execution unit that will be exclusively responsible for project management and administration. This unit will consist of the director of the executing agency, the national coordinator of the project, a supervisor (appointed by the foundation's board of directors), a person responsible for monitoring, an accountant, and an administrative assistant. Other key members of the executing agency will collaborate directly with the project execution unit on implementation of the project. There will be a supervisor appointed by the foundation's board of directors, who will report directly to the Office of the President, as well as a part-time financial manager and a project assistant.
- 5.5 The executing agency will sign letters of understanding or agreements with each firm and farmer organization participating in the project. At a minimum, the letters of understanding must indicate: (i) the responsibilities and commitments of each of the parties (executing agency and firm) with respect to implementation and achievement of the project objectives; and (ii) the performance indicators of the project and the firms.
- 5.6 The project coordinator will be responsible for supervision of the project, including tasks such as project planning and start-up, coordination of logistics, financial planning and monitoring, selection and training of personnel, and coordination with other important project stakeholders. These tasks are mentioned as examples, but the coordinator's role is not limited to these alone in the proper and correct operation and implementation of this project. In addition, the project coordinator will have the following responsibilities: (i) coordination and supervision of the work of hired consultants; (ii) preparation of an annual work plan; (iii) supervision and ongoing monitoring of the activities in each project component; (iv) periodic review of progress under the project and achievement of indicators and performance of contractual obligations. The project coordinator will report to the director of the executing agency and the advisory committee through updates on progress made in the project.
- 5.7 The person responsible for monitoring will assist the project coordinator in executing and monitoring project activities. This will include responsibility for establishing the baseline and developing an evaluation and monitoring system to monitor the project's basic milestones, outcomes, and contingencies that may arise in implementation and could affect the operation and evaluation of the project. Among other tasks, the administrative assistant will be responsible for

- proper maintenance of monitoring, administrative, and financial statement records, as well as for completing records required by the project and maintaining a filing system with relevant project information.
- 5.8 **Results-based disbursement:** Project disbursements will be contingent upon verification of completed milestones, in accordance with the means verification agreed upon by the executing agency and the MIF. Attainment of milestones does not relieve the executing agency of responsibility for achieving the indicators in the logical framework and for fulfilling the project objectives.
- 5.9 Under the risk- and performance-based project management method, project disbursement amounts will be determined according to the project's liquidity needs, for a maximum period of six months. These needs will be agreed upon by the MIF and the executing agency and will reflect activities and costs programmed in the annual planning exercise. The first disbursement will be contingent upon completion of milestone 0 (conditions precedent), and successive disbursements will be made when two conditions are met: (i) verification by the MIF that the milestones have been met as agreed in the annual plan; and (ii) the executing agency has justified 80% of cumulative advances of funds.
- 5.10 **Procurement:** For the procurement of goods and consulting services, the executing agency will follow the Bank's procurement policies (documents GN-2349-9 and GN-2350-9). Given that the [needs assessment of the executing agency](#) yielded a low need/risk level, the project team has determined that, based on the provisions of Appendix 4 to the above policies, the executing agency, a private sector entity, will use the private sector methods described in Annex 1 to the Operational Guidelines for Technical Cooperation Operations (document OP-639). In addition, project procurements and contracts will be reviewed annually on an ex post basis. Before initiating project contracts and procurement, the executing agency will submit the procurement plan for the project to the MIF for approval. This plan will be updated annually whenever there is a change in methods and/or in the good or service to be procured.

VI. MONITORING AND EVALUATION

- 6.1 **Financial management and supervision:** The executing agency will establish and be responsible for maintaining appropriate financial accounts, internal control mechanisms, and record-keeping systems for the project, following IDB/MIF financial management standards and policies. Given that the needs assessment of the executing agency yielded a low level of need/risk for the financial management section, supporting documentation for disbursements will be reviewed quarterly on an ex post basis. In addition, using MIF funds, the IDB/MIF will hire a consultant to train the executing agency in those areas of financial management that need strengthening, as identified in the [needs assessment](#).

- 6.2 The IDB/MIF will hire independent auditors to conduct ex post reviews of procurements and the supporting documentation for disbursements. The scope of ex post reviews will include analysis of the financial reports that the executing agency will prepare as part of its financial management. Funds from the MIF contribution will be used to finance this activity, following Bank procedures.
- 6.3 During project execution, the frequency of ex post reviews of procurements and supporting documentation for disbursements and the need for additional financial reports may be modified by the MIF based on the findings of the ex post reviews performed by the external auditors.
- 6.4 **Project status reports:** The executing agency will be responsible for submitting project status reports (PSR) to the MIF within 30 days after the end of each six-month period or more frequently, and on the dates set by the MIF, with at least 60 days advance notice to the executing agency. The PSR will cover progress made in executing the project, milestones attained, outcomes obtained, and their contribution to the project's objectives, as indicated in the logical framework and other operational planning instruments. It will also report on problems encountered during execution and possible solutions. Within 90 days after the end of the execution period, the executing agency will submit a final PSR to the MIF, in which priority will be given to outcomes achieved, the sustainability plan, findings from the final evaluation, and lessons learned.
- 6.5 **Baseline:** Information will be gathered to establish a system for monitoring progress made regarding the socioeconomic indicators disaggregated by gender, such as: (1) income levels (monthly, yearly, per capita, and per family), employment, sales, and earnings of the farmers; (2) yields per hectare; (3) product diversity; (4) quality (GAPs, handling, transport); (5) volume of purchases and sales of all fruit and vegetable distributors of Abasto Norte with which the project signs agreements; and (6) level of post-harvest loss. In the case of gender, specific information will be gathered on participation, leadership, and continued involvement in fruit and vegetable farming.
- 6.6 **Evaluations.** Two evaluations, a midterm and a final evaluation, will be performed by consultants to be hired by the Bank. The midterm evaluation will be commissioned when 50% of the MIF contribution has been disbursed or 18 months into the execution period, whichever occurs first. The midterm evaluation will identify: (i) to what extent the objectives, as defined in the logical framework, have been achieved as of the evaluation date; (ii) whether there are significant variations in execution of the activities; (iii) alternatives and strategies that would help to improve execution and thus increase the likelihood of achieving the project's expected outcomes.
- 6.7 The final evaluation will be commissioned by the Bank in the three months following the end of the execution period, with costs charged to the operation. At a minimum, it will analyze the degree of fulfillment of the specific and general objectives; the end beneficiaries' satisfaction with the intervention, as measured

through a survey; the degree of sustainability of the actions promoted by the project; the percentage of fruit and vegetable sales that are made through the produce market; as well as lessons learned and best practices identified, which could be used to replicate the intervention in other contexts.

- 6.8 A project closing workshop will be organized at least three months prior to the end of the project execution period, at which participants from the executing agency, Bank staff, and other interested parties can jointly evaluate the outcomes achieved, identify additional steps to ensure the sustainability of the project, and identify lessons learned from this project.

VII. BENEFITS AND RISKS

A. Benefits

- 7.1 The project will directly train 600 farming families who will increase their incomes as a result of improved productivity and production quality, business skills, and income diversification. The project will also work with at least seven farmer cooperatives and associations that will sell and distribute their production at the Abasto Norte market and will provide direct access to the market for small rural farmers. Those beneficiaries are located along the Limpio–Concepción road corridor (linking the eastern region’s central and northern areas) and Limpio–Benjamín Aceval road corridor (which also links the central area with one of the main urban areas of Paraguay’s Chaco region). Indirect beneficiaries of the project include other members of the communities where the direct beneficiaries are located, who will benefit from the growth and rural economic development associated with the value chains for fruits and vegetables and food in general. The end consumers in the produce markets and of the fruits and vegetables will also benefit by having safer and higher-quality products for their families.

B. Risks

- 7.2 The following potential weaknesses have been identified: (i) **climate change risks** affecting production. **Mitigating action 1:** the project will work in various areas with sufficient climatic and geographic diversity to reduce the risk. (ii) **risk 2: participation risks:** fruit and vegetable production is not currently seen as a profitable or economically attractive activity for many rural dwellers because it requires investments and technical skills that they do not possess at present. **Mitigating action 2:** the project will work on training each farmer and farmer organization on production techniques and product diversification for reaching higher-value markets. In addition, business plans will be prepared that will strengthen the financial, productive, and marketing capacity of the beneficiaries to increase their incomes and reduce the risk that they will leave the market.

VIII. ENVIRONMENTAL AND SOCIAL STRATEGY

- 8.1 The project will work with small farmers to improve local production of fruit and vegetables and reduce the negative impact on the environment. It will include training and technical assistance on GAPs and organic and environmentally sensitive production. Based on the Bank's toolkit, this project was reviewed and approved by ESR and classified as a category "C" operation.
- 8.2 Gender considerations will be analyzed and taken into account in the baseline indicators for monitoring purposes. The population will be made aware of environmental issues and will have options for reducing the environmental impact of agricultural activities. All of this will help to boost the economy in the area and change the context of social exclusion and rural poverty in which the population lives.