

Brazil

“Koronivia Joint Work on Agriculture. Workshop on Improved livestock management systems, including agropastoral production systems and others”

The past two decades have been truly transformational for Brazil’s agriculture. Please allow us to briefly talk about how Brazilian farmers managed to get where we are and propose a reflection on the data shown and the space for us to collectively think about how we could move forward as a united Koronivia Family under the UNFCCC.

The technological development that we can see today in Brazil’s livestock systems has demonstrated that from 1990 to 2016 beef livestock productivity increased with an improvement of 7.6% in digestibility, while controlling the intensity of GHG emissions, resulting in a reduction of over 8% of enteric methane emissions per animal unit. Further elements are available on the Brazilian submissions forwarded to the UNFCCC process¹.

To get to the point where we are today, with the agronomical understanding regarding production systems and elements such as animal and plant genetics, digestibility, animal welfare, early slaughter among many others including ecology, meteorology, and socioeconomy, Brazil had to endure challenges that are common to many developing countries and still remain relevant today for farmers around the globe. During the 70th and early 80th Brazil was a food-insecure country, we could not produce food to feed our population, despite our large geographical area and agricultural heritage.

The development of technologies and practices based on tropical agriculture coupled with adequate indicators were responsible for significant leaps in productivity. To shift from this conundrum, we invested in our researchers and encouraged our farmers to adopt scientific-based technologies and practices tailored to our diverse types of tropical agricultural systems in particular sustainable intensification; interaction between plants and microorganisms, that resulted in the decrease of chemical nitrogen fertilization demand in pastures; in addition to all

¹ <https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202004231918--Koronivia.Brazil.pdf>

the benefits of integrated production systems (ICLF). Together we have advanced and matured a national policy on climate change and a sectoral policy on adaptation and mitigation of agricultural greenhouse gases, the ABC Plan.

With the ABC Plan, we were able to improve public awareness regarding climate change and how agriculture could play a major role in face of the challenges. The adoption of modern agriculture technologies demonstrated that productivity could be coupled with sustainability and therefore delivering food security while also contributing with other bioproducts such as biofuels and biomaterials that significantly reduce the pressure for the use of fossil fuels and other hydrocarbons products.

We also believe that we need to strive to consolidate livestock's importance on food security, nutrition, and biodiversity. And secondly, to demonstrate that sustainable practices' adoption increases the positive interactions between the environment and livestock production.

Livestock often occupies areas of pastures non-convertible to cropland and play an important role in turning co-products into edible goods or in turning edible crops into nutritious and protein-rich food. Furthermore, research demonstrates that modest improvements in feed use efficiency can reduce land expansion as demand and production grow. As for livestock's greenhouse gas emissions, studies show the need to differentiate methane from animal origin, on the one hand, from CO₂ and methane emitted by combustion, extraction and transport of fossil fuel, on the other.

According to the IPCC report on Land efficient solutions in livestock production need to be scaled-up. It is crucial that evaluations and policies are adequately tailored to different production systems, climate and local contexts. When it comes to sustainable practices, it is important to recognize the expressive improvements brought by food production systems such as agroforestry systems. These systems have the potential to simultaneous contribute to the adaptation of adverse impacts of climate change, combating desertification, fighting soil degradation promoting food security and enhance agricultural systems ability to control emissions.

The ABC Plan has completed 10 years of execution in 2020 and a new phase is in full swing to start as early as 2021. Based on the lessons learned the next phase of the ABC Plan will consider three fundamental pillars: Adaptation; Integrated Landscape Approach and Conservation Agriculture. These pillars consider that the management of agricultural production systems take into account other elements of the rural landscape at different levels and scales and continue to encourage the adoption and maintenance of sustainable agriculture.

So, it is evident that Brazil has made a huge effort to implement a sectoral policy on climate change and agriculture, specially over the last decade. But here we want to use this opportunity to highlight the key role played by UNFCCC discussions related to agriculture gearing them to focus on food security and the particular vulnerability of the agriculture systems that later materialized in the Koronivia process. We in Brazil have been following very closely the entire process, making sure that our internal policy would actively interact and feed on the international discussions under the UNFCCC.

We definitely think that it would be very helpful to the UNFCCC discussions related to agriculture to also feed on the experiences accumulated at country level. Discussions under the UNFCCC provide support and technological clarity for countries' policies that ultimately will always be the appropriate place to effectively evaluate their local circumstances, needs and priorities for implementing scientific adequate action at the local level, taking into account the diversity of agricultural practices and systems, local populations, climate variations and much more.