



GABARITO DO EXAME DE PROFICIÊNCIA DE LEITURA EM LÍNGUA INGLESA 2023.2 (CHAMADA Nº 5/2023)

TEXTO I

Agroforestry: A New Restoration Horizon for Brazil's Most Degraded Forest Biome

Restoring the Atlantic Forest is one of the greatest environmental challenges in Brazil. Whilst the Amazon Forest, located Northwest, makes the news as Brazil's threatened biome, several other areas also suffer from the impacts of clear-cutting.

The forest that once stretched over most of Brazil's coast to the east is now composed of small and degraded forest patches that account for merely 7% of its original cover. Deforestation promoted by Portuguese extraction during the colonial period was perpetuated through rapid urban and agricultural advancement in the coast. According to the Brazilian Institute of Geography and Statistics, approximately 72% of Brazil's population lived in the area as of 2014.

In biomes hurt by urban sprawl and agricultural advancement, understanding the potential of solutions that integrate human and agricultural systems will help bridge the well-being of the population and the environment. That is why agroforestry has attracted the attention of farmers, researchers and policy makers in the last decade as a new horizon for forest conservation in tropical regions like the Atlantic biome.



Map indicates in light green original Atlantic Forest cover; dark green conveys reminiscent areas today.

(Reserva da Biosfera da Mata Atlântica)

Bridging forest and sustainable agriculture

Agroforestry integrates tree and agricultural ecosystems as a way to increase biodiversity, enhance soil fertility over time, and protect forest coverage. It also harnesses social co-benefits, such as increased food security, climate adaptation and income diversification. Globally, efforts to implement and research agroforestry systems are on the rise: the Global Agroforestry Network and Center for International Forestry Research are two examples of transnational initiatives. On the ground, networks like the Vale do Paraíba advance cooperation and knowledge exchange between hundreds of agroforestry farmers.

Through promotion of a sustainable and people-focused approach, agroforestry contrasts sharply with the agribusiness model that was responsible for 97% of deforestation in Brazil in 2021 alone. It emerges as an important method to break the dichotomy between forest preservation and agriculture, providing opportunity for ecological recovery and human well-being in degraded forest landscapes.

An article published in the *People and Nature* magazine in 2022 assessed family farms in São Paulo and found that farmers observations corroborate with scientific literature in reporting higher yields, decreased temperature on the farm and increased food security in agroforestry systems. Since 2012, Brazilian law has recognized agroforestry's benefits in legal terms. The Brazil's Native Vegetation Protection Law (Law No. 12,651; 2012) forecasts in Chapter X incentives for practices and technologies that "reconcile agricultural and forestry productivity, with reduction of environmental impacts, as a way of promoting ecologically sustainable development", making agroforestry an acceptable method of restoration.

Eleven years later, however, agroforestry remains largely absent from regional and national restoration plans and continues to be overlooked in agricultural policy.

A practice embraced by popular movements and NGOs

That does not mean agroforestry practice is disregarded by farmers and the non-governmental community. In 2017, small holders from the Landless Workers Movement launched a campaign to restore 400,000 hectares of Atlantic Forest through Cocoa

Cabruca agroforestry in southern Bahia. In 2021, the documentary "Cocoa and Freedom," directed by Felipe Abreu and Patricia Moll, documented the power of ecological agroforestry production in reclaiming sovereignty for the farmer community long marginalized by exploitative labor systems. The workers are now involved with pesticide-free cocoa production that preserves Atlantic forest cover, fostering a more ethical production cycle and honoring local biodiversity and produce.

SiAMA, a non-governmental body that uses agroforestry as a regional development strategy, has been training farmers, elaborating market strategies and mobilizing agricultural networks in the Atlantic region. In 2022, they published a Report on Agroforestry Experiences in Brazil that details challenges and accomplishments of agroforestry projects. Their efforts culminated in an interactive map that gathers information about hundreds of agroforestry farms across the biome, which helps situate and document the advancement of such projects in the region.

The future of agroforestry

Nevertheless, these efforts alone cannot guarantee a sustained and coordinated restoration approach. Heavy funding for agribusiness over small-scale farming is a factor hindering the success of sustainable agriculture in Brazil. Without adequate financial support, technical knowledge and governmental policies, severe challenges will remain for farms' transition to agroforestry systems and distribution of agroforestry produce.

The lack of focus on the role of people in environmental conservation is another barrier. Brazil's biggest urban centers are located in the area, and agroforestry can be a powerful tool to help citizens interact and understand the importance of forests for cities, ecosystems services such as clean air, water purification, and food. For that to happen, the government will have to step in with incentives for accessible agroforestry produce and environmental education opportunities.

During the presidency of Jair Bolsonaro (2019-2022), small farmers and issues of food security were severely overlooked, and his discourse discredited important, popular agrarian movements like the Landless Workers. As new president Luiz Inácio Lula da Silva begins his term in office following the November 2022 elections, the expectations are that governmental policy will shift toward favoring sustainable and small-scale farming, as well as forest conservation, which indicate a positive scenario for the future of agroforestry as a restoration method. This is an opportunity for Brazil, as a biodiversity hotspot and an agricultural country, to demonstrate leadership in ecological transition and social development of rural

communities, starting from its most degraded biome in the populous coast.

Source: SALGUEIRO, A. B.. Agroforestry: A New Restoration Horizon for Brazil's Most Degraded Forest Biome. *Weave News*, 24 Feb. 2023. Available at: <https://www.weavenews.org/>. Last checked: 24 Nov. 2023.

QUESTÃO 1

O texto tem como objetivo central apresentar os sistemas agroflorestais como:

- a) a principal forma de produção agrícola na região da Mata Atlântica.
- b) uma atividade econômica que possibilita grande margem de lucro.
- c) uma forma de produção agrícola bastante explorada na região Sudeste.
- d) uma forma de minimizar a degradação da Floresta Amazônica.
- e) uma estratégia para o reflorestamento da Mata Atlântica.

QUESTÃO 2

O mapa apresentado no Texto I apresenta um contraste entre:

- a) a cobertura vegetal original e a cobertura vegetal remanescente da Mata Atlântica.
- b) as regiões com maior conservação florestal e maior densidade demográfica.
- c) as regiões com altas taxas de desmatamento no presente e no passado.
- d) a produção do agronegócio e as regiões com floresta remanescente.
- e) a cobertura atual da Mata Atlântica e a cobertura da Floresta Amazônica.

QUESTÃO 3

O texto apresenta dois exemplos de organizações que têm desenvolvido práticas agroflorestais no Brasil. Quais são elas?

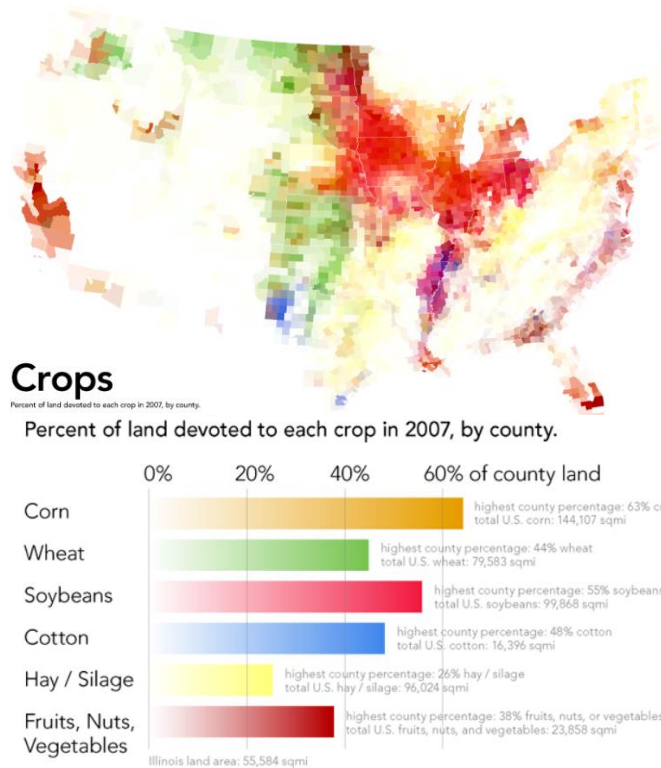
- a) IBGE e Lei de Proteção da Vegetação Nativa.
- b) movimentos sociais e ONGs.
- c) Ministério da Agricultura e ONGs.
- d) *Global Agroforestry Network* e *Center for International Forestry Research*
- e) Congresso Nacional e movimentos sociais.

QUESTÃO 4

No nono parágrafo, o termo "Nevertheless" funciona como conectivo, estabelecendo, entre duas seções do texto, uma relação de:

- a) adição.
- b) possibilidade.
- c) contraste.
- d) tempo.
- e) alternativa.

TEXTO II



Which crops are harvested where?

This map lays out where crops are being grown across the country. Many areas these days are focusing almost exclusively on one crop — a practice called monoculture. Corn covers more land in the US than any other crop. Some counties are up to 63 percent covered in corn. And second place? Soybeans. People aren't growing the stuff just for tofu, either. The majority of American soy becomes feed for livestock.

Source: <https://www.vox.com/a/explain-food-america>. Last checked: 24 Nov. 2023.

QUESTÃO 5

No enunciado “People aren't growing the stuff just for tofu, either”, o termo “stuff” faz referência a:

- a) feed.
- b) people.
- c) American.
- d) livestock.
- e) soybeans.

QUESTÃO 6

A partir da leitura do Texto II, pode-se afirmar que:

- a) a produção de soja nos EUA é relativamente baixa.
- b) a plantação de milho é a com maior cobertura em área.
- c) as áreas de produção de algodão concentram-se mais ao norte do país.
- d) a produção agrícola dos EUA é exclusivamente de monocultura.
- e) a maior parte da produção de trigo nos EUA é para produção de pães e cereais.

TEXTO III

Current status and management of coffee leaf rust in Brazil

In Brazil, coffee leaf rust, a fungal disease caused by *Hemileia vastatrix* Berk. et Br., was first detected in *Coffea arabica* in January 1970, in the southern region of Bahia state. Today, the disease is present in virtually all arabica and conilon (*Coffea canephora*) coffee-growing areas of Brazil, and continues to threaten coffee production with losses that range from 30 to 50%. The disease is usually less severe at elevations above 1,200 m, where the environment is less conducive for the rust. Disease risk is increased in arabica coffee compared to conilon, and lower production is expected in the year following an epidemic due to early defoliation and drying of branches. Several varieties were developed in the country using sources of resistance from germplasm collections in Portugal. However, very few are completely resistant, instead exhibiting various levels of partial resistance. The disease is currently managed through the use of protectant and systemic fungicides including copper, triazoles and strobilurins that should be applied following rules of decision that vary according to the risk scenario. A review of the biology and epidemiology of coffee rust in Brazil is presented and the best management practices for controlling the disease based on advances in breeding for resistance and crop protection are discussed.

Source: Laércio Zambolim. Current status and management of coffee leaf rust in Brazil. *Trop. plant pathol.*, v. 41, p. 1-8, 2016.

QUESTÃO 7

Assinale a afirmação correta, de acordo com as informações apresentadas no Texto III.

- a) A ferrugem do café atinge 30 a 50% das folhas da planta.
- b) Há mais risco de contaminação em altitudes mais elevadas.
- c) A produção tende a voltar a níveis normais um ano após a epidemia da doença.
- d) O café arábica é mais suscetível à doença.
- e) Não há variedades totalmente resistentes à praga.

QUESTÃO 8

O Texto III é um resumo acadêmico de um artigo científico. A partir da leitura, pode-se prever que o artigo:

- a) apresentará práticas de controle da doença.
- b) é resultado de uma pesquisa de doutorado.
- c) concentra-se especificamente na espécie *Coffea canephora*.
- d) foi desenvolvido em Portugal.
- e) propõe um novo tipo de fungicida.

TEXTO IV

Life stories of Sem Terra women

In this article, we analyse the sexual division of labour in the agroecological work of women living in Agrarian Reform territories in Paraná. Research data point to women's increased autonomy, 'agency' and active subjectivity. However, we identified the persistence of patriarchal sexual divisions of labour. This leads to longer working days and exhaustion of women's bodies. In addition, we identified reduced socio-political organization and migration to the realm of agroecological production and trading. These inequalities are reduced by generational factors, schooling, gender education, and countryside-city transience. Given this scenario, the feminist demand for an egalitarian sexual division of labour is relevant in the political struggle for gender, land, agroecology and decoloniality.

Source: CORADIN, Cristiane; SCHWENDLER, Sônia Fátima. Life stories of Sem Terra women. *Estudos Feministas*, v. 31, n. 2, p. 1-13, 2023.

QUESTÃO 9

O Texto IV é um resumo de uma publicação acadêmica que identificou, como principal resultado:

- a) a produção agroecológica em territórios que passaram por reforma agrária no Paraná.
- b) a persistência de divisões de trabalho marcadas por relações patriarcais no contexto estudado.
- c) as condições precárias de saúde das trabalhadoras de uma região rural do Paraná.
- d) as demandas feministas por igualdade e decolonialidade.
- e) o aumento de migrações como resultado da falta de políticas públicas por igualdade de gênero.

QUESTÃO 10

De acordo com o texto, alguns dos fatores que influenciam o problema encontrado são:

- a) decolonialidade e migrações.
 - b) escolaridade e fatores geracionais.
 - c) divisão territorial e renda.
 - d) jornada de trabalho e escolaridade.
 - e) políticas de saúde e jornada de trabalho.
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