

JOINT ACTIONS BETWEEN THE INTEC-INCUBATOR OF SOCIAL TECHNOLOGY AND SOLIDARITY ENTERPRISES OF UTFPR AND THE SOLIDARITY ECONOMY PROGRAM OF THE CITY HALL OF APUCARANA/PR

https://doi.org/10.56238/arev7n1-160

Submission date: 20/12/2024 Publication date: 20/01/2025

Márcia Cristina Alves¹, Fabia Regina Gomes Ribeiro², Marcelo Capre Dias³, Ronie Galeano⁴ and Wierly de Lima Barboza⁵

ABSTRACT

This article reports on joint actions carried out between INTEC – Incubator of Social Technology and Solidarity Enterprises of UTFPR and the Solidarity Economy Program of the City Hall of Apucarana. The main role of the Incubator is to support, advise, teach courses, workshops, lectures, publish articles, conduct research and monitor the incubated solidarity enterprises. The city government, through the Department of Women and Family Affairs, has supported solidarity enterprises through public policies and by promoting the solidarity economy program of the city of Apucarana. A brief review of the literature on the main topics that guided this article is presented. The methodology used by the incubator is action research, as it is participatory and interactive, and combines theory and practice to produce knowledge. The Apucarana Solidarity Economy Program is described for the reader's better understanding, and then the main actions carried out by INTEC are presented. The final considerations show the impact that the incubator has on the development of solidarity enterprises, as well as on strengthening the local economy and

¹ Doctor in Production Engineering

Federal Technological University of Paraná

E-mail: marciaalves@utfpr.edu.br ORCID: 0000-0003-1091-8221 LATTES: 2925821696721475 ² Doctor in Chemical Engineering

Federal Technological University of Paraná

E-mail: fabiaribeiro@utfpr.edu.br ORCID: 0000-0003-2836-9611 LATTES: 4616131363496919 ³ Doctor in Administration

Federal Technological University of Paraná

ORCID: 0000-0002-4824-4448 LATTES: 8283560889402441 ⁴ Doctor in Administration

Federal Technological University of Paraná

E-mail: roniegaleano@utfpr.edu.br ORCID: 0000-0002-2836-3140 LATTES: 4637282931621462

⁵ Pedagogist

Federal Technological University of Paraná

E-mail: wierly@utfpr.edu.br ORCID: 0009-0004-4390-8411 LATTES: 8283560889402441



generating income, employment and disseminating knowledge among the various actors that are part of and/or support the Apucarana Solidarity Economy Program.

Keywords: Solidarity Economy. Solidarity Enterprises. Solidarity Economy Incubator.



INTRODUCTION

After the Industrial Revolution, at the beginning of the 19th century, with the increasing number of machines entering the market and replacing the labor force, it became necessary to create an alternative that could meet the large number of unemployed people that progress generated. It was necessary to correct the problem of exploitation to which the working class was subjected and forced to work at excessive rates and in unhealthy conditions. In this context in which Europe found itself, a "new economic model" emerged, with great emphasis on England and France, as a way of helping and responding to the problems of the time, the "Solidarity Economy". In Brazil, we had the great economist Paul Singer, a professor at USP (University of São Paulo). He created the first Technological Incubator for Popular Cooperatives in 1998 at USP. He dedicated a large part of his life to spreading the solidarity economy in Brazil. In June 2003, Singer became the head of the National Secretariat for the Solidarity Economy (SENAES). He dedicated his entire life to studying, publishing, implementing and disseminating the solidarity economy. He passed away in 2018. His family recently created the "Paul Singer Institute", whose mission is to be a reference "Center" for research, debates, training and dissemination of Paul Singer's ideas, works and way of acting. In Brazil, after the 1981 crisis, when large industries filed for bankruptcy, the Solidarity Economy gained strength, becoming the alternative for defending the working class against mass unemployment, giving rise to "Cooperatives" formed by laid-off workers. In the mid-1990s, Brazilian universities began "Popular Cooperative Incubators," projects that aimed to help community groups develop by training and monitoring solidarity-based enterprises.

In recent decades, the National Secretariat for the Solidarity Economy was founded and government funding has increased. Solidarity Economy cooperatives have become more comprehensive, taking responsibility for everything from production to marketing, and have become the main form of collaboration between independent and family producers, covering both urban and rural areas.

The literature indicates that there is an increasing number of unemployed people and people living on the brink of poverty due to a lack of training and jobs. Solidarity-based enterprises seek to alleviate this disparity, providing these people with the opportunity to create new jobs, generate income, and create opportunities for them to enter the labor market. (BERNADELLI and ALVES; 2019, p.226)



Recently published research indicates that 78.3 million people in Brazil are below the poverty line, earning less than half the minimum wage per month. Welfare-based public policies undoubtedly alleviate the pain of those most in need, but like an analgesic, they do not address the causes of the pain and do not solve the problem (BERNADELLI and ALVES; 2019, p.226)

This article aims to report on joint actions carried out between INTEC – Incubator of Social Technology and Solidarity Enterprises of UTFPR and the Solidarity Economy Program of the Municipal Government of Apucarana/Paraná. Together with the Municipal Secretariat for Women and Family Affairs, the Solidarity Economy in Apucarana was consolidated with the project "Solidarity Women's Network and Female Protagonism" in 2014, empowering and training women from Apucarana to generate income through fairs and exhibitions based on the guidelines of the solidarity economy, with full support from the city of Apucarana and the women's secretariat. The creation of public policies in solidarity economy in Apucarana occurred with the creation of the Municipal Law of Solidarity Economy in 2015, this year a financial fund was created for solidarity enterprises that are consolidated. It was possible to observe during the meetings of COMSOL – Municipal Council of Solidarity Economy of Apucarana that the main obstacle faced by solidarity entrepreneurs is the lack of knowledge in management practices in various areas such as: people management, marketing, finance, accounting, production, product marketing, fair trade, conscious consumption, electronic media, agroecology and environment, ethics, social responsibility, and the importance of participation and cooperation among entrepreneurs.

Based on this premise, the main author of this article created the Solidarity Economy Incubator on the UTFPR/Apucarana campus to meet the needs of solidarity entrepreneurs. The main objective of the incubator is to advise solidarity enterprises through workshops, courses and lectures in various areas of management, to help enterprises find solutions to problems that arise and to meet, whenever possible, the demands coming from COMSOL.

The following is a brief summary literature review of the main topics that guided this work: item 2 addresses the theme of "Solidarity Economy" and its premises, the importance of "University Incubators of Solidarity Economy" in advising solidarity enterprises in Apucarana, and the importance of "Public Policies" that, when implemented by city governments, leverage solidarity enterprises; item 3 presents the "Methodology" of the



ISSN: 2358-2472

Incubator in Solidarity Enterprises; item 4 presents the "Results and discussions" on the Solidarity Economy Program of the city of Apucarana/Paraná; item 4.2 shows the actions developed by INTEC together with several actors who support the "Solidarity Economy Incubator" for the development of solidarity enterprises in the city of Apucarana; item 5 presents the final considerations and then it is possible to check all the "Bibliographic References" used in this work.

SOLIDARITY ECONOMY

In recent years, the "Solidarity Economy" movement has grown in Brazil due to government funding and as a form of collective integration to promote cooperation between independent and family producers, both in urban and rural areas. Cooperatives take shape in production, service provision, credit, marketing and consumption.

The structural changes, of an economic and social nature, that have occurred in the world in recent decades have weakened the traditional model of capitalist labor relations. The increase in informality and the precariousness of formal relationships have become a trend in a context of unemployment, leading workers to subject themselves to occupations in which their social rights are relinquished in order to guarantee their survival.

In Brazil, the solidarity economy has expanded from institutions and entities that supported community associative initiatives and through the creation and articulation of popular cooperatives, production and marketing networks, cooperative fairs, and the solidarity economy. The solidarity economy has also been receiving increasing support from municipal and state governments in recent years. In the state of Paraná, Law No. 19,784 of December 20, 2018, establishes the State Policy for the Solidarity Economy of Paraná. This law provides for the creation of a "State Council for the Solidarity Economy", which must be composed of representatives from support and development entities. However, the creation of the council is still in the process of being structured.

It is observed that solidarity economy projects are increasing in several Brazilian cities, and with this, several actions arise, such as the creation of a local currency (an exclusive bank for solidarity enterprises), training, exchange of experience, dissemination of information, spaces for the commercialization of products and the creation of incubators in public and private universities. Such initiatives strengthen solidarity enterprises and promote articulation with various actors in society through public and private institutions.



The book "Solidarity Economy: Introduction, History and Brazilian Experience" presents the theme, explaining that the great difference of the solidarity economy is that it emphasizes local production and consumption, with the aim of creating fairer, more sustainable and participatory economic systems, moving away from the conventional economic model and its inequalities. Social diversity and inclusion are valued, and opportunities are given to solidarity entrepreneurs to participate in training and develop skills through education and training programs focused on the premises of the solidarity economy (SINGER, 2002).

For SENAES (2006, p. 23), the Solidarity Economy is a set of economic activities of production, distribution, consumption, savings and credit, organized in a form of selfmanagement, which has the following characteristics: i) Cooperation: existence of common interests and objectives, the union of efforts and capabilities, collective ownership of goods, sharing of results and joint responsibility; ii) Self-management: participants in organizations exercise participatory practices of self-management of work processes, strategic and daily definitions of enterprises, and direction and coordination of actions in their various degrees and interests; iii) Economic Dimension: it is one of the bases of motivation for the aggregation of personal efforts and resources and those of other organizations for production, processing, credit, marketing and consumption; iv) Solidarity: The character of solidarity in enterprises is expressed in different dimensions: in the fair distribution of results achieved; in opportunities that lead to the development of capabilities and improvement of the living conditions of participants; in the commitment to a healthy environment; in the relationships established with the local community; in active participation in the processes of sustainable development of and territorial, regional and national basis; in relations with other social and popular movements of an emancipatory nature; in concern for the well-being of workers and consumers; and in respect for the rights of workers. The Solidarity Economy recognizes work as an educational principle in the construction of knowledge and other social relations. Thus, innovative, self-managed and solidarity-based political-pedagogical actions are based on the emancipatory perspective of transforming individuals and society.

For Culti (2009), the Solidarity Economy has been transforming itself into an efficient mechanism for generating work and income. Thus, its enterprises are formed predominantly by workers from low-income social segments, unemployed or on the verge of unemployment, informal or underemployed workers and the impoverished.



According to Carvalho et al. (2024, p. 6228),

To democratize the economy, "citizen engagement" is necessary in everyday life. Therefore, we are dealing with democratic solidarity in the field of the Solidarity Economy, when the socioeconomic experiences of the sectors of civil society, together with the State, stimulate solidarity in economic and political life, through the exercise of critical and active citizenship.

For Singer (2000), the solidarity economy is an alternative to the capitalist economy and a solution to poverty. The authors believe that the solidarity economy is a mode of production that is characterized by equality and that it is possible to organize itself in a way other than the capitalist one.

UNIVERSITY INCUBATORS OF THE SOLIDARITY ECONOMY

Universities play a fundamental role in the training/education of professionals for the development and socialization of technologies, research, incubation, management, and organization of the production process to support solidarity enterprises. For Bernardelli and Alves (2019, p.226), "In this way, they can consider the workplace of solidarity economic enterprises as spaces for learning and collaboration for research, aiming at the strengthening and survival of solidarity economy enterprises".

According to Culti (2006, p.5),

Universities have been important in supporting solidarity economy initiatives in terms of teaching, research and extension as a form of technology transfer, in theoretical development and in carrying out practical activities carried out through actions developed in University Incubators with the involvement of professors, researchers, technicians and academics. (CULTI, 2006, p.5).

Solidarity enterprise incubators are created to provide support and advice to new enterprises or strengthen existing enterprises, offering qualification courses and providing the necessary technical assistance during the period in which the enterprise is incubated. Incubators have been prominent in the incubation of enterprises, building networks for articulation and exchange of knowledge, thus strengthening all professionals working in the solidarity economy, in the development of knowledge, and in supporting government actions. According to Culti (2006, p. 36-37),



(...) incubation work is a construction/reconstruction of knowledge through the practical educational process of organization and systemic monitoring of groups of people interested in the formation of solidarity-based economic enterprises, given the need to provide technical and social support to these enterprises (...), involving workers, especially those excluded from the formal labor market or unemployed and on the verge of unemployment (...), the role of incubators in promoting the solidarity-based economy indirectly contributes to strengthening local and regional development. (CULTI, 2006, p. 36-37).

The so-called "University Incubators of Solidarity-Based Economic Enterprises" began to build social technology used in actions to generate work and income. These spaces bring together knowledge, theoretical and empirical research on the solidarity economy for professors, researchers, technicians and academics from various areas, in addition to activities to incubate solidarity economic enterprises, with the aim of serving workers who intend to organize their own enterprises, whether cooperatives, associations or self-managed companies, urban or rural. (BERNADELLI and ALVES; 2019, p.226)

In this way, partnerships with public authorities and private initiatives in the locations where the actions are developed and practiced strengthen the incubation process. University Incubators are increasingly becoming an option for workers who are starting a new solidarity enterprise, producing efficiently, and respecting the environment, with quality and competitiveness. It is worth noting that incubation is a practical educational process of organization and support. Systemic monitoring of groups of people interested in the formation of solidarity-based economic enterprises.

According to Bernardelli and Alves (2019, p.226), the guiding principles of the "Incubation Process" involve the knowledge acquired in the process of incubating solidarity-based economic enterprises, which occurs through a human action that we call work or praxis, where the exchange of knowledge occurs, which is understood as a process of knowledge production, where popular knowledge and theoretical concepts or academic/scientific knowledge of the advisor will be used as raw material, by both (educator-student) for the construction of popular and scientific knowledge into knowledge that is applicable or more appropriate to the nature of the enterprise and the cooperative worker (CULTI, 2006, p.8).

It is remarkable how this experience enriches and changes the way of teaching, encouraging the inter and multidisciplinarity that are indispensable in this collective work, in



addition to activating the association between teaching, research and extension, it enables the transfer of knowledge and technology to the community.

About communities, the workers who form their enterprises enable work and income and consequently change their way of thinking and acting, feeling safer, more respected, stronger, or empowered to interact in the society or community in which they live. This results in the status of cooperatives or associates, with autonomy to exercise self-management, gain citizenship, raise self-esteem, and restore hope through the access acquired to knowledge and technologies that universities, through their professors, researchers, technicians, and academics, transmit. The improvement in the quality of life of these workers is undeniable, as they report, they are no longer "invisible" (...) The solidarity economy is still a process under construction, which has already made great progress in the political, educational, training, organizational, production, and commercialization aspects, but there are still many discoveries to be made and a long way to go. (CULTI, 2006, p.8).

It is observed in the literature that social technology acts directly with products, processes, methods or techniques to solve a social problem. According to Dagnino (2014, p.32), social technology is a contemporary concept that refers to an innovative proposal for development (economic or social), seeking to solve problems such as demands for drinking water, food, education, energy, housing, income, health and the environment, among others.

Solidarity enterprise incubators support and advise new enterprises, strengthen existing enterprises, offering training and technical assistance during the incubation period. Incubators have stood out in the incubation of solidarity enterprises, training future professionals in the field of solidarity economy, developing knowledge and supporting government actions.

According to Culti (2006, p.5),

The involvement of universities has been important in supporting solidarity economy initiatives with regard to teaching, research and extension as a form of technology transfer, in the theoretical elaboration and in the implementation of practical activities carried out through actions developed in University Incubators with the involvement of professors, researchers, technicians and academics. (CULTI, 2006, p.5).



It is clear that an incubator focused on social technology within a university transforms those who are inside and outside it, through cooperation, slogans in solidarity economy, a win-win relationship.

PUBLIC POLICIES

The presence and active participation of the federal, state, and municipal governments in the construction of Public Policies for the Solidarity Economy is of utmost importance. The Solidarity Economy seeks to include people in associative and self-managed Solidarity Economy enterprises, promoting inclusion and economic, social, and cultural development with greater sustainability, equity, and democratization. The support of public policies provides an opportunity to break the cycles of poverty reproduction or precarious survival.

The responsibility of establishing public policies to promote the solidarity economy becomes part of the construction of a Republican and Democratic State through the recognition and existence of new social subjects, citizenship rights, and new forms of production, reproduction, and social distribution.

The Public Policies of each municipality must provide access to public goods and resources, and support solidarity enterprises in their city through appropriate instruments and mechanisms to promote and leverage these enterprises. We emphasize that the actions of Public Policies require a transversal articulation of several areas such as health, work, sustainability, economic development, hab. Citation, technology, education, credit, financing, and a place to sell products (adequate infrastructure), among others.

According to Schwengber (2008), the objectives of Public Policy are to promote the solidarity economy by: i) Contributing to the eradication of poverty, social inclusion, and gender and ethnic equity; ii) Promoting opportunities and improving working and income conditions; iii) Recognizing and promoting the different organizational forms of the popular solidarity economy; iv) Contributing to the promotion of development and socioeconomic and environmental sustainability; v) Giving visibility and expanding the legitimacy of the popular solidarity economy; vi) Creating legal mechanisms that enable the access of the popular solidarity economy to development instruments; vii) Promoting the integration and inter-sectoral nature of the various public policies that can promote the popular solidarity economy in the municipality; viii) Strengthening social participation, encouraging the organization, and social and political participation of workers in the popular solidarity



economy. The importance of creating Public Policies to foster the solidarity economy must be a construction that takes into account the reality of each municipality, its vocation, local culture, and the exchange of knowledge between the municipal government and solidarity entrepreneurs. Unfortunately, access to financing and credit for solidarity economic enterprises is extremely limited and in some sectors non-existent. There are resources available, but the barriers and requirements of the conventional financial system do not meet the reality and needs of the enterprises. The engagement of the main stakeholders is of utmost importance for strengthening solidarity enterprises and for formulating policies that serve solidarity entrepreneurs. The university, as one of the stakeholders, should support and participate in the elaboration of public policies, as well as in the formulation and approval of the municipal law on solidarity economy through its participation in the Municipal Council of Solidarity Economy. In this sense, it is worth mentioning the experiences of the Municipal Law on Solidarity Economy of Apucarana-Paraná. The Municipal Program for Solidarity Economy and Female Protagonism was established by Municipal Law No. 161/2015. Its objective is to encourage female entrepreneurship and support the creation and development of businesses from the perspective of the Solidarity Economy. The program meets the great female demand (currently male participation is growing) in the municipality through proposals and implementation of public policies aimed at gender equality, strategies to combat social exclusion, and the defense of rights. Through this program, the Solidarity Women's Network was created. By setting up their solidarity economic enterprises, solidarity entrepreneurs become protagonists of their life stories.

However, without the support of Public Policies, the consolidation of the Solidarity Economy is unfeasible, as it requires the support of several city government agencies and several public and private institutions to leverage solidarity enterprises.

It is important to understand the difference between public policy and political decisions.

Public Policy generally involves more than one decision and requires several strategically selected actions to implement the decisions made." While the political decision "corresponds to a choice among a set of possible alternatives, according to the hierarchy of preferences of the actors involved, expressing to a greater or lesser degree a certain adequacy between the intended ends and the available means" (RUA, 2009, p.19).



It is clear from Rua's (2009) statement that we need more public policy leaders than political leaders.

METHODOLOGY

INTEC - Incubator of Social Technology and Solidarity Enterprises of UTFPR/Apucarana Campus adopts the "action research" method, which is widely applied in research projects, as it is a method of gathering information and planning, with an empirical basis, in which researchers are directly involved in a cooperative or participatory manner.

Action research arose from the need to unite theory and practice, according to Thiollente (2011, p. 24), as it is a necessary path to produce knowledge, contribute to the discussion, or advance the debate on the issues addressed. "Action research" was theorized by Michel Thiollente (2011), corroborating the process of popular education developed by Paulo Freire (1987), completed by the incubation methodology developed by Farid Eid (UFScar) and Paul Singer (USP). This methodological trend aims to train actors with knowledge and civic awareness, capable of organizing work through the affirmation of the subject who can think and act individually and collectively, valuing capacities for self-management. It thus comes close to the concept of what is now called Social Technology, which includes re-applicable products, techniques, and/or methodologies, developed in interaction with communities and which represent effective contributions to the transformation of social realities. It is a strategy for building popular participation to redirect social life. Social Technology must be low-cost, re-applicable, and disseminated so that everyone can have access to it.

Action research should not be confused with a solitary process of self-evaluation, but rather a reflective practice with a social emphasis that is investigated. According to Elliot (1997, p.17), action research is a process that continually changes in spirals of reflection and action, where each spiral includes: i) Clarifying and diagnosing a practical situation or a practical problem that one wants to improve or solve; ii) Formulating action strategies; iii) Develop strategies and evaluate their effectiveness; iv) Expand understanding of the new situation; v) Take the same steps for the new practical situation.

Incubators often employ action research methods to improve their strategies and approaches to supporting entrepreneurs. As highlighted by (TRIPP, 2005), action research, due to its participatory and interactive nature, allows incubators to work closely with



entrepreneurs to identify challenges, develop solutions, implement changes, and evaluate results in real-time. This method facilitates agile adaptation to the evolving needs of enterprises and promotes an environment of continuous learning; the exchange of knowledge is essential for students, teachers, and entrepreneurs.

RESULTS AND DISCUSSION

SOLIDARITY ECONOMY PROGRAM IN APUCARANA/PR

The "Solidarity Economy and Female Protagonism Program" in Apucarana is developed by the "Secretariat for Women and Family Affairs", with support from the Secretariat for Industry, Commerce, and Employment. Since 2014, it has been promoting female empowerment and protagonism, inhibiting the cycle of domestic violence and creating opportunities for income generation. The program began with visits to churches, neighborhoods, Social Assistance Reference Centers, and door-to-door inviting women to participate. The initial objective of the program was to assist women in situations of domestic violence, but the program began to receive retired women and housewives who saw the opportunity for social interaction that the program offered, such as cooking courses, crafts, making pieces for hospitals and nursing homes, beauty and health courses, among others.

Between 2014 and 2024, the Program trained approximately 1,000 people in the perspective of the Solidarity Economy. However, not all of those trained entered the program and many have already left and set up their own business. In total, SEMAF (Secretariat for Women and Family Affairs) has 20 (twenty) employees, of which 11 (eleven) are permanent employees and 9 (nine) hold positions in commission. Six (six) employees work within the Solidarity Economy Program. It is worth noting that the city government invests in promoting public policies, not only in the Solidarity Economy Program but in other projects aimed at local society.

In December 2014, the "Women's Space" was opened, to exhibit and sell the artisanal products of women who are members of the Solidarity Economy Program, aiming at generating income, and financial autonomy and empowering women. The solidarity economy project began with 70 female participants, and today the project is open to the entire Apucarana community, not just women at risk, and men are also participating in solidarity ventures. Its goal is to encourage entrepreneurship and support the creation and



development of entrepreneurial ventures. Solidary from the perspective of the Solidarity Economy.

In 2016, Apucarana implemented the "Municipal Solidarity Economy Program" with the sanction of Law 161/2015, holding the 1st Municipal Conference on the Solidarity Economy and creating the Municipal Council for the Solidarity Economy (COMSOL). The Council is made up of public and legal entities, and it is understood that the participation of the community and representatives of solidarity enterprises is of utmost importance for the success of the program. Training the managers of the Municipal Council for the Solidarity Economy (COMSOL), dissemination, and sharing of experiences are necessary for the consolidation of a future agenda of actions to be implemented by the council (the main author of this article has represented UTFPR on the Council since 2018). In 2016, Apucarana implemented the "Municipal Solidarity Economy Program" with the enactment of Law 161/2015, which led to the 1st Municipal Conference on Solidarity Economy and the creation of the Municipal Council for Solidarity Economy (COMSOL). The Council is made up of public and legal entities, and it is understood that the participation of the community and representatives of solidarity enterprises is of utmost importance for the success of the program. Training the managers of the Municipal Council for Solidarity Economy (COMSOL), dissemination, and sharing of experiences are necessary for the consolidation of a future agenda of actions to be implemented by the council (the author of this article has represented UTFPR on the Council since 2018).

There are 13 (thirteen) spaces for the sale of products spread throughout the city and in different neighborhoods. The City Hall pays for the rent of the spaces where the products are sold, as well as water and electricity. The income obtained from the sale of the products is shared among the entrepreneurs who put their products up for sale in the spaces.

In addition to the product sales spaces, the "Fair Space" was opened in 2021. The pavilion has a covered area of 1,300 square meters. There are 80 (eighty) stalls. On Friday nights, the "Super Friday of the Solidarity Economy" takes place, where entrepreneurs from the solidarity economy program sell their products. There are 30 (thirty) enterprises in the gastronomy area; and 08 (eight) enterprises in the crafts/plants area that regularly participate in the fair; totaling 38 (thirty-eight) solidarity economic enterprises.

Another project that is proving to be a success is the "Solidarity Garden", which emerged as a strategy to promote health, inclusion, social well-being, and job and income



generation. The project is currently implemented in 41 (forty-one) spaces spread throughout the city's neighborhoods, both public and private, occupying 114,112m2 of cultivated area and serving approximately 4,127 people.

There are 11 (eleven) "Educational Gardens" set up within municipal and state educational institutions, totaling 563m2 of area. In an area of 2,521m2, we have the "Integrative Gardens" that were set up in public institutions and entities. In 177m2, the "Backyard Gardens" operate. The "Horta Solidária do Dom Romeu" has 3,142m2. All the locations where the gardens were set up have the basic urban infrastructure, with public lighting, a water supply network, and garbage collection.

The improvement of the patients who are part of the gardens is remarkable, and it is interesting to see how the solidarity gardens are arousing the interest of the residents in their surroundings; backyards and idle land have started to receive inputs and technical assistance from the city government to be transformed into productive fruit and vegetable beds free of pesticides.

The products harvested in the gardens are delivered free of charge to the employees of COCAP – Cooperativa de Materiais Recicláveis (Cooperative of Recyclable Materials) and to the NGO Maria/Maria, and the rest is sold by the producers. The places that do not have space on the ground create vertical gardens, as is the case of some UBSs.

One of the solidarity enterprises, "Sabor Funcional", won the bid to supply banana biomass and functional foods to a school in the municipality of Arapongas, for the amount of R\$80,937.40.

"Casa do Mel" is another solidarity enterprise that is doing well. They process, bottle and sell honey with a certificate of origin and sanitary standards from SIM (Municipal Inspection Service), and they also sell products made from honey.

Every week, the "Feiras nos Bairros" (Neighborhood Fairs) takes place. Each day of the week, the fair is held in a different neighborhood. There are 5 (five) neighborhoods in the city that host the fair, and the producers belong to the solidarity economy network.

The production and marketing of products come from various segments, including handicrafts, gastronomy, organic farming, beekeeping, and ornamental plants. The Solidarity Economy Program encourages solidarity entrepreneurship based on people's natural talent. It is a project that generates work and income, and is characterized as a promotion of public policies.



In order to sell products in the space In order to attend fairs and other online spaces, it is necessary to take a training course offered by the Solidarity Economy Program, which lasts five days. Each day, one or more topics are covered, focusing on the premises of the solidarity economy, such as: solidarity entrepreneurship, cooperation, social technology, public policies, how to open a company (MEI), motivation and leadership, among others. It is worth noting that the main author of this article is the coordinator of INTEC, who teaches the course on Solidarity Entrepreneurship, Motivation and Leadership in the training of new solidarity entrepreneurs.

The dates of the training are announced on the city hall's social networks and in the local press, as well as on the entrepreneurs' social networks. The Pillars of the Solidarity Economy Program are: solidarity, sustainability, self-management and economic viability. Production must be artisanal. Solidarity entrepreneurs participate in events such as street markets, tourist festivals on the municipal calendar, school events, university events, events promoted by the City Hall, philanthropic events, the production of "Octopus of Love" for the maternity hospital, Commercial Association, Class Association, among others.

The Solidarity Economy and Female Protagonism Program has a budget of R\$16,200.00. We emphasize that the support of the city government, public universities and the participation of some entrepreneurs make a difference in the success of the Program. Without the support of the city's public policies, it is practically impossible to create the various actions of the Program.

The latest survey carried out by the Solidarity Economy Network includes 94 (ninety-four) informal enterprises operating in shared public spaces, in the fair space, among others, with approximately 150 (one hundred and fifty) entrepreneurs selling their products; 14 (fourteen) businesses are located in the various public spaces provided for the Solidarity Economy Program, and 13 (thirteen) businesses are being used in a shared manner.

It is clear that the solidarity economy businesses are beginning to be profitable and are becoming consolidated and sustainable businesses. Some entrepreneurs have already left the program and opened their own businesses.



On average, each solidarity entrepreneur earns around R\$1,000.00 per month. There are currently 1,300 entrepreneurs who are part of the Solidarity Network, which means that solidarity entrepreneurs inject R\$1.3 million into the local economy.

The Solidarity Economy Program has won several awards: 1) SICOOB Institute: "Service Provided to Women", R\$2,000.00 in funding (2015); 2) ISABRASIL: "Ozires Silva Economic Entrepreneurship Award" (2016); 3) "IV Public Manager Award" of Paraná, granted to the municipal manager for the development, support and incentive to the Apucarana Solidarity Economy Program (2016); 4) The "Consulado da Mulher de Gastronomia 2017" award, the Program competed with 100 projects from 22 Brazilian states. The prize was "Consul" brand home appliances and the amount of R\$ 10,000.00 that were invested in the infrastructure of the gastronomy sales space and business management consultancy lasting 24 months (2017); 5) "ODS Seal" Award held by SESI in 2016 and 2017; 6) "Educating Cities" Award through the thematic axis of Promoting Quality of Life and Sustainability (2023); 7) "1st Entrepreneurial Cities Award", promoted by the Ministry of Economy (ME) through the Undersecretariat for the Development of Micro and Small Businesses, in partnership with the National School of Public Administration (ENAP), Brasília. Apucarana was among the last three finalists, in addition to the trophy, each of the three award categories will receive individual certificates for all team members worth R\$250,000 in cash (2023).

It was possible to verify that the promotion of Public Policies in the Solidarity Economy Program brought great results through the various awards received: job creation and income generation; emancipation of women; inclusion of people who were outside the job market; socialization and cooperation between enterprises; partnerships with universities, public and private institutions; exchange of knowledge between entrepreneurs, teachers and students, innovation through social technologies; dissemination of information. There are several actors working towards the success of the Apucarana Solidarity Economy Program.

In addition to investing in the Municipal Solidarity Economy Program, the city government, through Public Policies, supports other projects that are worth highlighting. The "Green Fair" was approved by the City Council. People take recyclable materials (paper, cardboard, glass, etc.) to the exchange point and receive in exchange a quantity of fruit and vegetable products, which the city government buys from family farmers in Apucarana, each The green market is held in a neighborhood of the city this week.



It can be seen that Apucarana's "Public Policies" do not extend only to the Solidarity Economy Program; there are other social projects aimed at the local community and low-income people. It is expected that the Solidarity Economy Program will continue to receive investments, since with the change of mayor we do not yet know whether the new mayor will continue with the various actions carried out by the Apucarana Solidarity Economy Program.

INTEC- Incubator of Social Technology and Solidarity Enterprises of UTFPR-Apucarana INTEC, the UTFPR incubator, is a major partner of the Municipal Solidarity Economy Program (ECOSOL) of Apucarana. This partnership with the government leverages the interface between the university and public policies in the city of Apucarana. INTEC was created in 2017 through an extension project with the main objective of supporting solidarity enterprises in the city of Apucarana through courses, workshops, lectures, advisory services, consultancy, creation of extension projects, publications and presentation of scientific articles at conferences, creation of new social technologies, as well as assisting enterprises in the search for solutions to problems that arise in solidarity enterprises, always respecting the initiative of a group of professionals who seek to disseminate a new way of thinking, in a fair way and respecting the environment through sustainability and the premises of the Solidarity Economy. INTEC carried out and requested several projects for UTFPR courses, which, through professors from various UTFPR-AP courses, created other extension projects. Table 1 shows the projects that were developed and/or projects that were supported by INTEC between 2017 and 2024...

Table 1 - Projects Developed and/or Supported by INTEC

Project Name	Coordinator(s)/Course	Target Audience	Activities/Period
Inclusive Fashion	Professors from the Fashion Design Technology course	Mothers of students from APAE in Apucarana/PR	- Pattern making course- Sewing and cutting course- Fashion show, with mothers and children wearing matching clothes.(2016 to 2018)
Cleaning Products and Soap	Professor from the Chemistry Teaching course	Women from the Solidarity Network	 Soap and cleaning product production using used cooking oil.(2017)
Workshops on Solidarity Economy	Coordinator of the INTEC Project and students from INTEC	People interested in joining the Solidarity Economy Program	 Courses, lectures, and workshops on various topics;- Motivation, leadership, and solidarity entrepreneurship workshops.(2017 to 2024)
Pink House	Professor from the Fashion Design courseCoordinator of	Women from the Solidarity Economy	Painted the location, planted flowers, and set up a space to



	the INTEC Project and students from INTEC	and their husbands, students, and professors from UTFPR-AP	sell handicrafts, honey, and food.(2018)
Labeling and Food Handling	Professor and students from the Food course at UTFPR Londrina	Women from the Solidarity Economy	Theory and practice of food labeling and handling.(2018)
Banana Fiber Art	Professor from the Chemistry Teaching course	Chemistry Teaching students and Women from the Solidarity Economy	Extension project to find a product that can be used on banana fibers to eliminate fungi.(2019)
Digital Entrepreneurship	Professor and students from the Textile Engineering course, and INTEC students	Women entrepreneurs in the handicraft sector of the solidarity economy	Digital communication extension project, offering courses in:- Logo design- Art and design for social media- Instagram setup(2022)
Assertive Communication Family-School	Professor from the Textile Engineering course and INTEC scholarship student	Public school teachers from Apucarana working in early childhood education	 Created a booklet on Assertive Communication- Presented tutorials on technological tools that can help in education.(2023)
Team Engagement	Coordinator and students from the INTEC Project	Members of the Junior Enterprise from the Civil Engineering course at UTFPR, Solução Jr	- How to act and structure teams- Multifunctional teams- Teamwork- Assertive communication(2023)
Technical Visit to Enterprises	Coordinator and students from the INTEC Project	INTEC students and UTFPR professors	 Main points of sale for products at community gardens, the honey house, and market spaces.(2024)
Various Workshops	Coordinator and students from the INTEC Project	Internal and external community of UTFPR	Leadership, motivation, conflicts, human relations, solidarity entrepreneurship, social technology, among others.
Source: Own authorship (2025)			

Highlights for some of these projects include the "Banana Fiber Art" Extension Project, aimed at finding a product for banana fibers to eliminate fungi, where citronella was used to treat the banana stems. The project won the award for best extension work at the "XIX Seminar on Extension and Innovation" at UTFPR in the Pato Branco campus (2019). The "Entrepreneurship in Digital" project was aimed at 13 women in the handicraft sector who were forced to adapt to sales through WhatsApp and social media during the COVID-19 pandemic, and continued to see growth through digital platforms post-pandemic. This workshop was conducted in partnership with Prof. Fábia Ribeiro, an Engineering student, and INTEC students (2022).

The Extension Project "Assertive Communication Family-School" trained over 70 teachers from public schools in Apucarana working in early childhood education. 61 cellphones were



donated to teachers participating in the course, provided by the Federal Revenue of Apucarana (2023).

Several workshops on leadership, motivation, conflicts, human relations, solidarity entrepreneurship, and social technology have been developed by INTEC students. A socio-economic survey of the solidarity entrepreneurs in the program aims to map and gather information about the enterprises and their entrepreneurs. The workshops and research will be carried out in the first half of 2025.

INTEC – Social Technology and Solidarity Enterprises Incubator from UTFPR has published a book chapter, presented at national and international conferences, and participated in various UTFPR extension seminars:

- 1. Book chapter titled "Case Study: Implementation of a Solidarity Economy Incubator at UTFPR/Apucarana Campus," in: Luan Vinicius Bernardelli (Ed.). *Economy from an Interdisciplinary Perspective*. 1st ed. Ponta Grossa: Atena Editora, 2019, v2, pp. 222-233.
- II CONPES Congress of Researchers in Solidarity Economy. Case study of a Solidarity Economy Incubator at UTFPR. 2018, São Carlos. Anais II CONPES. São Carlos: UFSCar, 2018. V.1. pp. 1-19.
- 8th SEI Seminar on Extension and Innovation from UTFPR, 2018. Solidarity
 Economy at the INTEC Incubator. Anais 8th SEI Seminar on Extension and
 Innovation from UTFPR, 2018, Apucarana. Curitiba: UTFPR, 2018. V.1. pp. 1-8.
- 9th SEI Seminar on Extension and Innovation from UTFPR, 2019. Study for fungus control on banana fibers using eucalyptus and citronella extracts. Pato Branco. Curitiba: UTFPR, 2019. V.1. This work was awarded.
- 9th SEI Seminar on Extension and Innovation from UTFPR, 2019. Social Entrepreneurship and Solidarity Economy Incubator at UTFPR. Pato Branco. Curitiba: UTFPR, 2019. V.1. This work was awarded.
- 6. 10th SEI Seminar on Extension and Innovation from UTFPR, 2020. Solidarity Economy Incubator at UTFPR. Toledo. UTFPR, 2020. V.1.
- 7. III CIESPS International Congress on Popular and Solidarity Economy and Local Development: Gathering Ideas to Delay the End of the World, 2021, Feira de Santana. Impacts of the COVID-19 Pandemic on the Actions of the Social Technology and Solidarity Enterprises Incubator of UTFPR/Apucarana Campus.



- 11th Seminar on Extension and Innovation from UTFPR, 2021. Social Entrepreneurship and Solidarity Economy Incubator of UTFPR/Apucarana Campus. Guarapuava. UTFPR, 2021. V.1.
- 9. 13th Seminar on Extension and Innovation from UTFPR, 2023. Social Technology and Solidarity Enterprises Incubator. Ponta Grossa. UTFPR, 2023. V.1.
- 10.14th Seminar on Extension and Innovation from UTFPR, 2024. UTFPR Incubator and the Future of Social Technology: Paths to Solidarity Enterprises. Francisco Beltrão. UTFPR, 2024. V.1.

All the works mentioned above were referenced in this article through citations of the authors Bernadelli and Alves (2019, pp. 222-223).

The Social Technology and Solidarity Enterprises Incubator – INTEC has good integration with the local community, the academic community, public and private educational institutions, and various companies that support the actions developed by the Incubator. The partnership with the municipal public authorities accelerates the development and maturity of the Incubator, providing solidarity entrepreneurs with guidance and training in enterprise management. INTEC has a significant differential, which is the participation of students from all UTFPR courses. In addition to participating in the Municipal Solidarity Economy Program, the Incubator participates annually in several events held by the Municipal Government: Mother's Day, Women's Day, Employability for 50+, Women Employability, monthly training for new entrepreneurs, philanthropic campaigns, and more.

FINAL CONSIDERATIONS

Considering the results of joint actions between INTEC – the Social Technology and Solidarity Enterprises Incubator of UTFPR and the Municipal Solidarity Economy Program of Apucarana, it was possible to observe that the incubator has an effective integration between the university and the community, promoting solidarity enterprises and boosting the local economy. Partnerships with various stakeholders such as solidarity entrepreneurs, educational institutions, public school teachers, junior companies, academic directories, the Municipal Government, and various municipal and private institutions supporting the incubator are essential for the success and realization of INTEC's diverse actions.

Despite the investment made by the Municipal Government (Public Policies) for the



Municipal Solidarity Economy Program of Apucarana, there are issues that hinder the creation, growth, maturity, and longevity of enterprises. Lack of capital and bank loans to start businesses and invest in production are the main obstacles solidarity entrepreneurs face.

Every semester, students enter and leave the incubator, which is the main problem the incubator faces, as students graduate, secure internships and jobs, drop out, or do not have enough time to dedicate to the incubator.

The heterogeneity of the students is one of the positive aspects of the incubator, as students from all UTFPR courses guarantee the success of the actions carried out by the incubator. Interdisciplinarity is important for finding solutions to the problems faced by solidarity enterprises.

With extremely positive results, active student participation not only promotes social awareness for societal development but also ensures that the contribution to solidarity economy continues to expand.

Some statements from women who are part of and support solidarity enterprises were highlighted: Student 1 from the soap workshop said: "I never imagined that I would one day enter a university and take a course. I feel so happy to be here. The chemistry lab at UTFPR is amazing."

The Secretary from the Secretariat for Women and Family Affairs of the Municipality of Apucarana emphasized: "Solidarity Economy is now consolidated as a municipal public policy, regulated by law, and is part of a municipal administration with a government plan focused on the community. Through specific legislation created by the mayor and approved by the city council, a council was established that has been overseeing, empowering actions, and contributing to the mobilization of resources for the program, which is now positively referenced by other municipalities in Paraná and Brazil. Solidarity economy has transformed the lives of hundreds of people in Apucarana, generating income and financial autonomy for our women."

"The project changed my life," says student 3, who has been participating in the Municipal Solidarity Economy Program for almost five years. "I want to continue in the project, taking courses and learning new techniques. The solidarity network was fundamental to my life. My self-esteem has improved."

Student 4 (a farmer) was one of the first women to participate in the project, selling organic products grown by her and her husband. "It's a beautiful project, I've reborn. I take many



courses and have evolved a lot in the network. I've met people I never imagined meeting." Student 5 says: "This social interaction has changed my life. My emotional state is completely different now."

The "Polvo do Amor" project, according to pediatrician and intensive care physician at the Sebastiana Simões Maternal and Child Hospital, states: "The octopus is one of the actions the hospital team is carrying out for better patient care, and it was possible to observe through the statements from the solidarity entrepreneurs how much the project has changed their professional and personal lives."

Through the testimonies above, it was possible to verify how engagement in the solidarity economy network has changed the personal and professional lives of these entrepreneurs. It is an educational process that transforms circumstances, the ways men and women act, and a process of knowledge construction and reconstruction for all the actors involved. Through the Incubator, UTFPR has fulfilled its role in teaching, research, and extension, bringing the community into the university while also reaching out to enterprises, bringing knowledge, developing new methodologies, generating new ideas, improving enterprise management, creating new jobs and income, and exchanging experiences.

Over the seven years of INTEC's existence, the participation and involvement of professors, technicians, and especially students in executing the various projects have made a significant contribution to the success of this work and the improvements made to public policies through municipal government support, the tireless work of solidarity entrepreneurs, and university community members.

.



REFERENCES

- Bernardelli, L. V. (Org.), & Alves, M. C. (2019). Estudo de caso: Implantação de uma incubadora de economia solidária na UTFPR/Campus Apucarana. In Economia Interdisciplinar (p. 222). Atena Editora.
- Carvalho, A., et al. (2024). Abordagem interseccional entre inovação, tecnologia e empreendedorismo na perspectiva da economia solidária. Revista Aracê, 6(3), 6226–6247.
- Culti, M. N. (2006). O desafio do processo educativo na prática de incubação de empreendimentos econômicos solidários [Tese de doutorado, Universidade de São Paulo]. USP.
- 4. Dagnino, R. (2014). Tecnologia social: Contribuições conceituais e metodológicas. EDUEPB.
- 5. Elliot, J. (1997). La investigación-acción en educación (3ª ed., P. Manzano, Trad.). Morata.
- 6. Freire, P. (1987). Educação como prática da liberdade (31ª ed.). Paz e Terra.
- 7. IPES. (2008). Incubadora de Economia Solidária [Projeto de extensão da UFRN/Currais Novos].
- 8. Rua, M. das G. (2009). Políticas públicas (p. 130). Departamento de Ciências da Administração / UFSC.
- 9. Schwengber, I. (2008). Quando o MST é notícia (1ª ed.). Editora UFGD.
- 10. SENAES. (2006). Atlas da economia solidária no Brasil 2005. Ministério do Trabalho e Emprego (MTE), Secretaria Nacional de Economia Solidária (SENAES).
- 11. Singer, P., & Souza, A. R. (Orgs.). (2000). A economia solidária no Brasil: A autogestão como resposta ao desemprego. Contexto.
- 12. Singer, P. (2002). Introdução à economia solidária. Editora Fundação Perseu Abramo.
- 13. Thiollent, M. (2011). Metodologia da pesquisa-ação (18ª ed.). Cortez.
- 14. Tripp, D. (2005). Pesquisa-ação: Uma introdução metodológica. Educação e Pesquisa, 31(3), 443–466. https://doi.org/10.1590/S1517-97022005000300009
- 15. Yin, R. K. (2001). Estudo de caso: Planejamento e métodos (2ª ed.). Bookman.