

Actions at the UFGD Study Bases: reports on research, teaching and extension projects carried out there

Ações nas Bases de Estudos da UFGD: relatos sobre os projetos de pesquisa, ensino e extensão nelas realizadas

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ABSTRACT

This Report aims to describe what the Study Bases of the Federal University of Grande Dourados are, to present its installation history and the benefits/results generated for the communities served with activities carried out in these spaces. In addition to exposing the physical structure of each location, initiatives with research, extension projects, courses and other actions promoted since 2013 are explained here, both in the Bases already deactivated, as well as in those still in operation in two regions of the state of Mato Grosso do Sul some of them financed by CNPq and/or in partnership with relevant institutions.

Keywords: Study base; Socioeconomic development; Research and extension.

RESUMO

O presente relato tem como objetivos descrever o que são as Bases de Estudos da Universidade Federal da Grande Dourados, apresentar seu histórico de instalação e os benéficos/resultados gerados para às comunidades atendidas com atividades realizadas nesses espaços. São aqui explicitadas, para além da exposição da estrutura física de cada local, as iniciativas com pesquisas, projetos de extensão, cursos e demais ações promovidas desde 2013 tanto nas Bases já desativadas, quanto nas ainda em funcionamento em duas regiões do estado do Mato Grosso do Sul, algumas delas financiadas pelo CNPq e/ou em parceria com instituições relevantes.

Palavras-chave: Base de estudos; Desenvolvimento socioeconômico; Pesquisa e extensão.

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1 INTRODUCTION

Since 2012, the Universidade Federal da Grande Dourados (UFGD) has started to set up study bases in several municipalities in Mato Grosso do Sul (MS). The first ones were established in the municipality of Sidrolândia, in the settlement Eldorado II and in the municipality of Nova Andradina, in the settlement Santa Olga. Both were installed by transferring physical spaces, being headquarters of former farms expropriated in favor of the creation of rural settlements, passed on by the Superintendence of the National Institute of Colonization and Agrarian Reform (INCRA) of MS.

In the same year, the base of Baía Negra was installed, in the municipality of Ladário, with the assignment of a property to UFGD by the Secretariat of the Union's Heritage (SPU). In 2016, a cooperation agreement was signed with the Army of Corumbá, for the use of physical space at the base of Forte Coimbra, municipality of Corumbá and, in 2018, that of the Itamarati settlement, municipality of Ponta Porã, was created, installed in the building of the Subprefecture of that municipality. Of the five bases assumed by UFGD since 2012, two of them are currently active: the one installed in the Itamarati settlement and the other in Baia Negra, municipality of Ladário.

The first study bases, those of the Eldorado II and Santa Olga settlements, were deactivated in 2017 and 2020, respectively, due to the termination of the technical cooperation agreement between UFGD and INCRA, and the successive cuts in funds in the University's budget, thus making the maintenance of these bases unfeasible. In 2021, he won the contract between UFGD and the Army, in the property section at Forte de Coimbra, ending the term in that unit. However, in the three units where the agreements for the transfer of facilities ended, extension, teaching and research actions in the communities of those places continue.

Regarding the spaces at the UFGD bases, in relation to the building structures, these are physical areas endowed with infrastructure for the development of projects, actions and/or

activities exclusively related to teaching, research and extension, which can be used by all UFGD employees and/or professors, as well as students. The community residing around the bases shares these spaces in the programs that are developed in these units. The bases also spaces that establish networks of partnerships with several institutions, among them: Agency for Agrarian Development and Rural Extension (AGRAER), Embrapa, the Brazilian Army, Ibama, Federal Institute of Mato Grosso do Sul, MAMEDE Institute, the ONG ECOA, City Hall of Ladário, City Hall of Ponta Porã, UFMS, UEMS, UNESP, among others.

1.1 Structure of the Study Bases in operation

1.1.1 Baía Negra Study Base, Ladário-MS

650 km from Dourados-MS, the Baía Negra Study Base (photo 1) has approximately 30 hectare of preserved forest area and is located in the legal reserve Environmental Protection Area (APA) Baía Negra (photo 2 and photo 3) with entrance to the Paraguay River, fully inserted in the territory of the Pantanal sul-mato-grossense. This region borders a riverside/fisherman village and rural settlement 72, thus becoming a suitable place for the development of projects or actions that seek to improve the life and social well-being of the communities in that area. region, through different foci and/or objectives.

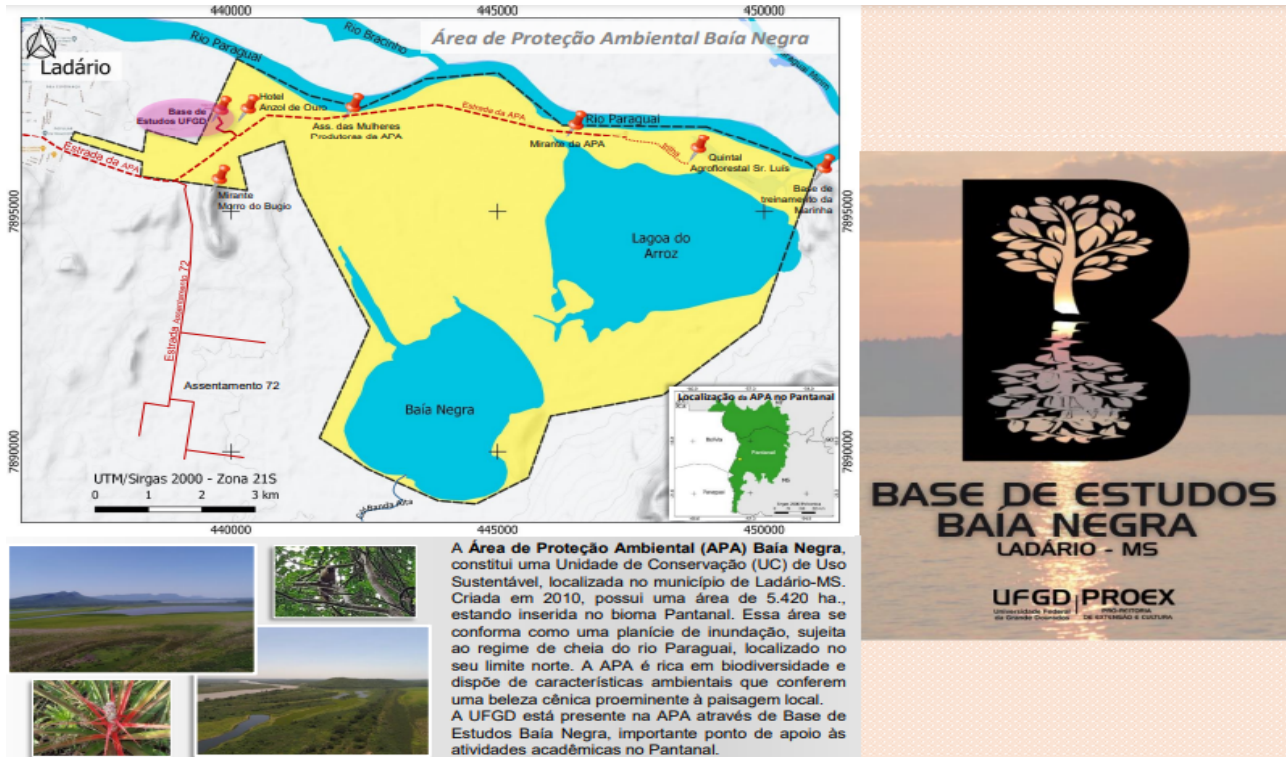
This base offers a stay structure for groups of up to 50 people with apartments equipped with air conditioning, bed, private bathroom and great lighting. It also has a laundry area with washing machine; kitchen equipped with freezer, refrigerator, industrial stove, sets of tables and chairs for the dining room, filter and water troughs, thermoses for transporting cold and hot water, as well as all general utensils such as plates, cutlery, pans, which make it possible to prepare food while staying in the enclosure. It also offers a classroom with 60 university desks, two steel lockers, three tables for meetings with smaller groups and a large table for meetings with larger groups, all with air conditioning.

Photo 1 - Baía Negra Study Base, Ladário-MS.



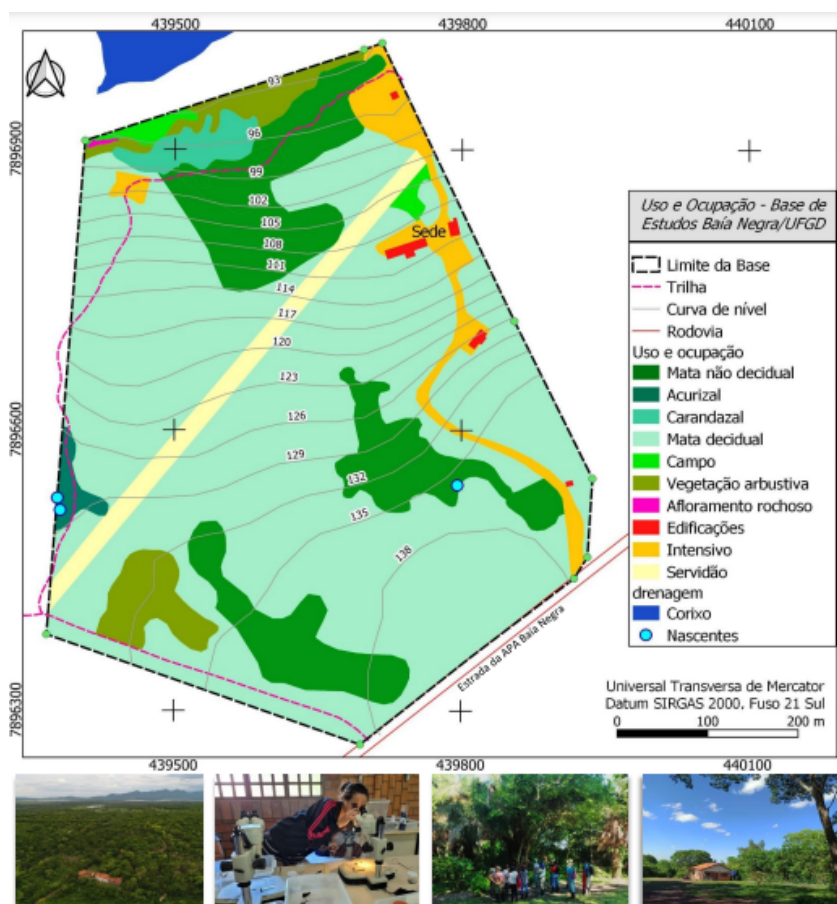
Source: UFGD Social Communication Office, 2019.

Photo 2 - Baía Negra Environmental Protection Area.



Source: Provided by Prof. Joelson Gonçalves Pereira, 2020.

Photo 3 - Use and Occupation of the Baía Negra/UFGD Study Base.



Base de Estudos Baía Negra



Localizada na APA Baía Negra, a Base de Estudos da Universidade Federal da Grande Dourados ocupa uma área de pouco mais de 30 ha., grande parte ocupada por vegetação nativa, que contribui para a manutenção da biodiversidade local.

A infraestrutura da Base de Estudos, administrada pela PROEX/UFGD, inclui alojamento, cozinha, refeitório e mini auditório, todos climatizados. A unidade se consolidou como um importante ponto de apoio às atividades de ensino, pesquisa e extensão desenvolvidas pela comunidade acadêmica da UFGD no Pantanal, em virtude do fácil acesso e localização privilegiada.



O Curso de Campo do Pantanal, o projeto Cidadania e Sustentabilidade na APA Baía Negra e as práticas do PET Biologia, desenvolvidos por docentes da FCBA, são algumas das ações realizadas na Base, além das atividades vinculadas ao Núcleo de Ações Extensionistas da APA Baía Negra/PROEX.

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Fotos: PROEX, Curso de Campo do Pantanal, PET Biologia
Mapas: Lab. Geotecnologia/FCBA, Plano Diretor UFGD
Realização: Projeto Cidadania e Sustentabilidade na APA Baía Negra
Apoio: PROEX/UFGD

Source: Provided by Prof. Joelson Gonçalves Pereira, 2020.

1.1.2 Itamarati Study Base, Ponta Porã-MS

Located 110 km from Dourados-MS, it is limited to an area of approximately 01 ha, with a large house installed in the building of the Subprefecture of Ponta Porã, in the Itamarati settlement, where several projects can be developed with small local producers in various areas of activity.

It offers a stay structure for groups of up to 40 people, providing rooms with air conditioning, bed, private bathroom and great lighting. It has a laundry area with washing

machine, and kitchen equipped with industrial stove, duplex refrigerator, freezer, steel and Formica cabinet, five sets of tables and chairs for the dining room, an industrial water fountain, a water filter, bottles thermoses for transporting hot or cold water, and general utensils for cooking food (plates, cutlery and pans). It also provides a classroom with tables and desks for 40 people.

1.2 Regulation of Study Bases

In 2016, UFGD created and included the Division of Study Bases (DIBE) in its organization chart, with the aim of monitoring, guiding, supervising and managing said study bases, thus providing use and support for the development of actions and projects in these locations.

For the correct and effective use of these UFGD Teaching, Research and Extension spaces, a general regulation for the use of the bases was prepared and approved by the University Council (COUNI) in 2017, which regulates and systematizes the use of the infrastructure (meeting rooms, cafeteria, kitchen, bedrooms, etc.) and permanent materials (computer equipment, furniture, utensils, tools, etc.) within the scope of the University and made available in the study bases. It also establishes basic principles and conduct to be followed by servers and/or users (academic community and/or external community), based on the constitutional premises of public administration, legality, impersonality, morality, publicity and efficiency.

In addition, this regulation defines that all UFGD employees, students, groups of people representing or directly linked to public or private institutions can use the structure of the study bases, clarifying, once again, that the purpose for use must be directed to the development of activities and/or projects related to teaching, research or extension, linked to its economic and social development, as long as it fits into the schedule and does not interfere with any activity, program and/or project linked to UFGD.

In order to request and use the infrastructure and permanent materials of the University Study Bases, this regulation must be complied with without reservations.

1.3 Activities developed at the Study Bases

1.3.1 Headquarters Eldorado II and Santa Olga

On these study bases, UFGD professors and students had been developing university extension programs and projects, with emphasis on the development of small production, aiming at improving life, increasing family income and social inclusion in the most diverse dimensions, with a focus on the social well-being of the affected populations. Between 2013 and 2014 the following activities were carried out:

- The “Experience Internship in Rural Settlement Areas in Mato Grosso do Sul: exchanging academic and social knowledge”, coordinated by Prof.^a. Dr. Alzira Salete Menegat from the Faculty of Human Sciences (FCH/UFGD), aimed to direct 50 students from the UFGD Post-Graduation course to the communities of the settlements, so that they could carry out a survey about the reality experienced by the families and, with these data, subsidize new projects that the University could forward, in line with the needs of the settled families. In this sense, we quote Menegat et al. (2017):

It is important to highlight that the course was organized in an articulation between teaching, research and extension, involved in projects and subprojects linked to three axes of knowledge, namely: rural extension, agroecology and production, in a relationship between theory and practice, having as guiding principle the Methodology of Alternation, which combined face-to-face classes at UFGD with classes in the students' communities, thus expanding the debate around environmental, agrarian, production and rights of rural people.

- The project “Development of Regional Food Products as Income Generation Strategies”, supervised by Prof.^a. Dr. Eliana Janet Sanjinez Argandoña from the Faculty of Engineering (FAEN/UFGD), aimed to: validate the construction of solar and electric dehydrators for the production of dehydrated foods without compromising nutritional characteristics; technically train rural producers and farmers in technological processes to obtain food products with bioactive components and in quality control and food handling practices, aiming at products that comply with current legislation; assist community groups in the study of technical and economic

viability and; implement an environmental policy in the planning and management of projects in rural areas, carrying out environmental education interventions.

- The initiative coordinated by Prof.^a. Dr. Fabiana Cavichiolo from the Faculty of Agricultural Sciences (FCA/UFGD), “Sustainability in Fish Farming, Productivity Guarantee”, focused on: forming a demonstrative unit for fish production; make producers aware of new techniques for preserving and maintaining environmental and economic sustainability and; develop the cultivation of Aquaponics as a new source of revenue and family income.
- The program “Actions for the Development of Technologies for Small Producers: Production and Distribution of Electricity Through MHC, Construction of a Hybrid Dryer (solar plate and electrical resistance)”, had the purpose of building a hybrid dehydrator (plate solar/electric resistance) and a bench made up of a turbine/generator set in order to lower production costs for the dehydration of cerrado fruits and medicinal plants. It also intended to encourage the planting of fruit species native to the Cerrado. It was assisted by Prof. doctor Orlando Moreira Junior from FA-EN/UFGD.
- Organized by Prof. doctor Gustavo de Souza Preussler from the Faculty of Rights and International Relations (FADIR/UFGD), the activity of “Training Human Rights Defenders in Settlement Areas” aimed to: carry out itinerant legal assistance from the Legal Practice Nucleus (NPAJ) to settlers from Sidrolândia – MS, systematizing their demands and guiding them in extrajudicial dispute resolutions; hold a public hearing with the settled families and; organize representatives on the approach of the training course on human rights education and training of human rights defenders.
- The proposal “Actions for the development of technologies for small producers: Production and Distribution of Electric Energy through BFT, study on a bench with flow pumps of implantation viability”, coordinated by Prof. doctor Orlando, intended to develop technologies aimed at producing/using water resources in the community of the Eldorado II settlement, with a view to producing energy.
- The project “Rural Extension: implementation and monitoring of improvements in agroecological practices using animals and vegetables in family farming in Mato Grosso Sul” sought to: stimulate the cultivation of horticulture (vegetable garden, medicinal, aromatic and condiment plants) and the development fruit growing using fruit species that have economic potential for the

community and region; improve the productivity of the herd enabling the increase of milk production; to benefit the resulting products, adding value to them, encouraging solidary consumption and; provide support to the beekeeping activity on small properties as an extra source of income. It was coordinated by Prof. Doctor Euclides Reuter de Oliveira from FCA/UFGD.

- Also supervised by the same professor, the program “Production of Dairy Cattle in an Organic System in Rural Settlement” proposed to guide, with appropriate techniques, the production of dairy cattle based on the organic production system.
- The proposal for “Raising Animals in an Ecological Way, in a settlement, in the south of Mato Grosso do Sul” - beekeeping activity - was intended to assist families in raising bees for the production and processing of honey, with the aim of make the activity economically viable and with ecological exploitation. Coordinated by professor Dr. Euclides.
- The program “Adoption of Agroecological Practices in Agricultural Production and Family Sustainability, in settlements in the south of Mato Grosso do Sul” - pasture recovery activity - aimed to guide families in the recovery and improvement of pastures, with introduction of new varieties, aiming at improving the feeding of cattle and increasing milk production. Supervised by Euclides.
- The “Project Space for Dialogues on Adequate Food: food and nutritional security actions”, having as its activity a course on public purchases of family farming, planned to direct settled families and segments of city halls to appropriate the necessary tools to the sale and purchase of food from family farming, as this would strengthen the production of basic foodstuffs and therefore improve the quality of life of rural people. It was coordinated by Professor Dr.^a Angélica Margarete Magalhães from the Faculty of Health Sciences (FCS/UFGD).
- The initiative proposed by Prof. Dr. Alzira, “Aulas de Curso da UFGD – Curso de Residência Agrária/PRONERA”, aimed to use the physical facilities of the house at the unit in Sidrolândia to bring together the group of students and professors of the course of Agrarian Residency, organized in an agreement between UFGD , the National Program for Education in Agrarian Reform (PRONERA) and the National Council for Scientific and Technological Development (CNPq) , to teach classes there in 2013 and, in two other stages in 2014, developing activities in

the community, linked to the practical part of the disciplines of the stage, as well as organizing a seminar on agroecology, involving the community.

- “Horta e Orchard Escolar” was an action created by Prof. doctor Nestor Antônio Zarate from FCA/UFMG with the aim of instructing teachers and students on appropriate techniques for the formation of school gardens and orchards, in relation to the formation of beds, planting of vegetables and fruit seedlings. It also proposed to carry out guidelines regarding the nutrients of fruits and vegetables, with a view to improving the food base, in order to take advantage of production in school lunches and, furthermore, to encourage families to adopt vegetable gardens and orchards in their lots.
- The program “Adoption of Agroecological Practices in Agricultural Production and Family Sustainability, in settlements in the south of Mato Grosso do Sul” – activity: beekeeping – aimed to assist families in raising bees for production and processing of honey, aiming at the family’s food base and commercialization of the surplus. Co-ordinated by Professor Dr. Euclides Reuter de Oliveira.

In 2015, several teaching activities were carried out during the Specialization in Agricultural Residency course (photo 5), which had 58 graduate students. Two technical visits were also carried out, in the community of that settlement, by the students and teachers of the graduation course in Education in the Countryside, from FAIND. Practices were also carried out with the students of the Municipal School of the Eldorado Settlement, supervised by the teacher Zefa Valdivina Pereira, from which the students learned to work with the production of seedlings of native species. When the production was finished, the seedlings were distributed to the community itself. The activities extended during 2016 and 2017.

Inaugurated in September 2015, and extending its activities until 2017, the “Extension Project – Community Bank of Crioulas Seeds”, also coordinated by Professor Zefa Pereira, with resources from CNPq and assisted 110 families living in the settlement in Eldorado II. The Bank had a physical structure that had a cold chamber capable of storing three tons of Creole seeds. After the end of the contract in that unit, the Seed Bank was installed in the Dourados Indigenous Reserve.

About this extension action, Cunha et al. (2017) state:

The criteria in relation to the formats for the bank's operation, especially in relation to the exchanges, were constructed through dialogues with the community itself, which guided how it believed the bank's operation to be viable, and which had as a guiding principle the security that each family produces and benefits its own seed, but shares in its propagation, bringing a small part of its production to the bank, serving as a community stock.

Two more extension programs subsidized by CNPq, which assisted 50 and 30 families respectively, were carried out in the Território da Cidadania do Vale do Ivinhema, at the base of Nova Andradina, one of them coordinated by Professor Caio Luís Shiariello, and the other, by Apiculture (photo 6), coordinated by professor Euclides. The two projects continued their activities in 2017. In 2016, the latter assisted 12 families and in 2017, 10 of them.

During 2016 and 2017, at the headquarters of Settlement Eldorado II, some stages of the Licenciante in Rural Education course (LEDUC), offered by the Faculdade Intercultural Indígena (FAIND), were developed, with Sidrolândia as one of the Poles. There were also some technical visits by undergraduate groups, with the aim of developing practical classes to improve the knowledge acquired in the classroom, which were: a) class from the UFGD Environmental Management Course – subject “Recovery of degraded areas”; b) class of the Biological Sciences Course at UFGD – discipline of “Ecology of the field” and; c) class of the Biological Sciences Course at the State University of Mato Grosso do Sul (UEMS) – discipline of “Ecology of Ecosystems”.

There was also continuity of the activities of the Extension Project in Horticulture, by prof. Euclides, involving about 15 families, until 2017. In the same year, the following were structured: the “Extension Project in Organic Milk Cattle”, coordinated by the same professor, who implemented a rotating system for the production of organic milk, and which is used as a model and experience for other groups of residents and; the “Extension Project Economic and Productive Feasibility for Settlements: price formation, demand and economic viability of production in settlements”, supervised by Professor Márcio Rogério Silva, who held training courses in the area for community members. Both remained active until 2017.

In addition to these activities, a cooperation agreement was signed between the UFGD and the Production Cooperative of Family Farmers from the Santa Olga Settlement (COOPAOLGA), at the Nova Andradina base, in order to make the kitchen available in the mansion at the Santa Olga study base. Olga and, also, an auxiliary house to carry out activities of the “Candy Agroindustry Project for the Generation of Work and Income for Women of the Santa Olga Settlement in Nova Andradina-MS”, with the objective of guiding the group in the construction of your project and promote the development of the families involved.

The space at the Santa Olga base was released, in the course of 2016, to the National Rural Learning Service (SENAR), through the Technical Assistance and Rural Extension Program (ATER), to carry out courses for the community in the horticultural, basic management of fish farming tanks, digital inclusion and basic information technology, among others.

In the following year, the place was also made available by UFGD for the execution of some activities. Together with SENAR, it offered courses on: Correct Handling of Agricultural Defensives, Cultivation of Passion Fruit; Breads and Cakes and; Management for Women of the Settlement. With SENAI, the Professional Sewing course. Through SEBRAE, the courses of: Entrepreneur in the Countryside; Costs to Produce in the Field and; Concepts of Homeopathy in Agriculture. Together with the Brazilian Agricultural Research Corporation (Embrapa), the course on Rapid Participatory Diagnosis in the Production of Vegetables and Fruits in an Organic Production System. Finally, together with the Secretariat for Integrated Development (SEMDI) of Nova Andradina, the course on Improvement and Transformation of Products Derived from Cassava and the meeting to publicize the Support Program for Family Fish Farming.

Photo 5 - Agrarian Residency Course at the Eldorado II Study Base



Source: Provided by Prof. Euclides Reuter de Oliveira, 2015.

Photo 6 - Beekeeping Course at the Santa Olga Study Base.



Source: Provided by Prof. Euclides Reuter de Oliveira, 2015.

1.3.2 Itamarati headquarters

In 2017, an important and remarkable technical cooperation agreement was negotiated between the University and the Municipality of Ponta Porã, signed only in 2018: Management Contract No. 17/2018, thus creating the project from the Regional Development Center (CDR) of Itamarati - Sustainable Solutions Network. This program should be carried out with the Itamarati settlement community through various actions and/or activities, focused on various areas of knowledge, and always seeking the socioeconomic-cultural development of this community and small rural producers in the municipality of Ponta Porã-MS.

The general objective of this project is

discuss in a participatory manner sustainable actions that meet regional demand and are gradually implemented, monitored and adjusted according to local dynamics. In this sense, the proposal has as its central axis the acceptance of the sustainable development objectives (SDG2030) launched by the United Nations (UN) in 2015 and the Itamarati Settlement Development Plan, so that the local dimensions and regional and there is interconnection in actions and public policies (CARRIJO, 2017).

In 2018, motivated by the implementation and execution of the aforementioned project, there was also the opening and structuring of the UFGD study base in the Itamarati settlement, through the installation of beds, industrial stove and cafeteria tables to host and/or serve as support for students, professors, researchers and other participants in the development of teaching, research and extension activities in the region. Based on the historic milestone of the partnership between these institutions, the elaboration and execution of several practices aimed at improving the life of this community began, with the participation of residents of the settlement, namely:

- 1st Fish Farming Course (photo 7): study of potential species for commercial fish farming and the importance of water quality for fish farming and; introduction to cropping systems. 2nd Pisciculture Course: study of water quality, theory and practice. 3rd Pisciculture Course: study about Legislation. Both coordinated by Prof.^a Sheila Nogueira, with the participation, respectively, of 90, 40 and 30 people.

- UFGD+SAÚDE Program: carrying out consultations and medical guidance activities for the population of the settlement, aiming at implementing the health axis. Coordinated by PROEX and FCS/UFGD, serving more than 800 residents. From this action, it is concluded that

The experiences provided by this type of activity reinforce the role of the university both in the development of extension actions aimed at promoting health in its broadest sense, a key element for guaranteeing the right to health protected by the Federal Constitution (BRASIL, 1988), and in the professional training of the academics involved, since they provide a close relationship with the community, with the different ways of falling ill and with the reality of the health-disease process beyond the walls of health establishments. health area (PI-NHEIRO et al., 2021).

- First Edition of the Pre-College Exam Course: a course offering a focus on the UFGD test. Supervised by the PROEX Training Center, taught by scholarship holders from the University and with the participation of 94 students.
- Course on “Control of Household Expenses and Stimulation of Family Entrepreneurship”, coordinated by prof. Fabio M. Dutra.
- Practical course on “Construction and Installation of Biodigesters” in small properties in the settlement. Coordinated by professor Euclides, with the participation of 22 producers. We can highlight about this activity that:

Biodigester technology proved to be an efficient alternative in the Itamarati Settlement, in the municipality of Ponta Porã-MS, with significant gains for the producer and the environment, since it removes untreated waste from the environment that can be a source of contamination soil and water courses. Fertilization using biofertilizers proved to be easily applicable and a good tool for organic products, as it does not contain chemical substances, in addition to making producers self-sustainable because organic products add value (DURÃES, 2021).

- Courses on “Beekeeping Production System” and “Organic Milk Production in Family Farming”, both supervised by Professor Euclides.
- Course on “Water Quality as a Foundation for the Sustainable Production of Small Fish Producers”, managed by prof. Dacley Hertes Neu.
- Course on “Smoking Tilapia as an Alternative to Increase Fish Consumption”. Assisted by Prof. Claucia Aparecida Honorato da Silva.

- Course on “Environmental Education in the Preservation and Conservation of Native Orchids” for students and professors at Escola Estadual Nova Itamarati. Coordinated by prof. Jose Carlos Sorgato.
- Course on “Pfeiffer Chromatography: Soil Quality Assessment Technique for Food Production, Health and Society Well-Being”. Administered by Prof.^a Alessandra Mayumi Tokura Alovisi.
- Course on “Production of Rabbits in Family Farming”, coordinated by Prof. Andréa Maria de Araújo Gabriel.
- Course on “Production of Soybean Silage in Family Units in Organic Production Systems”. Assisted by Professor Jefferson Rodrigues Gandra.

Photo 7 - Fish Farming Action at the Itamarati Studies Base, Ponta Porã-MS.



Source: Provided by Prof.^a Sheila Nogueira de Oliveira, 2019.

1.3.3 APA Baía Negra Headquarters

In the course of 2017, the various reforms and maintenance in the structures and facilities of the study base of Ladário-MS, carried out by PROEX, stood out. On this basis, visits were made by professors and students from the University, so that teaching, research and extension activities could be developed, such as: field classes with the Geo-morphology class from the Geography course with the participation of 40 students and a professor from UFGD and; field classes of the Biology course with the participation of 40 students and five professors from the institution.

The activities carried out in this study base were:

- Course “Training Teachers in Environmental Education”, with the participation of 30 people and taught by Thainan, a member of the Brazilian Institute for the Environment and Renewable Natural Resources (Ibama).
- Activities linked to the extension project “Núcleo de Estudos Extensionista Baía Negra” with the project “Qualification of Products of the Rural Family Agroindustry and Social Entrepreneurship), ODS 08 and; together with the project “Assembly and Implementation of the Arte Sana Bistrô Restaurant – Gastronomia Artesanal”, both coordinated by Prof. Angélica Margarete Magalhães from FCS/UFGD, and developed together with the Association of Women Producers of the Protected Area.
- Work related to the extension action “Citizenship and Sustainability”, coordinated by prof. Joelson Gonçalves Pereira and FCBA/UFGD students, and developed with the community. In this sense, the work presented at the 14th ENEPE/UFGD by CRUZ and PEREIRA (2020) points out that:

The Baía Negra Environmental Protection Area (APA) is a conservation unit (UC) for sustainable use, the first created in the Pantanal of Mato Grosso do Sul, in 2010, with an area of 5,420.58 ha (...) the Sustainability and Citizenship Workshops project carried out, as one of its actions in the first half of its execution, in 2021, the generation of geo-information products about the APA Baía Negra, using cartographic language, the material presents information on the aspects environmental, physical characteristics, location and description of the potential for academic-scientific visits in the APA and its surroundings. (...) As a result, it is expected that the material can contribute to the dissemination of the APA, in order to guarantee its conservation by encouraging academic-scientific visits to the conservation unit, as well as to the hot spots in its

surroundings . The material will be distributed to the APA community and to UFGD students and employees who participate in projects at the Baía Negra Study Base.

- Preventive Health Action with communities, Settlement 072 and the city's urban area, coordinated by professor Márcio Barros from FCS/UFGD, with the participation of 40 students from the Medicine and Nutrition course at UFGD and all the college's leagues.
- Development of Extension Project (PET) – PANTANAL activities, coordinated by professor Zefa Valdivina Pereira and participation of 30 FCBA/UFGD students.
- Course “Training Teachers in Environmental Education” through the Foundation for the Environment and Rural Development of Ladário together with the City's Municipal Department of Education, taught by employees of the City Hall and the participation of 50 people.
- Course on “Training of Bird Watchers in the Pantanal”, taught by the Mamede Institute and participation of 20 people.
- Activities prepared by the NGO Ecologia e Ação (ECOA) regarding the project “Strategies for Conservation, Restoration and Management for Biodiversity in the Pantanal”, contemplated by the Brazilian Fund for Biodiversity (FUNBIO) through the agency Global Environmental Facility (GEF Terrestre), with the participation of the entire community and in partnership with UFGD.
- Presentation of the project "Human Settlements - Journalistic Travel Narratives and the use of the great Multimedia Report", which derived from the report "They live in the middle of the Highway", from the Journalism Course of the Faculty of Arts, Letters and Communication (FAALC/UFMS), coordinated by prof. Edson Silva from the Federal University of Mato Grosso do Sul and participation in the group.
- Classes of the “Adult Literacy Project”, coordinated by prof. Necio Turra Neto and 10 students from the São Paulo State University (UNESP), with the participation of the population.

- Activities of the Biology Course on Countryside and Citizen Science developed by the Mamede Institute with the participation of residents of the region.

In 2021, a technical cooperation agreement was negotiated and signed between the UFGD and the Municipal Prefecture of Ladário: the Management Contract n.º 27/2021, with the purpose of executing the extension project “Núcleo de Estudos Extensionistas Baía Negra”, which aimed to develop different actions in different areas of knowledge in the municipality, benefiting and promoting socio-economic and cultural progress to the entire Ladarenses community, but, mainly, to communities lacking fishermen and riverside dwellers in the Rural Protection Area and small producers of Settlement 72.

The justification of the aforementioned Agreement makes it clear that

In the development of research and extension projects, UFGD will be able to build a continuous interaction with the community of Ladário, which will allow the University to approach the community, the identification and perception of various problems of an organizational, productive and social nature. in the resident social groups, as well as the bottlenecks in the different production chains. There is a notorious urgency to expand extension actions and technical assistance on site, so that the actions primarily consider economic, social, cultural and educational issues, with the research developed by the academic community as an ally in the integration with extension actions and consequently the practice in the field (UFGD, 2021).

1.4. Others initiatives

Other relevant programs and activities developed at the UFGD study bases, or with their support, in the years 2018, 2019 and 2021³:

- Activities related to the subject “Field Entomology” of the Graduate Program in Entomology and Biodiversity Conservation (PPGECB) of the Faculty of Biological and Environmental Sciences (FCBA/UFGD), with prof. Ricardo Augusto dos Passos and students from the institution.
- Event of the Federal Institute of Matos Grosso do Sul (IFMS), “Memories: Building the History of the Settlements of the City of Nova Andradina” through the use of oral history as a data collection technique with Prof. Yasmine Braga Theodoro of the Institute.

³ Due to the COVID-19 pandemic, no face-to-face activities were carried out in 2020.

- Actions related to the Scientific Initiation work plan of the FCBA/UFGD Biological Sciences Course, with student Diego da Silva Pereira, professor Josué Raizer and UFGD students as field assistants.
- Course “Formation of Community Brigades in the Cerrado and Pantanal” including APA Baía Negra, with the participation of 40 people, taught by the NGO ECOA employee, André Luiz Siqueira.
- Workshop on “Seed Collection and Planting Native Seedlings from the Pantanal and Preservation of the Pantanal Environment” coordinated by Prof. Zefa Valdivina from FCBA/UFGD and 35 students from the University.
- Field technical class in the Pantanal of the UEMS Biological Sciences Courses with Professor Sáuria Lucia Rocha de Castro and participation of 45 students from the mentioned course.
- Activities related to the “XX Ibero-American Symposium on Conservation and Use of Local Zoogenetic Resources”, in Corumbá-MS, with the participation of 25 people and ministered by Embrapa Pantanal.
- Field classes related to the Graduation Course in Geography at FCH/UFGD with professor Alexandre Bergamin Vieira and 25 students from the University.
- Teaching Project Interdisciplinarity as a tool for “Studies of the Fauna and Flora of the Pantanal Sul-Mato-Grossense: A paradigm in relation to learning”, year XIII; and Extension Project on “Promotion of Sustainable Environmental Practice in the Pantanal”, (ODS 11 and 15), developed by FCBA/UFGD, both coordinated by professor Jairo Campos Gaona and with the participation of 40 students and four professors from UFGD, each.
- Actions of the Postgraduate and Masters Course in Borders and Human Rights held by FADIR/UFGD with the participation of 25 students and a professor from the aforementioned faculty, supervised by professor Francielle Vascotto Folle.

- Project for the development of actions and activities related to the work plan of the Scientific Initiation of the Biological Sciences Course at FBCA/UFGD, coordinated by prof. Joshua Raizer.
- Project to develop actions related to the Entomology Course with practical classes in “Field Entomology” at the same faculty, managed by professor Marcos Gino Fernandes from UFGD.
- Development of activities for the Extension Project of the Permaculture Course with prof. Walter Roberto Marschner.
- Activities related to the “Mborahéi Rapére Show - By the Trails of Singing” at the South America Festival in the Pantanal, Indigenous Dances and Performances for presentation at the 14th Festival of South America Pantanal in Corumbá-MS, coordinated by Professor Graciela Chamorro and students from UFGD.
- Actions concerning the Teaching Project (PEG) “Protected Areas in Mato Grosso do Sul, Evaluation and Decision Making”, year III, 2018 edition, coordinated by prof. Jairo Campos Gaona and participation of 40 students from the institution.

3 ANALYSIS AND RESULTS

In relation to projects and/or actions, PROEX has encouraged demands for teachers and students to develop and/or carry out their actions and/or activities in the best possible way. Furthermore, with the aim of encouraging the carrying out of actions and/or extension projects at the Bases, specific public notices are being published annually for their approval, under the responsibility of PROEX.

Accompanying, supporting and/or participating, since 2016, in various projects and actions mentioned in this Report, among others, we can affirm the countless benefits and gains that the people, populations and/or communities affected have achieved throughout this period.

The presentation of solutions to the numerous demands that come from the various communities involved has always been the focus and primary objective of all the work elaborated and carried out by the professors, researchers and students of the University, jointly - or not - with its partner institutions through their study bases. The increase in income, the improvement of life and social well-being of the people and communities impacted, are among the positive results achieved over the years mentioned in which we carried out these actions and projects, either through the improvement of its existing business or providing production alternatives.

Some examples are: training producers of honey, organic milk and natural juices; specialization of people in the manufacture of preserves and fresh fruits; teaching about individual and community gardens for fruit and vegetable production; organization of communities into associations or cooperatives; management courses for the population to learn how to better manage their businesses; entrepreneurship course for people and/or families to seek new alternatives for survival or expansion of their source of family income; alternatives or improvements in animal feed and nutrition to increase the property's production; alternatives for raising animals, fish and poultry; alternatives for new grain crops, ornamental or medicinal plants; construction of biodigesters to produce energy on the property; healthy eating and food security of the population; public health and disease prevention; sustainable production and preservation of the environment in which we live; advice for starting new businesses; among many other incentives and benefits, whether at the individual family or collective level for the general community.

These results are expressed in the participation of people participating, directly or indirectly, in the projects and/or actions developed by UFGD in its bases. The transformation of the reality of the different families reached by these actions and projects is evident and can be easily perceived by visualizing the before and after of the activities carried out in the properties or places and, also, through the analysis of the data collected later. Added to this is the impact on the training of the University's academics, who leave their comfort zones and face different realities, experiencing transformations both as professionals and as human beings.

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