

**Practicing Integral Sustainability Values in the Context of
Low-Income Brazilian Community Gardens**
*Praticando Valores da Sustentabilidade Integral no Contexto de
Hortas Comunitárias Brasileiras de Baixa Renda*

Rosângela Míriam L.O. Mendonça – PhD – ED-UEMG

rosangela.mendonca@uemg.br

Samantha de Oliveira Nery – PhD – Energy Choice

samnery@gmail.com

Ediméia Maria Ribeiro de Mello – PhD - DeMello

profa.edimeiamaria@gmail.com

Abstract

This article presents an ongoing research-intervention program, being developed since 2017 in low-income communities in Belo Horizonte, exemplifying its details with one of its projects. Its goals are to practice sustainable actions improving the residents' quality of life: their health conditions, protagonism and collective identity. The academy is participating fostering the establishment of networks, through a participatory research-action. This involves conversation circles, workshops and collective practices, based on the principles of Systemic Design, agroecology and solidarity economy. There has been a significant transformation of the territory and learning of all involved, including the academy regarding the practice of the theoretical foundations, including some social dynamics.

Keywords: Community Garden; Integral Sustainability; Systemic Design; Agroecology; Participatory-research action

Resumo

Este artigo apresenta um programa de pesquisa-intervenção em andamento, desenvolvido desde 2017 em comunidades de baixa renda de Belo Horizonte, exemplificando seus detalhes com um de seus projetos. Seus objetivos são praticar ações sustentáveis que melhorem a qualidade de vida dos moradores: suas condições de saúde, protagonismo e identidade coletiva. A academia participa fomentando o estabelecimento de redes, através de uma pesquisa-ação participativa. Isso envolve rodas de conversa, oficinas e práticas coletivas, baseadas nos princípios do Design Sistêmico, da agroecologia e da economia solidária. Houve uma transformação significativa do território e do aprendizado de todos os envolvidos, inclusive da academia no que diz respeito à prática dos fundamentos teóricos, incluindo algumas dinâmicas sociais.

Palavras-chave: Horta Comunitária; Sustentabilidade Integral; Design Sistêmico; Agroecologia; Pesquisa-ação participativa.

1. Introduction

This article presents an ongoing research-intervention program started at the beginning of 2017 in a low-income community, the Santa Lúcia Agglomerate, in Belo Horizonte, State of Minas Gerais, Brazil. Its goals are the inclusion of integral sustainability values in this context, to contribute to the resident's quality of life by means of the formalization of their collective identity and improvement of their protagonism. In order to achieve these purposes, the Community Gardening Program (CGP) is being developed fostering dialogue and learning, while building the Esperança (Hope) Community Garden, as well as others similar initiatives in Belo Horizonte. In doing so, another important desired result is the improvement of their health conditions through good nutrition and food security and sovereignty.

In this territory, knowledge regarding urban agriculture practices involve their cultural heritage, since many of them have rural origins and have migrated to the capital city [1 p.9]. Therefore, it has been identified by the group itself, with the facilitation of our academic team, that the creation of a community garden would be a suitable approach for the existing problem that was being posed: the need for a collective action to transform a vacant area in the community, source of many problems, into a productive one as a resource for their welfare, as will be detailed next.

In order to achieve this purpose, some methodologies and tools have been combined. The Systemic Design methodology is used as a reference for sustainable principles, related to the optimization of resources (considering circularity and other strategies), valorization of local culture and resources, respect to all living forms, inclusion, accessibility, recognition of the importance of positive win-win relationships and autonomy, that in the agricultural context coincides with the values of agroecology [2–4]. The conduction of the project was structured as a participatory research-action, involving conversation circles, workshops and *mutirões* (meetings where inhabitants work together for achieving a goal), supporting the local group in its initiatives around its community garden such as the construction, planting, harvesting and distribution of their production, aiming at increasing the local quality of life.

As theoretical foundations the project is then based on: “**Integral Sustainability**”; “**Systemic approaches**” and on “**Agroecology, Food Sovereignty and Solidarity Economy**”.

Since the 1970s, sustainability has been recognized an essential value to current societies. Initially, with the focus of the depletion of nonrenewable resources being an environmental matter. As studies and global meetings developed, the understanding evolved that it was required a joint effort of all countries in improving and reconciling the three pillars of the sustainable development — environmental, economic and social. Above all, it was emphasized the importance of the respect among human beings and between them and the environment [5–6]. The term “**Integral Sustainability**” is then intended to call attention to the need of involving economic, environmental and social aspects to achieve the balance required for humanity's well-being.

For a long time, our society is failing at, using the specialized approaches, “fixing” problems that threaten human quality of life such as hunger, diseases, crimes, lack of education and housing. Systemic thinking is a way of reasoning that considers the complexity of the whole, which is coherent with the holistic approach required for integral sustainability. It is a cognitive process that leads to the capacity of perceiving, modeling and evaluating the consequences of

actions in an expanded way in terms of time and space [7]. The **Systemic Design** is a methodology of this context that puts into relation businesses from different areas, in order to balance the system and try to reach zero waste using five principles: output/input, relationships, autopoiesis, act locally, life at the center of the project [2]. It makes qualitative and quantitative analysis of the current process with its outputs and inputs; identifies its problems; and proposes a systemic model that optimizes resources (matter and energy), improves equitable relations, foster networks, value local culture and give priority to quality of life over product generation [4,8,9].

Agroecology values correspond to the Systemic Design ones, applied specifically to the area of agriculture. Its principles consider the local features, in order to preserve biodiversity, natural resources and ways of life, building an *ethos* of integral sustainability [10]. It is considered a science, as it uses principles from ecology, as well as transdisciplinary and action-oriented research, applied to agricultural and food systems; a practice as it combines the local culture, with its traditional and resilient ancestral knowledge, especially in smallholder farming systems, to optimize resources and produce healthy food with no pesticides, for the families involved in the production and for the local market shortening or even eliminating the middlemen; and also a movement as it acts against the imbalance of food availability, empowering the stakeholders in keeping **food sovereignty**, that is, defending the right of autonomy of the countries to deal with its politics and strategies of production, distribution and consumption of food, protecting the small and medium agriculture [10–13].

Aligned with agroecology, in the 1970s, emerged in Brazil the social and **solidarity economy** [14–16]. Their main principles are the social appreciation of the worker's production; the destination of economic production and technology efforts for the purpose of fully satisfying everyone's needs; the perception of the relevance of female participation for the implementation of solidarity practices; the preservation of the environment; and the option for cooperation and solidarity [17].

2. Methods

The Community Gardening Program (CGP) is composed by a series of projects and initiatives that give support to the constitution and maintenance of community gardens developed to foster dialogue and learning related to nutrition and food security, disseminating sustainability values. It is the result of the confluence of needs, interests and resources materialized as urban gardens.

The methodology of the CGP described in this article involves continuous bibliographic studies and the application of theoretical foundations presented above: the Systemic Design and Solidarity Economy principles, practicing agroecology through the participatory action-research [18], which allows the creation of a continuously reflexive and pedagogical process within the community.

The research-action methodology was chosen because its values lead to the direction of our objectives. Since its origins, it rescued values considered indispensable for the achievement of sustainable development, namely: the construction of democratic relations; the deliberative participation of the subjects; the recognition of individual, cultural and ethnic rights of minorities; tolerance for differing opinions; and the consideration that subjects change more easily when driven by group decisions [19]. Besides, it intends to introduce to the community

a process committed to the “cognitive construction of experience”, based on the “collective critical reflection” for the “emancipation of the subjects from the conditions that the collective considers oppressive” [19 p.485].

This assumes the important feature of unpredictability, due to the delegation of power to the community and the ethical posture of each researcher, who puts himself/ herself as an “enhancer subject with frailties”, and the participant as a “frailty receiver with potentialities” [20 p.491].

It was an organic process grounded in the values and principles of the group. It all began with two projects that ran initially in parallel. The first one is the LEIA (*Laboratório Ecosistêmico Interdisciplinar de Aprendizagem*) that had an experimental garden at UNA University, where workshops on sustainable relations used to take place and was closely related to the university’s Gastronomy and Architecture and Urbanism graduation courses and, also, to the master degree in Social Management, Education and Local Development. Its approach involves a participatory, collaborative and collective process, prioritizing social management, associated with solidarity economy, in addition to urban environmental and socioeconomic sustainability [21 p.136]. The second one was the Extension Courses on Urban Gardens from the Design School of the State University of Minas Gerais (ED-UEMG), used as a didactic resource and a means to communicate and practice the values of Systemic Design, as a methodological basis for design projects.

After a request from a member of the Santa Lúcia Community to one of the LEIA’s coordinators, to help them to find a solution to a vacant lot located in front of her home, that presented as a threat for their security and health (an area of geological risk, that was used as garbage dump and therefore attracted pests and illegal activities), the group structured an outreach project to work with the community, the first one from the Community Gardens Program. This outreach project, with the partnership of yet another academic institution (UFMG), was then materialized (on mid-2016) as multidisciplinary project, encompassing economy, social science, psychology, gastronomy, architecture and urbanism, design.

The first actions of the project involved the development of a research to understand the local resources and demands to define the use of that piece of land. The result was that the community would like to use that space to build a fruit and vegetable garden. This decision had the influence of the origin of many of them, who came from rural areas, where they used to grow their own food. Therefore, this practice constituted an important asset for the initiative, as the knowledge resulted from their culture, memories and traditions.

From these initial participatory steps, the actions for the implementation of the community garden are always intended to involve dialogue, cooperation, exchanges and the attraction of more and more participants to the network that would transform relations and the environment.

3. The constituted network

The initial actors were some members of the community, especially the ones living near the area of intervention and the academic group, composed by three university teams (UNA, UFMG and ED-UEMG). Before any actual intervention the representatives from the municipality responsible for the area, URBEL/ PBH (*Companhia Urbanizadora e de Habitação de Belo Horizonte*) were called to dialogue and since then are taking part of the network [22]. One year later we invited the SUSAN/ PBH (*Subsecretaria de Segurança Alimentar e*

Nutricional/ Secretaria Municipal de Assistência Social Segurança Alimentar e Cidadania) to support the development of the vegetable garden [23].

Another important member of the network is the nursery school located in front of the garden (*Creche Educacional Nascer da Esperança*). The name of the community garden was chosen by means of an activity that the teachers developed with the children and the selected one was *Esperança* (Hope), establishing the name *Esperança Community Garden (ECG)*. Besides, they have an important role in the community garden, hosting meetings of the local group and mobilizing other members of the community, thanks to their close relations with the children's parents. Two special moments of their participation were the initial *mutirão* in 2017, a joint effort to clean the space and plant the first seedlings; and the first meeting of Belo Horizonte's Community Gardens and Agroecology, in 2019, that gathered gardeners from many similar initiatives to exchange experiences [24].

4. Main Actions

The project started with the cleaning of the space and planting of some seedlings that were brought by the participants of the first *mutirão*. After that, the main routine involves the cycle of continuous cleaning and preparation of the space, increasing the area for planting, maintenance of the plants (watering, combating harmful elements), harvesting, planting new seedlings. Although they bring seedlings from their own personal circle of relationships, the new production relies mainly on the donations from SUSAN (that has a project that promotes the implementation and maintenance of production units in Belo Horizonte, through the donation of supplies), especially of seedlings and manure [25]. URBEL provides some equipment, basic infrastructure and also some technical engineering assistance.

The academic group gives continuous support to the local community. Having a WhatsApp group as an open communication channel, it dialogues and gives support to the local group with the demands that arise, be them related to relationship, supplies or infrastructure issues. For instance, it helps to mediate conflicts that arise in their daily routine and takes the local demands to other groups involved, such as URBEL and SUSAN. It also organizes periodic local meetings, always practicing the participatory research-action principles: giving protagonism to their voices and ideas, fostering social cohesion, respecting their previous knowledge of planting, using integral sustainability values and practices.

It is also important to highlight two impacting milestones of the Project. The first one was the COVID19 pandemic, within three aspects: a) the ECG was maintained and resisted bravely to this period; b) our relationship, even physically apart for a long period, was strong enough to resist and strengthen; a Whatsapp group was created (despite the initial difficulty of some members with this technology) and became this constant means of contact so useful for our nowadays activities, giving voice to each and every member; c) our connection with the community allowed us to contribute with the dissemination of information about the measures of protection against the virus regarding the use of fabric masks, by the distribution of an instructional booklet, a coloring leaflet and a jigsaw puzzle for the schools of the community [26]. The second milestone were the meetings that gathered gardeners from all over Belo Horizonte in the Community Gardens and Agroecology events, where the groups, many of them fostered by SUSAN, could meet to communicate their achievements, discuss and find solutions to common problems.

The academic group also intermediates the exchange of knowledge bringing to the community technical workshops, such as “how to identify contour lines to build the planting beds”, “how to use materials available to help irrigation”, “how to produce fertilizer using the organic waste from their household”. Regarding the acquisition of knowledge from the academy, students from a number of courses are being received in the Esperança Community Garden to make research for their academic works and are encouraged to bring back results (for instance, different composting methods).

Nowadays, the regular participants are about six families, who live very close to the community garden, together with teachers, employees and children from the nursery school. At this moment, a younger generation is approaching, having had as their first point of contact the participation of the academic group in a local event for women empowerment in the a promoted by the Belo Horizonte local administration. The actual participation of the community has then cycles of expansion and contraction, but has leaders that are resilient and actively involved from the very beginning.

In this last one year and a half, the group is trying to build a containment wall on the steepest parts of the terrain to reduce the danger of landslide that would affect neighboring houses, and would also increase the usable area of the garden. The initial plan was to build it using the social technology of tire walls, what would serve both for the function as a land contention and also as a destination (upcycling) to wasted tires. Nevertheless, its building is very strainful and physically demanding, making it a challenging task, since the group is mainly composed by older women. Besides, during a recent visit with representatives of SUSAN they have demobilized this plan, by considering more adequate that the city hall’s construction department would build a concrete containment wall, a solution whose viability is still undefined.

5. Results

All this initiative, that begun with academic internal projects and found opportunity to be extended to the society from one voluntary personal point of contact, have promoted significant changes for those involved regarding aspects of integral sustainability – change of the environment, of relations, and even economic as resources are being used to produce food with quality and low cost, contributing to the health of the ones involved. The methodology has been consolidated, having their principles validated, creating a new framework (**Figure 1**). In this sense, the actions are happening in participatory cycles of four moments (collective planning, implementation, monitoring, evaluation of the results and sharing of lessons learned) [18,19] with elements of the Systemic Design process, that are being registered through images, recordings, notes and reports.

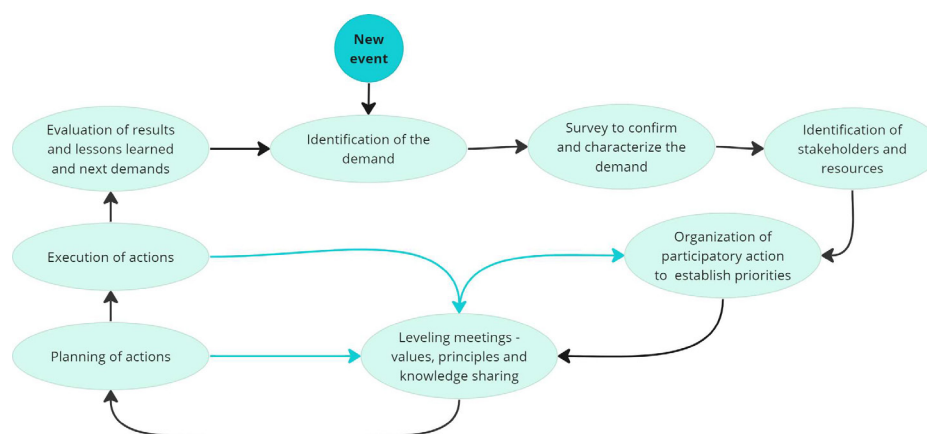


Figure 1: Methodology for sustainable community actions. Source: Own authors.

In relation to the environment, the area was effectively cleaned, some terrain level adjustments have been made and planting beds created, and more than just tackling the problems of a vacant lot in the community, creating a green productive spot. Considering the spreading of similar initiatives in the community itself, it is noteworthy that the ECG is growing as a reference.

Regarding the team, an important bond is being created. The action-research and Systemic Design principles contribute to reinforce that exchanges between academic institutions, local authorities and community should evolve naturally, without a notion of superiority, as long as everyone participates effectively in the movement and learns from each other.

6. Discussion

Urban community gardens are becoming an alternative to the large market chains, to give access to quality food, especially to the low-income population. Participants in the integrated system see community gardens also as a space of nature and peace within the chaotic urban center.

With the development of community-based, collaborative and shared work, community gardens are a way of resisting gentrification and a context for practicing partnership involving the community with their internal “specialized” groups, the private sector, the local administration, higher education institutions.

The experiences in the ECG show some typical features, as stated during meetings and with other groups. Even if the communitarian, collective quality of the initiatives is reinforced, some members still have attitudes of dominance and control of the space as almost private, willing to exercise and represent power as managers of the space and its production. Disputes about what to plant, where and how to plant; how to distribute production are frequent challenges. Whenever this takes a dimension that it starts to be perceived as a problem to the operation of the initiative, meetings should be organized to discuss how the individual can be expressed within the collective purpose of the garden.

Low-income communities have resilience as their strength. If operational disagreements arise, also solidarity is present among the members, sharing personal resources in critical

situations of their everyday life regarding, for instance, moments of illness and difficulty of communication.

Community Gardens are then a space of, besides cultivating, sharing resources, knowledge, learning to solve disputes and conflicts, organizing to plan and implement actions. Communication is being practiced involving every stakeholder.

For the academy, it is being an opportunity of sharing knowledge, practicing solidarity, putting theories into practice. The Systemic Design methodology is being an important guide to inspire propositions, but is not yet being used as a planning tool to formally prepare a project to be executed. Its principles are being transmitted and practiced as essential elements for building sustainability.

7. Conclusions

The CGP, in special the ECG, has become an important academic practice, bringing to all the participants – researchers, students, members of the community and of the public institution – new knowledge and contributing to the development of the society by using some effective methods, tools and actions, in the context of urban agriculture. It is an opportunity of practicing diversity, exchanging empiric and academic knowledge, bringing together three pillars of the society: community, academy and public administration, trying also to involve the “industry” to transform the environment.

Theories are being verified in practice. The systemic approach is proving to be very important for the broader goal of creating a context of change in order to try and solve chronic problems of our society by means of the protagonism of the community itself, which is also one of the bases of the solidarity economy.

After seven years of exchange between the participants of this network, changes have been materialized by the transformation of the area of geological risk into a productive community garden. It can be observed that the continuous cycles of the research-action methodology have been proven coherent with what happens in real life within a community, as an ongoing process of thinking, acting and trying to learn from it. The intensification of meetings and discussions are contributions of the academic approach. Nevertheless, there is yet work to be done to make the cyclic production a reality, to establish a more harmonious relationship within the group directly involved and to broaden the participating group, for them to achieve self-management and formalize it also as a possible economically sustainable activity. It is also an enduring process making the community understand the possibility and the significant value of being autonomous. It requires behavior, social and emotional changes which, in its turn, requires time, strong connections and the development of the local cohesion.

Regarding the academic research, the CGP seems to be getting near to maturity, making possible to try and approach the actual elaboration of formal Systemic Design plans, using also as strong basis the deepening on the theoretical understanding of social cohesion and its relation to sustainability. This long experience will allow us to make a model of action that could be replicated in order to disseminate the benefits of this kind of initiative to other territories. This will include a compilation of suggested best practices for spreading actions for integral sustainability as a means of improving the quality of life.

Referências

1. Costa HS de M, Almeida DAO de. Agricultura Urbana: possibilidades de uma praxis espacial? Cad Estud Cult [Internet]. 2012;4(8):1–21. Available from: <https://periodicos.ufms.br/index.php/cadec/article/view/3528>
2. Bistagnino L. Systemic Design [Internet]. 2nd ed. Bra (Cn): Slow Food Editore srl; 2011. 272 p. Available from: <https://www.unilibro.it/ebook/luigi-bistagnino/systemic-design-e-book-formato-pdf/29750742>
3. Mendonça RMLO. Systemic Network Innovation and Its Application in the Brazilian Context of the “Estrada Real” [Internet]. Politecnico di Torino; 2014. Available from: <https://iris.polito.it/handle/11583/2534088#.XDYjJVz0mMp>
4. Monteiro R, Mendonça RM, Pessoa B. Briefing: ferramenta estratégica para o Design Sustentável. Rev Transverso [Internet]. 2024;1(14):13–31. Available from: <https://revista.uemg.br/index.php/transverso/article/view/8359>
5. Meadows DH, Meadows DL, Randers J, III WWB. Limits to Growth [Internet]. 2o. Meadows DL, editor. New York: Universe Books; 1972 [cited 2024 Jan 15]. 205 p. Available from: https://collections.dartmouth.edu/content/deliver/inline/meadows/pdf/meadows_ltg-001.pdf
6. Paul BD. A history of the concept of Sustainable Development: Literature Review. Ann Univ Oradea, Econ Sci Ser [Internet]. 2008;17(2):581. Available from: https://www.academia.edu/29604734/A_history_of_the_concept_of_sustainable_development_literature_review
7. Andrade AL. O Curso do Pensamento Sistêmico. 1a ed. São Paulo: Digital Publish & Print Editora; 2014. 230 p.
8. Mendonça RMLO, Martins V. A academia na rede sistêmica de empreendimentos integrais em agroecologia. In: Mendonça RMLO, Figueiredo MCB de, editors. Economia Criativa: Práticas para Inovação e Desenvolvimento [Internet]. Belo Horizonte: Editora UEMG; 2019. p. 74–98. Available from: <https://editora.uemg.br/component/k2/item/176-economia-criativa-praticas-para-inovacao-e-desenvolvimento?highlight=WyJlY29ub21pYSIsImNyaWF0aXZhIiwZWNvbm9taWEgY3JpYXRpdmEiXQ==>
9. Mendonça RMLO, de Figueiredo MCB. EILAB, Design e Sustentabilidade: uma parceria empreendedora. An do 22º Semin Pesqui e Extensão [Internet]. 2020;46–80. Available from: <https://uemg.br/seminariospe-publicacoes/artigos?download=7172:22-p-e-caderno-de-artigos-de-extensao-2020>
10. EMBRAPA. Marco Referencial em Agroecologia [Internet]. Brasília, DF: Embrapa Informação Tecnológica; 2006 [cited 2024 Dec 10]. 70 p. Available from: <https://ainfo.cnptia.embrapa.br/digital/bitstream/item/66727/1/Marco-referencial.pdf>
11. Carlile R, Garnett T. What is agroecology? [Internet]. TABLE Expl. University of Oxford, Swedish University of Agricultural Sciences and Wageningen University &

- Research; 2021. 70 p. Available from: [https://tabledebates.org/sites/default/files/2021-06/What is agroecology_0.pdf](https://tabledebates.org/sites/default/files/2021-06/What%20is%20agroecology_0.pdf)
12. Santiago JL, Fraxe T de JP, Castro AP de, Campos JF. Agroecologia em rede e o fortalecimento da agricultura familiar. *Rev Amaz Ensino Ciências* [Internet]. 2017;10(21):12–22. Available from: [http://repositorioinstitucional.uea.edu.br/bitstream/riuea/2807/1/Agroecologia em rede e o fortalecimento da agricultura familiar.pdf](http://repositorioinstitucional.uea.edu.br/bitstream/riuea/2807/1/Agroecologia%20em%20rede%20e%20o%20fortalecimento%20da%20agricultura%20familiar.pdf)
 13. Burity V, Franceschini T, Valente F, Recine E, Leão M, Carvalho M de F. Direito Humano à Alimentação Adequada no Contexto da Segurança Alimentar e Nutricional [Internet]. ABRANDH; 2010. 204 p. Available from: https://www.redsan-cplp.org/uploads/5/6/8/7/5687387/dhaa_no_contexto_da_san.pdf
 14. Ciodaro AD de A, Mello EMR de. Um arranjo formativo em economia solidária para alunos do fundamental. *PEPSIC* [Internet]. 2018;13(4). Available from: [http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1809-89082018000400014#:~:text=Uma formação em economia solidária,uma vida saudável e digna](http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1809-89082018000400014#:~:text=Uma%20forma%C3%A7%C3%A3o%20em%20economia%20solid%C3%A1ria,uma%20vida%20saud%C3%A1vel%20e%20digna)
 15. Singer P. Economia solidária versus economia capitalista. *Soc e Estado* [Internet]. 2001;16(1–2). Available from: <https://www.scielo.br/j/se/a/Xy7BmyrV8tHfwKNVhmSXFyw/?lang=pt>
 16. Singer P. Relaciones entre sociedad y Estado en la economía solidaria. *Iconos – Rev Ciencias Soc.* 2009;(33):51–65.
 17. Fórum Brasileiro de Economia Solidária (FBES). Carta de princípios da Economia Solidária [Internet]. 2003 [cited 2024 Jan 10]. Available from: <https://fbes.org.br/2005/05/02/carta-de-principios-da-economia-solidaria/>
 18. Tripp D. Pesquisa-ação: uma introdução metodológica. *Educ e Pesqui* [Internet]. 2005;31(3):443–66. Available from: <https://www.scielo.br/j/ep/a/3DkbXnqBQyq5bV4TCL9NSH/?format=pdf&lang=pt>
 19. Franco MAS. Pedagogia da pesquisa-ação. *Educ e Pesqui* [Internet]. 2005 Dec;31(3):483–502. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1517-97022005000300011&lng=pt&tlng=pt
 20. Perdigão AC. A ética do cuidado na intervenção comunitária e social: Os pressupostos filosóficos. *Análise Psicológica* [Internet]. 2003;4(XXI):485–97. Available from: <http://publicacoes.ispa.pt/index.php/ap/article/view/8/pdf>
 21. Mello EMR de, Nery S de O, Almeida DER, Costa JD. Economia solidária e segurança alimentar: pesquisa intervenção em hortas comunitárias. In: Manaus, editor. VI Conferência Internacional de Pesquisa sobre Economia Social e Solidária - CIRIEC “Economia Social e Solidária, Sustentabilidade e Inovação: enfrentando os velhos e os novos problemas sociais” [Internet]. UFAM; 2018. Available from: <https://even3.blob.core.windows.net/processos/641c78eea4e04d419014.pdf>
 22. Prefeitura de Belo Horizonte (PBH). Companhia Urbanizadora e de Habitação de Belo Horizonte [Internet]. [cited 2024 Feb 5]. Available from:

<https://prefeitura.pbh.gov.br/urbel>

23. Prefeitura de Belo Horizonte. Educação Alimentar e Nutricional [Internet]. 2019 [cited 2024 Jan 9]. Available from: <https://prefeitura.pbh.gov.br/smasac/seguranca-alimentar-e-nutricional/informacoes/educacao-alimentar-e-nutricional>
24. ED-UEMG. I Encontro Itinerante das Hortas Comunitárias de Belo Horizonte e Agroecologia [Internet]. 2019 [cited 2024 Feb 5]. Available from: <https://ed.uemg.br/i-encontro-itinerante-das-hortas-comunitarias-de-belo-horizonte-e-agroecologia/>
25. Secretaria de Assistência Social SA e C. Unidades Produtivas Coletivas e Comunitárias [Internet]. PBH. 2023 [cited 2023 Aug 15]. Available from: <https://prefeitura.pbh.gov.br/smasac/susan/fomento/sistemas-de-producao/coletivas-e-comunitarias>
26. Mendonça RMLO, Rodrigues CS. Como utilizar máscaras de tecido – Nova versão detalhando o descarte seguro [Internet]. 2020 [cited 2020 Oct 1]. Available from: <http://ed.uemg.br/como-utilizar-mascaras-de-tecido-nova-versao-detalhando-o-descarte-seguro/>