



COFFEEBRIDGE

BRIDGING KNOWLEDGE TO THE FIELD: AN EVALUATION OF THE AGRONOMIC AND SOCIO-ECONOMIC POTENTIAL OF ROBUSTA COFFEE GENETIC RESOURCES AS A CASH CROP IN YANGAMBI

Acronym: Coffeebridge
Timespan: 12/2019-12/2023
Funder: BELSPO
Coordinator: Piet Stoffelen
Type of project: Research & Policy Advice



Objectives:

Robusta coffee in Yangambi is evaluated from a socio-economic, agronomic and historic perspective. Furthermore, the phenotypic, genetic, organoleptic and chemical properties of the coffee collection available there are examined. Furthermore, historic data on Robusta coffee and grey literature will be recovered for colonial archives. The project will formulate policy advice and develop a tool for the development of the coffee chain in Yangambi.

Partner institutes and promoters:

Meise Botanic Garden	(MeiseB)	Stoffelen Piet
State Archives	(Arch)	Amara Michaël
KU Leuven – Soil & Water Management	(KUL-SWM)	Merckx Roeland
KU Leuven - Interfaculty Centre for Agrarian History	(KUL-Hist)	Segers Yves
ULB – Pharmacognosie	(ULB-Pharm)	Stevigny Caroline
Africa Museum – Environmental Governance	(RMCA)	Tréfon Théodore
KU Leuven-Forest Nature & Landscape	(KUL-FNL)	Verbist Bruno
CoffeeLab Independent	(CLI)	Van den Bruel Raf
University of Kisangani - Agronomy	(UNIKIS)	Dhed'a Djailo Benoit
National Agricultural Study and Research Institute	(INERA)	Mbuya Kankolongo Amand
Postgraduate School- Agricultural Economy	(ERAIFT)	Baudouin Michel

Work packages & Partners

		Coordinator	Collaborators
WP1	Project organisation/coordination	MeiseBG	
WP2	Socio-economic survey	RMCA/ERAIFT	UNIKIS
WP3	1. Genetic analysis	MeiseBG	UNIKIS, INERA
	2. Phenotypification	MeiseBG	UNIKIS, INERA
	3. Chemical profiling & fingerprinting	ULB-Pharm	UNIKIS
	4. Organoleptic assessment	MeiseBG	CLI, INERA, UNIKIS, ULB
	5. Integration of data and analysis	MeiseBG	All WP3 partners
WP4	Agro-ecology & soil fertility	KUL-FNL/ KUL-SWM	INERA, UNIKIS
WP5	Historic sources/ archives on coffee	Arch, KUL-Hist	
WP6	Policy advice & science based tool	KUL-FNL	RMCA, ERAIFT, CLI





Summary:

Coffee is an important cash crop for small coffee farmers in the Global South and is an important commodity worldwide. The economy of coffee production is influenced by ecology, climate change, biodiversity, soil fertility, and livelihood options. In this project expertise from different disciplines will be integrated; knowledge will be valorized and science-based advice will be provided for the revival of sustainable Robusta coffee production in Tshopo Province (DR Congo), for the conservation of the Congolese genetic diversity of wild *Coffea canephora* genetic resources and its wild relatives and for the development of a local, sustainable economy in a global context. This project will contribute, directly and indirectly, to the conservation and valorization of coffee genetic resources and several UN Sustainable Development Goals, and strengthen local and international skills in the field of agriculture and food. Although this project is focusing on the Congo Basin and Tshopo Province, in particular, the project will contribute to broader coffee challenges.

The proposed project has five objectives:

1. the local coffee chain, its sociological dimensions and economic relevance will be evaluated by carrying out socio-economic surveys in the Tshopo Province (WP2).
2. the evaluation of the Robusta coffee genetic resources in the DRC, in particular in Tshopo province, for cultivation and breeding by doing a genetic, phenotypic, chemical and organoleptic study of the available genetic resources in the perspective of its valorization. This will contribute to the coffee cultivation locally and globally, characterize new genetic resources and indicate potentially interesting genetic diversity.
3. the evaluation of the existing cropping system and proposing potential optimization of the cropping system by analyzing i.e. macro- and micro-nutrient deficiencies in the coffee leaves in different genetic lines and an agro-ecological evaluation of the current cropping system. This will result in recommendations to improve current agronomic practices and the cropping system in order to arrive at a sustainable and profitable coffee culture, as a cornerstone for the well-being of the local communities.
4. research in the (colonial) Archives will allow to 'recuperate' knowledge on Robusta coffee kept in archives and grey literature, which can give information on the origin and 'genetic' identity of the cultivated Robusta coffee and on the successes and failures of the past.
5. integration of the results in order to formulate a policy advice and tool for the rehabilitation of the Coffee cultivation in Tshopo Province.

