

*Threatened Mangrove. Scientific uncertainties, inappropriate policies*

The 2015 political agenda, national and international (COP 21; UNEP program Ecosystem-based Adaptation), puts mangroves in the spotlight because of their particular function of Climate Change mitigation (Alongi 2008). Main discourses report the dramatic loss of the mangroves areas and their ability to sequestre carbone, justifying politics of reforestation in the frame of REDD+. Those dominant discourses are reinforced by the recognition of the multiple values and functions of mangrove (shelter against tsunamis, nursery for fish, refuge habitat for birds, water purification, firewood, etc.) (Cormier-Salem, 2014). Some other documents suggest the limited development of methodologies for carbon accounting in mangroves and the lack of inclusion of mangroves in some definitions of forests may be inhibiting their inclusion in REDD+.

The objectives of our contribution are, first to show that a mangrove is not a single forest of mangle trees ; it is a complex socio-ecosystem, between land and sea ; second, to question the reforestation schemes, based on uncertain scientific data on mangrove dynamics (progression or regression ? at which socio-spatial scales ?) (Fairhead & Leach, 1998), limited methodologies for carbon accounting (Leach & Scoones, 2013), and most often inappropriate guidelines (monospecificity of the plantation, too high density of the seed lines, unfair compensation of the seed collectors, etc.) ; third, to highlight the risk of environmental injustice and mangroves grabbing (Sikor & Newell, 2014 ; Fairhead et al, 2013).

From our fieldwork conducted in various mangrove areas (West Africa, Guyana, Vietnam,...) and the analysis of a vast and diversified corpus of publications (discursive approach of reports, grey litteratures, scientific articles, etc), we argue mangroves are more robust than fragile (Cormier-Salem, 2000) ; their extent on a long time span and at a world scale is remarkably stable (Giri et al, 2011) ; they have regressed in some countries during some periods. Also, from 1960 to 1990s, the loss of the total mangroves areas reaches 20% according to FAO (2007). However, during the two last decades, a progression is put in evidence, attributed to the « good » governance of mangroves. Although the success of mangroves reforestation is questionable in terms of carbon storage and biodiversity restoration, we show the enclosure of mangrove areas for the benefit of private companies leads to environmental injustice. Local people, notably women who are used to collecting cockles on muddy flats, have no more access to the resources of their communal territory. In the end, we argue that mangrove reforestation projects are forms of green washing and green grabbing (Beymer-Farris & Bassett, 2011; Cormier-Salem & Panfili, in press).

Finally, we advocate for integrative methodologies evaluating the societal and ecological effects of mangrove reforestation and taking into account all the values of mangroves, and not only carbon storage. Alternative policies, such as « tann » or hypersalted areas' restoration, access and user regulation measures, heritage and local product valorization, have to be more explored. So, mangroves appear threatened not per se, but because of the scarcity of scientific surveys and the inadequacy of environmental politics.