

Classification: This is a category I project as it has a positive environmental impact in that it helps to promote conservation of the Bolivian Amazon rainforest. During project appraisal the following environmental and social issues were analyzed: forest conservation, quality control/food hygiene, organic certification, occupational health and safety, management of solid (organic) waste and liquid effluents, and other labor considerations.

Forest Conservation: The project has positive environmental impacts as it promotes the conservation of the Amazon rainforest. By providing value to the standing trees, it deters the nut collector from cutting trees and selling timber to complement his source of livelihood. In addition, Tahuamanu provides the nut collectors with training on how to conduct collection activities while respecting the local flora and fauna, and is also active in other initiatives to ensure the sustainable development and conservation of the Amazon rainforest, including their participation in the Fundación José Manuel Pando. During the collection process, no harm is done to the Brazil Nut tree, since the nuts are collected from the ground around each tree after they have fallen naturally.

Quality Control / Food Safety: With the IIC loan, Tahuamanu will be able to complete the upgrades to the plant needed in order to finalize the implementation of a hazard analysis and critical control point (HACCP) system. HACCP is used for identifying and minimizing all potential sources and points in the process at which food could become contaminated. Upgrades necessary to complete the implementation of HACCP include items such as the purchase and installation of metal detectors along various points of the process to ensure that no products are packaged that have foreign bodies/debris in them, the construction of a new building with special floors, a program to ensure that all lights are covered or protected to prevent shattered glass from contaminating the product, and in-depth pest control inspections, amongst others. The Company has also set up a microbiological testing program for machinery surfaces that come into contact with the nuts; also tested are the workers' hands and gloves to detect any contamination (the tests are for listeria, coliforms, E. Coli, and enterobacteria). Tahuamanu is a pioneering company in detecting aflatoxins (a carcinogen) in Brazil Nuts. This is done in addition to sampling in the quality control lab, which is periodically cross-checked with certified laboratories abroad in France and Germany. The company's quality control practices are continuously being audited by Tahuamanu's international clients, who have stringent quality control requirements and will not purchase Brazil Nuts if the plant does not pass inspection.

Additionally, the project will continue to improve gathering of the raw material and its quality by providing the nut collectors with technical assistance in the collection process. This assistance is in the form of training services, as well as in the construction of temporary warehouses and the provision of transportation equipment to ensure that the raw material is safely stored with appropriate ventilation until it can be transported to the processing plant.

Organic Certification: Tahuamanu is one of two companies in Bolivia that sell organic Brazil Nuts that have been certified by the United States Organic Crop Improvement Association and the European Union's Institute for Marketology.

General Health and Safety: Plant workers are provided with appropriate protective equipment, as well as medical assistance and first aid. As the nut cracking process produces a considerable amount of noise, employees working in this area are required to wear ear plugs or ear mufflers. Workers are also supplied with rubber boots and gloves. Tahuamanu holds periodic training sessions for workers to show them how to use their protective equipment. Regarding emergency procedures, the IIC will request that the Company place additional signs showing evacuation routes at the plant, and install a reserve tank for water in case of fire. The plant has a health unit with a nurse on staff equipped to provide first aid. In addition, Tahuamanu covers the costs of medical bills for its employees at a local

private hospital, as well as offers them the state health coverage. With respect to safe storage of above ground diesel storage tanks, the IIC will require that Tahuamanu install concrete secondary containment walls below the tanks to reduce the risk of contamination due to potential leaks or spills.

Liquid Effluents: The sewage from the plant is treated in a septic tank system. No other wastewater is generated in the process.

Solid Waste: The cracking process procedures produce a considerable amount of solid waste, consisting of broken shells. These shells are temporarily stored near the processing plant. A portion of these shells is being used as fuel for the plant that generates steam for the nut cleaning process, and the remainder of the shells will be used in a new biomass power project currently being assessed by Tahuamanu. Given the high calorific value of the shells, the potential for power generation is significant. Tahuamanu is working with European companies in developing a biomass electricity generation plant. Laboratory waste, such as microbiology slides, are sterilized in an autoclave and then disposed of in sealed packages.

Labor Considerations: Tahuamanu has significantly improved its workers nutrition and consciousness of health issues by way of training and offering them balanced meals, including breakfast, lunch and dinner during their shifts. Tahuamanu complies with the minimum working age requirements and prohibits forced labor. It also respects the freedom of association, the freedom to join labor unions, and the right to collective bargaining. However, its employees have not formed a labor union. Tahuamanu employees are provided with life insurance and health insurance.

Tahuamanu is exemplary in that it has provided its employees with opportunities that would not have been available otherwise. For instance, it has provided its employees with housing opportunities in a nearby neighborhood with water and electricity, not commonly available for much of the local population. In addition, the company has had a significant impact on the employees and their families by providing them with training on occupational health and safety, nutrition, and health care.

Other Social Benefits: Additionally, as the quality of the raw material that is delivered to the processing plant will continue to improve by Tahuamanu providing the nut collectors with technical assistance in the collection process, the project will continue to have a significant impact on the region's nut collection industry, as it improves the collector's income by improving yields of first class products. That is, it will ensure that collectors are being paid top prices for a larger portion of their production by assisting them in preventing decay of the nuts. The expansion of the company supports the nut gathering activity, which is an environmentally friendly source of income for the workers.

However, one of the most important impacts that Tahuamanu's success will continue to have on the region is that by implementing strict quality control procedures, it is demonstrating to consumers and Brazil Nut exporters that the Brazil Nut sector (most commonly managed in an artisan way) is capable of producing a high quality product and developing byproducts with value added content.

Oversight and Compliance: Tahuamanu will be required to implement an environmental management plan acceptable to the IIC. The plan must include (1) a description of planned improvements to the Company's HACCP system and other environmental and fire safety measures, (2) a schedule for implementing all of the environmental and safety measures mentioned herein; and (3) the components that are subject to yearly oversight. Throughout the project, the IIC will ensure compliance with its own environmental and labor review policies, review the verification reports that

Tahuamanu submits each year, and make regular field visits as part of the project supervision process.