



he waters of the Tebicuary River, in the Yuty area, Caazapá, were a source of food and sustenance for fishermen, at least until a decade ago. After the installation of the rice fields along the riverbank, the fish population decreased yearly, to the point that in 2020, with luck and ingenuity, they were getting but a fifth of what used to get.

The Dorado and Surubí, the gold pieces for all freshwater fishermen, are no longer found in this river because fish fauna of Tebicuary Basin is being destroyed. One of the main causes is extraction of water for rice fields. Now species that are usually taken are mbatás or bogas, small species which are already becoming scarce.

Matilde Ferreira, president of the Yuty Fishermen's Association, which brings 63 formal fishermen together, says that fishermen in the area of influence do not lose hope that after the 2020 fishing season they will be able to increase their average number of pieces, but the water level is so low that they are aware that the pit will not be compared to previous years.



## **FACTSHEET**

**CASE:** Extraction of water for irrigation in rice fields of the Tebicuary River

LOCATION: Yuty.

**SUBJECT/HUMAN RIGHTS AFFECTED:** 3- Universal
Human Rights / 3.1- Water

## JUDICIAL/GOVERNMENTAL/ INTERNATIONAL CASE STATUS:

MADES, Ministerio del Ambiente y Desarrollo Sostenible
[Ministry of the Environment and Sustainable Development]; administrative summaries; sanctions, fines and dismissal for lack of evidence. Judicial Power, Prosecutor's Office; criminal proceedings with alternative solutions to trial.

**NUMBER OF PEOPLE AFFECTED:**63 families, around 300 people.

**BRIEF DESCRIPTION:** Decrease in fishing due to the extraction of water for rice fields in the area of influence of the Tebicuary Basin (Itapúa, Caazapá, and Guairá).

Their income was declining inversely with growth of the rice companies. Ten years ago, they grossed G.1,500,000 to G. 2,000,000 a week; about five years ago, the sum already down to G.400,000, and this year, they barely reached the G.100,000 weekly, an amount that is not enough to maintain their daily sustenance.

"The extraction of the rice fields eliminates the breeding of fish. There are more and more rice fields, and fewer fish in the Tebicuary River. Hopefully, we get 20 to 30 kilos a week. We hope that in October of next year the water level rises and the amount of fish increase from the Paraguay River", Ferreira indicates when noting that a decade ago they were harvesting up to 150 kilos a week.

The engineer Rober Monte Domec, research professor of hydrology at UNA, Universidad Nacional de Asunción [National University of Asunción], and UCA, Universidad Católica [Catholic University], says that although drought affects the quantity of fish, as well as violations of the fishing ban or presence of added fishermen from other rivers coming to Tebicuary and Yuty contribute. These are not the only and most worrisome factors. The constant pumping of water for irrigation of rice fields in the area contributes to lower river water levels, and it also damages the wildlife of the Tebicuary and its entire basin.

The science of environment, and in planning and management of water resources emphasizes that extracting water without environmental criteria is unsustainable. For the production of rice, the basin must be previously characterized and the flow from which the water is intended must be gauged, the extraction must be based on the behavior of the river overtime. "If it is in a period of descent, the pumping must be reduced because a river must maintain an ecological flow, an environmental flow, which is a minimal amount to maintain life so that fish remain in the river," he details.

After years of indiscriminate use of the river, wildlife was affected, and the fishermen who depend on the Tebicuary and the entire basin were hit. "We will not be able to recover the environmental damage in 10 years," Gustavo Barboza emphasizes, a resident of Yuty and promoter of the first Water Council, specifically of the Upper Tebicuary Basin.

As a result of a decade of social struggle by fishermen, residents and ecologists of Caazapá managed to get the SEAM, Secretaría del Ambiente [Secretary of the Environment] today MADES, Ministerio del Ambiente y Desarrollo Sostenible [Ministry Environment and Sustainable Development] to establish rules and regulations for rice producers in 2014 after complaints, requests for interventions to public institutions, organization of dialogue tables, and even protests. On paper, the amount of pumper's water was limited, depending on the river plain, seasonal factors, the period of medium, low and high water and is also required for the rice producers to have cutwaters and other water reservoirs, Monte Domec explains.

MADES estimates that rice farms need 10,000 cubic meters of water per hectare per year, distributed over six months in different proportions. Likewise, according to official data, there are some 86.000 hectares of rice in the area of influence of this water basin made up of the upper, middle and lower basins of the Tebicuary

River, and of the sub-basins of the Tebicuarymí, Pirapó, Mbuyapey and Yaquary streams.

The amount of water pumped in a staggered manner is declared by the rice producers themselves. Despite these new regulations, irregular extraction continues, and control of the institutions in charge of safeguarding the water is poor and does not curtail the practice. In 2018, the Water Council specified about 32 rice fields on the banks of both rivers with the number is much higher according to Barboza. "The rice producers must have enough water reservoirs to use

in times of drought. With SEAM, a rule was established on the level of the river, and below a certain level there is an alert. There is a unique volume of water that cannot be passed," he said.

The rule in matter can be observed at this time of year completely exposed under the bridge that connects the community of Yuty with the municipality of Fulgencio Yegros, below level "o". In Yuty, cessation of pumping is ordered when the river flow drops to 15 cubic meters per second, which represents around 55 centimeters from the level, according to MADES's "Tebicuary River Basin Report".

The rule is not respected, and the problem is that it is difficult to monitor non-compliance of mitigation measures. Boats are needed to move through the waterways and to verify pumping. The fishermen who enter the rivers are the ones who detect the irregular extraction of water most often.





"We complain, but we cannot do anything more. It is too difficult with businessmen. The authorities do nothing. We, the fishermen, cannot go fishing much in the river either. I have a boat with a small engine, and I can barely move forward when the water level is too low", Matilde Ferreira says about the situation.

Every time that fishermen and residents verify that the rice plants are pumping with the flow of water below the legal level, the environmental damage is reported to the Environmental Prosecutor's Office and to MADES. By the time professionals arrive, the pumps are already turned off, and in most cases, verifications do not lead to anything and the Public Ministry does not even prosecute those who are violators.

Although MADES has stations, sensors and radar to detect irregular pumping, it only officially finds irregularities after there is a formal complaint. A clear example occurred at the beginning of November 2020, when the Villarrica environmental prosecutor, Erico Ávalos, ordered dismissal of the pumper of a rice producer in the town of Iturbe, on the banks of the Tebicuarymí, part of the Tebicuary Basin. The complaint was presented by Mayor Darío Cabral, and it could be substantiated since municipal officials entered the river and took photographs and recorded videos.

Likewise, Barboza recalls other fruitful complaints. For example, in 2013 the producers Martín Lukac from Itapúa, and Pablo Arrau from Yuty district opened a channel, and diverted water from the Tebicuary to their rice crops. The channel was sufficient evidence, although there was only intervention with closing when the case took public status through the press.

Another detail of the regulation is that MADES undertook to reject permits for new rice crops in the area of influence of Tebicuary basin, since the rational use is calculated by the current amount of cultivated hectares. "No one could settle anymore on the Tebicuary and the Pirapó's banks, but licenses continued to be issued. MADES knows perfectly the situation, but does nothing to prevent damage."

"Currently, there are rice farmers who are digging the bed to take backwater, a deep place where the water overflows to be pumped. They are digging in places where they stretch the water because not even their pump reaches them due to the critical level of the Tebicuary", Gustavo Barboza also explains.

He also complained that rice fields are expanding downstream towards its arms and towards its tributaries, as in Villa Florida, Misiones department, as well as towards the Tebicuarymí, Guairá department, even towards the Paraguay River itself.





Amid the 2020 drought, the Tebicuary River continued to decline. In September, the average level of the Tebicuary River in Yutý was 9.85 centimeters above the reference level according to data from the Hydrology Directorate. In October, it dropped to 4.6 cm, and in the first half of November, the average fell down to -3.75 cm. In mid-December, the level rose to 0.04 centimeters, and after January rains, the level could rebound to 3 meters according to the report updated on February 10th.

The fishermen and activists of the water councils, and even municipal and departmental authorities demand verifications from the MADES, the protection of the river, fines for the offenders, as well as asking the Prosecutor's Office and the Justice criminal sanctions for those responsible.

The Law No. 3239/07 establishes that the management of water resources must take place within the framework of sustainable development, and prohibits its agricultural use without the concession of the Ministry of the Environment, while Law No. 5146/14 and its regulation Decree No. 2598/14 empowers MADES to apply fines, and other penalties for using public domain water in quantities greater than those authorized, which damage to water channels or the ecosystem, and causing or contributing to the alteration of the water supply to the population.





MADES Legal Advisory Directorate reported that seven rice plants were reprimanded and sanctioned in 2020 and in January 2021. After a summary, it was confirmed that they violated the regulations on farms, projects, irrigation systems, and rice cultivation; a reported case was dismissed due to lack of evidence. Rainer María Bendlin Beyersdorff and the company Cimexpar SA in Caapucú (Paraguarí), Oscar Daniel Rolin (Establishment San Florencio SA) in San Juan Bautista (Misiones), and Fulvio César Franco in Santa Rosa del Aguaray (San Pedro) were reprimanded. While Luis Komarek in Yabebyry district (Misiones) was fined 1,500 minimum wages (G. 126,510,000), Agroganadera Santiago SA was fined 800 wages (G. 67,472,000) and María Martis Martino de Corrales (Agroforestal Caapucumí SA) in the town of San Ignacio (Misiones) was fined 500 wages (G. 42,170,000).

The fisherman, Matilde Ferreira finally emphasizes that those who depend on fishing to survive, hope that the fish from the Paraguay River will increase as well as in the Tebicuary in 2021. However, they will not do so if the level falls again in the coming months, and if the rice farms do not adhere to the ecological measures that seek a balance between food production and the preservation of the environment.