Agribusiness and pandemic in Brazil
Is a syndemic worsening the Covid-19 pandemic?

This report analyses the COVID-19 pandemic in Brazil in the context of: 1) deregulation of sanitation, labor, and environmental systems that increase exposure to pesticides and malnutrition; 2) dismantling of health and environmental inspection structures; 3) continued dismantling of health services for both prevention and assistance; and 4) increasing understanding of chronic disorders generating a syndemic interaction with COVID-19.

Some of the facts presented in the report from recent studies in Brazil showed that:

Several pesticides used in Brazil are banned internationally. OECD and BRICS countries have already banned dangerous pesticides still sold in Brazil. In a recent study of 399 active substances, 120 substances can damage health and the environment (Friedrich et al, 2021b, one of the authors of the ABRASCO-IPEN report).

Pesticides in Brazilian food represent a cocktail of pesticide exposure in several crops. According to the latest data from the health authority (Anvisa) on pesticide food monitoring between the second semester of 2017 and the first semester of 2018, mixtures of pesticides (2 to 21 residues present) were detected in 34.6% of the samples, an only 17.0% of the analyzed samples presented a single pesticide residue.

Increased flexibility of environmental and pesticide legislation: In January 2019, one of the first government measures was the publication of Administrative Acts authorizing the registration of pesticides in Brazil, despite the existence of alternatives that are less harmful to health and the environment.

- Several products banned in the country in which they were manufactured were released, including: 2 products manufactured in France — both from BASF, indicated for cotton and corn crops, and classified as toxic to bees; 14 manufactured in China and 1 in India (authorization data in China and India are from 2015 and may be out of date). Of the 161 formulated products, 36 corresponded to mixtures of pesticides (22 indicated for soy, 20 for corn, etc.), whose synergisms and additive effects have not been evaluated by the registration bodies (Fundação Oswaldo Cruz, 2020)
- Acceleration of pesticides approval. In 2020, 494 products were authorized, totaling 997 new products in just two years. By contrast, in the six years between 2010 and 2015, 815 pesticides were registered
- Maintaining the registration of several pesticides despite evidence of their health and environmental toxicity because of strong lobbying from pesticide producer companies. The report provides detailed examples of how health authority Anvisa decided to maintain the registration of glyphosate, 2,4-D, thiram, abamectin, and paraquat in Brazil.
• **Maintaining the package of tax reductions and exemptions** that include tax waivers and exemptions related to pesticides, privatizing the profits and socializing the burden associated with the use of pesticides.

• **Reduction of pesticide aerial spraying limits.** In April 2020, MAPA allowed aerial spraying of agricultural fungicides and mineral oil on banana crops, reducing the minimum safety distance from neighborhoods, cities, towns, and villages from 500 to 250 meters.

• **Weak review of the Water Potability Ordinance.** The 27 pesticides defined in the ordinance for monitoring purposes do not include those most used in Brazil, such as Glyphosate and 2,4-D. Of the 27 pesticides defined, 21 of them are on PAN’s list of highly dangerous pesticides.

• **Authorization to burn pesticide residues in cement kilns** used for cement production, such as organochlorine pesticides, classified as persistent organic pollutants, which have a high capacity to bioaccumulate in living organisms and to remain in the environment for long periods, despite a resolution to stop it by the National Environment Council (Conama) in September 2020.

The report summarized the outcomes of epidemiological studies conducted in Brazil. Those people exposed to pesticides experience effects (neurological, metabolic, genetic damage, and cancer) that make them more vulnerable to the worst clinical prognoses of COVID-19.

The report argues that it is clear that metabolic disturbances, including obesity and a biased immunological system, interact and increase the vulnerability to the effects of SARS-COV2 exposure.

The report concludes that:

• In 2020, more than 200,000 Brazilians died of COVID-19 — at least twice as many as expected in a country with such a young population — and mortality rates show huge social class disparities. This is primarily due fewer protections and higher rates of virus exposure, but there are reasons to believe that the health effects of the intensive extraction and industrialized agribusiness through at least three different pathways might aggravate both exposure and vulnerability to zoonotic disorders like COVID-19: The intensive use of pesticides influences the immunological system; industrialized farming increases the risk of new zoonoses; and industrialized food production promotes obesity and the vulnerability to COVID-19. The social disparities in both obesity and COVID-19, and the fact they interact make them a *syndemic* – i.e. interacting epidemics.

• The impact of coming pandemics might therefore be mitigated by making agribusiness more environmentally sustainable. However, several changes in Brazilian policies in health, agriculture, and environment indicate that the situation is currently moving in the opposite direction.
Launch The report “Agribusiness and the pandemic in Brazil: is a syndemic aggravating the Covid-19 pandemic?”,
Date: May 27th, 4pm (Brasilia Time) On TV Abrasco, on YouTube:

Contact for interviews: Hara Flaeschen – Abrasco Journalist
hara@abrasco.org.br +55 21 965622292