Agriculture

HOW TO FEED THE WORLD IN A TIME OF PANDEMIC AND CLIMATE CHANGE

Business & technology

COVID-19 DETECTION THROUGH MEANINGFUL PARTNERSHIPS, THE CASE OF XOOR AND VIRUFY.ORG

Environment

YAGUARETÉS NOW ROAM FREE IN THE IBERÁ PARK IN CORRIENTES PROVINCE

# ARGENTINA IN FOCUS

EMBASSY OF ARGENTINA, WASHINGTON, D.C.

LAMAS BREEDING IN JUJUY

FEBRUARY 2021 // NEWSLETTER

#### AGRICULTURE | ARG IN FOCUS



Minister of Agriculture, Livestock and Fisheries, Luis Eugenio Basterra

## HOW TO FEED THE WORLD IN A TIME OF PANDEMIC AND CLIMATE CHANGE

By Luis Basterra, Minister of Agriculture, Livestock and Fisheries of Argentina

In Argentina we are deeply saddened by the devastating level of human loss and suffering due to the health impacts caused by the COVID-19 pandemic and also very concerned about its socioeconomic consequences.

As countries strive to contain this unprecedented crisis, we want to recognize the essential role played by the food and agriculture sector and express our profound appreciation to all those that continue working all along the food chain during the pandemic to provide us with food and agricultural products.

The pandemic's impact forces us to rethink about the world we live in and how to address the complex challenges of feeding a global population, one experiencing a rapid demographic growth.



Once again, I share with you the latest edition of our Embassy Newsletter. This edition includes an article of how to address the challenges of feeding a global population after the pandemic's impact, written by Luis Basterra, Minister of Agriculture, Livestock and Fisheries of Argentina.

This issue also includes an interview with Mauricio Payetta, CEO of XOOR, on the collaboration project with a U.S. nonprofit to detect COVID-19 through a smartphone.

Finally, an article on the 10 years efforts to return the jaguar (yaguareté) to Iberá in the Corrientes province, after 70 years of being one of the endangered species.

Jorge Argüello Ambassador to the United States

#### AN AGRICULTURE BASED ON SOCIAL JUSTICE, COOPERATION, SOLIDARITY, THE ERADICATION OF HUNGER AND POVERTY, SUSTAINABILITY AND EQUITY SHOULD GUIDE OUR WORK IN THE COMING YEARS.

To do this, we must bolster a balanced development of the global food system that, besides promoting efficiency and productivity, takes into account environmental sustainability. Producing healthy, safe, and nutritious food that enables making progress in the fight against hunger increasingly requires caring for the planet and a deep commitment to mitigate the effects of climate change.

The post-pandemic world must be substantially different from the one we will be leaving behind. This means agriculture with new conceptions based on social justice, cooperation, solidarity, the eradication of hunger and poverty, sustainability and equity should guide our work in the coming years.

For us to advocate together for a more humane world, we need the State to play a strategic role, building a renewed social agenda that places human capital and solidarity at the center of inclusiveness.

At the international level, cooperation should focus on reducing the current asymmetries between countries and the deterioration of the terms and conditions of trade. In 2019, the Ministers of Agriculture of Argentina, Brazil, Canada, Mexico, and the United States created the Western Hemisphere Agriculture Group or Ag5, in order to work together to defend world food security and agricultural trade, based on sound scientific principles and risk analysis.

At the Ag5 we attach particular importance to innovation and technological developments, including those adapted for small producers and include knowledge of family farming. Likewise, we are committed to achieving sustainable food systems that guarantee access to healthy diets.

The members of the Ag5 represent 35% of world exports of agricultural products and for us it is important to maintain trade flows, and avoid measures that unjustifiably restrict trade, in order to keep markets open and guarantee world food security, especially for the most vulnerable.

As we continue to cope with the effects of this crisis, agriculture remains vital to ensure the availability of safe and nutritious food around the world. Ag5 members have taken all necessary measures to keep the food supply chains operational, ensuring the continuous production and distribution of quality products, while at the same time safeguarding the health and well-being of this sector's workers. Our partners can count on us for safe, high-quality food.

At the Ag-5 we are strongly committed to the sustainability of our agriculture, without losing sight of the fact that the responsibilities faced by the different countries are not the same and therefore, the format and pace of a possible transition must be attuned to the reality and historical responsibility of each country.

INNOVATION AND TECHNOLOGICAL DEVELOPMENT WILL BE ESSENTIAL TO ENSURE THAT FOOD SYSTEMS DEVELOP SUSTAINABLY IN ORDER TO FEED A GROWING WORLD POPULATION.

Argentina and the Ag5 members will continue working with our partners and the relevant regional and international organizations to exchange information, improve coordination, and strengthen our global response to this crisis.

As we look at the aftermath of this pandemic, we recognize that agriculture will be an important driver of economic recovery. Innovation and technological development will be vital to ensure that food systems develop sustainably in order to feed a growing world population. How we emerge from this crisis will be our greatest legacy for food security in the future. The principles of cooperation, sustainability and solidarity must guide us in the years to come if we wish to live in a more equitable world. It is important to remember that peace refers not only to the absence of conflict but is the result of more prosperous and egalitarian societies achieved through the sustainable development of all countries.

Sunflower culture



### A PARTNERSHIP TO DETECT COVID-19 THROUGH A SMARTPHONE: THE CASE OF XOOR AND VIRUFY.ORG

In the age where data analysis is the key to solving challenging problems and creating better decision-making, looking for partnerships that bring value to society are imperative. Different case studies keep growing all around the world as it becomes evident the need for new public resource utilization and extended access to solutions for underserved populations.

Considering that the COVID-19 pandemic has affected societies as a whole, the quest for joint solutions and collaborative models has emerged to prompt innovation. When we found a case study that connected an Argentinean company and a U.S. nonprofit, Argentina in Focus knew the importance and relevance of portraying this example for our weekly readers. This is the case of an Argentinean app and web development company named Xoor, coming straight from Mar del Plata's beach city, and the nonprofit Virufy.org, which runs on a volunteer work base. Both parties bring their own expertise to the project, Virufy.org developed the algorithm that can diagnose COVID-19 from cough patterns rapidly and at no cost through a smartphone (based research, code and information published in the following link). Xoor, has created the "Progressive Web Application (PWA)" that records the user's cough and submit the data to the Virufy artificial intelligence (AI) engine. This PWA gives the user freedom because they don't have to download the app, install it, and make the process seamless and fast.

This project is crowdsourced and the result of an interdisciplinary effort, being part of Stanford's COVID-19 Response Innovation Lab. Together with Xoor other partners join this effort, such as Hacking 4 recovery, Siena Company from Brazil, and JIG from Japan. The project is now in the study phase, collecting sample from all over the world to train and use the Artificial Intelligence architecture.

COO Manuel Massud (Left), CEO Mauricio Payetta (Ctr) & Jonatan Jaskilioff



THE PROJECT IS NOW IN THE STUDY PHASE, COLLECTING SAMPLE FROM ALL OVER THE WORLD TO TRAIN AND USE THE ARTIFICIAL INTELLIGENCE ARCHITECTURE.

So far, the AI engine can distinguish between COVID-19 coughs and several types of non-COVID 19 coughs with over 80% accuracy.

Argentina in Focus interviewed Mauricio Payetta, CEO of XOOR, to know more about the initiative and the collaboration model:

## Argentina in Focus: ¿Can you tell us about the origin of this partnership with Virufy?

**Mauricio Payetta:** Six months ago, Amil Khanzada, CEO of Virufy, contacted us. He briefly explained his idea and that he was looking for partners. For the very first moment, we knew we needed to be part of this project because we realized that it could have a worldwide impact. Since that very first call, we have been working together, and we expect to keep on working with them and the other partners.

## AIF: Right now, there is available a PWA. Is this the MVP? What are the next steps?

**MP:** The PWA is the final app for the sample collection. All machine learning (ML) systems have a strong relation with Data, the "learning enabler".

This first PWA works with coughs that people donate to us around the world. With this, we build our initial sample. We will use the information to train the algorithm, and in a second phase, we expect it to diagnose the presence or not of Covid-19. The next step is the development of a diagnosis app that the algorithm will execute. This diagnosis app will detect other respiratory conditions or diseases that create a specific print in our throats and lungs. We are planning an extensive use. That is why we are working on the infrastructure and legal framework, focusing on Covid-19 and considering other respiratory conditions.

#### AIF: With this pandemic, do you think business models are moving into faster, more collaborative forms to have seamless and more effective responses?

**MP:** Undoubtedly. Nowadays, connectivity incentives and encourages partnerships, and this is how we get most of our partners and clients. The pandemic has accelerated the process and has demonstrated that fast solutions equal finding the right team. Virufy is a clear example of this, where organizations and people from more than 20 countries have worked jointly to make progress in a brief period. This joint work aims to find solutions to change people's lives quickly and build a platform of solutions for the long run.

## AIF: What are the plans for Xoor in the U.S. market?

**MP:** The U.S. has always been our primary market. This year we have created a joint venture with a former client to improve our outreach and commercial presence. This strategy will help us grow and position ourselves as nearshore providers. We are always looking for new challenges. The case study with Virufy is one of our testimonials on this.

If after reading this artic you felt inspired by the initiative, go to this link and help the algorithm learn: https://virufy.org/app/welcome



Karai & Porã // Photo Credit: Matias Rebak

## YAGUARETÉS NOW ROAM FREE IN THE IBERÁ PARK IN CORRIENTES PROVINCE

After more than 10 years of efforts, and 70 years as an endangered species in the Province of Corrientes, the jaguar (yaguareté) once again roams freely in Iberá, as reported by the National Park Administration, the Province of Corrientes, and the Rewilding Argentina Foundation.

The project is unique and unprecedented. For the first time throughout the world, an attempt is being made to return this great feline to an environment where man had exterminated it.

The first to emerge from the huge pens of the Jaguar Reintroduction Center in Iberá Park were the cubs Karai and Porã, born in mid-September 2020, and their mother Mariua.

The family now wanders at ease in the Corrientes wetland where this animal once reigned and where, if all goes well, it will once again dominate the landscape.

The return of the jaguar to Corrientes is a decision made by the Argentine State and the Corrientes Province, and was undertaken with the collaboration of the Rewilding Argentina Foundation, which has already reintroduced in Iberá (or is in the process of doing so) other species such as pampas deer, giant anteaters, red macaws, giant otters, and the collared peccary.

However, the project could never have come about were it not for the involvement of the

#### THIS OCCASION WILL BE RECOGNIZED INTERNATIONALLY AS AN ACHIEVEMENT BY CORRIENTES THAT RETURNS TO THE ECOSYSTEM A KEY SPECIES FROM AN ECOLOGICAL POINT OF VIEW.

people of Corrientes in general, and the inhabitants of Iberá in particular. Jaguars represent a remarkable part of the culture of these lands and the people of Corrientes are associated with the bravery, pride, and free spirit of this magnificent animal. Undoubtedly, this event will be recognized internationally as an achievement of Corrientes, that returns to the ecosystem a key species from an ecological point of view by returning to the ecosystem an ecological key species which is also a cultural icon that will help keep the spirit of the estuaries alive.

The announcement of this release was made by the Minister of Environment and Sustainable Development of Argentina, Juan Cabandié, who stated, "Today we took another great step for the preservation of the jaguar in Iberá. Mariua, Karai and Porã were released and are now in their natural habitat. Caring for the jaguar is everyone's responsibility." Cabandié also recalled that the jaguar became extinct in this region 70 years ago.

Gustavo Valdés, Governor of Corrientes, highlighted the global significance of this release and the importance of the return of the jaguar for the local economies of Iberá. And he added: "The jaguar is synonymous with local development, genuine employment, and booming economies that are revitalized thanks to naturebased tourism in the Great Iberá Park. For her part, Sofía Heinonen, executive director of the Rewilding Argentina Foundation, pointed out that "the United Nations Organization (UN) has declared the period 2021-2030 as the Decade on Restoration, and in Argentina it could not have started any better, by reintroducing for the first time in Latin America a top predator that we had almost made extinct. The damage we have done to natural ecosystems is of such magnitude that the UN stated that traditional conservation is no longer enough to protect what is still standing. The time has come to recover lost environments and species, and that is what Rewilding is all about."

The jaguar is the largest South American carnivore and has suffered an alarming decrease in the last two centuries. In Argentina it has lost more than 95% of its territory and only between 200 and 300 individuals have survived. This species is classified as "Critically Endangered".

Sebastián Di Martino, Conservation Director of Fundación Rewilding Argentina, points out that "Top predators are key species in ecosystems. When they disappear, natural environments degrade and even collapse. And that is when environmental crises such as climate change, water and air pollution, loss of soil or the appearance of pandemics begin to intensify. Returning the jaguar where it has become extinct is related to our own survival."

The dream of creating a great national and provincial park began more than 20 years ago, and the return of the jaguar has represented 10 years of intense work. In Heinonen's words "This is just beginning; we are on the right track, with the national government and the province of Corrientes leading the recovery of our environments, which is important to highlight. But there is still a lot of work ahead."



Mariua, Karai & Porã realease

THIS BIG CAT REPRESENTS A REMARKABLE PART OF THE CULTURE OF THESE LANDS AND THE PEOPLE OF CORRIENTES ARE ASSOCIATED WITH THE BRAVERY, PRIDE, AND FREE SPIRIT OF THIS MAGNIFICENT ANIMAL.

"Today is a day of celebration, a historic day for conservation in Argentina. The return of the jaguar is a symbol of the recovery of what we have lost, and the Rewilding Foundation has to set the conservation agenda from now on."

Meanwhile, oblivious to such repercussions, the family made up by Karai, Porã and Mariua wanders throughout the wild domains where their species once reigned and where today, thanks to the efforts of many, it is now returning.

Facebook: ARGinUSA Twitter: ARGinUSA Instagram: ARGinUSA Flickr: /photos/ARGinUSA arginfocus@embassyofargentina.us eeeuu.cancilleria.gob.ar