

## General Information and Scope of IDB Invest's Environmental and Social Review

Agrofertil is a company created in 1993, engaged in the sale of agricultural inputs and grain storage and sale (soy, corn, wheat, rice, canola, and others). It provides financing services for inputs (fertilizers, seed, herbicides, insecticides, fungicides and plant nutrition products) and loans to farmers. The company has its headquarters in Ciudad del Este and twenty-one branches. Fourteen of its units have grain storage silos located in eastern and southern sector of the country, allowing it to store a total of 247,500 tons of grains. Of the total number of branches and silos, 18 have current environmental licenses and licenses are being processed for seven locations. As of the end of February 2018 the company had 439 employees; 57 were women, 73 were temporary staff and 366 were permanent staff. Its vehicular fleet includes 192 vehicles (6 automobiles, 24 trucks and 162 vans). Agrofertil also has an estate of some 1,500 hectares for agricultural production in the Itakyry district, approximately 112 kilometers from Ciudad del Este. The area intended for soy production amounts to 935 hectares, producing some 3,600 tons in the last harvest.

During the period March 20-21, 2018, responsible staff from IDB Invest's Environmental, Social and Governance Division (SEG) conducted the environmental and social due diligence for this transaction, holding meetings with company managers at headquarters and various silos in the interior, as well as with some clients, and performed a visual assessment of the facilities' environmental and health and safety conditions. Also, during the due diligence procedure, SEG staff made contact with the NGO WWF Paraguay to learn about its views regarding the agricultural sector and particularly the cultivation and sale of grains in Paraguay.

In view of the results of the assessment and IDB Invest's Environmental and Social Sustainability Policy, the transaction is classified as a Category B operation. Although the potential environmental, social and health and safety impacts and risks are considered potentially significant, they can be adequately managed through plans, programs and procedures with content that is known and widely used in the sector.

The potential environmental, social and health and safety risks and impacts associated with the transaction include possible health effects on workers and members of the community in the event agrochemicals are mishandled (mishandling of fumigation activities and contaminated containers management). In such case, the effects would include contamination of the soil and water. Possible effects on biodiversity due to contaminating events and illegal deforestation, possible effects on soil quality due to poor agricultural practices, and the risk of vehicular accidents associated with the transport of agrochemicals by company and contract personnel should also be mentioned. Given the nature and scale of the potential impacts and risks identified, the following IFC Performance Standards are applicable: PS1 (Assessment and Management of Environmental and Social Risks and Impacts), PS2 (Labor and Working Conditions), PS3 (Resource Efficiency and Pollution Prevention), PS4 (Community Health, Safety and Security) and PS6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources). Performance Standards 5, 7 and 8 are not considered directly applicable to the transaction.

### Environmental and social context

Most of Agrofertil's activities and facilities are located in the country's eastern region, which represents 39% of national territory. The region is subdivided into two subregions, the larger one encompassing the Paraguay river basin and the smaller the Paraná river basin, where tropical and subtropical forests predominate. There are three mountain ranges in the eastern region: the [Sierras de Amambay](#), [Maracayú](#) and [Caaguazú](#). The highest altitudes are found in the [Ybytyruzú](#) range, where [Tres Kandu](#) peak rise to 842 meters above sea level. Average annual temperature in this region varies between 20°C and 23°C and rainfall reaches figures of up to 1,700 mm per year.

Toward the central northern area of the eastern region, and toward the tropical Chaco region, rainfall levels are lower, particularly during the winter season (1300 mm/year). Average annual temperature is between 20°C and 25°C in the country, increasing from south to north, with temperatures that can reach 38°C, and thermal sensation in excess of 40°C.

According to the General Directorate of Statistics, Surveys and Census (DGEEC), [Paraguay's](#) population in 2017 amounted to 6,953,646 inhabitants. An estimated 60% of Paraguayans live in cities. The [eastern region](#) has the largest cities, including Asunción (525,294 inhabitants) and Ciudad del Este (293,817 inhabitants). The Chaco or [western region](#) has a predominantly rural population, with small towns rather than large cities. Paraguay's population is the result of a heterogeneous blend of [mestizos](#), [creoles](#), and Portuguese, German, [Italian](#), and [Mennonite](#) immigrants. The indigenous population, of mostly Guaraní origin, amounted to some 84,061 people, according to the [2002](#) indigenous census, distributed in 496 communities located in Asunción and thirteen departments in the country's interior.

The eastern region has a wide variety of birds such as vultures, [chimango](#), sparrow hawks, [owls](#), [macaws](#), bellbirds, orioles, and [great](#) kiskadees. Mammals notably include the [howler](#) monkey, jaguar, puma, [wild](#) cat, tapir, [boar](#), anteater, and [tatúes](#). The most common fish are the [surubí](#), bream, sea bass, [armado](#), skate, catfish, [patí](#) and [piranha](#). The aquatic ecosystem is also home to reptiles like the [cayman](#), [iguana](#) and [chameleon](#). Other notable reptiles in this region are the coral snake and the [ñandurire](#). Dominant plant species in the Chaco include lapacho, quebracho, [urunday](#), [timbo](#), [guayacán](#), [palo santo](#), [samuhu](#), [guayaibi](#), [caranday](#) palm, various laurels, and others. Through the SINASIP (National Protected Wilderness Areas System), the SEAM (Secretariat of the Environment) manages Protected Wilderness Areas, which have been assigned different management categories. Protected Wilderness Areas are distributed throughout the country. The eastern region includes the following such areas: The San Rafael Managed Resources Reserve, the Caazapá National Park, the Tapyta National Reserve, the Ñacunday National Park, the Kuri'y Wildlife Refuge, the Isla Susu Natural Monument, the Yabebyry Wildlife Refuge, and the Ybytiruzú Managed Resources Reserve.

Over the last five decades the country, particularly in the eastern region, lost nearly 90 % of its original forest cover, primarily due to the expansion of livestock and agricultural activities. The lost wealth and fragmentation of forest resources has had extreme negative impacts on soil, water and biodiversity resources, contributing to climate change and affecting the living conditions of rural communities, particularly the indigenous communities that depend on the forests for their survival.

### **Environmental risks and impacts and proposed mitigation and compensation measures.**

**Evaluation and management of environmental and social risks and impacts:** Although Agrofertil manages the potential environmental, social and health and safety impacts and risks associated with its operations acceptably, that management could be improved by applying a structured management system according to the requirements of IFC Performance Standard 1. Although values and principles in the area of human rights, health and safety and care of the environment have been documented in the Code of Ethics, those values and principles have not been condensed in a policy statement. Agrofertil should articulate an Environmental, Social and Health and Safety Management Policy signed by Management that reflects the adoption of its values and principles, consistent with the requirements of the IFC Performance Standards.

Agrofertil manages the environmental, social and health and safety aspects and risks of its operations through the Registration, Hygiene and Environment Department (reporting to Administrative Management) and the efforts of the Chief of Operational Security (reporting to a Commercial Director). For security reasons, the Chief of Operational Security is available

continuously (24 hours a day, seven days a week).

The large majority of Agrofertil's storage sites include an entrance gate with a guard house, a transport vehicle parking area, an agrochemicals storage area, a grain receiving, drying and storage area, a firewood storage area, and a housing area and office. The facilities are subject to an Environmental Impact Study to be approved by the SEAM; the agrochemicals and grain deposits have certificates of approval from the SENAVE (National Plant and Seed Quality and Safety Service); the facilities have fire systems approved by the municipality. The transport vehicles are authorized by DINATRAM (National Transportation Directorate) and SENAVE for the transportation of agrochemicals and fertilizers.

The Department of Registration, Hygiene and Environment compiles the environmental, health and safety aspects and the Chief of Operational Security monitors the implementation of safety standards. To systematize the compilation and evaluation of environmental, health and safety aspects and legal aspects, Agrofertil should prepare matrices identifying and evaluating environmental and occupational risks aspects, as well as a matrix identifying and monitoring compliance with legal aspects. Those matrices should consider, among other aspects, the specifications for the identification and assessment of aspects and risks indicated in IFC Performance Standard 1.

Agrofertil plans annual training activities for its employees, including courses on defensive driving, preparation for and response to emergency situations, and the handling and transport of agrochemicals, among others. In addition, the company offers technical advisory services to its clients through professionals who make up the commercial team, including the dissemination of good environmental and health and safety practices. This training is conducted during exhibitions, the so-called Field Days, in new product presentations, and in discussions disseminating the SIGEV (empty containers system) program. Agrofertil must prepare an Annual Training Plan on environmental, social and health and safety matters for its own employees, contractors, and third parties (for the two last when needs of training are detected). Its preparation will consider the results of the identification and assessment of environmental and occupational risks, the promulgation of new legislation and the adoption of new technologies. The Training Plan must provide for the conduct of emergency drills at the facilities and silos. The Training Plan should include attendance records.

In the area of operational procedures, Agrofertil has prepared procedures and/or specific operational manuals (called manuals of functions) such as the Operations Manual for Transport of Agrochemicals, the Silos Operations Manual, the Manual for Confined Spaces, and the Manual for Transport of Pesticides.

As for managing the prevention of and response to emergencies, the Chief of Operational Security organizes employee training courses to address emergency situations in administrative facilities and silos. Agrofertil should prepare emergency preparation and response plans for each branch (including, as appropriate, the corresponding silo), based on specific emergency scenarios, and indicating emergency prevention and response actions associated with those scenarios.

With regard to the management of (environmental and/or personnel) accidents, Agrofertil has a procedure for vehicular accidents. Agrofertil should develop a procedure for managing occupational and/or environmental accidents for both its own staff and contract staff. That procedure should at a minimum provide for recording the nature and seriousness of the accident, the handling of legal aspects, the accident investigation report and the preventive and/or corrective measures adopted to prevent the repetition thereof.

Contractors are managed by monitoring compliance with contractual conditions established at the proper time. The main contractors are those that carry out civil works, electromechanical equipment operators, the company's own truck drivers, and the companies contracted to transport the soy produced in the company's fields.

Agrofertil should prepare a Monitoring and Follow-up Plan on environmental and health and safety risks for company and contract personnel, to plan and implement monitoring actions and communicate the results to the personnel responsible for identifying and implementing the corresponding corrective actions when parameter values that show deviations are measured. Agrofertil should define, calculate, record and monitor the evaluation of accident rates (Frequency Rate and Severity Rate), both for its own personnel and contract personnel.

With regard to the participation of stakeholders, it should be mentioned that in 2003 Agrofertil created the CETEDI (Technological Center for Development and Research) Foundation in conjunction with Tecnomyl ([1]) to prepare and implement social development projects in the areas of education, health, community development and productive improvement of vulnerable human groups in both urban and rural areas.

### **Labor and working conditions.**

During the assessment visit, IDB Invest staff confirmed that workplace health and safety conditions, both at administrative headquarters and in the silos and field facilities themselves were generally adequate. Agrofertil implements the 5S Policy to ensure the maintenance of order, cleanliness and discipline in the workplace.

Fixed contract personnel are subject to medical examinations upon admission and annually. The Chief of Operational Security, together with the Human Resources Department, maintains a record of work-related accidents and possible occupational diseases. Fixed contract employees have medical insurance granted by the Social Security Institute (IPS). Personnel who handle agrochemicals are periodically given cholinesterase tests in order to take preventive or corrective actions in the event that poisoning is detected. The company offers its employees private medical insurance and covers a portion of cost.

Through the Monitoring and Follow-up Plan, Agrofertil should at a minimum monitor and record drinking water quality labor accident rates, vehicle accident rates, results from the cholinesterase levels of personnel exposed to the handling of agrochemicals and earth ground resistance of electrical panels

Fixed contract personnel are not unionized. It has been reported that relations between staff and management at Agrofertil are not problematic. Agrofertil has developed Internal Work Rules, authorized by the Labor Code ([2]).

Through the Human Resources Department, Agrofertil has implemented a mechanism for accepting and resolving internal staff complaints called the SAF (Employee Support System). Complaints or claims can be anonymous, and a maximum period is established for providing a response to the person who submitted the complaint or claim.

### **Resource efficiency and pollution prevention**

Agrofertil records water and electricity consumption through the use of meters. All branches and silos are supplied with underground water (artesian wells). Drinking water is provided in drums. Agrofertil records fuel consumption for its vehicle fleet, verifying that it is reasonable.

Agrofertil, together with the Tecnomyl company, implements the Empty Containers Management System (SIGEV). Agrofertil's clients are instructed in triple washing or pressure washing and puncturing of used containers to prevent them from being reused. The containers are collected at six collection points set up by Agrofertil and through collection agreements signed with cooperatives and one silo. They are used by Tecnomyl to manufacture new containers (to ensure container quality, 30% of the plastic in the new containers is new). Domestic waste generated at central headquarters and branches is removed by municipal collection services.

As reported by Agrofertil, the company does not sell any products with chemical components classified as Class 1A to 1B by the World Health Organization (WHO). Agrofertil should supervise the chemical composition of every agrochemical sold by the company, to verify that no agrochemicals are purchased that include any Class 1A or 1B component according to the WHO classification.

The greenhouse gases that Agrofertil produces are primarily due to the movement of vehicles with internal combustion engines, grain drying activity and the consumption of electricity, generating an estimated 15,000 tons of CO<sub>2</sub> equivalent per year.

### **Community health, safety and security**

Agrofertil has prepared and implemented the Operational Manual for Transport of Agrochemicals, which contains the requirements to be met by transporters of hazardous substances in compliance with current legislation, providing actions for preventing and responding to emergencies in the case of contamination and/or fire. Agrofertil provides training courses for agrochemical transporters, as well as university-level courses disseminating good environmental practices applied to the transport of agrochemicals and the recycling of empty containers (in agronomic engineering and environmental engineering programs).

Agrofertil's activities in the recycling of empty containers through the SIGEV, in addition to reducing contamination, helps to reduce health risks to the community, considering that there are companies that recycle empty agrochemical containers illegally to produce other plastic articles the use of which is unclear.

Agrofertil's security personnel are armed. According to reports, the contracted companies that provide security services to Agrofertil appropriately train their personnel to prevent the improper use of weapons.

### **Biodiversity conservation and sustainable management of living natural resources**

To verify that the soybeans that reach Agrofertil's storage sites do not come from illegally deforested zones or environmentally protected areas, since August 2016 Agrofertil has been using the GFW (Global Forest Watch) computer tool that is capable of satellite monitoring of its clients' properties. In addition, through a clause included in the grain storage contracts, Agrofertil undertakes not to store grains that have been produced in illegally deforested fields. The results of the monitoring of forested areas through application of the GFW tool are included in reports issued every four months.

The silo dryers use firewood to operate ([3]) during the grain harvest months (an estimated total of about 5 months per year). In August 2016 the company began to use eucalyptus wood, avoiding and/or reducing the use of wood from native species. To ensure the provision of fuel, Agrofertil has proceeded to engage in forestry in the communities of Santa Rosa, Itakyry and San Alberto. Agrofertil will record the consumption of wood from native species in silo dryers and will set annual target figures for reducing the use of such species and replacing them with eucalyptus wood.

**Environmental and social action plan (see Related Files).**

[1] Tecnomyl S.A. is one of the principal suppliers of Agrofertil's Agricultural Defenses, representing 81% of total agrochemicals

produced by Agrofertil

[2] Paid employee work is regulated by the Labor Code, which establishes rights and obligations for the employer, the worker,

and also regulates their relations with the State.

[3] Firewood is purchased with a legal invoice and transport certificates. The volume of firewood used depends on the moisture of

the product coming from the field. Drying corn is the process that uses the most firewood because corn usually enters the silos

with higher moisture content than soybeans. Total annual firewood consumption is estimated to be 7,500 tons.

**Contact Information**

For project inquiries, including environmental and social questions related to an IDB Invest transaction please contact the client (see **Investment Summary** tab), or IDB Invest using the email [requestinformation@idbinvest.org](mailto:requestinformation@idbinvest.org). As a last resort, affected communities have access to the IDB Invest Independent Consultation and Investigation Mechanism by writing to [mecanismo@iadb.org](mailto:mecanismo@iadb.org) or [MICI@iadb.org](mailto:MICI@iadb.org), or calling +1(202) 623-3952.