## To the California Air Resources Board,

I am an anthropologist specialized in development and environmental policies in the Global South. Before starting my PhD at the George Washington University, Washington DC, I worked for eight years as a policy-analyst in the environmental area for the Portuguese government. During that time, I became a specialist on carbon markets – both compliance and voluntary markets.

Since 2012 I have been doing research about REDD+ and other offsets based on land-uses. I interviewed dozens of environmental practitioners from some of the most important NGOs advocating for REDD+ (e.g. WWF, EDF, Rainforest Alliance) about REDD+ standards, safeguards, and carbon accountability, as well as REDD+ project developers. I also carried out fieldwork in Acre (Brazil) and Zambézia (Mozambique) in order to understand how is jurisdictional REDD being implemented in these places.

Although the jurisdictional REDD+ programs being implemented in these two regions are very different—as they should, since the regions are ecologically and socially distinct, thus generating different deforestation drivers—I found, however, some disturbing similarities. These, as I will detail next, are due to the intrinsic mismatches between the idealistic assumptions behind REDD+'s formulation as a template that can be applied anywhere in the Global South, and the realities of its implementation.

<u>Deforestation drivers</u>: REDD+ advocates consider that the drivers of deforestation are local and therefore, by implementing REDD (especially at a jurisdictional scale) those can be fought effectively. This rationale constitutes a gross misunderstanding of how deforestation works, with serious consequences for poor rural communities. Both in Acre and in Zambézia deforestation is attributed to small farmers who use fire to clear fields for agriculture. Although it is undeniable that fire continues to be used not just to clear fields, but also to enrich soils' poor nutrient content (notably in Acre), the dimension of this practice cannot possibly account for the devastating levels of deforestation in the Amazon. These are subsistence farmers, who use fire in small plots to feed their families.

Authorities in Acre are criminally persecuting these farmers as a way of reducing deforestation, but the evolution of deforestation rates in the state does not provide any evidence of this strategy's success, while poor farmers feel they are being discriminated visà-vis large landowners who do not face the same level of legal enforcement. In fact, as one authority in Acre recognized during one of our conversations, if the Chinese want to eat more meat, there is no way we will be able to stop deforestation. For ethical reasons, I have to keep the identity of this authority anonymous, but this person has been deeply involved in the implementation of REDD+ in the state since its beginning – i.e. this person is not against REDD+ and yet, is aware of its shortcomings in fighting deforestation, especially when its drivers are international.

In Mozambique, the assumptions are no different and while there are not yet legal fines imposed on small farmers using fire, authorities are supporting international NGOs in their efforts to "convince" Mozambican farmers to adopt conservation agriculture. It is undeniable that conservation agriculture provides environmental benefits (including less

emissions) but, as Mozambican farmers are very well aware, such practices are also risky, and depend on technical support and resources that are only available while these NGOs can provide them. Once these NGOs are gone farmers are left on their own, which means that if they want to eat, they have to practice agriculture as they know it.

Deforestation in Mozambique cannot be explained by the fact that small farmers are "resistant" to adopt conservation agriculture. Instead, it can be attributed to large agricultural projects, coal extraction, and the illegal extraction of timber destined to Chinese markets. Even though this extraction cannot be technically considered "deforestation"—instead, it is considered "degradation"—there is no doubt that it has very detrimental effects in the health of Mozambican forests, opening the way for increased deforestation, and higher risk of wild fires.

Additionality: It is well known that in order to reduce emissions, actions implemented with such goal need to be additional. What I verified during my fieldwork in Acre and Mozambique was that many of the things that were being done under the REDD+ template (and therefore, being funded by international donors under the assumption that these things were reducing emissions additionally) were not new at all. Providing subsidies for rubber production, promoting the production of açaí or Brazilian nuts, incentivizing "sustainable forest management" were already part of the policies implemented by Acre's authorities. In the same way, promoting conservation agriculture, distributing efficient cookstoves, and incentivizing cashew cultivation have been implemented in Mozambique for many years prior to REDD's existence. However, every time I asked authorities and local academics about the additionality principle of these activities, their answer was that although the activities were not new, their scope was bigger – which provided the additional element needed in carbon accounting. I find this explanation insufficient and misleading. REDD+ funding should support new activities, and not more of what is already being implemented. How much more is more? From what point is more, additional? Given that some of these activities have been intermittently implemented in Acre and Mozambique since the 1990s, it is hard to account for them in order to establish a baseline. In both locations not only was not clear how this baseline was being established (in order to count more as additional) but also there was nothing to ensure that the reductions achieved were actually permanent and not reversed. This whole logic is, therefore, flawed and compromises the environmental integrity of offsets accounting.

What is REDD+: The more problematic aspect of REDD+'s implementation that I found during my fieldwork was, however, the amount of different things that local authorities considered to be REDD+. Things as diverse as fish farming or cattle ranching were being supported in Acre as part of their REDD+ strategy. The same with the expansion of "sustainable forest management" inside the Extractive Reserves, which were created in the beginning of the 1990s, after Chico Mendes's assassination, and as part of a wide struggle led by rubber tappers to sustain their livelihoods in the forest. How to justify cutting trees down inside spaces that were created with the purpose of keeping trees standing – even if those cuts are done "sustainably"? To many, this state policy constitutes a treason to rubber tappers' historical struggle for the forest.

In Mozambique, the jewel of the crown in the REDD+ program seems to be a massive eucalyptus plantation by a Portuguese pulp and paper company. Interestingly, such investment was already taking place with the support of the World Bank, and only later was it incorporated as part of the REDD+ program for Zambézia. Again, the additionality principle is at stake here, but the idea that planting eucalyptus that will be cut down after five years can generate carbon offsets seems to be deeply flawed, not to mention environmentally destructive. Eucalyptus are not a native species of Mozambique, they are known for exhausting water resources and causing soil erosion. They are also very flammable, increasing the risks of wild fires. (Note that the wild fires responsible for the death of over 100 people in Portugal in 2017 were in eucalyptus areas). Even if this plantation does not endanger the food security of local populations—a concern that was expressed to me by one of the company's director, who also identified their strategies to minimize this risk—it is highly doubtful that it will help reduce Mozambique's carbon emissions. What is more disturbing is that it was the World Bank's idea to include the eucalyptus plantation in Mozambique's REDD+ jurisdictional program. If the entities responsible for funding and regulating REDD+ activities are the ones stretching the template to fit the purposes of industrial plantations (instead of preserving diverse and native forests) and the interests of private investors, what other interests might be served by this ambiguous template?

Deforestation is a complex problem that needs to be tackled as part of a wider set of policies to fight climate change. REDD+ is the wrong tool to do it, as are all strategies that take deforestation as a local issue. Using forest offsets to compensate for carbon emissions is not only environmentally flawed but utterly dangerous in the face of much urgently needed real climate action. For these reasons, the California Air Resources Board should refuse to use any kind of forest offsets as a means to reduce California's emissions.

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