

Poster N° 1

KPERA G.N., AARTS N., MENSAH G.A., MARTIN, S., TOSSOU R.C., SINSIN A.B., VAN DER ZIJPP A.J., 2013. Living with crocodiles for sustainable use and management of agro-pastoral dams in Northern Benin: a hope or a scope. Poster presented at the 22nd Working Meeting of the IUCN – SSC Crocodile Specialist Group – World Crocodile Conference ‘Living with Crocodilians’, Sri Lanka, 20–23 May, 2013.



Living with crocodiles for sustainable use and management of agro-pastoral dams in Northern Benin: a hope or a scope?

Kpéra G.N.^{a,b,c,f}, Aarts N.^b, Mensah G.A.^c, Martin S.^d, Tossou C.R.^e, Sinsin A.B.^f & van der Zijpp A.J.^a

(a) Animal Production Systems Group, Wageningen University (APS/WIAS/WUR); (b) Strategic Communication, Wageningen University (KTA/WASS/WUR); (c) Institut National des Recherches Agricoles du Bénin (INRAB); (d) La Ferme aux Crocodiles, Pierrelatte, France; (e) Département d'Economie, de Sociologie Anthropologique et de Communication, University of Abomey Calavi (UAC); (f) Laboratoire d'Ecologie Appliquée, Université d'Abomey Calavi (LEA/FSA/UAC)

Objectives

- Stakeholders' framing on crocodiles
- Characterisation of dams water quality (physico-chemical, microbiological composition)
- Distribution of crocodiles holes, nests, and village visited by crocodiles

Materials and methods

- Case study in three villages (Nikki, Sakabansi and Fombawi)
- Waters sampled and analyzed for the physico-chemical and microbiological parameters
- Crocodile nests and holes and spaces visited were geo-referenced and mapped



Background

Crocodiles make themselves at home in agro-pastoral dams in Benin and share the dam ecosystem services with local people



Results

- Crocodile framed as a problem
- Agro-pastoral dam water polluted: Means of physico-chemical variables > standard values for human and livestock
- Pollution by harmful bacteria: Coliforms, fecal streptococcus, *Echerichia coli*, spore of Clostridium, *Salmonella tippy*, *Salmonella tippyurium*, *Salmonella enteritidis* and *Campylobacter jejuni*)
- Space visited by crocodiles consist of: riparian forest, farms, garbage heaps, homes, schools, and churches depending on seasons and caused some damages (Figure 1)

Acknowledgement

Thanks to NUFFIC, La Ferme aux crocodiles, and IUCN-SSC Crocodile Specialist Group Student Research Assistance Scheme for funding this research.

Conclusion

Researchers from biological and social sciences should develop collaborative efforts with local communities and use direct observations, measurements and communication tools to assess humans and crocodiles living together

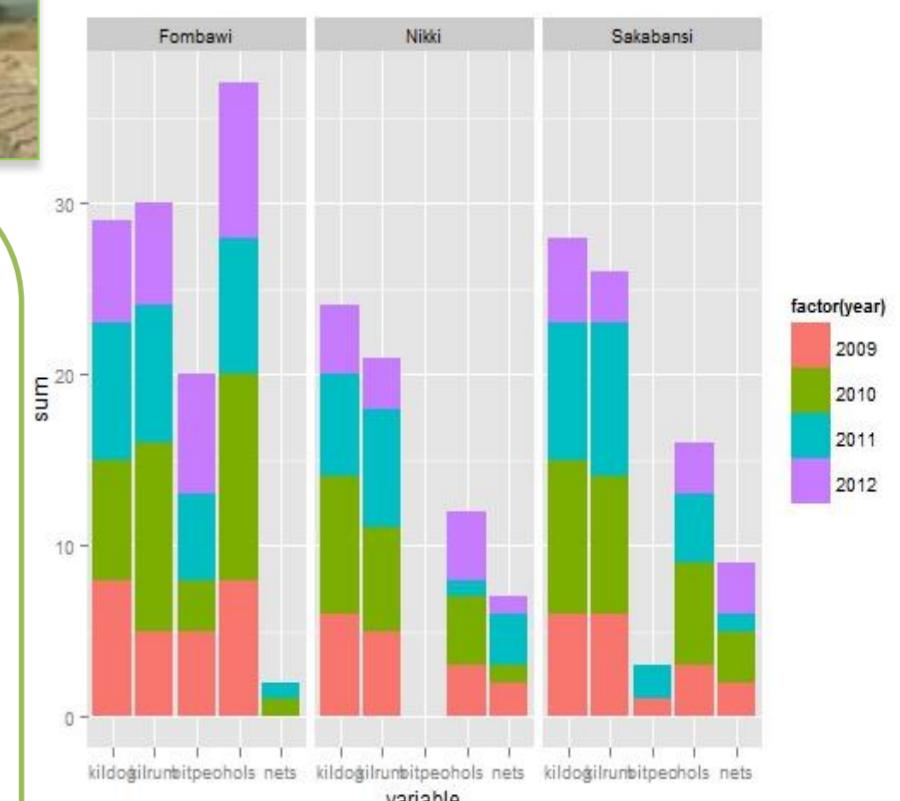


Figure 1. Crocodile damages in Nikki, Sakabansi and Fombawi dams from 2009 to 2012

Damages consist of killing dogs, sheep and goats; biting people, destroying fishing nets and the dam infrastructure