

## **RURAL EDUCATION AND AGROECOLOGY: A HISTORICAL PROCESS OF PATHWAYS AND CHALLENGES FOR THE EMANCIPATION OF RIGHTS**

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### **1. Abstract**

This article is a product of the discussions of the Group of Studies and Research Social Movements, Diversity and Education of the Field – (GPEMDEC) in the Graduate Program of Education of the State University of Southwest Bahia (UESB) in Vitória da Conquista. Through bibliographic research, we aimed to substantiate the discussion about Agroecology and rural education among others that enabled the deepening of critical reflection on how the rural education dialogues with the principles of agroecology. Initially, Reflections on some of the historical path of the development of agroecology and rural education are presented. Finally, the considerations point out that, theoretically, the agroecology educational principles

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applied to the rural education and the rural education as a whole complement each other and serve as a basis for the construction of humanized educational practices.

**Keywords:** Rural Education. Agroecology. Human Formation.

## 2. Introduction

The present article was conducted due to the need to discuss the various themes related to rural education and agroecology in the Group of Studies and Research on Social Movements, Diversity and Field Education - (GEPEMDEC) in the Postgraduate Program in Education - PPGEd in the State University of Southwestern Bahia (UESB) in Vitória da Conquista. By means of disambiguation, in this article, the term “rural education”, according to the definition of Caldart (2011), refers to the type of school and education that recognizes and helps to strengthen the significance of the peasants as social individuals capable of helping in the process of humanization of society as a whole, with their struggles, their history, their work, their knowledge, culture and their way of living. Reaffirming the concept that “[...] A rural school is the one that defends the interests of the peasant’s farming, their abilities to build knowledge and technologies in the direction of social and economic development of their population ”(ARROYO; FERNANDES, 1999, p. 47)<sup>5</sup>. In this aspect, many studies have been carried out to make a critical evaluation of the social and cultural impacts of the modernization of agriculture in Brazil, expressed especially in the models of rural extension and agricultural education developed from the 1960s onwards (FREIRE, 2008; CAPORAL, 1998; CAPORAL; COSTA BEBER, 2002; KOLLER; SOBRAL, 2010). The criticisms pointed out how agricultural education and rural extension were used as a kind of “transmission belt” for the dissemination of technologies contained in the packages of the Green Revolution, understood here as a set of technologies generated in research centers or institutions of agricultural education in order to increase productivity, based on the use of genetically improved seeds, use of chemical fertilizers and agrochemicals, mechanization and use of irrigation (MUSSOI, 2011).

<sup>5</sup> Authors’ translation

In this perspective of making a harsh criticism in the context of the marginalization by the economic, political and social sector of the small familiar property's peasants and their knowledge and this sector's attempts of silencing these groups, other autonomous processes were also building strength and influence in the agricultural field, provided by the historical struggles of Latin America reflected on its colonial limitations and historical possibilities of liberation, this process of organic reflection/action called Popular Education represents a reorientation in the thinking and treatment of popular groups in the face of hegemonic forms that deny their place in society and their cultures, because they are based in the 'gnoseological misunderstanding' of imposing other forms of knowledge, values and ways of life onto the less privileged, denying their importance and their capacity for social innovation (Freire, 2013).

To reach the goals of a sensible articulation and institutionalization in rural education and agroecology it is necessary to build possible strategies to be addressed and implemented for the communication in universities and federal institutes and to allow a communication channel for access and permanence of the peasants' communities on these discussions on rural education. What has been observed in the course of professional and higher training courses in Agroecology is that the non-articulation of these courses to concrete processes of rural development, based on sustainable farming styles, transformative pedagogical perspectives and relations with the rural social movements, have created and maintained a distance gap with the basic concepts of the rural education.

Without a more effective participation of the peasantry in these debates and the dialogue with their interests and the resolution of the problems identified in their territory, there is a risk that they are likely to become subjects of conventional training or to lean towards only specific niches of the organic production market.

### 3. Methodology

The research was carried out through a bibliographic review in which it was possible to deepen the theoretical framework about the subject. To compose the theoretical contribution,

the works of authors who dialogue on the theme "family-workforce centered agriculture"; peasant movement; rural education and agroecology were considered, so we have: (Freire, 2008, CAPORAL, 1998, CAPORAL, COSTA BEBER, 2002, KOLLER, SOBRAL, 2010). The bibliographic research is marked by discipline, criticality, amplitude, and such characteristics make it a methodological procedure of scientific value and it is:

[...] disciplined because we must have a systematic practice - a clear criteria of choice of texts and authors. [...] Critical because we need to establish a reflexive dialogue between the theories and other studies with the object of investigation chosen by us. [...] Broad because it should account for the current "state" of knowledge about the problem - the researcher is expected to be able to say what is consensus about the subject under discussion and what is controversial (DESLANDES, 2009, p. 36, author's highlights).<sup>6</sup>

#### 4. Bibliographic Review

In order to develop an approximation with discussions about family farming, since centuries ago with the advances of the last decades of rural education and agroecology, it is necessary to present some elements of the historical trajectory that express the absence of public policies and the incorporation of the government into the most popular groups of our society, among which the peasants stand out. A profound historical survey will not be made, but important points are highlighted for understanding the issues presented over the years.

##### 4.1 The evolution of a concept of education for the small-property farmer

Before conceptualizing the rural education, it is important to draw an explanatory panorama about the origin of the concept and the history of the "rural field education" as a resistance force towards the Capital. This process has its origins in historical and social transformations that happened in an intense way in the mid-twentieth century, producing negative impacts on the peasant's<sup>7</sup> life up to the contemporary era.

<sup>6</sup> Authors' translation.

<sup>7</sup> According to the Caldas Aulete dictionary (available at <http://www.aulete.com.br/campon%C3%AAs>, last viewed in 25/03/2019) the word peasant means: 1. Person who lives and/or works in the field. 2. Individual belonging to a class or social group formed by low-income rural workers, small rural owners, etc.

The aforementioned transformations refer greatly to the relationship between the State, the Capital and the peasant's families which according to Costa (2000), are family nuclei that extract their basic needs through the use of land and Natural resources, resolving their problems of subsistence and referrals of projects that conform their family life cycle, through rural production. However, when speaking about the conformation of the idea of peasantry and capitalist structures, we cannot help but talk about state policies.

The national-development-oriented policies that begun to emerge from mid-1950 in the JK (Juscelino Kubitchek) government began to increase the role of the State to aid economic development. This State, which began to invest massively in a process of Industrialization that produced an increase in Brazilian GDP, but with poor planning such economic growth did not reach all social strata and ended up forcing a rural exodus, which happened largely to the southeastern region of Brazil. According to Furtado (1959), the expansion of agriculture in an industrial way has greatly affected the lives of peasant's families:

The private appropriation of the agricultural land, rural and urban migrations, in search of land and work, are relevant facts to the social and political history of the country. It is evident, therefore, that the lack of access to land, education and work of the rural and urban population, was not equated in the milestones of the precarious state of Brazilian law (TAVARES, 1999, p. 455).<sup>8</sup>

This context impacted the political structure in Brazil as it stimulated the birth and rise of several political parties and ideas linked to the political left<sup>9</sup>, as well as increased articulation of social movements of struggle for the agricultural land as the Landless Rural Workers' Movement -MST, as well as promoted articulations at international level such as Via Campesina in order to demand and fight for rights, as well as to confront the structures and modify the system's status quo (Queiroz, 2011). Many reforms have also been achieved, in the electoral, university and tax agendas, among others, however there are still social disputes towards the agricultural land (IDEM).

<sup>8</sup> Authors' translation.

<sup>9</sup> An ideology of the left "defends equality, who fights for a more equal income distribution, for greater social justice. Hence, belongs to the right one who does not have this goal as a priority, seeing inequality as inevitable and under many aspects, desirable "(BRESSER-PEREIRA 1997, p. 55).

Education has undergone major impacts from this process, due to the Government's concern with investing in an education that would meet the economic and social demands, a series of reforms were applied to ensure a certain "synchronisation" of the contents taught at school to attend the demands of the market and industry, which guided the governmental policies and as an example of this impact on higher education and high School we had the University Reform of 1968 and the Law of professionalization of high School in 1971 (Sobral, 2000). These reforms promoted among some phenomena, the professionalization of high School, but this reform promoted some negative effects, since it inferred a certain political-social control, for when preparing the individual directly to the requirements of the market, it hindered or avoided its access to University (QUEIROZ, 2011).

According to Gohn (2001), in this period the struggle for citizenship and social rights emerges in a very striking way, the organization of workers in social movements that fought for literacy, youth and adult education, and it is important to cite the involvement of the rural aspect in this context, when the Agricultural Families' Schools in Espírito Santo's state emerged, working with the Pedagogy of Alternation, where the students spend some in school and another period back at their communities, still developing their abilities. Still according to Gohn (2001), there were gains and losses in this period, in education and in the social field for the peasantry in general, as an example of these gains, one can cite the emergence of fundamental movements in the conquest of rights with the formation of Central Unity of Workers (CUT), in 1983, and the Rural Landless workers Movement (MST), in 1984. The MST has consolidated itself as a voice for Agrarian Reform and has an important participation in the dispute for an education that represents the desires and particularities of the needs of the peasant's family (IDEM).

As An example of the losses for the Campesinos, in the nineties, several neoliberal policies were implemented in countries such as Brazil and Chile and among these policies was a package of industrialization of agriculture and notions of development that prioritized the increase of GDP, and consequently, left little room for social policies aimed for human development (Queiroz, 2011). However, although with little influence towards rural Education, some policies were instituted, such as the creation of the Education Guidelines and Bases Act, where for the first time a proposal for education for rural areas was cited.

According to article 28 of the Education guidelines and bases' Law:

As for the provision of basic education for the rural population, the educational systems will promote the necessary adaptations to their adequacy to the peculiarities of rural life and of each region, especially: I-curricular contents and methodologies appropriate to the real needs and interests of students in the rural area; II-Personalized school organization, including adequacy of the school calendar to the phases of the agricultural cycle and climatic conditions; III-Adequacy to the nature of work in rural areas (BRASIL, 1996, p. 02).<sup>10</sup>

Having ensured in legislation a proposal aimed at the education for rural areas has become an important advancement for the recognition of the need for an educational process geared to the identity and needs of the rural areas. One of the events responsible for this consolidation was held in July 1998 in Luziânia in the State of Goiás called "For a Basic Education of the Rural Areas" and has since begun a process of struggle that worked to ensure the Rural Education and its identity and in accordance with the Operational Guidelines for Basic Education in the rural schools, according to BRASIL (2008, p. 02) is defined "by its linking to the issues inherent to its reality, anchoring itself in temporality and self-knowledge of students, in the collective memory that envisages a future."

Finally, it is noted that a proposal of education that is focused on the identity issues of the rural area has spent considerable time being despised by governmental policies, and that what has been achieved today is the result of confrontations promoted by social movements and pastorals, among other non-governmental entities (QUEIROZ, 2011).

## 5. Conceptualization of Agriculture, the Peasant in society and Agroecology

After World War II, advances were triggered in the agriculture of such an order and in such intensity, that the process on a global scale became known as the Green Revolution, a term coined by the multinational industry, given to the set of techniques responsible for a significant increase in the productivity of cultivated species. In addition, the integration of agricultural production with the respective industrial sector began to be identified as Agro industrial complex. (MÜLLER, 1989). As a result, agricultural policies continued to privilege the agro-industrial complex and large monoculture crops and the industrial sector have continued to achieve absolute priority in all official policies. (PRADO JR, 1984).

In this sense, it can be observed:

<sup>10</sup> Authors' translation.

[...] The large agricultural companies ruin the soil from which on our own existence depends, perpetuate social injustice and hunger in the world, and seriously threatens the global ecological balance. An activity that was originally dedicated to feeding and sustaining life has become an important risk for individual, social and ecological health. (CAPRA, 1998).<sup>11</sup>

With the aim at obtaining positive balance in the commercial trade market scale, agricultural policies in recent decades have produced perverse distributive effects, further aggravating the country's historical social inequalities. Throughout the twentieth century, conflicts of access to rural land increased, the efforts for the acquisition of land were structured, with the creation of unions, peasant leagues, as well as the Confederation of Agricultural workers and the Movement of Landless Rural Workers (MST), which was officially born in 1984, in the 1st National Meeting of Rural Workers in Cascavel, Paraná, with the participation of the Pastoral Commission of the Land (CPT) and some unions (WANDERLEY, 2014).

The social movements realized that in this whole process, the Brazilian working class was not expropriated only from the land, but also from all its rights, including school education (in 1920, for example, according to IBGE data, the rate of illiteracy among those older than 15 years of age was 64.90%; In the 80s, it was 25.50%). The social movements perceived that there is "a direct link between the condition of poverty, the latifundium and the social inequality with the existence of people who cannot read or write." (TIEPOLO, 2015).

With The Green Revolution, there are many studies that make a critical assessment of the social and cultural impacts of the modernization of agriculture in Brazil, especially expressed in rural extension models and agricultural education developed from the 1960s onwards (FREIRE, 2008; CAPORAL, 1998; CAPORAL COSTABEBER, 2002; KOLLER SOBRAL, 2010). The criticisms pointed out how agricultural education and rural extension were used as a mechanism for disseminating the technologies contained in the green revolution packages, here understood as a set of technologies generated in research centers or agricultural education institutions in order to increase productivity, based on the use of genetically improved seeds, use of chemical fertilizers and pesticides, motor mechanization

<sup>11</sup> Author' translation.



and use of irrigation. To achieve this goal, there was a reorientation of the extension programs, research and vocational training to incorporate and disseminate the "Modern technological packages", as a universal application, designed to maximize the yield of crops and raising of animals in very different ecological situations. Agricultural technicians, agro engineers and veterinarians, educated according to the logic of modernization, deepened the dissemination of the model based on the artificialization of Nature (MUSSOI, 2011; CAVALLET, 1999).

This process has completely changed the ways in which peasants related to their agroecosystems. In general, farmers were seen as mere deposits of technological packages, generated in research centers and agricultural higher education schools. Many centuries-old practices developed by peasant farmers were lost or abandoned due to this new way of farming, with the loss of native seeds as an example, and the necessary knowledge was also lost on how to deal with these seeds (SOUSA, 2017). This also happened with the abandoning of practices as the use of organic residues as a means of enriching the soil and other practices that farmers ceased to realize or ceased to make more visible. Toledo and Barrera-Bassols (2015) called it the loss of biocultural memory. In The schools of education in Agrarian Sciences, these wisdoms were totally ignored and in general treated with prejudice, as suggested by Van Der Ploeg (2008). Machado (2014) In a few words still states that in scale farming, agribusiness, the technician and the professional/producer only follow a recipe, a closed script, equal for all cases, and independent of the scale, the farmer is not the owner of his own business, because it does not decide, who decides is the seller of the supplies, machines and seeds, the owner of the "package".

However, in recent years, the small farming peasants, through their organizations and social movements, have reacted and have built ways of fighting and organize resistances around the world against this hegemonic perspective of disseminating knowledge, Experimenting and putting into practice countless initiatives of education, research and extension based on the principles of agroecology and precepts of rural education (SOUSA, 2015).

Thus, it is possible to identify a set of agroecological proposals and practices present in the Rural Education movement. Within the scope of PRONERA, agroecology as an innovative technical-scientific matrix assumes a central dimension in the reflections and

practices of the Rural Education movement. Also in the experiences of training in higher education there are several projects and programs that assume agroecology as the guiding axis of their educational proposals, such as the Agrarian Residency Program developed by PRONERA in the scope of MDA and, more Recently, of the Undergraduate Courses in Rural Education, with emphasis on agroecology, developed by SECADi, under the Ministry of Education and Culture (CALDART, 2010; MOLINA et al., 2009; FREITAS, 2012).

From the historical point of view in Brazil, we can say that the agroecological focus and the rural education have the same social base of initial construction – the resistance of small property peasant farmers and their reorganization process through the social movements. One of the remarkable characteristics of agroecology in Brazil is its link with the defense of peasant's family farming as a social base of sustainable rural development styles. (CAPORAL and PETERSEN, 2012)

## 6. Conclusions

The set of analysis and reflections built upon the readings about the theme of rural education with an agroecological bias and in consonance with family-based agriculture, could allow a greater understanding about the society in which we are inserted. Nevertheless, they reveal, among other aspects, that the principles of rural education and agroecology correspond to the same social historical matrix of many struggles of the social movements for a popular and humanized education, turning these movements into two fields of knowledge that have in common the struggle for agricultural land and for life, the confrontation of agribusiness, the protagonism of organizations, social and union movements, and the affirmation of the rural development project with emphasis on family-based agriculture and agroecology. Under this logic, we can affirm that rural education and agroecology both, seek to break with traditional paradigms, reassuring principles of the protagonism of family-based farming groups as producers of knowledge, researchers of their own experiences, who seek and claim for alternatives that contemplate their ways of production, their livings, their dignity, work and culture.

In this sense, the relationship between rural education and agroecology is a key point for human development, and such dialogue enables theoretical and practical changes in education. In this way, learning and teaching are not specific practices of the school space,

but they are free from the restraint of this environment and also happen outside these spaces: in churches, in rural families' union centers, in community associations and cooperatives.

Therefore, it is understood that the relationship between rural education and an agroecology-based approach is necessary for an educational project that aims to assert itself as emancipator. This relation indicates ways for liberation, for social justice, for the acquisition of rights; we emphasize that it is not easy, but with a lot of struggle and resistance, we have already advanced and some successful experiences have emerged. Finally, it is necessary and urgent to oppose, as Arroyo (2012) argues, to any form of thinking that undermines, segregates, oppresses, dichotomizes or tries to hinder the construction of a more humane society.

Thus, this discussion reaffirms the certainty that there is still a lot to learn, to discuss, to listen, to propose and, above all, to surpass the theoretical discussion and investigate if the results conclusions are reflected on the educational practices in rural schools with an agroecological approach, seeking to perceive limits and challenges to possible practical-theoretical reconfigurations of human development. All this, based on a perspective of an emancipatory rural education with the achievements and struggles that agroecology has endured and envisaged in the last few decades.

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