

## **Extension Phase of Senior Fellowship for Dr. Luc Hippolyte Dossa: "Resource use efficiency and productivity of cattle farming systems across vegetation zones of Benin: breeding strategies for local genetic resources"**

Initiative: Wissen für morgen – Kooperative Forschungsvorhaben im subsaharischen Afrika (beendet)

Ausschreibung: Postdoctoral Fellowships "Resources, their Dynamics and Sustainability - Capacity-

Development in Comparative and Integrated Approaches"

Bewilligung: 26.06.2018

Laufzeit: 2 Jahre

In Benin, like in other coastal West African countries, many large-sized zebu cattle breeds are found in smallholder production systems as a result of cross-border transhumance from Sahelian countries. Crossbreeding these breeds with the local taurine breeds has been increasingly practiced by smallholder cattle farmers as a way of intensifying meat and milk production. While this practice will likely continue among smallholder farmers, breeding strategies have to be adjusted since continued availability of cattle of local breeds - which are able to survive, grow and reproduce under harsh conditions - are needed to ensure sustainable crossbreeding strategies. Building upon the large quantitative and qualitative data collected between 2014 and 2017 in the framework of the Volkswagen Foundation senior fellowship project entitled "Cross-border and regional livestock mobility along the transect from the Sahel to Southern Benin: risks and opportunities for animal genetic resources and livestock production" this project aims to identify possibilities for enhancing the productivity and sustainability of cattle farming systems in Benin and other countries in West Africa with similar agro-ecological conditions through a better understanding of interactions of genotype x environment x management. More specifically, it aims at providing a selection basis for the genetic improvement and improved use of local cattle breeds in the region.

### **Projektbeteiligte**

#### **Prof. Dr. Hartmut Stützel**

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## Open Access-Publikationen

**First DNA Sequencing in Beninese Indigenous Cattle Breeds Captures New Milk Protein Variants**

**Current Knowledge on the Lagune Cattle Breed in Benin: A State of the Art Review.**

**Dynamics of changes in the breed composition of pastoral and agro-pastoral cattle herds in Benin: implications for the sustainable use of indigenous breeds.**

**Unraveling Admixture, Inbreeding, and Recent Selection Signatures in West African Indigenous Cattle Populations in Benin**

**Sustainable Management of Animal Genetic Resources to Improve Low-Input Livestock Production: Insights into Local Beninese Cattle Populations**