

SUSTAINABLE RURAL ENTERPRISE

WEST REGION BAHIA SCENARIO - BRASIL



EXPEDIENT

REALIZATION

Association of Irrigation and Agriculture of Bahia – Aiba

ENDORSEMENT

Brazilian Institute of Cotton – IBA

Program for Development of Agriculture – Prodeagro

Brazilian Association of Vegetable Oil Industries – Abiove

TECHNICAL TEAM OF THE BOARD OF ENVIRONMENT AND IRRIGATION

Alessandra Chaves – Director of Environment and Irrigation

Aloísio Bezerra – Environmental Analyst

Eneas Porto – Environmental Analyst

Glauciana Araújo – Environmental Analyst

Raquel Paiva – Environmental Analyst

Sérgio Pignata – Environmental Analyst

REVIEW

Catiane Magalhães

Cristiane Barilli

Hebert Régis

COLLABORATION

Brazilian Association of Cotton Producers – Abapa

GRAPHIC PROJECT AND EDITING

Marca Studio Criativo

TRANSLATION

Flávio Nóbrega Catarino



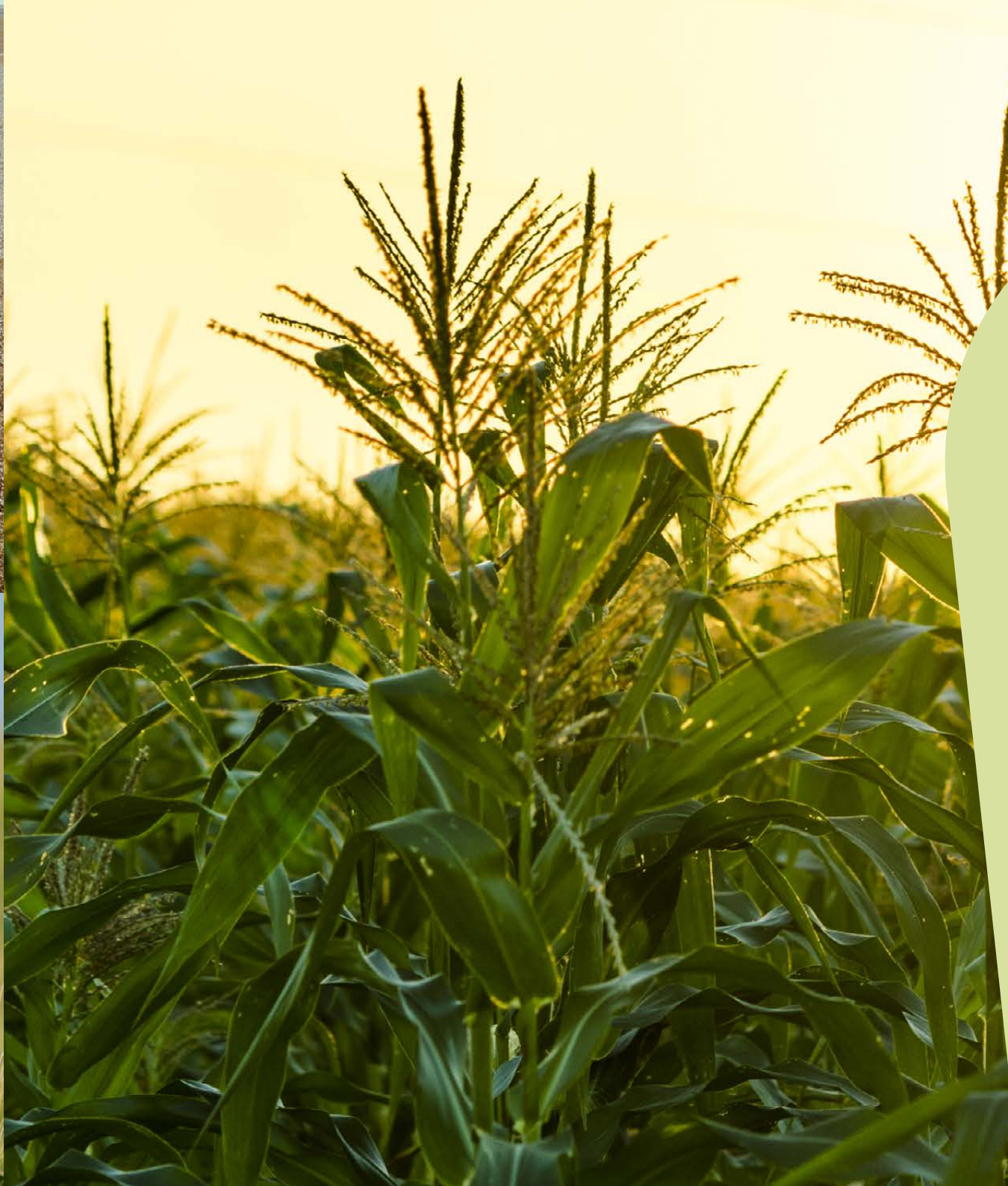
THE WEST REGION

With undeniable agricultural vocation, the west region of Bahia earned national spotlight after the implementation of agriculture in the region at the end of the 1970s. Its lands are now, today, a true productive silo of grains, fiber and fruits.

The agribusiness is the main regional economic activity, and has been supporting the economic development for the local counties with employment, better infrastructure and logistics, as well as life quality for the region.

According to estimates of the superintendence of economic and social studies of Bahia (SEI), for every job inside the field at least three others are created outside the farm. The government organ predicts, also that the sector holds a good share of the estate GDP, being responsible, on its own for almost 24% of it.

Overcoming its own brand, year after year, the agribusiness of Bahia has been solidifying itself nationally and worldly as an essential activity to guarantee food security, producing in quantity and quality, in a sustainable way.



RURAL ACTIVITIES

The growing search for efficiency in the agricultural activities has made the region an example of development, with insertion of technologies and sustainability on the productive system. The biggest representation is for the production of grains and fiber, with an increase also in cattle activities, fruit production, swines, poultry and fish.

The industrialization and verticalization of the productive process has allied itself to the agriculture development, which aggregate value to the regional production. In this manner, actions have been made seeking in an efficient way, the good agriculture practices and environmental and occupational regularities of the enterprises, which has guaranteed high productivity to supply domestic and overseas markets.

The commercialization of commodities represents 60% of agriculture production, and has gained prominence in economic participation on the region.

The activities respect all the process of licensing and are rooted in the national, state and county laws.

These actions carried in rural properties make the west region of Bahia a productive and sustainable territory.

CONSOLIDATED AREAS

The west region of Bahia possesses a consolidated area of 3,1 million hectares, which represents 35% of the territory. The production of grains and fibers occupies 2,9 million hectares.

In these areas the conservation of soil and water techniques have been fundamental to avoid erosive processes, loss of nutrients and sediment carriage. The direct planting, level curve, rainwater retention dams on roads are highlighted here. The consolidation has obeyed the legislation, through authorization of vegetal suppression by the responsible organs. There is a high potential for expansion of the technical agriculture especially in the areas of the vale of the river basin of the rivers Grande and Corrente.





IRRIGATION

The irrigation of the west of Bahia occupies an area of 203 thousand hectares, what represents about 7% of the cultivated land with grains and fiber, including public and private areas.

The efficiency of the use of irrigation, through technological systems of precision, has contributed to the increase of productivity in order to guarantee the maintenance of the water resources.



PRODUCTIVITY

The combination of technology and the weather and agricultural characteristics of the region guarantees high level of excellence in the productive process. The packets of technology in seeds, manure and agricultural pesticides, ever more modern, provided a great productivity, which means to product ever more in the same area. With soy in the highlight, the region has been producing an average of 56 sacks per hectare, equivalent to a total production of 5,3 million of tons of the oleaginous seed.

The cotton, with a productivity of 300 arrobas per hectare, had a total volume production of 1,5 million per hectare. Beyond that, the region stands out in the fruticulture, with the largest production of bananas in the country, estimated in 240 thousand tons, cultivated in an area of 9 thousand hectares.

The integration of the areas of grains, poultry and confined meat cattle has been a viable alternative for the region.





TECNOLOGY

Startup companies, that work to aggregate technology, improve quality of agriculture production and modernize services, are becoming ever more real in the agribusiness, in many rural properties of west Bahia.

Adept to high Technologies, they develop concepts of precision in the cultivation(from seeding to harvest), interpretation of data and monitoring of operations in real time are some examples of possibility to generate innovations that promote new concepts in operational management of a farm, optimizing technical resources and humans, while great companies and universities keep working on improving platforms seeking the integration of these systems.



GOOD PRACTICES IN AGRICULTURE

Beyond compliance with laws, it is crucial to adopt conservationist practices of all resources involved in the production process. These are essential in activities involving ranching, agriculture and forestry. Within the activities conducted in the rural enterprises, the producers have adopted a broader scale of handling and conservation of soil and water, maintenance of roads, programs of fire prevention and/or recovery of permanent preservation areas (APP) and legal reserve, besides adoption of programs connected to the socio-ambiental conscientization of those involved in the productive process. These actions promote collective benefits and guarantee the sustainability of the agribusiness.



WATER RESOURCES

The abundance of water resources in the region, both through the perennial rivers and the aquifer Urucuia, which guarantees the maintenance of the springs and allows use of water in rural activities. The water potential program is an example of rural producer participation in the system of water resources management, bringing information and knowledge over the water availability, in a way to guarantee sustainability of the water resources in the region.

The associations of Aiba and Abapa, with a partnership to the Brazilian institute of cotton (IBA) have been conducting different actions of preservation, protection and recovery of springs in 9 counties of the west region of Bahia, initiative that contributes to reverse the reduction of the flow of the rivers in west Bahia.





INDUSTRY OF COTTON PROCESSING

Currently within the region of west Bahia there are over 80 industries that process cotton. Out of these, 51 are currently active. The region disposes of a laboratory for analysis of fiber, where characteristics such as length, thickness and quality are evaluated, seeking to meet standards of the national and international markets.

The whole productive chain of cotton follows the legislation thoroughly, and has been seeking sustainability, with the reduction of environmental impact, reduction of work-related accidents and occupational diseases, beyond training professionals, standardizing techniques of management, making it possible to serve programs of sustainability on a national level, such as the program Brazilian Responsible Cotton (ABR) and even international programs such as the Better Cotton Initiative (BCI)

DANGEROUS RESIDUE MANAGEMENT

AGROCHEMICAL PACKAGING - the agriculture applications meet the legislation, guaranteeing safety for those involved in rural activities, customers and the environment. The producers guarantee the return of more than 95% of the agrochemical packaging so that the manufacturers give it the proper recycling/disposing, conducting a reverse logistics. Beyond that, the application techniques respect international protocol for the use of products with register in the National Agency of Sanitary Vigilance (Anvisa), in the ministry of agriculture, cattle and supply (Mapa), and Brazilian Institute of the environment and renewable natural resources (Ibama), along other regulation institutions. The respect to environmental and occupational law, related to training offered for workers, including information described in agronomic prescriptions, especially regarding the dose utilized and obedience to the safety interval (time between application and harvest), guarantee the safety and quality of food.





DANGEROUS RESIDUE MANAGEMENT

BATTERIES - Batteries are electrochemical equipment that work as portable mini powerplants and possess the ability to convert chemical energy into electric power. Batteries can be classified in many ways, depending on shape, composition and goal.

A great volume of batteries discarded in an inadequate way may cause contamination of soil and water with heavy metals, depending on its composition, which may contain lead, mercury, nickel and cadmium, components capable of causing renal diseases, cancers and problems related to the central nervous system.

Rural producers, thinking about the proper disposal of this type of residue and with the goal of conscientizing the population of rural zones about proper disposal and destination, promoted the program of collection of batteries, through Aiba and Abapa, and a partnership with the company Retec - technology in residues, also with a help from laiba (Aiba institute).

Through the program, which counts on more than 60 points of voluntary disposal (PEVs) spread throughout diverse locations in the counties of Barreiras, Correntina and Luis Eduardo Magalhães. Up to moment, approximately 400kg were collected, ridding thus the contamination of the environment and the population.

STORAGE

The storing of grains, through silo use, is an alternative utilized by producers that wish to keep production close and have control over what was produced. With this, they may have control over the commercialization of the grains, post-harvest. These activities are realized in a regular manner, with norms of legislation and guarantee bigger rent-ability, especially with the commodities, in addition to contribute to the food safety in different periods of the year.





PREVENTION AND FIREFIGHTING ON FOREST FIRES

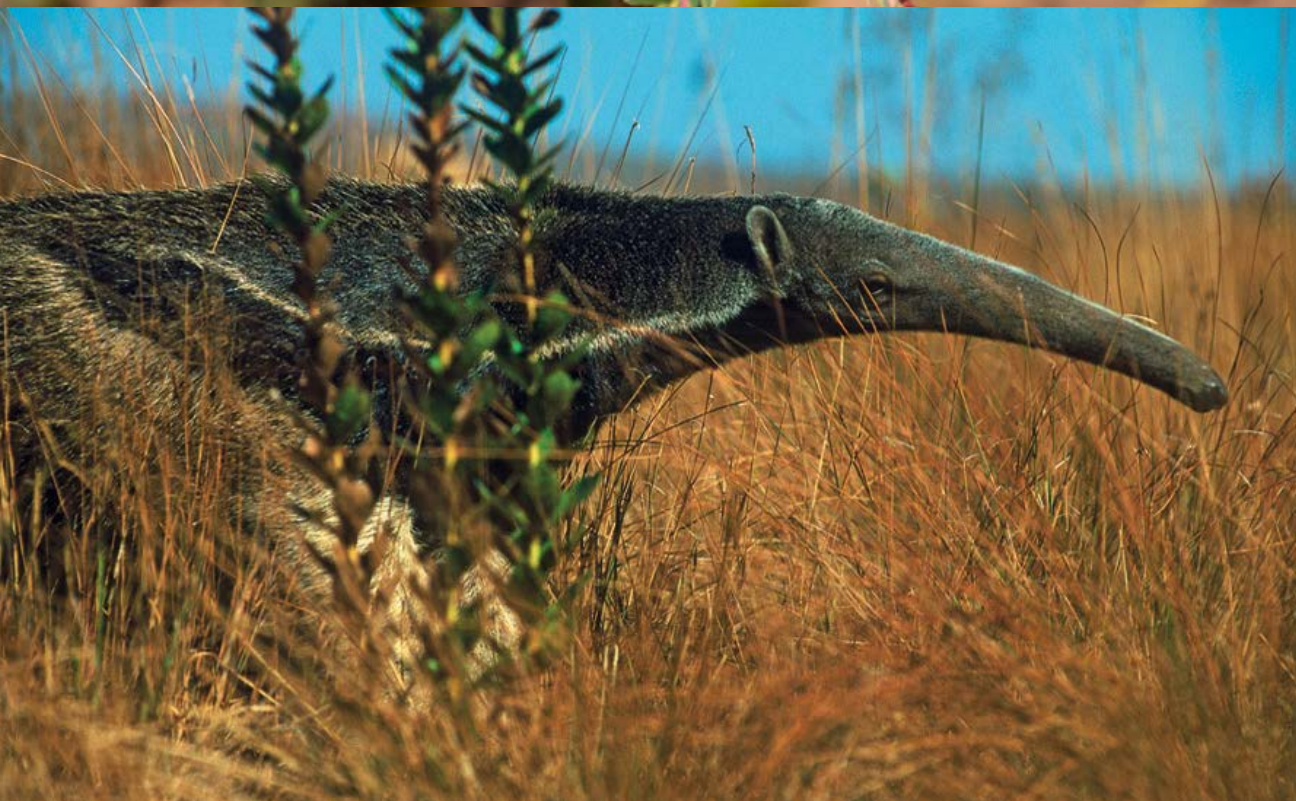
Meeting environmental legislation, rural producers use techniques that minimize the risk of forest fires. The implementation of forest fire brigades is among the prevention actions that help the fight, especially in the driest periods of the year, which happen on the months of July through November.

CONSERVATION AREAS

The numbers of membership to the Register of Rural Environment (CAR), which in Bahia is known as Register of Rural State Forest Properties (Cefir), reveal that the remainders conserved, preserved and/or in processes of recovery found in the west region of Bahia (14,4 million hectares) are in private lands, in its biggest proportion as Legal Reserve (RL), areas of Permanent Preservation (APP) and other remainders of native vegetation, of which can be individualized on the following manner: I) native vegetation surplus exceed 2,3 million hectares; II) areas of legal reserve corresponds to 1,4 million hectares, and III) area of Permanent Preservation (APP) is of 290 thousand hectares, which totals a conserved area of 4,1 million hectares, the equivalent to 28% of all the region.

When the numbers of membership are analyzed to the CAR in areas exclusively of Cerrado it can be noticed that I) surplus native vegetation exceed 1,8 million hectares; II) areas of Legal Reserve corresponds to 1,1 million hectares; and III) areas of Permanent Preservation (APP) is of 260 thousand hectares, totaling an area of conservation of 3,3 million hectares, which is equivalent to 36% of the biome with its different physiognomies. It is important for the maintenance of the biodiversity of the Cerrado Biome.





BIODIVERSITY OF CERRADO

Surveys conducted by different researches in remaining areas with native vegetation found in areas of Legal Reserve and Permanent Preservation (APP), found on rural enterprises indicate the occurrence of common species to other areas of Cerrado in Brazil. Among the thousands of registers, below are some species: *Anacardium occidentale* L., *Tapirira guianensis* Aubl. e *Myracrodruon urundeuva* Allemão (Anacardiaceae), *Annona crassiflora* Mart. (Annonaceae), *Aspidosperma tomentosum* Mart. e *Hancornia speciosa* Gomes (Apocynaceae), *Sagittaria guianensis* Kunth, *Sagittaria rhombifolia* Cham (Alismataceae), *Mauritia flexuosa* Linn.f. e *Mauritiella* sp. (Arecaceae), *Handroanthus ochraceus* (Cham.) Mattos. e *H. serratifolius* (Vahl) S.Grose (Bignoniaceae), *Caryocar brasiliense* Cambess. (Caryocaraceae), *Bulbostylis capillaris* (L.) C.B. Clarke, *Bulbostylis lanata* (Kunth) C.B., *Rhynchospora filiformes* Vahl, *Lagenocarpus rigidus* Nees (Cyperaceae), *Kielmeyera coriacea* Mart. & Zucc. (Calophyllaceae), *Connarus suberosus* (Connaraceae), *Eriocaulon longifolium* Nees ex Kunth., *Syngonanthus nitens* (Bong.) Ruhl. *Syngonanthus xeranthemoides* Ruhland (Eriocaulaceae), *Acosmium dasycarpum* (Vogel) Yakovlev., *Stryphonodendron adstringens* (Mart.) Coville, *Hymenaea stigonocarpa* Mart., *Hymenaea courbaril* L. e *Dimorphandra mollis* Benth. (Fabaceae), *Utricularia cf. amethystina* A. St. Hil., *Utricularia gibba* L. (Lentibulariaceae), *Byrsonima coccolobifolia* Kunth. e *Byrsonima verbascifolia* Rich ex. A. Juss (Malpighiaceae), *Eugenia dysenterica* (Mart.) DC. (Myrtaceae), *Epistephium sclerophyllum* Lind., *Habenaria cf. secundiflora* Barb. Rodr., *Habenaria josephensis* Barb. Rodr. (Orchidaceae), *Agonandra brasiliensis* Miers ex Benth. & Hook (Opiliaceae), *Aristida riparia* Trin., *Axonopus grandifolium* Rev., *Echinolaena inflexa* (Poir.) Chase, *Luziola bahiensis* (Steud.) Hitchc. *Luziola fragilis* Swallen, *Panicum rupestre* Trin, *Paspalum foveolatum* Sdend., *Trachypogon spicatus* (L.f/Kuntze) (Poaceae), *Pouteria ramiflora* (Mart.) Radlk. (Sapotaceae), *Casearia sylvestris* Swartz (Salicaceae), *Qualea grandiflora* Mart., *Qualea multiflora* Mart., *Qualea parviflora* Mart., *Qualea grandiflora* Mart. e *Salvertia convallariaeodora* A. St. Hil. (Vochysiaceae), *Xyris blanchetiana* Malme, *Xyris jupicai* L.C. Rich. *Xyris cf. goyazensis* Malme, *Xyris savanensis* Miquel (Xyridaceae).

The diversity of species found, shows a floral wealth registered in the west region of Bahia, associated to a big diversity of fauna and microorganisms.

An aerial photograph of a rural landscape. In the foreground, a dense, lush green forest covers a hillside. A dirt road winds through the forest, leading towards a large, open field. The field is divided into sections of different shades of green, suggesting different crops or stages of growth. The overall scene is bright and vibrant, with strong sunlight creating high contrast between the dark forest and the bright fields.

LEGISLATION THAT BACK THE REGULARITY OF THE RURAL ENDEAVOR

Federal Law nº 13.887/2019, Federal Law nº 13.295/2016, Federal Law nº 12.727/2012, Federal Law nº 12.651/2012, Federal Law nº 11.284/2006, Federal Law nº 9.832/2005, Federal Law nº 6.938/1981, Federal Decree nº 9.640/2018, Federal Decree nº 8.235/2014, Federal Decree nº 7.830/2012, State Law nº 13.223/2015, State Law nº 10.431/2006, State Decree nº 18.140/2018, State Decree nº 16.963/2016, State Decree nº 15.682/2014, State Decree nº 15.180/2014, State Decree nº 14.024/2012, Resolutions of the National Council of Environment (CONAMA) and the State Council of Environment (CEPRAM), among other normatives.

PRESIDENT: Odacil Ranzi

1º VICE-PRESIDENT: Moisés Almeida Schmidt

2º VICE-PRESIDENT: Willian Seiji Mizote

ADMINISTRATIVE DIRECTOR: Olmiro Flores de Oliveira

VICE-ADMINISTRATIVE DIRECTOR: André Vinicius Schwaab

FINANCIAL DIRECTOR: Hélio Hopp

VICE-FINANCIAL DIRECTOR: Ricardo Lhossuke Horita

FISCAL COUNCIL HOLDERS

Ildo João Rambo

Valter Gatto

Célio Zuttion

FISCAL COUNCIL SUBSTITUTES

Romeu César Carvalho

Hélio Busato

Martin Döwich

TECHNIC COUNCIL

Humberto Santa Cruz Filho

João Carlos Jacobsen Rodrigues

Walter Yukio Horita

Júlio César Busato

Celestino Zanella

GUEST ADVISERS

Luís Carlos Bergamaschi

Paulo Massayoshi Mizote

Osvino Fábio Ricardi

Luiz Antonio Pradella

Douglas Alexandre Radoll

www.aiba.org.br



+55 77 3613.8000



aibaoficial



aibaoficial



aibaoficial





31
ANOS

