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Agroecology: way to reduce social and environmental inequalities and to realize the right to food

Thaisa Toscano Tanus

Salgado de Oliveira University, Law, Goiânia, Brazil; e-mail toscanothaisa@gmail.com

Introduction

Agroecology is a transdisciplinary science that combines the three dimensions of sustainability: economic, social and environmental, uniting Agriculture and Ecology (HAVERROTH, 2011). In Brazil, Agrobusiness predominates, being a model of agricultural production that is environmentally unsustainable and does not guarantee the right to healthy food to all Brazilians. Moreover, the use of pesticides causes environmental impacts and damages to human health, all this generating social and environmental inequalities (BRAUNER AND GOMES, 2019). In 2018 there were 820 million people starving, which means 10% of the world population (FAO, 2019). Therefore, the challenge of the millennium is to provide food in quantity and quality to the entire world population (VENÂNCIO, 2014).

This study aimed to seek convergent points between Agroecology, as a model of sustainable production, and the universal guarantee of fundamental rights such as healthy food, in order to reduce inequalities and to promote environmental justice.

Material and Methods

A bibliographical, documentary and legislative exploratory research was performed.

Results and Discussion

In Brazil, unsustainable practices are carried out by the intense exploitation of the environment by Agrobusiness. It appeared in the 1950's in the United States and aimed to eradicate hunger in the world by providing cheaper and more nutritious food to the population. However, this promise has not realized although Agrobusiness technologies enable greater food production in less time. This increase has not generated an equal distribution of food security among the various social groups, including the rural area, which compromises the realization of the human right to adequate food (BRAUNER AND GOMES, 2019).

The current agricultural model is characterized by a high level of specialization (monocultures) and the use of inorganic inputs, pesticides, technology, machinery, genetically modified seeds, being highly harmful to the environment and ineffective in the production of healthy and nutritious foods (VENÂNCIO, 2014). The intensive use of these inputs and inadequate soil cultivation techniques deteriorate natural resources. Biotechnology in the field has served to generate profits for companies and not to offer quality food, because Agrobusiness destroys biodiversity and indiscriminately uses agrochemicals, which are harmful to health, affecting the quality of life of rural and urban population (BRAUNER AND GOMES, 2019).

Agrobusiness benefits only landowners and multinationals, because it removes from the farmer his autonomy and his land, impoverishing him and excluding him from a system of maximum production in less time (FERNANDES, 2015). It increases the concentration of income and land in the hands of large producers and reduces the need for labor due to the mechanization of the fields, generating unemployment and rural exodus, thus increasing migration to urban centers. It also destroys forests, causes erosion and produces poisoned food. This shows the unsustainability of this mode of production (BRAUNER AND GOMES, 2019).

Originated in the 1970s, Agroecology "considers the environmental, economic, social, cultural, political and ethical dimensions and promotes the hybridization of knowledge for the sustainability of agriculture and rural development". (HAVERROTH, 2011). It allows balancing these spheres, and thus achieving social and environmental justice, by promoting sustainable, social and inclusive agricultural development. (FERNANDES, 2015). In this mode of production, economic progress is only one of the objectives to be achieved, because it seeks environmental balance by not using agrochemicals and social development by offering healthy food to the population and fair labor relations. It produces food with quantity and quality, sufficient to meet the demands of current and future generations, in addition to diversifying production and optimizing the use of natural resources. (BRAUNER AND GOMES, 2019).

Agroecology allows small and medium farmers, excluded by Agrobusiness, to be the owners of their land and independent of the market, because they do not need chemical inputs, fertilizers or fossil energy to produce, which makes the price of products more affordable and with higher productivity compared to Agrobusiness (FERNANDES, 2015). A 2007 University of

Michigan study assessed the contribution of organic agriculture to the global food supply. The results revealed that organic production methods could feed the existing population at that time, and also the future population with the current base of cultivable land. Such a study caused great repercussion in the scientific field, since it contradicted the fallacy that food produced by organic methods was not sufficient to feed the world population (VENÂNCIO, 2014).

Conclusions

Agroecology, being based on sustainability, enables the exercise of fundamental rights constitutionally guaranteed. By not using agrochemicals, it produces healthy foods with high nutritional content, and providing food to the entire population, it fulfills its socio-economical-environmental function in ensuring the exercise of the human right to healthy food (BRAUNER AND GOMES, 2019). It provides to the human being the exercise of full citizenship, as it allows the access to work, housing, health, education, culture and leisure as minimum conditions to be assisted (MACHADO *APUD* FERNANDES, 2015).

In a short term, it strengthens family agriculture, reducing social inequality and improving the quality of life of rural workers, in addition to strengthening the local economy by providing more income to small producers. It provides quality food with nutritional gain at lower prices than those of Agrobusiness products, and therefore more accessible, because it is not subject to the impositions of multinationals. In a long term, it conserves the natural environment, as it excels in the rational use of natural resources and organic products in the crops, dispensing chemical products (BRAUNER AND GOMES, 2019).

In terms of right to health, the relationship between the intensive use of pesticides and the development of diseases has already been proven: besides causing pollution and intoxication of workers and the general population, it causes risks to human health such as infertility, impotence, abortion, malformation, hormonal deregulation, effects on the immune system, cancer, etc. By not using pesticides and seeking natural environmental balance, Agroecology provides the social right to health. In terms of social right to work, it can overcome dependence on technologies from industrialized countries and enhance local agricultural knowledge, thus generating jobs and strengthening the local economy and family farming (BRAUNER AND GOMES, 2019).

Agroecology also shows positive results in the economy, as it needs a lot of manpower to implement its techniques. For the government it is much less expensive to generate jobs in rural areas than in urban areas. Therefore, the greatest investments in food production should be directed to the fields, since there would be greater economic, social and environmental return, and at the same time would enable the rural population to fully exercise its rights and participate in the country's progress (FERNANDES, 2015). It is noted, therefore, that social and environmental issues are inseparable, and that there is a close relationship between Agroecology and Environmental Justice. This helps to understand how the socio-political scenario at all levels (global, national, regional and local) can produce environmental conflicts, and thus strengthen the struggle for social justice (ZIEGLER, ROCHA, CAMURÇA *ET AL*, 2015).

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