

Extending the Pastoral Frontier: The Introduction of Cattle Farming in French Equatorial Africa during Late Colonialism

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Extending the Pastoral Frontier: The Introduction of Cattle Farming in French Equatorial Africa during Late Colonialism¹

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In the late 1940s, the veterinary services in French Equatorial Africa (AEF), a federation consisting of the colonies of Moyen-Congo, Gabon, Oubangui-Chari and Chad, started a programme aimed at introducing, acclimatising and breeding large cattle in regions where it was virtually inexistent and cattle farming had been deemed impossible due to endemic animal trypanosomiasis. Tsetse flies transmitting this (often fatal) parasitic disease, which was related to Human African Trypanosomiasis or sleeping sickness, inhabited most of the territory of Moyen-Congo, Gabon and Oubangui-Chari and were also present in southern Chad.² Yet, inspired by the success of cattle farms functioning under similar conditions in the neighbouring Belgian Congo, French experts believed that, if certain precautions were taken, cattle farming could be made possible in certain thus far forbidden parts of these colonies. In their view, the extension of the pastoral frontier would not only bring about a long-term solution for widespread malnutrition among the AEF's African population, but also alleviate underpopulation and ultimately economic underdevelopment.

While these far-reaching goals proved too ambitious, the developmentalist framework of late colonialism allowed the programme to achieve a certain success. Together with new knowledge about the treatment and prevention of animal diseases, the programme greatly benefited from the expansion of AEF's technical (most notably veterinary, agricultural, entomological and pedological) services and, perhaps most importantly, from the financial support from the *Fonds d'Investissement pour le Développement Économique et Social* (FIDES). Established in 1946 and functioning through four year plans, the FIDES development programme was “a turning point in French colonial policy”, as “for the first time, the metropole began to invest in its colonies on a massive scale”.³

¹ This paper was prepared for the international workshop ‘Global Commodity Frontiers in Comparative Context’, University of London, 9-10 December 2016. It is part of a broader book project on the transformation of cattle economies in the late nineteenth and twentieth-century French colonial empire.

² René Malbrant & J. M. Dugué, ‘Les trypanosomiasis animales en Afrique Equatoriale Française’, *Recueil de Médecine Vétérinaire Exotique* 6 (1933), pp.77-83; Lionel Maillot, ‘Répartition des Glossines en A.E.F.’, *Bulletin de la Société de Pathologie Exotique* 46 (1953), pp. 195-7.

³ Céline Pessis, ‘The Tractor as a Tool of Development? The Mythologies and Legacies of Mechanised Tropical Agriculture in French Africa, 1944-56’, in Joseph Morgan Hodge et al. (eds), *Developing Africa. Concepts and Practices in Twentieth-Century Colonialism*, Manchester: Manchester University Press, 2014, p.180. On development in Africa after 1945, see Frederick Cooper, ‘Modernizing Bureaucrats, Backward Africans, and the Development Concept’, in Frederick Cooper & Randall Packard (eds), *International Development and the Social Sciences. Essays on the History and Politics of Knowledge*, Berkeley: University of California Press, 1997, pp.64-92; Frederick Cooper, *Africa since 1940. The Past of the Present*, Cambridge: Cambridge University Press, 2002, pp.85-132; Hodge et al. (2014). On the FIDES programme, see Martin Atangana, *French Investment in Colonial Cameroon. The FIDES Era (1946-1957)*, New York: Peter Lang, 2009.

As experiments in state-directed breeding stations in the Moyen-Congo confirmed the possibility of acclimatisation for certain trypanotolerant cattle races originating from West Africa, cattle farming became in the 1950s a new and growing economic activity in this colony, pursued by European-led commercial cattle ranches as well as African villagers. From the mid-1950s onwards, the breeding of West African trypanotolerant cattle was also extended to certain areas of Gabon and Oubangui-Chari (now Central African Republic). Having become a key project of socio-economic change, the dissemination of trypanotolerant cattle did not come to a halt with decolonisation; it was continued by the veterinary services of the newly independent states.⁴

This paper is a preliminary analysis of the rationalities, practicalities and consequences of this experiment. The extension of the pastoral frontier into the humid savannas of Equatorial Africa was a huge logistical operation, involving the purchase, transport, acclimatisation, breeding and diffusion of thousands of animals under often difficult conditions. It also involved the development and mobilisation of different forms of expertise, ranging from pedology and botany to veterinary medicine, and created new forms of cattle farming as well as labour relations. The paper shows why and how veterinary experts planned and started the introduction of trypanotolerant cattle into the AEF; and how European companies and African villagers gradually bought into this project, as they tried to benefit from the opportunities it raised. It also highlights the eminently transnational character of this endeavour by pointing at the influence of previous similar attempts in the Belgian Congo. Finally, it argues that, in various ways, the establishment of trypanotolerant cattle farming in the AEF was illustrative of and contributed to the making of global capitalism.

Rationalities

For colonial officials, the extension of the pastoral frontier responded to various imperatives. Already in the 1930s, René Malbrant, the director of the veterinary services in the AEF, had repeatedly stressed the need to develop cattle farming in the Moyen-Congo and Gabon in order to cope with the severe malnutrition suffered by a large part of the African population in these colonies.⁵ Malbrant argued that the calorific intake of many Africans in these regions was not only insufficient, but that their nutrition was usually also unbalanced, due to a lack of animal proteins. His critique of local diets echoed the opinion of leading medical doctors in the AEF, like Muraz, and followed a larger trend in nutrition studies.⁶ In the interwar years, the focus of colonial doctors, administrators and companies broadened from quantity to quality, from undernutrition to malnutrition, from mere calories to proteins, vitamins and

⁴ A. P. M. Shaw & C. H. Hoste, *Trypanotolerant Cattle and Livestock Development in West and Central Africa*. 2 vols, *FAO Animal Production and Health Paper*, 67/1 & 2, Rome: Food and Agriculture Organization of the United Nations, 1987.

⁵ René Malbrant, Note sur l'élevage en AEF et sur le fonctionnement du service zootechnique, 24 September 1937, Archives Nationales d'Outre-Mer, Aix-en-Provence (ANOM), Guernut 49. Similarly, René Malbrant [Chef du Service Zootechnique de l'AEF], Élevage et Action Zootechnique en AEF, 8 July 1941, ANOM, GGAEF, 5D50.

⁶ Muraz, 'L'alimentation indigène en Afrique Équatoriale Française', in George Hardy & Charles Richet (eds), *L'alimentation indigène dans les colonies françaises, protectorats et territoires sous mandat*, Paris: Vigot, 1933, pp.177-211.

minerals.⁷ Conducted in the late 1920s and published in 1931, the famous Orr and Gilks study comparing the nutrition of the agricultural Kikuyu with the pastoral Maasai in Kenya had emphasised the crucial impact of animal proteins on bodily growth and health.⁸ Even if studies of African diets remained rare before 1945, also in the French colonies, the importance of meat and fish was now uncontested.⁹ Yet, for the likes of Muraz and Malbrant, proteinic malnutrition did not only cause disease, it was also the main reason for the underpopulation of the Congo and Gabon, as it caused “the native [...] to live badly, procreate badly and die prematurely”. “Only the development of animal husbandry”, Malbrant stated, “could solve this situation and I can say that the future of the AEF is, to a large extent, linked with this problem.”¹⁰

To be sure, animal proteins were not only contained in large cattle. Veterinary doctors like Malbrant also viewed poultry, small cattle (pigs, sheep, goats) and fish as valuable sources of proteins and supported the development of such animal industries.¹¹ The focus of their attention and efforts, however, would be on large, that is bovine, cattle.

The development of cattle farming in the southern parts of the AEF not only aimed at solving the nutritional problem in its rural Africans, but also at reducing the dependency of its urban centres on unstable and expensive long-distance meat imports. Until the mid-1940s, the growing cities of Pointe-Noire and Brazzaville (Moyen-Congo) as well as Libreville (Gabon) were dependent on the import of livestock on the hoof from neighbouring colonies, especially from Portuguese Angola. This trade, however, was interrupted for several years, when epizootic disease struck Angolan cattle in 1932, and again during the Second World War, when Angola had to supply its metropole, forcing the French to search for alternatives. As a temporary solution, cattle on the hoof was imported from French Cameroon and Oubangui, but long transportation routes increased costs and often took a heavy toll on the livestock.¹² An alternative was found after the Second World War. Starting in 1948, refrigerated meat was transported by airplane from Chad’s cattle centres, like Fort Lamy and Abéché, to the AEF’s southern cities (and to Léopoldville). This new trade offered a market for Chad’s untapped cattle resources, which had been the subject of longstanding discussions among French veterinary experts, but it was hardly profitable as it necessitated the establishment of new

⁷ Michael Worboys, ‘The Discovery of Colonial Malnutrition Between the Wars’, in David Arnold (ed.), *Imperial Medicine and Indigenous Societies*, Oxford: Oxford University Press, 1988, pp.208-25.

⁸ John Boyd Orr & J. L. Gilks, *The Physique and Health of Two African Tribes*, London: H.M.S.O., 1931; Cynthia Brantley, ‘Kikuyu-Maasai Nutrition and Colonial Science. The Orr and Gilks Study in late 1920s Kenya revisited’, *The International Journal of African Historical Studies* 30:1 (1997), pp.49-86.

⁹ Hardy & Richet (1933); Vincent Bonnacase, *La pauvreté au Sahel. Du savoir colonial à la mesure internationale*, Paris: Karthala, 2011, pp.31-3.

¹⁰ René Malbrant, Note sur l’élevage en AEF et sur le fonctionnement du service zootechnique, 24 September 1937, ANOM, Guernut 49.

¹¹ René Malbrant, Programme d’action du service zootechnique de l’AEF, 1936, September 1937, ANOM, Guernut 49.

¹² Muraz (1933), p.197; Pierre Vennetier, *Pointe-Noire et la façade maritime du Congo-Brazzaville*, Paris: ORSTOM, 1968, pp.327-9; René Malbrant, Rapport sur une mission effectuée en Angola du 26 mai au 15 juin 1942, 6 July 1942, ANOM, 211COL18; Georges Bruel, *La France Équatoriale Africaine. Le pays, les habitants, la colonisation, les pouvoirs publics*, Paris: Larose, 1935, p.370.

airports and routes, modern abattoirs and large cold storage rooms.¹³ Moreover, while it helped to ensure the meat supply in the larger cities, it did not solve the protein problem for the Africans living in the countryside.

Looking beyond the nutritional problem, French experts also increasingly highlighted other advantages. If African peasants adopted cattle farming, the reasoning went, they would be able to generate a higher income, not only by selling the animals or their meat, but also by using the manure and the labour of their animals to increase the productivity of their fields. Moreover, extensive cattle farming would, in itself, also improve the quality of the soils.¹⁴ By raising the rural standard of living, cattle and/or mixed farming would hence contribute to slow down the rural exodus, which was flooding the cities and further depleting the already underpopulated countryside. Some authors even added that cattle farming would reduce the ubiquitous bush fires, since Africans not only used them to fertilise the land, but also to chase wild animals.¹⁵ By supplying animal proteins, cattle farming would reduce African hunting activities and, in turn, be an important stimulus for wildlife tourism.

Finding places

The successful implementation of the programme hinged on different factors: beyond the need for sufficient funding, the choices of the locations, types of animals and modes of production were crucial. Expert knowledge was constitutive to each of these factors, as was the collaboration of (parts of) the African population.

After the Second World War, the veterinary services identified several regions where cattle farming would possibly trigger good results: the Niari Valley and the Batéké highlands in the southern Moyen-Congo, the Nyanga and N’Gounié valleys in Gabon and the areas around Berberati and Bangassou in Oubangui-Chari.¹⁶ The main criterion was, of course, the existence of fertile pastures and a low tsetse fly density. These were vast regions, however, often covering many thousands of square kilometres. Over the years, more detailed prospections further differentiated the quality of the pastures and hence their ‘pastoral vocation’, by studying the types of grass, the composition and stability of the soils, the presence of water reservoirs and the exact distribution of the tsetse flies (*glossinae*).

Many of these prospections were carried out by, or in collaboration with, the *Institut d’Etudes Centrafricaines* (IEC) in Brazzaville. The IEC was founded in 1947 as a local branch of the *Office de la Recherche Scientifique Coloniale* in Paris, France’s official research

¹³ See, for instance, Chauvet, ‘Un exposé du Gouverneur Général Chauvet sur la situation en A.E.F.’, *Chroniques d’Outre-Mer* (1955), pp.55-8, in ANOM, 211COL114; Virginia Thompson & Richard Adloff, *The Emerging States of French Equatorial Africa*, Stanford: Stanford University Press, 1960, pp.347-8.

¹⁴ Auguste Chevalier, ‘Les essais de cultures nouvelles et de mécanisation de l’agriculture au Moyen Congo Français (Niari et pays Batéké)’, *Comptes rendus des séances de l’Académie d’agriculture de France* 37:10 (1951), pp.342-5; Maurice Piettre, ‘Élevage extensif, première étape de la mise en valeur des sols pauvres’, *Revue internationale de botanique appliquée et d’agriculture tropicale* 31:347-348 (1951), p.513.

¹⁵ Philippe Bertucat, *L’élevage bovin en République Centrafricaine*, veterinary doctoral thesis, École Nationale Vétérinaire de Toulouse, 1965, pp.74-5.

¹⁶ Gérard Lemonnier, *Introduction du bétail trypanotolérant en République Centrafricaine*, veterinary doctoral thesis, École Nationale Vétérinaire d’Alfort, 1966, p.55.

institute for colonial sciences, which had been founded in 1943 and would be best known, from 1953 onwards, as the Office de la Recherche Scientifique et Technique d'Outre-Mer (ORSTOM).¹⁷ The IEC was AEFs key centre of scientific research and comprised seven sections, six of them on natural sciences such as pedology, plant biology and medical entomology, and one on social sciences.¹⁸ These sections would not only conduct comprehensive surveys for state services but also small-scale analyses for parastatal and private enterprises that wanted to set up agricultural and pastoral companies in the AEF.¹⁹

Of course, detailed studies were not carried out everywhere. From early on, both the veterinary services and the scientists of the IEC paid particular attention to the Niari valley, as this region seemed very promising, not only for cattle farming, but also for modern, large-scale agricultural enterprises. The Niari valley was a sparsely populated area of around 11,500 km², situated west of Brazzaville on the south bank of the Niari river, between Mindouli and the Bamba mountains, and characterised by very fertile clay (or sandy clay) soils resting on calcareous shale rocks (*formations schisto-calcaires*).²⁰ The nearby Congo-Océan railway, which connected the port of Pointe-Noire with Brazzaville and which had been built in the interwar years at tremendous human cost, offered good transportation facilities.²¹ European colonisation had started in the early 1940s and attracted more and more private agricultural enterprises as well as parastatal experimental stations for peanuts, cotton, rice and other cash crops.²² The veterinary services entertained two animal-breeding stations in the Niari valley, in Dolisie and Mindouli. Based on their breeding experiences and guided by the in-depth studies by IEC soil scientists (pedologists), botanists and medical entomologists, the Niari valley became southern AEF's first and foremost site for cattle farming, with other areas in Gabon and Oubangui-Chari following suit later on.²³ René Larrat, the director of the animal husbandry section in the Overseas Ministry, even believed that the Niari valley could accommodate up to 100,000 head of cattle, which was equivalent with 15,000 animals for slaughter or 2,000 tonnes of meat annually.²⁴

¹⁷ Christophe Bonneuil & Patrick Petitjean, 'Recherche scientifique et politique coloniale. Les chemins de la création de l'ORSTOM, 1936-1945', in Patrick Petitjean (ed.), *Les sciences hors d'Occident au XXe siècle. Vol 2: Les sciences coloniales. Figures et institutions*, Paris: ORSTOM, 1996, pp.113-61; ORSTOM, *Office de la Recherche Scientifique et Technique Outre-Mer. Organisation - activités: 1944-1955*, Paris: ORSTOM, 1955. In 1998, ORSTOM changed its name into *Institut de Recherche pour le Développement (IRD)*.

¹⁸ ORSTOM (1955), pp.52-4; Jean-Louis Trochain, 'Les études poursuivies par l'Institut d'Etudes Centrafricaines, depuis sa création, sur le territoire de la République du Congo', *Bulletin de l'Institut d'Etudes Centrafricaines* 19-20 (1960), pp.127-88.

¹⁹ See, for instance, for pedology, Trochain (1960), p.151.

²⁰ Maurice Guillaume, 'La mise en valeur de la vallée du Niari', *Agronomie Tropicale* 9:3 (1954), pp.324-9; Jean-Marie Brugière, *Etude pédologique de la vallée du Niari*, Paris: ORSTOM, 1952.

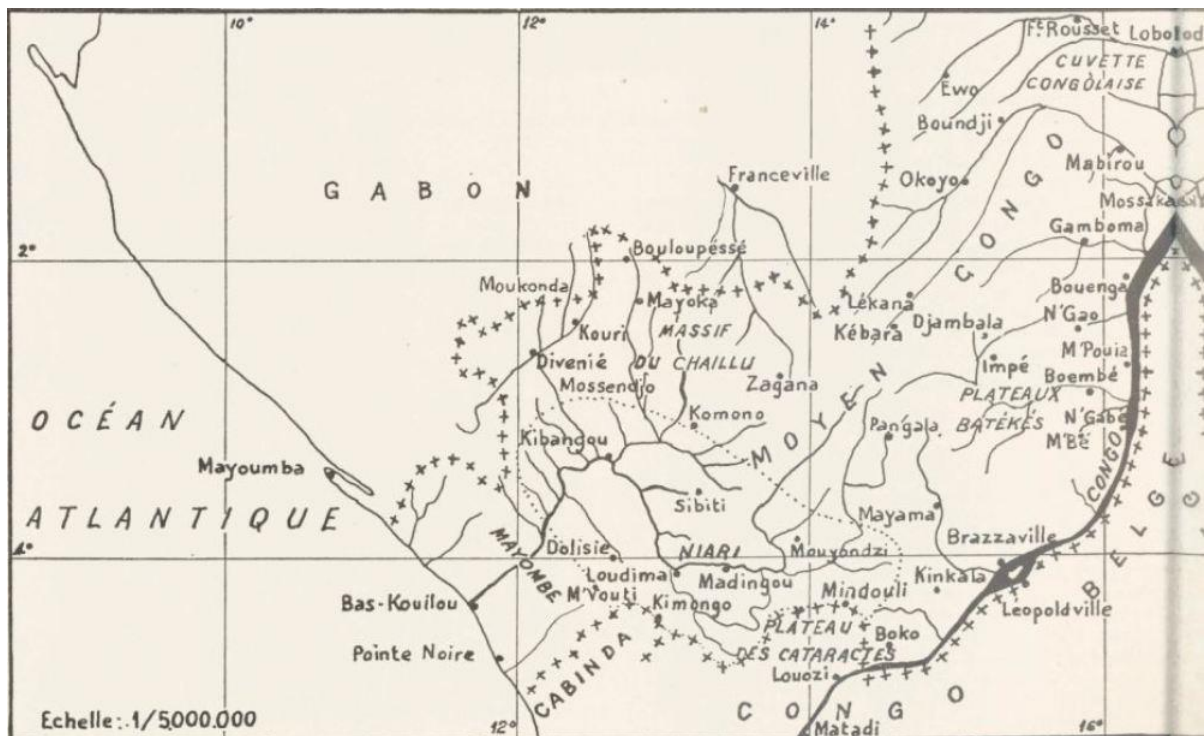
²¹ Gilles Sautter, 'Notes sur la construction du chemin de fer Congo-Océan (1921-1934)', *Cahiers d'Etudes Africaines* 7:26 (1967), pp.219-99.

²² Guillaume (1954).

²³ Brugière (1952), pp.163-71; Maillot (1953).

²⁴ René Larrat to Directeur des Affaires Économiques et du Plan [Avant-projet du 3e plan quadriennal Moyen-Congo], 15 October 1957, ANOM, 211COL54.

Map 1 – Niari Valley and surroundings



Source: Guillaume (1954), p.326.

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Choosing cattle races

The success of the programme was largely due to the choice of cattle. In the first decades of the twentieth century, there had already been various attempts at breeding zebu cattle from Angola and Cameroon in the tsetse-infested areas of the southern AEF. Despite many precautions, such as the ‘immunisation’ of cattle with trypanocidal drugs, the clearing of brushwood (where tsetse flies liked to breed) or the transportation of cattle only at night, when tsetse flies were reputed to be less active, most of these attempts ended with the decimation of the herds.²⁵ The idea of importing and acclimatising trypanotolerant taurine cattle breeds from West Africa only gradually emerged among French veterinary experts in the 1930s and 1940s.²⁶

On the one hand, the emergence of this idea was due to accrued awareness of, and new knowledge on, trypanotolerance. European veterinary doctors had already noted the accrued resistance of certain taurine cattle races in West Africa against animal trypanosomiasis early

²⁵ See, for instance, ‘Étude sur les possibilités de l’élevage en diverses régions du Moyen Congo et sur l’état sanitaire des troupeaux entre Brazzaville et Pointe-Noire’, *Bulletin Économique de l’Afrique Équatoriale Française* 6:17 (1930), pp.3-9.

²⁶ For early and still cautious recommendations, see René Malbrant, Programme d’action du service zootechnique de l’AEF, 1936, Sept. 1937, p.10, ANOM, Guernut 49; Etat actuel de l’élevage dans les colonies françaises d’Afrique, 1939, pp.25, 33, ANOM, 211COL29.

on in the twentieth century.²⁷ The exact nature and the causes of this phenomenon would not be well understood until the 1970s and 80s, when special research centres were set up;²⁸ but by the late 1940s, veterinary experts usually agreed on two issues. Firstly, they agreed that these taurine breeds, most notably the long-horned N'Damas and the smaller and short-horned Lagunes and Baoulés, did not possess an absolute immunity. Trypanotolerance meant that these animals were, microbiologically speaking, infected with pathogenic trypanosomes, but their organism had become accustomed to the trypanosomes and was able to prevent the outbreak of the disease. They acknowledged that this was a condition of fragile equilibrium and that the animals would suffer from an (often deadly) outbreak of the disease if they were weakened by malnutrition, fatigue or other, for instance tick-borne, diseases, or if they were put in an area that was very highly infested with trypanosomes.²⁹ Secondly, they agreed that the transfer of trypanotolerant cattle from one region to another was not impossible, but would have to be handled with great caution. In a similar vein as with debates about human immunity,³⁰ veterinary experts had frequently noted that the animals' 'immunity' was very local and that they would often lose their protection outside their natural habitat.³¹ This observation corresponded with the fact that there were various types of trypanosomes, with different characteristics.³²

But perhaps more than theoretical knowledge on trypanotolerance, it was the successful experiences with trypanotolerant cattle in the neighbouring Belgian Congo that convinced French experts. Indeed, after small-scale experiments by Belgian missionaries and settlers in the late nineteenth and early twentieth century, Belgian colonial enterprises had, from the late 1920s onwards, begun to import and breed trypanotolerant cattle in the Bas-Congo on a much larger scale. While the Compagnie J. Van Lancker in Kolo specialised in breeding N'Dama cattle, the *Société de Colonisation Agricole au Mayumbe* (SCAM) concentrated on short-horned Lagunes. As their herds showed high and constant growth rates, these companies not only proved that trypanotolerant races could acclimatise and thrive under conditions very similar to those of Moyen-Congo or Gabon, but that cattle farming there could

²⁷ See A. P. M. Shaw & C. H. Hoste, 'Les échanges internationaux de bovins trypanotolérants. I. Historique et synthèse', *Revue d'élevage et de médecine vétérinaire des pays tropicaux* 44:2 (1991), pp.221-8; and, for instance, C. Pierre, *L'élevage dans l'Afrique Occidentale Française*, Paris: A. Challamel, 1906, p.136.

²⁸ J. Coulomb et al., *La trypanotolérance. Synthèse bibliographique des connaissances actuelles*, Paris/Maisons-Alfort: Ministère de la Coopération / IEMVT, 1977, pp.97-8; Max Murray, 'Trypanotolerance, its criteria and genetic and environmental influences', in The African Trypanotolerant Livestock Network (ed.), *Livestock Production in Tsetse affected areas of Africa. Proceedings of a meeting held in Nairobi, Kenya, from the 23th to 27th November 1987*, Nairobi: International Livestock Centre for Africa and the International Laboratory for Research on Animal Diseases (ILCA/ILRAD), 1988; Shaw & Hoste (1991).

²⁹ J. Stewart, 'The West African Shorthorn cattle. Their value to Africa as trypanosomiasis-resistant animals', *Veterinary Record* 63 (1951), pp.454-7; Jean-Bernard Suchel, 'L' élevage des bovins en République Centrafricaine (ex Oubangui-Chari)', *Les Cahiers d'Outre-Mer. Revue de Géographie de Bordeaux* 20 (1967), p.146; Coulomb et al. (1977), pp.46-7.

³⁰ Warwick Anderson, 'Immunities of Empire. Race, Disease, and the New Tropical Medicine, 1900-1920', *Bulletin of the History of Medicine* 70:1 (1996), pp.94-118.

³¹ See, for instance, Pierre (1906), p.241; R. Aillerie, 'Enquête sur la mouche tsé-tsé et les trypanosomiasés en Côte-d'Ivoire', *Recueil de Médecine Vétérinaire Exotique* 3 (1930), p.33; J. L. Stewart, 'The cattle of the Gold Coast', *Veterinary Record* 49 (1937), p.1289.

³² Malbrant & Dugué (1933).

also be commercially successful.³³ After the Second World War, these experiences in the Belgian Congo would become a crucial reference, and hence point of inter-imperial comparison and learning, for French veterinary doctors and entrepreneurs.

Although the experiences of Van Lancker and SCAM in the Belgian Congo had clearly shown the advantages of trypanotolerant cattle over other breeds, the veterinary services of the Moyen-Congo wished to repeat the experiment. In order to compare their acclimatisation possibilities, the experimental stations in Dolisie and Mindouli imported a few hundred animals of different race and provenience between 1948 and 1950: N'Damas from their region of origin, the Fouta-Djalon, in French Guinée and from J. Van Lancker in the Belgian Congo; Borroro and Foulbé Zebus from Oubangui and Cameroon, and Adamoua-Montbéliard crossbreeds from Oubangui and Cameroon as well.³⁴ By the end of 1951, the veterinary services drew their conclusions and ended the experiment. While the zebus and crossbred zebus from Oubangui and Cameroon had displayed a high susceptibility, not only to trypanosomiasis, but also to tick-borne diseases such as heart water, rickettsiosis and bovine piroplasmiasis, leading to high mortality despite drug treatment, the (trypanotolerant) N'Damas, especially those imported from the Belgian Congo, had thriven very well in their new environment, with low mortality and high fertility rates. Their conclusion was clear: only the trypanotolerant N'Dama cattle would be of any use for future ranching projects in the Niari valley.³⁵

Importing cattle

After their first transport of trypanotolerant cattle from Guinée in 1948, the veterinary services of the Moyen-Congo would set up many such operations over the years, to stock their experimental breeding stations, to supply private companies or to distribute the animals among African villagers. Some of the larger private companies mounted similar operations and, from the mid-1950s, the veterinary services of Oubangui-Chari and Gabon also began to participate in this inner-imperial cattle trade, focussing more on Baoulé cattle from Côte d'Ivoire, Haute-Volta or Mali.³⁶

Bringing cattle from West to Central Africa was anything but an easy endeavour, however. Certainly, cattle and other large animals had been shipped across the globe for many

³³ See, for instance, Agostino Flamigni, 'Note sur l'élevage des bovidés du Dahomey au Mayumbe', *Bulletin Agricole du Congo Belge* 30:2 (1939), pp.199-211; and 'Note sur l'élevage des bovidés du Dahomey au Mayumbe', *Bulletin Agricole du Congo Belge* 39:3 (1948), pp.647-62; Vladimir Drachoussoff, 'Van Lancker, Jules (1887-1954)', in Académie Royale des Sciences d'Outre-Mer (ed.), *Biographie Belge d'Outre-Mer*, vol. IX (2015), pp.396-9; Pierre Georges Choquel, *Intérêt et utilisation des bovins trypanotolérants*, veterinary doctoral thesis, École Nationale Vétérinaire d'Alfort, 1969, pp.52-74.

³⁴ See the extracts from the Annual Reports of the Veterinary Services of Moyen-Congo and French Equatorial Africa, 1948-1951, ANOM, 211COL5; 'Les premiers résultats de l'élevage dans le Niari', s.a., s.d., p.15, ANOM, 211COL55.

³⁵ See the reports on Mindouli, 1950 and 1951, in ANOM, 211COL5.

³⁶ J. Desrotour et al., 'Les bovins trypanotolérants. Leur élevage en République Centrafricaine', *Revue d'élevage et de médecine vétérinaire des pays tropicaux* 20:4 (1967), pp.589-94; Philippe Martin-Granel, *Jean Desrotour. Baba ti Mbororo - le père des Mbororo. Épopée d'un vétérinaire de l'Afrique centrale à l'Éthiopie*, Salinelles: L'Acèu libre, 2014, pp.164-5. For Gabon, see Cl. Niverd [Chef du Service de l'Élevage et des Industries Animales] to Directeur du Plan, 31 June 1959, ANOM, 211COL30.

decades, if not centuries for military, commercial and (cross-)breeding purposes.³⁷ Many of these transports, however, only included a few animals. In order to rapidly constitute herds, veterinary doctors and entrepreneurs now wanted to import hundreds of animals at a time. This constituted a logistic, sanitary and financial challenge.

The purchase of trypanotolerant cattle was the first obstacle. Even if the AEF's veterinary services solicited cattle from other French colonies, inner-imperial solidarity was not self-evident. Trypanotolerant cattle, especially the short-horned Lagunes and Baoulés, was rather scarce and often lived dispersed in West Africa itself. In 1947, veterinary doctor Doutressoulle thus estimated that there existed only about 30,000 Baoulé cattle in its region of origin in Côte d'Ivoire.³⁸ As a consequence, both veterinary services and African cattle owners in French West Africa were reluctant to sell many animals, especially since the AEF wanted healthy females at their best reproductive age.³⁹ In order to gather a few hundred of such animals, preferably also homogenous in physical appearance, buyers had to convince many different cattle owners and usually pay a high price.⁴⁰

Transport was a real challenge as well, as the animals were to be moved by various means of transport over a distance of thousands of kilometres. The animals were mostly bought in the interior of Guinée, Dahomey (Benin) or Côte d'Ivoire, from where they were walked to gathering points. They were then taken by train or truck to the coast, from where they were shipped to Pointe-Noire in the Moyen-Congo. The journey was continued by train to Brazzaville. From Brazzaville, they were either brought to their final destination in the Niari valley or, if their destination was the Oubangui-Chari, shipped in river boats to Bangui, from where they were walked or transported in trucks to their final destination.⁴¹

³⁷ See, for instance, Gesine Krüger, 'Tiere und Imperium. Animate History postkolonial: Rinder, Pferde und ein kannibalischer Hund', in Gesine Krüger et al. (eds), *Tiere und Geschichte. Konturen einer Animate History*, Stuttgart: Franz Steiner, 2014, pp.131-2; Roquinaldo Ferreira, 'The supply and deployment of horses in Angolan warfare (17th and 18th centuries)', in Beatrix Heintze & Achim von Oppen (eds), *Angola on the move / Angola em Movimento. Transport Routes, Communications and History / Vias de Transporte, Comunicações e História*, Frankfurt am Main: Lembeck, 2008, pp.41-51.

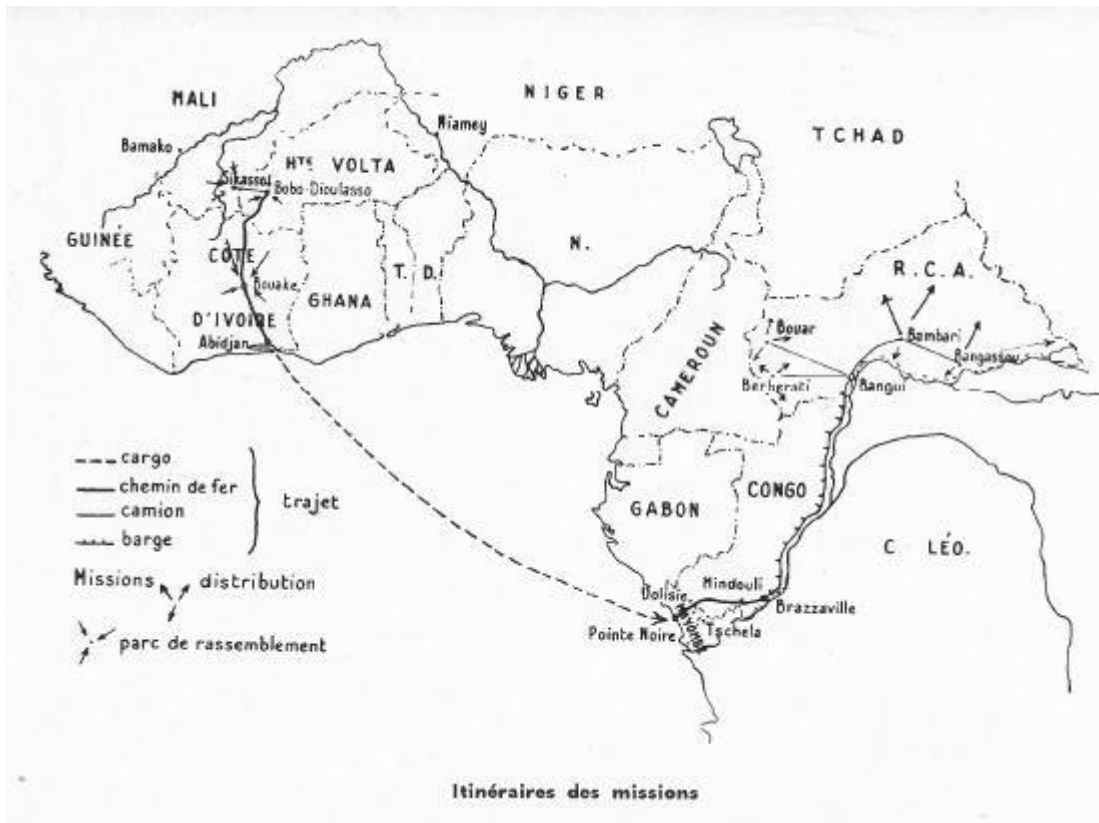
³⁸ Georges Doutressoulle, *L'Élevage en Afrique Occidentale Française*, Paris: Editions Larose, 1947, p.87.

³⁹ See, for instance, René Larrat, Note, 5 December 1951, ANOM, 211COL 55; Choquel (1969), p.103.

⁴⁰ 'Extrait du rapport de mission en Guinée effectuée en Décembre 1948 par M. le Chef du Service de l'Élevage du Moyen-Congo', ANOM, 211COL55; Jean Desrotour et al., *Note technique sur les modes de transport dans la diffusion du bétail trypanotolérant*, GERDAT-IEMVT, 1972, p.2.

⁴¹ Desrotour et al. (1972), pp.2-4; Suchel (1967); Choquel (1969), pp.103-4.

Map 2 – Itineraries of the cattle purchase missions



Source: Lemonnier (1966), p.45.

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Beyond logistical difficulties, the challenge was also to deliver the animals in the best possible state of health, in order not to compromise their chances to acclimatise in their new environment. During their journey, the animals were usually submitted to regular sanitary controls, including preventive treatments against rinderpest, anthrax, tick-borne diseases and trypanosomiasis. In some of the early operations, losses due to disease were high, with an exceptional 30 percent for the first importation of Baoulé cattle into Oubangui-Chari in 1955, but they could quickly be reduced to a few percent or even less.⁴² In order to avoid long and expensive transportation, AEF agents repeatedly bought N'Damas and Lagunes from Van Lancker and SCAM in the Belgian Congo. These companies, however, had still fewer animals available, and usually sold them at a higher price than the African cattle owners in West Africa, so that the financial advantage of buying from the Belgian Congo was limited.

Overall, the importation of trypanotolerant cattle into the AEF was a complicated and expensive operation. Most private companies could not stem the costs and relied on the state veterinary services for supply (see below). These were able to pay the transactions thanks to money from the colonial FIDES programme, and later the French and European development

⁴² Desrotour et al. (1969), p.592; Lemonnier (1966), pp.52-4.

aid programmes: FAC (*Fonds d'Aide et de Coopération*) and FEDOM (*Fonds Européen de Développement*).⁴³

European companies and extensive cattle ranching

While the French veterinary services had taken the lead, they did not want cattle farming in the AEF to remain a state enterprise. In the Niari valley, experts initially set their hopes on large European private enterprises rather than on African farmers. They assumed that only large companies would be able to supply the larger cities with meat, but also that the diffusion of cattle breeding among the local African population would be a long and difficult process, due to their much discussed lack of 'pastoral vocation'. Africans in the region, they claimed, had no experience with large cattle and would often even run away from them out of fear.⁴⁴

One of the main problems for private investors, however, was the large amount of capital needed to mount a profitable ranch with trypanotolerant cattle. The French colonial state was more than willing to help, as the founding history of the *Société Africaine d'Élevage* (SAFEL), the largest and most successful cattle-farming company in the AEF, illustrates.⁴⁵ SAFEL was born out of two *sociétés anonymes*, which both studied the economic possibilities of cattle ranching in southern Moyen-Congo in 1951: the SEGEDAN (*Société d'Études et de Gestion de l'Afrique Noire*), an investment group with its head office in Brazzaville, and the COMINAC (*Compagnie Industrielle pour l'Afrique Occidentale*), an investment group founded by M. Cahen d'Anvers, the experienced long-time director of the *Société Foncière du Paraguay*, a company specialised in extensive cattle farming in Paraguay.⁴⁶ When they eventually presented their business plans to the French colonial administration, they both asked for very substantial loans from the FIDES programme in order to finance the construction of the farming infrastructure, the purchase of a few thousand animals from West Africa to start with and the running expenses for the first eight to ten years. Only after a decade would the herds be big enough for the companies to start making profits. The colonial administration, including AEF High Commissioner Chauvet, was sympathetic to these projects, but in order not to strain FIDES budgets, demanded both investment groups to join forces.

In July 1952, the newly created SAFEL received a twelve-year loan of 75 million CFA francs to pursue its still ambitious aim of creating a herd of 15,000 animals on a concession of 50,000 ha. by 1963. This size would allow SAFEL to sell 2,900 animals for slaughter per year. Simultaneously, SAFEL was granted an initial concession of 5,000 ha. near Madingou in the Niari Valley. Based on the preliminary prospections by SEGEDAN and Cahen d'Anvers,

⁴³ See, for instance, the correspondence in ANOM, 211COL30 and 211COL57.

⁴⁴ See, for instance, René Malbrant, 'Elevage et Action Zootechnique en AEF', 8 July 1941, pp.19-21, ANOM, GGAEF 5D50; René Larrat, 'Note pour Monsieur le Secrétaire d'Etat (Étude des possibilités offertes par la région de Niari en matière d'élevage bovin)', 1 August 1950, ANOM, 211COL55.

⁴⁵ For the following, see the reports and correspondence in ANOM, 211COL55 and 1FIDES54.

⁴⁶ On the Société Foncière du Paraguay, see Sylvain Souchaud, *Pionniers brésiliens au Paraguay*, Paris: Karthala, 2002, p.57. More research on possible transfers between Paraguay and the Moyen-Congo is needed.

the direction of SAFEL had concluded that this area offered very favourable conditions for extensive cattle farming. It was an undulating plateau with apparently high-quality savannah pastures, a reasonably rich soil, abundant rainfall and many small rivers. Tsetse flies were rather rare and mostly limited to some riverbank woodlands. Moreover, Madingou was relatively close to the large urban centres of southern AEF (Brazzaville, Pointe-Noire) and connected with them through the nearby Congo-Océan railway.⁴⁷

SAFEL was almost entirely modelled upon the Van Lancker company, which Cahen d'Anvers had visited during his stay in the Moyen-Congo in October 1951.⁴⁸ Just like Van Lancker, SAFEL embraced the system of extensive cattle ranching as the only viable mode of production under the given conditions. Developed in the Americas and responsible for the expansion of the US-American and Argentinean beef industry in the nineteenth century, extensive ranching involved a very low animal/surface ratio, a relatively low number of labourers and the enclosure of pastures with barbed wire.⁴⁹ SAFEL allotted 3 to 4 ha. of land per animal and 1 herdsman per 50 to 75 animals.⁵⁰ Pastures were enclosed with barbed wire fences to better manage the herd, control its reproduction and facilitate sanitary measures such as regular dipping sessions against tick-borne diseases. Fencing was also important to enable pasture rotation, avoid overgrazing and hence fight against soil erosion – a problem that had become a major focus of attention for both agronomists and veterinary scientists in tropical Africa since the 1930s.⁵¹ Or as René Larrat put it: “Without fences and paddocks, pastures are rapidly destroyed, fodder is wasted and soils are stripped bare.”⁵²

Like Van Lancker, SAFEL also chose N'Dama cattle for its enterprise, because of its high trypanotolerance, its limited needs, acceptable weight and high fertility. Between 1953 and 1955, SAFEL imported 1,755 N'Dama cattle during several operations, most of them directly from the Fouta-Djalon in Guinée and the rest from the Van Lancker company in the Belgian Congo, which also provided the bulls.⁵³ In 1953, Jules Van Lancker had become a shareholder of SAFEL, paying his contribution in animals.⁵⁴

⁴⁷ Société Africaine d'Élevage, 17 July 1952, ANOM, 1FIDES54.

⁴⁸ Gilbert Cahen d'Anvers, 'Étude sur un élevage bovin au Moyen Congo', 1 March 1952, pp.12-5, ANOM, 211COL55.

⁴⁹ Jeremy Rifkin, *Beyond Beef. The Rise and Fall of the Cattle Culture*, New York: Plume, 1992, pp.100-9. On ranching in the AEF, see also 'Le "ranching" en AEF', *Chroniques d'Outre-Mer* 40 (1957), ANOM, 211COL58.

⁵⁰ Société Africaine d'Élevage, 17 July 1952, ANOM, 1FIDES54.

⁵¹ René Larrat to Directeur des Affaires Économiques et du Plan, 31 March 1952, ANOM, 211COL55. For the international discussion on soil erosion, see David Anderson, 'Depression, Dust Bowl, Demography, and Drought. The Colonial State and Soil Conservation in East Africa during the 1930s', *African Affairs* 83:332 (1984), pp.321-43; W. Beinart, 'Soil Erosion, Conservationism and Ideas about Development. A Southern African Exploration, 1900-1960', *Journal of Southern African Studies* 11 (1984), pp.52-83; Karen Brown & Daniel Gilfoyle, 'Introduction', in Karen Brown & Daniel Gilfoyle (eds), *Healing the Herds. Disease, Livestock Economies, and the Globalization of Veterinary Medicine*, Athens: Ohio University Press, 2010, p.11; Monica M. van Beusekom, 'From Underpopulation To Overpopulation. French Perceptions Of Population, Environment, and Agricultural Development in French Soudan (Mali), 1900-1960', *Environmental History* 4:2 (1999), pp.211-2.

⁵² René Larrat to Directeur des Affaires Économiques et du Plan, 31 March 1952, ANOM, 211COL55.

⁵³ Service de l'élevage de la Guinée française, Rapport annuel, 1953, pp.139-40, ANOM, 14Miom1976; Service de l'élevage de la Guinée française, Rapport annuel, 1954, p.157, ANOM, 14Miom1996. See also Rapports sur l'élevage au Moyen-Congo, 1954 and 1955, ANOM, 211COL 117.

⁵⁴ Directeur de l'Office des Changes de l'AEF to Haut-Commissaire AEF, 31 December 1952, ANOM, 211COL55; Drachoussoff (2015).

Finally, SAFEL even adopted a similar solution for its labour problem. As already noted before, the idea that Africans in the Moyen-Congo were neither interested in nor apt for cattle farming was widespread among colonial experts. Leading veterinary doctors like Malbrant and Dauzats stated that, due to their lack of contact with large cattle, the Bantu populations of the Moyen-Congo were completely inexperienced and useless as cattle herders; it would at least take a generation of education at experimental state farms or farming schools to turn some of them into good herders. In the short-term, they argued, the only solution was to attract herders from regions with a long pastoral tradition, like the Fula people (Fr.: 'Peul(h)s') from Cameroon or Chad, or the Bororos from Oubangui.⁵⁵ AEF's experimental stations had readily adopted this solution in the late 1940s and also SAFEL would settle Fulani to herd their cattle.⁵⁶ In a similar vein, Jules Van Lancker had engaged mainly Angolan herders, as Cahen d'Anvers had been able to observe with his own eyes during a short visit in October 1951.⁵⁷

Over the next years, SAFEL's efforts were largely crowned with success. Even if its herd did not grow as quickly as expected, mainly because many of the heifers imported from Guinée were not yet in reproductive age on their arrival,⁵⁸ the development was favourable and by early 1959 its stock had nearly quadrupled to over 6,000 animals.⁵⁹ SAFEL had proven that, within certain limits, commercial cattle farming was possible under the adverse conditions of the Moyen-Congo.

To be sure, SAFEL was not the only European player in the field. Other companies in the Niari valley, like SOCAMA and SAPN, as well as some European settlers, like Neeser and Joffre, had also begun to invest in cattle farming in the early 1950s.⁶⁰ However, despite state support, many of these smaller enterprises stagnated or gave up after a few years as they still lacked capital to import a sufficient number of animals or to bear the heavy initial operation costs.⁶¹ Among the most stable of these enterprises were a few parastatal companies that actually focused on other commodities, like the *Compagnie Générale des Oléagineux Tropicaux* (CGOT) (peanuts) and the *Institut de Recherches du Coton et des Textiles Exotiques* (IRCT) (cotton).⁶² They were mainly interested in creating synergies between cattle

⁵⁵ René Malbrant, 'Élevage et Action Zootechnique en AEF', 8 July 1941, pp.19-22, ANOM, GGAEF, 5D50; L'élevage en Afrique Équatoriale [1939], pp.16-7, ANOM, 211 COL53; Reply of A. Dauzats (Inspecteur de l'Élevage), 5 juin 1948, to 'La situation et la politique alimentaire dans les régions du Niari et du Kouilou', pp.9-10b, ANOM, GGAEF 3D52.

⁵⁶ See, for instance, the observations by Chevalier (1951), p.345; and Société Africaine d'Élevage, 17 July 1952, p.7, ANOM, 1FIDES54.

⁵⁷ Gilbert Cahen d'Anvers, 'Étude sur un élevage bovin au Moyen Congo', 1 March 1952, p.15, ANOM, 211COL55. More research on the modalities of this labour mobility is needed.

⁵⁸ See the references in footnote 53; and Choquel (1969), pp.85-6.

⁵⁹ René Larrat to Directeur des Affaires Économiques et du Plan, 24 March 1959, ANOM, 211COL30.

⁶⁰ 'Les premiers résultats de l'élevage dans le Niari [1953]', p.17, ANOM, 211COL55; René Larrat, 'Inspection des Services de l'Élevage. Rapport de mission en Afrique Equatoriale Africaine et au Cameroun', 1956, pp.70-8, ANOM, 211COL59.

⁶¹ See, for instance, Ministre de la France d'Outre-Mer to Haut-Commissaire de l'AEF, 11 February 1955, ANOM, 211COL55; 'Rapport du Service de l'Élevage du Moyen-Congo, Année 1955', pp.17-21, ANOM, 211COL117.

⁶² République du Congo, *Quinze ans de travaux et de recherches dans les pays du Niari, 1949-1964. Institut de recherches du coton et des textiles exotiques (IRCT), Principaux travaux réalisés à la station de Madingou de 1949 à 1964*, Monaco: Paul Bory, 1966, pp.19; 59-64. On the CGOT, which was also present in Senegal, see

farming and agriculture, through the use of manure as fertiliser or the use of cattle as draft animals. By 1960, European companies in the Niari valley, including a few catholic mission posts, owned around 13,000 head of cattle, with SAFEL alone possessing a bit more than 8,000.⁶³

Generally, extensive ranching became, in the 1950s, the form in which both the French veterinary services and European companies in the AEF tried to extend commercial cattle farming into new areas.⁶⁴ In southern Chad, the *Compagnie Pastorale* from Cameroon established a ranch in Massakory in the mid-1950s;⁶⁵ and, in 1959, both SAFEL, whose concession in the Niari valley had been reduced from 50,000 ha. to 25,000 ha. at the eve of decolonisation, and CGOT started working on the establishment of cattle ranches in Gabon.⁶⁶ Cattle ranching was not abandoned when the French colonies gained their independence. There was not even a clear rupture with regard to their funding, as FAC and FEDOM took over FIDES' role.⁶⁷ As for SAFEL, the government of the Republic of Congo nationalised the company and changed its name into SONEL (*Société Nationale d'Élevage*) in 1966, but continued to adhere to the ranching principle.⁶⁸ SONEL remained profitable until the 1980s and other ranches were created, often with the advice of French experts.⁶⁹

Métayage

Ranching was not the only scheme used to extend the pastoral frontier in the AEF. Although the anthropological reservations regarding the pastoral aptitude of Equatorial Africans persisted, the AEF's veterinary services, and later private companies like SAFEL as well, began in the 1950s to disseminate trypanotolerant cattle among the local population through the so-called *métayage* system. This system implied that, after the signing of a *métayage* contract, selected African peasants would receive a small herd of five to ten heifers or young cows and one bull, which they were to reimburse over a time period of usually five years with similar animals from the natural increase of their herd. During that time frame, the *métayers* had to follow the advice of the donors – that is the veterinary services or private enterprises – who would send veterinary agents to regularly inspect the conditions. Only after the reimbursement would they become the legal owners of their cattle. Depending on the type of

Marina Diallo Côt-Trung, *La Compagnie générale des oléagineux tropicaux en Casamance. Autopsie d'une opération de mise en valeur coloniale (1948-1962)*, Paris: Karthala, 1998.

⁶³ Choquel (1969), p.84.

⁶⁴ 'Le "ranching" en AEF', *Chroniques d'Outre-Mer* 40 (1957), ANOM, 211COL58.

⁶⁵ See the correspondence in ANOM, 211COL58 and René Larrat, 'Inspection des Services de l'Élevage. Rapport de mission en Afrique Equatoriale Africaine et au Cameroun', 1956, pp.54-68, ANOM, 211COL59.

⁶⁶ See the correspondence in the folder 'Élevage bovin en parcs clôturés', ANOM, 211COL57. See also Choquel (1969), pp.85-6.

⁶⁷ See, for instance, the correspondence in ANOM, 211COL30.

⁶⁸ 'Animal husbandry', in *Historical Dictionary of Republic of the Congo*, 4th ed., Lanham/Toronto/Plymouth: Scarecrow Press, 2012, pp.42-4.

⁶⁹ See, for instance, Alain Auger, *Les problèmes humains posés par le projet de ranch d'élevage de bovins dans la plaine de Dihessé (Congo-Brazzaville)*, Brazzaville: ORSTOM, 1970, online http://horizon.documentation.ird.fr/exl-doc/pleins_textes/divers13-02/04754.pdf (last accessed 31 May 2017); Claude Rousseau, *Contribution à l'étude du ranching en République Populaire du Congo. Le ranch de la Dihessé*, veterinary doctoral thesis, École Nationale Vétérinaire d'Alfort, 1982.

cattle and the colony, *métayers* would either have to share all additional newborns with the original cattle owner or be allowed to keep them all.⁷⁰

Cattle *métayage* was introduced in the Moyen-Congo in 1952/53 and a few years later in Oubangui-Chari and Gabon as well, but it was not a French invention.⁷¹ On the one hand, the system was connected to widespread and long-standing practices of sharecropping across the globe.⁷² On the other, the *Société de Colonisation Agricole au Mayumbe* (SCAM) in the Belgian Congo had already set up a cattle *métayage* scheme for some of its workers in the 1930s.⁷³ Interestingly, SCAM had itself modelled its system upon a local practice of *métayage* used by the Congolese in the Mayumbe for smaller animals, like pigs, sheep and goats.⁷⁴ As *métayage* turned out to be a considerable success in the Mayumbe, the French veterinary services studied, emulated and adapted the scheme for the AEF.⁷⁵

Métayage promised to overcome several of the obstacles to the dissemination of cattle in new areas. As it did not involve any upfront payments, it made cattle farming, at least in theory, accessible to the large majority of African peasants who lacked the capital needed to buy cattle. At the same time, it established a certain level of control and education. Not only would veterinary agents guide the *métayers* in their first steps, the latter had already gone through a selection process. In order to receive a *métayage* contract, Africans had to prove their 'seriousness' through a positive evaluation of their previous activities. Veterinary agents would also evaluate the suitability of the area where the animals were to be held and demand that candidate *métayers* construct a night shelter for the animals and enclose the pastures with barbed wire.⁷⁶

Métayage quickly proved to be an appropriate, though certainly not perfect way to extend the pastoral frontier in the AEF, parallel to European cattle ranching. The scheme started in 1953 with a rather modest pilot project, when 43 Lagunes imported from the Belgian Congo were distributed to Africans in the Kimongo district in the Moyen-Congo.⁷⁷ Yet, after encouraging results, *métayage* was extended to other parts of the colony, so that by the end of 1957, nearly 600 animals had been distributed in *métayage*, a number that further increased to 1,507 in 1960.⁷⁸ In Oubangui, the veterinary services' almost yearly purchase

⁷⁰ Bertucat (1965), pp.74-5; Choquel (1969), pp.87-92; René Larrat, 'Inspection des Services de l'Élevage. Rapport de mission en Afrique Equatoriale Africaine et au Cameroun, 1956', pp.78-83, ANOM, 211COL59.

⁷¹ Claude Baco, *Contribution à l'étude de l'élevage bovin dans la République du Congo-Brazzaville*, veterinary doctoral thesis, Université de Lyon, Faculté de Médecine et de Pharmacie, 1965, p.60; Bertucat (1965), p.74. For Gabon, see also the correspondence in ANOM, 211COL30.

⁷² <https://www.britannica.com/topic/metayage> (last accessed 31 May 2017).

⁷³ Flamigni (1939), pp.207-11; and (1948), pp.654-8.

⁷⁴ Flamigni (1939), p.209; and (1948), pp.654-5; Choquel (1969), pp.63-4.

⁷⁵ Choquel (1969), pp.61-6; 70-3. See also République Centrafricaine. *Projet F.E.D.O.M. - 2e Tranche. Développement de l'élevage en milieu villageois à vocation non pastorale*, pp.4-5, ANOM, 211COL54. As an expression of French interest in SCAM's experiment, Flamigni's 1948 article was reprinted as Agostino Flamigni, 'Note sur l'élevage des bovidés du Dahomey au Mayumbe (Extrait du Bulletin Agricole du Congo Belge)', *Bulletin des Services de l'élevage et des industries animales de l'Afrique Occidentale Française* 2:2-3 (1949), pp.51-65.

⁷⁶ See, for instance, Bertucat (1965), pp.74-5.

⁷⁷ Rapport du Service de l'Élevage du Moyen-Congo, Année 1953, p.17, ANOM, 211COL5; Rapport du Service de l'Élevage du Moyen-Congo, Année 1954, pp.19-21, ANOM, 211COL117.

⁷⁸ Plan d'équipement de l'AEF, Tranche 1958-1959, pp.71-2, ANOM, 211COL54; Choquel (1969), pp.88-91; 'Rapport du Service de l'Élevage du Moyen-Congo, Année 1954', pp.19-21, ANOM, 211COL117.

missions to the Côte d'Ivoire and the Belgian Congo allowed for the distribution of more than a thousand animals between 1955 and 1960.⁷⁹ In Gabon, some 370 animals had been lent to people in the Nyanga and N'Goué valleys between 1956 and 1958.⁸⁰

Success was of course not only (and not even primarily) measured by the growing number of distributed animals, but in terms of their acclimatisation and natural increase. In all three colonies, results varied from region to region, probably hinging more on the quality of the pastures and the disease environment than on human interventions. But, in each colony, there was a very encouraging rapid natural growth of the herds – in the Moyen-Congo, for instance, of 50 percent by 1957.⁸¹ This further stimulated African demand for trypanotolerant cattle. In some areas, like the Niari Valley, the demand became much higher than the number of animals available, so that people tried to buy cattle by themselves, in order not to wait too long.⁸²

An important reason for the success of *métayage* in the different parts of AEF was the particular choice of cattle. Following the example of SCAM in the Belgian Congo, French veterinary services and commercial enterprises mainly used West African shorthorn cattle (Lagunes and Baoulés) for *métayage* operations. This matched local African preferences. State-owned experimental stations and private companies had discarded this type of cattle for ranching purposes, as it was considerably smaller, less fertile, more slowly maturing and also more difficult to keep in large herds compared to the commercially more profitable N'Dama cattle.⁸³ Many Equatorial Africans, however, were said to be afraid of N'Damas and to feel more comfortable with the smaller and more docile Lagunes and Baoulés.⁸⁴ Another advantage of West African shorthorn cattle was that it proved more resistant against trypanosomiasis and tick-borne diseases than N'Dama cattle. It was, hence, better adapted to the “contemplative”,⁸⁵ that is non-interventionist or *laissez-faire*, way of cattle farming of the local African population, which did not include the regular dipping or spraying with tick-killing solutions.⁸⁶

But what was one of the main reasons for the scheme's success, was also one of its main problems. The number of trypanotolerant shorthorn cattle in French West Africa (and the Belgian Congo) was very limited and the veterinary services faced increasing import

⁷⁹ Lemonnier (1966), pp.39-54.

⁸⁰ Chef du service d'élevage du Gabon, Projet Besoins FEDOM, 1959-63, 18 December 1958, ANOM, 211COL30.

⁸¹ 'Service de l'Élevage du Moyen-Congo, Bilan des premier et second Plans d'Équipement et de développement économique et social de l'AEF', pp.9-10, ANOM, 211COL54. For Gabon, see Chef du service d'élevage du Gabon, Projet Besoins FEDOM, 1959-63, 18 December 1958, ANOM, 211COL30. For Oubangui-Chari, see, for instance, FAC 1959/60, ANOM, 211COL54; and René Larrat, 'Note pour monsieur le Ministre d'État, Division des Affaires Économiques et Techniques', 25 January 1960, ANOM, 211COL30.

⁸² Philippe Haeringer, 'L'économie rurale dans la région de Mouyondzi', République du Congo (ed.), *Quinze Ans de Travaux et de Recherches dans les Pays du Niari. Etudes socio-économiques 1949-1964*, Brazzaville: ORSTOM, 1967, p.281.

⁸³ Baradat to Haut-Commissaire de l'AEF, 13 August 1951, ANOM, 211COL55.

⁸⁴ For the Moyen-Congo, see Baco (1965), p.60; Haeringer (1967), p.282. For Oubangui-Chari, see Lemonnier (1966), p.34; Desrotour et al. (1967), p.592.

⁸⁵ Baco (1965), p.61.

⁸⁶ Choquel (1969), p.88; Service de l'Élevage du Moyen-Congo, 'Bilan des premier et second Plans d'Équipement et de développement économique et social de l'AEF', p.11, ANOM, 211COL54.

difficulties.⁸⁷ This even led the veterinary services of the Moyen-Congo to stop the distribution of shorthorn cattle in 1962 and switch to N'Dama cattle, with very mitigated results.⁸⁸

The shortage of trypanotolerant cattle slowed the expansion of African cattle farming in the AEF, but was not the only problem of the *métayage* system. First of all, *métayers* were not always selected on the basis of aptitudes. Given the great demand, contracts were often offered to those Africans who had good connections with the colonial administration, such as local chiefs or civil servants. These would mostly not take care of the animals themselves.⁸⁹ Secondly, quite a few *métayers* stopped following the advice of the veterinary agents after they received their herd. As a consequence, animals were not held in enclosures, but vagabonded around the villages, where they overgrazed the pastures and/or destroyed plantations.⁹⁰ Thirdly, instead of considering their small herd as a slowly growing capital, some *métayers* quickly sold their animals after having become owners. Being rare and much in demand, shorthorn cattle reached high prices on the market.⁹¹

Overall, however, leading French officials, in the AEF veterinary services as well as in Paris, made a very positive evaluation. “Métayage”, René Larrat, the director of the animal husbandry section in the Overseas Ministry, concluded, was “a simple, flexible and effective method which allows for direct and in-depth intervention in indigenous society.”⁹² Or to quote his successor Claude Niverd: “It deserves to be generalized since it appeals to the Africans and turns out to be financially more economical for the state.”⁹³ After 1960, the veterinary services of the newly independent states, often still led by French experts, adhered to this opinion and, when possible, continued *métayage*.

Conclusion

The introduction of trypanotolerant cattle in French Equatorial Africa illustrates to what lengths colonial regimes were prepared to go to transform the colonial countryside. It was an unlikely and perhaps atypical agricultural project, as compared to some of the huge agricultural projects of the late colonial and early postcolonial period, no huge financial

⁸⁷ See, for instance, Cl. Niverd [Chef du Service de l'Élevage et des Industries Animales] to Directeur du Plan, 31 June 1959, ANOM, 211COL30.

⁸⁸ Baco (1965), pp.60 & 63.

⁸⁹ ‘Rapport du Service de l'Élevage du Moyen-Congo, Année 1953’, p.17, ANOM, 211COL5; ‘Rapport du Service de l'Élevage du Moyen-Congo, Année 1954’, pp.19-21, ANOM, 211COL117. See also the critique in Baco (1965), pp.61-2.

⁹⁰ Baco (1965), pp.61-2. See also Service de l'Élevage du Moyen-Congo, ‘Bilan des premier et second Plans d'Équipement et de développement économique et social de l'AEF’, p.10, ANOM, 211COL54. More research is needed here on the role of the African overseers (*moniteurs* or *infirmiers-vétérinaires*) in this story.

⁹¹ Baco (1965), pp.99-100.

⁹² René Larrat to Directeur des Affaires Économiques et du Plan, 24 March 1959, ANOM, 211COL30.

⁹³ Cl. Niverd [Chef du Service de l'Élevage et des Industries Animales du MC], Note pour Monsieur le Directeur du Plan, 31 June 1959, ANOM, 211COL30.

benefits were to be expected.⁹⁴ Unlike the peanut, cotton or palm-oil schemes, it was not meant to produce a commodity for the world market, not even for the French metropole.

Nevertheless, even if its stated aim was to improve food security, it was not detached from the expansion of global capitalism under late colonial rule. With the introduction of trypanotolerant cattle, European companies also introduced a deeply capitalist mode of animal farming in the AEF, which was previously unknown in the region, which had revolutionised global meat production in the nineteenth century and which would be carried on by postcolonial governments. With the ranching system, they also introduced herders from other parts of Africa, turning them into dependent labourers. Even if African forms of *métayage* might have previously existed in some areas, the introduction of this kind of written contract and labour division in rural AEF can also be seen as an expansion of a capitalist mode of production. Beyond assuring food security, *métayage* aimed at transforming peasants into (at least part-time) cattle farmers with new forms and practices of knowledge and, perhaps, a new sense for ownership, accumulation and markets. The various ways by which Africans adopted and adapted *métayage* to their needs might be illustrative of both the appeal and the boundaries of global capitalism.

⁹⁴ See, by way of example, Christophe Bonneuil, ““Penetrating the Natives”. Peanut breeding, Peasants and the Colonial State in Senegal (1900-1950)”, *Science, Technology and Society* 4:2 (1999), pp.273-302; Martin Rempe, ‘Fit für den Weltmarkt in fünf Jahren? Die Modernisierung der senegalesischen Erdnusswirtschaft in den 1960er Jahren’, in Hubertus Büschel & Daniel Speich (eds), *Entwicklungswelten. Globalgeschichte der Entwicklungszusammenarbeit*, Frankfurt: Campus-Verl., 2009, pp.241-74; Allen F. Isaacman, *Cotton is the Mother of Poverty. Peasants, Work, and Rural Struggle in Colonial Mozambique, 1938-1961*, Portsmouth: Heinemann, 1996; Monica M. van Beusekom, *Negotiating Development. African Farmers and Colonial Experts at the Office du Niger, 1920-1960*, Portsmouth: Heinemann, 2002; Jan Hogendorn & K. M. Scott, ‘Very large-scale agricultural projects. The lessons of the East African Groundnut Scheme’, in: Robert I. Rotberg (ed.), *Imperialism, Colonialism, and Hunger. East and Central Africa*, Lexington: Lexington Books, 1983, pp.167-98.

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The mutually reinforcing relationship between 'commodities' and 'empires' has long been recognised. Over the last six centuries the quest for profits has driven imperial expansion, with the global trade in commodities fuelling the ongoing industrial revolution. These 'commodities of empire', which became transnationally mobilised in ever larger quantities, included foodstuffs (wheat, rice, bananas); industrial crops (cotton, rubber, linseed and palm oils); stimulants (sugar, tea, coffee, cocoa, tobacco and opium); and ores (tin, copper, gold, diamonds). Their expanded production and global movements brought vast spatial, social, economic and cultural changes to both metropolises and colonies.

In the Commodities of Empire project we explore the networks through which such commodities circulated within, and in the spaces between, empires. We are particularly attentive to local processes – originating in Africa, Asia, the Caribbean and Latin America – which significantly influenced the outcome of the encounter between the world economy and regional societies, doing so through a comparative approach that explores the experiences of peoples subjected to different imperial hegemonies.

The following key research questions inform the work of project:

- 1) The networks through which commodities were produced and circulated within, between and beyond empires;
- 2) The interlinking 'systems' (political-military, agricultural labour, commercial, maritime, industrial production, social communication, technological knowledge) that were themselves evolving during the colonial period, and through which these commodity networks functioned;
- 3) The impact of agents in the periphery on the establishment and development of commodity networks: as instigators and promoters; through their social, cultural and technological resistance; or through the production of anti-commodities;
- 4) The impact of commodity circulation both on the periphery, and on the economic, social and cultural life of the metropolises;
- 5) The interrogation of the concept of 'globalisation' through the study of the historical movement and impact of commodities.

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