

1. Environmental Classification:

This is a category III project according to the IIC's environmental and labor review procedure because specific impacts may result that can be avoided or mitigated by adhering to generally recognized performance standards, guidelines, and design criteria. During project evaluation the following potential environmental and labor effects were analyzed: native forest management, use of agrochemicals, certification of third-party operations, liquid effluents, air emissions, solid and hazardous waste management, occupational safety and hygiene and other labor and social issues.

2. Principal Environmental Impacts

Liquid effluents: Sanrisil has a wastewater management plant that is operated by a local consulting firm. However, the treatment system is being upgraded and requires improvements to satisfactorily reduce organic contamination of its industrial wastewater, which has high BOD and COD compared with treated effluents. The company discharges its treated effluents in the municipal sewage system. Sanrisil plans to invest in improving its current effluent treatment system, which will include the installation of a physical-chemical and a biological treatment plant to comply with local requirements and IIC standards. These improvements also include proper handling of sludge that results from the treatment of liquid effluents, which is now used to condition the soil.

Air Emissions: Combustion equipment is used to generate steam and burn the bagasse left from the Fava d'Anta that is processed in the plant. The equipment operates on gas oil, releasing fumes and particles into the air that require control. As part of the plant expansion project, Sanrisil will replace gas oil in the steam generating boilers with natural gas, which is a clean fuel. Also, combustion equipment will be monitored and maintained to control air emissions according to the standards established by the pertinent environmental authority. There is cooling equipment that uses R22 (chlorofluorocarbon) that will eventually be discarded because it operates with a controlled substance under the Montreal Protocol on Substances that deplete the Ozone Layer.

Solid and hazardous waste: The bagasse that is generated by the extraction processes is burnt as a fuel in a boiler by adding gas oil. The ashes are used as soil conditioner through a local company. The company holds a CADRI certification (Certificado de Aprobación para Disposición de Residuos Industriales) [certification of approval for industrial waste disposal] issued by CETESB (Companhia de Tecnologia de Saneamento Ambiental del Estado de São Paulo) [Environment Sanitation Technology Company for the State of São Paulo], which authorizes solid waste management and disposal. This certificate was issued by CETESB on 28 December 1999, and Sanrisil is currently updating it. Residue from the microbiology laboratories (bacteria and other microorganism cultures, potential infectious agents) and analytical chemistry laboratories are handled according to the standards established by ANVISA (Agencia Nacional de Vigilância Sanitaria) [National Health Control Agency], which is the competent authority.

Use of agrochemicals: No agrochemicals are used to obtain Fava d'Anta because it is extracted from native forests where the trees reproduce naturally. Through its agronomists and consultants, Sanrisil controls directly the use of agrochemicals by its suppliers of plant species grown in plantations. In one of the plantations (artichoke), mineral fertilizers (nitrogen, phosphorus and potassium) and organic fertilizers (poultry and cattle manure) are used moderately, depending on need. Approximately three tons per hectare of land is applied each year. However, the trend is towards the practice of completely organic agriculture. To control insects, a bioorganic insecticide is used that contains an active substance obtained from a tree known as Melia Azeclarah that produces a natural insecticide.

Management of native forest and plantations: To extract Rutin, Sanrisil buys Fava d'Anta from local gatherers who obtain it from native forests in the State of Minas Gerais. A native forest is one

that reproduces naturally without being cultivated. Under Brazilian law, IBAMA authorization is needed to gather, transport, market and industrialize ornamental, medicinal, aromatic and toxic plants that grow in native forests. Sanrisil manages Fava d'Anta in the municipality of San Francisco, State of Minas Gerais, under a project coordinated by a researcher from the Technological Center of Minas Gerais (CETEC of Belo Horizonte). The Fava d'Anta project is being validated by the pertinent authorities of the State of Minas Gerais and IBAMA. It is necessary to obtain three selective collections (one per year). The first one was obtained in 2002.

There is a large group of suppliers comprising some 29 companies or private owners that provide Sanrisil with plants and fruits grown in plantations. These are used as raw material to obtain medicinal and fruit extracts. Brazilian law has established an official list of endangered Brazilian plant species, which now includes 107 species. The export of products and byproducts derived from native Brazilian forests or exotic plants, including Fava d'Anta, Yerba Mate and other medicinal plants, is regulated under several export categories: free, limited, temporarily limited, or forbidden, taking into consideration origin, nature, species, quantity, quality, industrialization degree, among others, according to natural resource preservation and conservation policies. At IIC's request, the company will submit a formal request to IBAMA for authorization of the products it currently exports. According to standards acceptable to the IIC, there are independent certifications issued by third parties that are recognized worldwide and validated by NGOs, such as Greenpeace and WWF to ensure environmentally appropriate, socially beneficial, and economically viable management of native forests and plantations. The IIC will require that Sanrisil ensure that its raw material suppliers have third-party certification.

3. Environmental Licenses - Certifications

Environmental Licenses: For the environmental authorization of existing operations and expansion projects, all industrial facilities should have installation and operation licenses, among others. Sanrisil has environmental licenses. However, they require to be regularized or updated by competent agencies such as CETESB and IBAMA. All licenses and authorizations are currently being regularized or updated by Sanrisil.

Third-party certification of operations: In Brazil, Imaflora (Institute for Forest and Agricultural Management and Certification) is an organization that is member of the SmartWood Network of the Rainforest Alliance in the U.S. and is accredited by the Forest Stewardship Council (FSC). SmartWood is the world's largest and oldest certification program and is one of those accredited by the FSC. The FSC seal guarantees that the product comes from forest resources that are managed in an environmentally appropriate, socially beneficial and economically viable fashion. The Imaflora/SmartWood Program evaluates forest operations (native forests and plantations) and certifies those operations that comply with standards that preserve the environment and forest resources. The certification process comprises an evaluation of the company's strengths and weaknesses that is carried out by environmental, technical, social and economic evaluation specialists. The process involves meetings with government agencies, environmentalists, commercial associations and industries, labor unions and social organizations. The certification of non-timber forest products for the management of medicinal plants and phytotherapeutic/cosmetic products certified by the FSC certifies companies regarding appropriate forest management and provides them opportunities to market products with the FSC seal. To mitigate the effect of forest resource management, Sanrisil will obtain a third-party certification attesting that its raw material suppliers practice sustainable management of forest resources (native forests and plantations). Certification of its operation will allow Sanrisil to obtain competitive advantages and added value for its products in European and American markets.

Sanrisil has a quality assurance system for the production of herbal extracts and dyes for use as

inputs that is certified by BRTUV under quality standard ISO 9002:1994. The company has undergone quality audits (Good Manufacturing Practices) carried out by its clients, which have resulted in a certification as a qualified supplier by companies such as Johnson & Johnson and British American Tobacco. Sanrisil has quality and good manufacturing practices manuals, which have been distributed to the different company units for dissemination and implementation.

4. Occupational safety and hygiene

The electrical equipment operates on mineral oil so as to avoid the use of polychlorinated biphenyls (oils used in electric transformers, which are dangerous because of the health risks involved when they are handled). There are no underground oil, gasoline, diesel, chemical product or solvent tanks. There is an evacuation plan, a fire squad, a rescue team and a fire system (fire hydrants, hoses, and extinguishers) approved and inspected by the fire department, pursuant to a document dated September 2001. Occupational safety and hygiene issues are handled under the environmental risk prevention program and the medical occupational health control program. The fire and evacuation squad trains employees in firefighting, which involves theoretical and practical training on the use of the protection and firefighting equipment installed in the company, as well as evacuation of the facilities and first aid. Occupational accidents are recorded using the Instituto Nacional de Seguro Social occupational accident report form and monthly meetings of Sanrisil's internal accident prevention commission.

5. Labor and social practices

Sanrisil's labor policy excludes forced labor; workers are hired under a regular recruiting process; workers are free to associate and have the right to collective bargaining; and discriminatory practices based on race, sex, nationality, etc. are avoided. Sanrisil maintains a cooperative relationship with workers and the Union of the Industry of Pharmaceutical Products of the State of São Paulo (SINDUSFARMA), which allows workers to have free access to unions and collective bargaining. The minimum working age is 18 in any of the company's units, except for interns in the Young Citizen Program of the Ministry of Labor. Under this program, Sanrisil registers young workers (16-18 years old) to enable them to go to school without requiring them to work under schedules that interfere with school. When they finish their studies and reach the minimum working age, they may be hired by the company. There is a minimum wage that has been agreed upon with the union that is higher than the national wage. Benefits offered by the company include bus transportation from São Paulo to the plant with preestablished itineraries and boarding points, or coupons for the regular public transportation system, medical plan for workers and dependents, cafeteria and basic monthly basket, life insurance and personal accident insurance.

Sanrisil is involved in the community through the Alto-Tiete Regional Environmental Education Center, which was established by a state decree, in activities that include community environmental awareness. In coordination with Sanrisil and CETEC, the municipality of San Francisco and PRONATURA (a nongovernmental organization) support has been provided to rural communities whose livelihood depends on gathering Fava d'Anta, with technical assistance and organization from cooperatives. A manual tool was developed for gatherers, allowing them to gather Fava d'Anta without harming trees, unlike in the past. This technology will not be patented and will remain in the public domain.

6. Control and follow-up

The Company will be required to implement an Environmental Management Plan acceptable to the IIC. This plan must include (1) a description of planned improvements to environmental protection, including regulation of licenses and environmental permits, third-party certification of suppliers for the sustainable management of native forests and

plantations, effluent treatment plant improvements to comply with IIC standards; (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 policies, review the verification reports that the Company submits regularly, and make field visits as part of the project supervision process.