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► To cite this version:

Cheikh Tidiane Niang, Ambroise A Dalecky, Isabelle Laffont-Schwob, Amadou Bocar Bal, Stephane Ranque, et al.. Socio-environmental changes, structure and impact of rodent communities and their parasites: the context of major hydro-agricultural schemes in the Senegal River valley. 13th African Small Mammal Symposium (ASMS 2019), Sep 2019, Mekellé, Ethiopia. hal-04036498

HAL Id: hal-04036498

<https://hal.science/hal-04036498>

Submitted on 20 Mar 2023

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Socio-environmental changes, structure and impact of rodent communities and their parasites: the context of major hydro-agricultural schemes in the Senegal River valley

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Ecosystems are increasingly exposed to global changes of anthropogenic origin, which include climate, biodiversity, or land use. These global changes may be the cause of major agricultural problems via deforestation, an increase of crop pests, an impact on crop yields. These changes may also have severe direct or indirect health consequences via animal populations acting as reservoirs of zoonoses.

Parasitism is increasingly considered as an important potential factor affecting the response of species to global change. Parasites can regulate the abundance of their host population, influence the structure and composition of communities, and affect the composition of ecosystems.

In Senegal, rice production is still insufficient to cover household consumption needs despite the availability of arable land and a river in the North. As part of the national program of self-sufficiency in rice and large irrigation projects in the Senegal River Valley, agricultural development programs aimed at increasing production and stocks have been implemented. These changes are accompanied by an increase in the food resources and water around which human populations, livestock, rodents and associated parasites / pathogens concentrate and meet, with expected consequences in terms of health and food security.

It is in this context that our thesis will be implemented. falls in order to determine the rodent communities (identification of species) pests of culture present in the valley of the Senegal River. But also to characterize the species of parasites that they shelter (gastrointestinal helminths and dermatophytes fungi), and which could be source of diseases, but especially to impact the dynamics of these populations of rodents. This thesis will also make it possible to estimate the damage caused to the fields and the stocks by these rodents, so as to be able to alert but also to take adequate measures for a fight against these pests of cultures.

(ORAL PRESENTATION)