

12

RESPONSIBLE
CONSUMPTION
AND PRODUCTION



ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

CASE STUDY: ITAIPU AND SDG 12

Activities by ITAIPU Binacional supporting implementation of the Sustainable Development Goal 12 (SDG 12) of the United Nations 2030 Agenda for Sustainable Development



Itaipu Binacional

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Itaipu Binacional

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WHERE WE ARE



Integration that generates Renewable Energy and promotes Sustainable Development

ITAIPU BINACIONAL AND THE UNITED NATIONS 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

Itaipu is a binational entity created in 1974 by Brazil and Paraguay in order to utilize the Paraná River, along the border of the two countries, to generate hydropower. Today, the Itaipu Hydropower Plant is the largest generator of renewable power in the world (ITAIPU, 2018 a). By the end of 2018, Itaipu had generated a total of over 2.6 billion Megawatts-hours (MWh) since the beginning of its operation in 1984 (ITAIPU, 2019 a).

Since its conception, Itaipu Binacional has followed sustainable development principles as reflected by its integrated actions and programs supporting social well-being, economic growth and environmental protection, contributing to regional prosperity in Paraguay and Brazil. Itaipu's activities in the region have been recognized as excellent examples of "Best Practices" in the effective implementation of the United Nations 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs).

12

RESPONSIBLE
CONSUMPTION
AND PRODUCTION



SDG 12: ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

Target 12.1 Implement the 10-Year framework of programmes on sustainable consumption and production patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries.

Target 12.2 By 2030, achieve the sustainable management and efficient use of natural resources.

Target 12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.

Target 12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.

Target 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

Target 12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.

Target 12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities.

Target 12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.

Target 12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.

Target 12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products.

Target 12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities.

Source: United Nations, 2015.



Itaipu Binacional



Itaipu Binacional

SUSTAINABLE DEVELOPMENT STRATEGY OF ITAIPU

Itaipu's vision for 2020 is to be "the generator of clean, renewable energy with the best operating performance and the world's best sustainability practices, promoting sustainable development and regional integration"(ITAIPU, 2018 b).

For Itaipu, sustainable economic growth is a major commitment, intrinsically linked to its management system, constituting one of its most important missions in its different lines of action. Itaipu follows policies and practices that promote prosperity and contribute to improving the well-being of the population in many communities, in both Paraguay and Brazil. The organization represents a powerful force in the advancement of sustainable regional development, helping to build more responsible, equitable and solidary societies. In Brazil, these actions have taken place

mainly in the area of influence of the reservoir, and extend to many municipalities in the western region of the state of Paraná. In Paraguay, many of the actions have national coverage and benefit different regions of the country.

Within the economic dimension of sustainable development, activities by Itaipu are designed to create jobs, reduce poverty, foster better education, develop tourism opportunities and promote equality with respect to gender, age, disabilities, race, religion, ethnicity and economic status. They also promote income generation, protection of children and adolescents, respect for human rights, conservation of biodiversity, and sustainable means of production and consumption. These activities are part of Itaipu's Business Plan, which includes the corresponding programs and actions that are fully linked to strategic objectives and organizational policies and guidelines (ITAIPU, 2018 c).



Alexandre Marchetti



Itaipu Binacional

ITAIPU and the SDG 12

Itaipu is committed to ensuring sustainable consumption and production through many important activities designed to promote the region's agro-ecological-industrial growth and expansion, reaching out to and supporting family initiatives, small businesses, and companies. Itaipu's contribution provides several work avenues through education, training and standards to develop, guide and maintain its sustainable production and consumption program at all levels and in complete alignment with its sustainable development strategy and the SDG 12.



1.

SUSTAINABLE RURAL DEVELOPMENT PROGRAM



Alexandre Marchetti

Objective and description

The purpose of this program is to promote sustainable rural development and the reduction of the use of contaminants in agriculture in the watershed of the Reservoir and other areas of interest of Itaipu. The program started in 2002 and is currently being refined. The program aims at the diffusion of agro-ecological or sustainable production systems, with focus on organic production and conversion of traditional agriculture into more sustainable production systems. It includes four actions: encouraging the production and consumption of organic foods; promoting sustainable agricultural production and consumption systems; family farming development; and incentivizing the production and consumption of medicinal plants and phytotherapeutics.

Through Itaipu's network of Technical Assistance and Rural Extension (ATER), free technical support, training and guidance are provided in the region for family farmers interested in working in the productive and commercial market chain for organic and sustainable products. The program promotes the dissemination of agro-ecological production practices focused on local productive arrangements between the sponsoring organizations (such as Itaipu and city administrations) and the executing organizations and partners who attend to all the associations and cooperatives of the project's partnering farmers.

It also supports the research, development, and family

teaching of organic agriculture, meeting the demands of the region. This line of action is made possible through agreements with universities for the training of teachers, researchers and students, and participation in the Paraná State Network of Agro-ecology Research. The initiative supports technological innovation, such as the use of homeopathy in agriculture and the development of an organic no-tillage farming system, in addition to courses, seminars and publications. Another line of action is the strengthening of the certification process and commercialization of organic products and family farming, which is done through support with advice to associations and cooperatives.

The Sustainable Rural Development program also promotes the dissemination of the benefits of organic production to the population, seeking the creation of direct social, environmental and commercial links, from rural to urban locations. This is done through lectures in schools and the promotion and participation in events, with booths, promotional materials and the sale of organic products from family agriculture.

The promotion of sustainable agriculture takes into account technical and economic aspects for the development and continuity of family farming. Therefore, the program encourages production diversification and land management improvement. This work is carried out periodically by the Technical Assistance and Rural



Extension (ATER), with technical advisory services to the rural properties in intervals of 15 to 90 days, according to the type of productive activity (ITAIPU, 2014).

The Sustainable Rural Development Program is available to all municipalities in Itaipu's area of influence, and to date, it has been active in 36 municipalities.

Related Targets

This action is directly linked to Target 12.2 on achieving the sustainable management and efficient use of natural resources by 2030; Target 12.3 on reducing the per capita global food waste at the retail and consumer levels and food losses along production and supply chains; and Target 12.4 on achieving the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reducing their release to air, water and soil to minimize their adverse impacts on human health and the environment. It is also consistent with Target 12.7 on promoting sustainable public procurement practices that are sustainable, in accordance with national policies and priorities, and Target 12.a on supporting activities to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.

The program's operating strategies are related to these targets through the following:

- Incentives towards the organic or agro-ecological production system, reducing the external dependence of inputs, and adding value to the products;
- The use of conservation practices in soil management
- and other natural resources;
- The development of strategies of direct marketing to the consumer, through farmers' markets, home delivery, and on-site commercialization; and
- Working with institutional programs from National Food Security Policy – such as the Food Acquisition Program (PAA) and the National School Meals Program (PNAE) – promoting short marketing cycles, to reduce the ecological footprint and provide employment to the family workforce.

Challenges

A challenging task for the program was to achieve an effective organization of the local markets. The important combined effort with the organizations involved in the program led to significant evolution in the quality, quantity and variety of their products, as well as in their organizations.

Other challenges include increasing the production and consumption of organic food; expanding and maintaining the Technical Assistance and Rural Extension (ATER) network; developing current production chains; strengthening associations and cooperatives; supporting the research, development and teaching of Agro-ecology; and measuring socioeconomic results with indicators.



Itaipu Binacional

The institutional support of Itaipu has been fundamental to making the project viable during its 17 years of existence, providing methodological, technical and financial support.

Lessons Learned

One of the main lessons learned in structuring a complex program with regional dimension is that there should be continuous planning of activities and actions, with periodic review and monitoring, ensuring the participation of all the relevant stakeholders. Major contributions to the success of the practice included: the adaptation and creation of participative methodologies for the development of the Technical Assistance and Rural Extension (ATER), increased value to the products through agro-industrialization, integration and commercialization actions. The program includes an active Steering Committee composed of organizations representing civil society, farmers and government sectors, allowing the active participation of their peers, this being crucial for the development of the program activities.

Results

Since the beginning of the project, a significant evolution in the quality, quantity and variety of products, as well as in family farmers' organizations, has been achieved. In addition to placing their products in the market, these

companies have sought to invest and expand their agro-industries and their retail outlets. Another important result has been obtained from the direct action with family farming cooperatives and agro-industries in the topics of labeling, brands, nutritional information and product standardization, allowing the expansion of the commercialization with increased value to the products, providing income improvement and economic development.

The good practices implemented in the area have resulted in the publication of books by Itaipu's technicians or by Itaipu and its partners and in a web platform of good practices. In addition, Itaipu has invested in the acquisition of an astronomic-agricultural calendar that serves as a subsidy for farmers to use as agricultural support.

Itaipu actively and continuously monitors these actions and their results, comparing them to pre-established baselines and goals, seeking to correct obstacles in the execution of these actions to ensure success of the work. Additionally, work execution and quality of the service is monitored and verified by Itaipu's managers in the field.

The program started with 188 beneficiaries and currently serves approximately 2,500 families, among family farmers and indigenous communities.





2.

SUSTAINABLE PROCUREMENT POLICY AND PROGRAM



Alexandre Marchetti

Objective and description

Itaipu's Sustainable Procurement Program includes sustainability concerns and life-cycle considerations in their supply chains. The Procurement Process involves and enforces detailed analysis regarding wasteful resource consumption, pollution and other environmental impacts, health, social, and labor issues; as well as the evaluation of the product life cycle (from production to disposal), the total cost of ownership and the applicable laws for the qualification and selection of suppliers and contracts. This procurement criterion is achieved via contracting conditions that permit the minimization of potential negative impacts and maximization of potential positive impacts relative to the product or service to be acquired.

To enhance transparency and facilitate the process, the Entity has implemented strict sustainability procurement criteria, which is a self-assessment mechanism, applying a Flexible Matrix for measuring and monitoring the progress of Sustainable Purchases over time. Itaipu's purchasing power and Sustainable Procurement Program generate greater environmental, economic and social benefits.

Related Targets

The Sustainable Procurement Program is directly linked to Target 12.2, the sustainable management of resources and the business sustainability policy according to the social, economic and environmental dimensions of sustainable development (triple approach); and Target 12.4, regarding the application of sustainability requirements in oil and lubricant recovery contracts to prevent spillage into water, as well as in cleaning contracts, regarding compliance with the prohibition of the use of chemicals harmful to water during the provision of such service. The action is also linked to Target 12.6, regarding application of sustainability requirements to fifty-three items, products and services, and promotion of sustainability practices in accordance with the three dimensions of sustainable development (environment, social and economic), including encouraging suppliers to promote the same in their supply chain; and to Target 12.7, regarding Itaipu's role as a public company, promoting good sustainable practices with chain suppliers, holding seminars and sharing Itaipu's Sustainable Procurement Program experience with the National Directorate of Public Procurement (DNCP, the - Paraguayan agency responsible for public purchases) and the participation of suppliers of the Paraguayan government.



Rubens Fraulini

Challenges

Some of the challenges related to this project include the drafting of the Sustainable Procurement Policy, the establishment of new procedures, and the realization of the implementation plan of the Sustainable Procurement Program with a binational character, requiring the alteration of internal standards in the two countries.

Other challenges are the resistance from internal and external actors at all levels; the process of adjusting and suiting different cultural perspectives in a binational program, and the establishment of a new procurement criteria and procedures, often contentious and opposed to by some stakeholders.

- The formulation and implementation of an innovative program that alters internal standards of two nations requires a clear policy on the objectives to be achieved within a specific period of time, and to be the tool that provides the necessary communication channel to achieve internal and external consensus, facilitate the decision making process and further commits all stakeholders of the organization to comply with it. This was achieved through the Sustainable Procurement Committee.
- The implementation process could only focus on a number of priority items, goods and services. So far, this priority list includes only 55 of 30,000 items considered as possible purchases, always considering the environmental, social and economic impacts during the process in a given time.
- Internal Manuals need to be compiled in order to facilitate operations, continuity, and transparency.
- Internal Manuals need to be compiled in order to facilitate operations, continuity, and transparency.

Lessons learned

The experience of Itaipu with the introduction of a Binational Sustainability Procurement Program points to a number of important lessons learned:

Results

Itaipu's Binational Sustainability Procurement Policy and Program directly and indirectly contributes to: (a) higher product quality, (b) lower levels of waste and emissions, (c) more efficient water and energy consumption, (d) lower levels of greenhouse gas (GHG) emissions, (e) preferred procurement from local suppliers, and (f) strict adherence to labor rights and labor standards.

Progress result measurements include 78.5% of the flexible matrix implemented by May 2019. The goal is 83.1% by December 2019.

Itaipu is working on the development of indicators that will make it possible to measure progress in its Sustainable Procurement Policy, such as: reduction of greenhouse gases, reduction of waste generation, reduction in water and energy consumption, contributions to regional supply and local development.





3.

**TERRITORIAL WASTE
MANAGEMENT PROGRAM**



Alexandre Marchetti

Objective and description

The purpose of this action is to substantially reduce waste generation regionally via prevention, reduction, recycling and reuse to promote regional sanitation and good water quality in the Reservoir.

The Territorial Waste Management Program, active since 2003, comprises 55 municipalities in the state of Paraná and one municipality in the state of Mato Grosso do Sul, in Brazil. The project involves: infrastructure support actions (including construction/refurbishment/expansion of sorting sheds) for waste pickers associations; continuing training in solid waste management for municipal technicians and waste collector's leadership; environmental education with actions in formal and non-formal education; compliance support to Brazilian Law 12.305 / 2010 (Federal Solid Waste Law) at the municipal level; equipment purchase and truck acquisition for the Recyclable Recovery Units (UVR) Program under contracts with municipalities, including the Associations and Cooperatives of collectors; technical support in project management, monitoring of regional selective collection indicators; a recyclable marketing network setting up support; and environmental services incentive payment by municipalities to the collectors of waste.

The Program is monitored by means of a computational tool called Reciclômetro ("Recycle-o-meter") and other

monitoring reports. The Reciclômetro registers the type of waste that enters the UVRs, its quantity, commercialization values, and monitors general income to each association in all municipalities involved in the program.

Related Targets

This action is directly linked with Target 12.5 which refers to substantially reducing waste generation through prevention, reduction, recycling and reuse. The Waste Management Program is directly linked to municipal solid waste management in the are of influence of Itaipu.

Challenges

The need to change the perception of waste management presented the main challenge. The Program, through the maintained, continued effort of all its initiatives regarding prevention, reduction, recycling, reuse processes and education, changed the perception to a systemic view that includes the awareness to the fact that waste management involves the shared responsibility of all agents of society, whether public or private.

Lessons Learned

The implementation of this action requires the involvement of all stakeholders in the chain, whether public, private or civil society; and environmental education actions are to be properly aligned, always focusing on the prevention, reduction, recycling and reuse of solid waste, and must be closely linked to current legislation. Also, the staff has the role of aligning the entire recycling chain with a systemic view of waste management.

Other important lessons learned regard the social inclusion of the vulnerable segment of the waste collectors and the municipal technical support, which is of paramount importance in the creation of solid Municipal Selective Collection Programs. In addition to human capital, emphasis is also needed on raising funds, whether public or private, to ensure basic infrastructure for program optimization.

- **Human resources**

Hiring of 34 UVR (Recyclable Recovery Unit) technicians to support the management of selective collection in the municipality; training of 100 technicians in the Solid Waste Management course in partnership with Unilivre, an open university for environment; 1,452 public managers, technicians and waste collectors trained in solid waste management; hiring collector collectives to provide collection and sorting services in 15 municipalities.

- **Measuring progress**

Creation of a platform called Reciclômetro (Recycle-o-meter) to measure regional Selective Collection Indicators.

Results

The scope of this program has produced important results at various levels, also achieving earning-purposed activities and work for the most needed. Some of the results include:

- **Infrastructure**

Important efforts resulted in the construction/refurbishment/expansion of sorting sheds; delivery of 42 trucks and 42 equipment kits, in partnership with the Paraná Water Institute; construction and structuring of a Recycling Valuing Center in Céu Azul, PR (in progress), to coordinate a commercialization network.

- **Institutional**

Creation and development of 34 Municipal Selective Collection Programs in a collective and participatory manner; delivery, to municipalities, of 57 Operational Plans with diagnostics and theoretical Potentials of Recyclable Generation (PTG) of the Recovery Units; technical advisory support in 49 municipalities to reach planned goals; increase of recyclables processing from 1,083 tons/month to 1,168 tons/month (regional total).





4.

APPLICATION OF THE HYDROPOWER SUSTAINABILITY ASSESSMENT PROTOCOL



Alexandre Marchetti

Objective and Description

The International Hydropower Association (IHA) Protocol is the main international instrument for assessing and certifying the sustainability of hydroelectric power practices. To make it acceptable to all sectors, IHA promotes a number of forums in various countries, where the terms of the Protocol are discussed.

The Protocol can be applied to each phase of a hydroelectric plant's life cycle: "Early Stage", "Preparation", "Implementation" and "Operation".

The tool applied to Itaipu was "Operation". The formal evaluation through the Hydropower Sustainability Assessment Protocol, by IHA, began in 2013 and was concluded in 2016. The application of the protocol involved the entire entity, including the Brazilian and Paraguayan sides.

The following items were assessed:

- Management of environmental and social issues; employment and work conditions; reservoir management; public health; native peoples; communities and livelihoods affected by the project; resettlement; and cultural heritage;
- Water resources; water quality; downstream flow regimes; erosion and sedimentation; biodiversity and invasive species;
- Governance; financial viability; project benefits; asset reliability and efficiency; infrastructure security; and communications and consultation.



Hydropower Sustainability Assessment Protocol

Alexandre Marchetti

Related Targets

This action is directly linked to Target 12.6, which encourages companies, especially large and transnational companies, to adopt sustainable practices and integrate sustainability information into their reporting cycle.

Lessons Learned

One of the main lessons learned was the need for conducting this process bi-nationally, through the actions taken jointly by Paraguay and Brazil. The process was crucial to reflecting the sustainable approach, by Itaipu, in all activities related to hydropower generation.

Challenges

Challenges included transforming Itaipu's historical documents into the protocol assessment format, training teams to participate in this assessment, raising awareness on the importance of participating in this project, and rescuing some important historical documents.

Results

The main result was the final report with the positive application of Itaipu of the Hydropower Sustainability Assessment Protocol. The report was published in Portuguese, Spanish and English versions.



Alexandre Marchetti



5.

**ENVIRONMENTAL
EDUCATION
PROGRAM**



Nilton Rolin

Objective and Description

Itaipu's Environmental Education action focuses on the propagation and development of conscious sustainable consumption and production practices aimed at reducing the ecological footprint and developing a culture of sustainability.

The program sensitizes and reaches out to communities in Itaipu's area of influence to develop a more sustainable lifestyle and promotes a similar sensitization in the corporate organizational culture in favor of the environment and the adoption of the best sustainability practices in the world.

Implementation of the program is achieved through the creation and development of important educational, training, information and communication initiatives at both the regional community and the corporate levels. Some tools used for this purpose include seminars, continuing workshops, training events and campaigns, all focusing on conscious sustainable consumption and production.

In addition to the program's environmental objectives (less CO₂ emissions, uncut trees, etc.) and the comprehensive nature of the program, social objectives are extensively inclusive to even the most vulnerable social groups (recyclers, charities).

In Brazil, the program has a component related to food security and nutritional improvement. This component promotes education for sustainable development with emphasis on fostering family farming, the local economy, food security and improvement of nutritional habits.

The environmental education program is carried out at corporate level and in the overall region and area of influence of Itaipu.



Alexandre Marchetti

Related Targets

This program is directly linked with Target 12.2, regarding the achievement of sustainable management and efficient use of natural resources. It is intended to develop a sustainable corporate business culture, reflected in best practices and the efficient use of resources in the work area (rational use of paper, electricity, correct separation of waste for recycling) by all Itaipu personnel. It is also linked with Target 12.5, regarding the substantial reduction of waste generation through prevention, reduction, recycling and reusing. The Corporate Environmental Education action places strong emphasis on the proper management of solid waste, application of prevention, reduction, recycling and reusing in order to decrease general pollution and the negative environmental impact.

Additionally, it is linked with Target 12.8, relative to ensuring that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature. The

activities developed with this action aim precisely to promote the dissemination of concepts and practices for a more sustainable lifestyle, especially conscious consumption and the reduction of the environmental footprint.

Challenges

Since its inception in 2003, the implementation of the program has undergone different stages throughout its evolution, allowing it to overcome the inertia regarding the development and establishment of a sustainable culture and lifestyle. Constant efforts, programs and campaigns have led to the important behavioral changes required for conscious sustainable consumption and production practices.



Alexandre Marchetti

The development and acquisition of specific technological tools facilitated the monitoring and constancy of impacts and their mapping with quantifiable indicators in real-time. Other challenges overcome include the hiring of professionals required for these activities, and the improvement of transportation logistics to cover Itaipu's influence area.

measurement of results in real-time fashion. Likewise, the change of habits and attitudes is a process that requires maintained continuity through active follow-up procedures in order to achieve the sustainable culture conversion that would secure the best practices for the conservation of natural resources.

Lessons learned

The important role that a large enterprise plays in its surroundings and in its own staff as an opportunity to develop human skills for sustainability has been of crucial importance. Similarly, program continuity is essential; it is necessary to overcome limitations regarding human resources, the acquisition of proper technology and logistics in order to maintain continuity in raising awareness, training, monitoring and

Results

From 2013 to July 2019, some results reported by the programs implemented in Paraguay with respect to recycling waste include a record of about 118,000 kg of solid waste recycled and stored correctly, including paper, cardboard and plastics, which is equivalent in environmental and economic terms to 2007 uncut trees (older than 10 years); the avoidance of 40,721 kg of CO₂ greenhouse gas emissions; 3,542,760 liters of



Alexandre Marchetti

water saved; and 472,368 kWh of electricity. These results represent considerable economic savings and an important environmental contribution by Itaipu.

One of the main axes is focused on corporate level of correct separation of waste at source. What is collected is usually donated to charities, such as the nursing home, children's shelters and recyclers' association in the San Francisco neighborhood in Paraguay; the latter receives the recyclable materials correctly separated. Results reported by the programs implemented in Brazil include: 480 participants in training events; more than 1,000 cooks trained in nutritional meals; 169 recipes selected and published in three editions of the Healthy

Recipe Booklet; and financial contributions distributed in awards to schools and finalist cooks of the three editions of the Healthy Recipes Contest.

In addition, the Environmental Education Program has distributed other material, such as the Environmental Education Treaty and the Earth Charter, besides publishing a booklet with guidance about rural properties integrated management for water security in the territory and a children's booklet about solid waste and recycling.



INTERLINKAGES WITH OTHER SDGs



Alexandre Marchetti

There are important interlinkages between Sustainable Consumption and Production activities (SDG 12) by Itaipu and other SDGs. The activities are closely linked to food security and improved nutrition (SDG 2), to sustainable management of water resources (SDG 6), including its biodiversity (SDG 15), to sustainable economic growth and jobs (SDG 8), to sustainable cities and settlements (SDG 11), and to partnerships (SDG 17).





CONCLUSIONS




Nilton Rolin

Itaipu recognizes the importance of creating awareness and implementing sustainable consumption and production policies and activities. Its efforts through relevant programs such as sustainable rural development, sustainable procurement policy, territorial waste management and environmental education confirm Itaipu's commitment to a more responsible way of life conducive to sustainable development and prosperity for all. Its activities promote the region's

agro-ecological-industrial growth and expansion, reaching out to and supporting family initiatives, small businesses, and companies. Itaipu's contribution through education, training and standards to develop, guide and maintain its sustainable production and consumption programs at all levels supports the objectives of the SDG 12 and the UN 2030 Agenda for Sustainable Development.

SDG 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

SUSTAINABLE AGRICULTURE

2.500 
families are beneficiaries
Technical support, training and guidance
Dissemination of agro-ecological production



EDUCATION AND SUSTAINABLE CITIES

Sustainable Procurement Policy and Program

78.5%

of the flexible matrix
implemented by May 2019



Itaipu final report on
Hydropower Sustainability
Assessment Protocol

Environmental Education Program



About **118,000 kg**
of solid waste recycled and
stored in Paraguay since 2013



In Brazil, **480** participants in
training events; more than
1,000 cooks trained in
nutritional meals; **169** recipes
selected and published in three
editions of the Healthy Recipe



Territorial Waste Management Program

Construction and refurbishment
of sorting sheds

42 trucks and

42 equipment kits delivered

34 Municipal Selective Collection Programs
created

100 technicians trained in the Solid Waste
Management

1,452 public managers, technicians and
waste collectors trained



Itaipu Binacional



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RESPONSIBLE
CONSUMPTION
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