

Projectupdate

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| Geographical focus: | Kenya/coast and/or Lake Victoria |
| Call reference: | "Innovative approaches to process local food in Sub-Saharan Africa and Southeast Asia" (Bekanntmachung des BMEL: Innovative Ansätze zur Verarbeitung lokaler Lebensmittel in Subsahara-Afrika und Südostasien) |
| Project titel: | Development of Milkfish (<i>Chanos chanos</i>) and Kimarawali (<i>Stolephorus delectatus</i>) Solar Drying-Cooling Technology, Value Addition and Quality Assurance |
| Cooperating partners: | Fraunhofer-Institute for Solar Energy Systems ISE Kenya Industrial Research and Development Institute Kenya Marine and Fisheries Research Institute Technical University of Mombasa Innotech Ingenieursgesellschaft mbH |
| Duration: | 09/2018 – 08/2021 |
| Budget: | 966.094,70 € |

Map of the target region

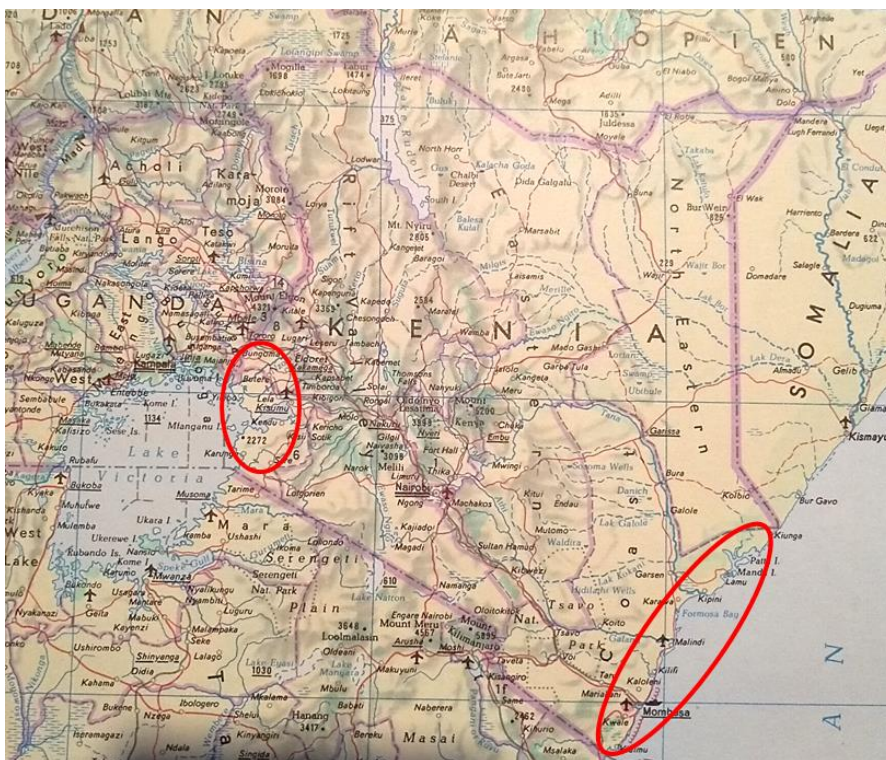


Fig. 1: Location of the target regions in Kenya (Source: Haack Weltatlas, VEB Hermann Haack,

Geographisch-Kartographische Anstalt, Gotha/Leipzig, 1972, 1. Auflage)

Aim of the project:

The proposed project aims to develop a solar cooling-drying system for fish. The Project will introduce a stand-alone solar technology package consisting of a 100% off-grid cooling and drying systems among mariculture farmers. For cooling technology, PCM cold storages or use of electrical battery, or a combination, will be optimised to guarantee stable and reliable cooling operations. Drying will be coupled to the cooling system and heat rejection will be optimised to supplement drying. To produce high quality dried fish (premium nutritional value, texture and flavour), dehydration will be done through optimised control of temperature and humidity. Fish farmers will be trained on processing and quality assurance. Fraunhofer ISE and Innotech will partner with Kenya Industrial Research and Development Institute (KIRDI), Kenya Marine and Fisheries Research Institute (KMFRI) and Technical University of Mombasa (TUM) to design, develop and transfer the proposed technology package.

Results

The project Kick off Meeting took place in February 2019 in Kenya. During the meeting the participating institutions were visited and potential locations for the planned system were visited. A baseline survey is currently being prepared. Based on the results the next steps will be derived.

Key statements

Reduction of post harvest losses by preservation technologies and accompanying measures for education are important issues.

Policy advice

No advice can be given on this at the moment.

Pictures:





Fig. 2: Fish farming in Lake Victoria near Kisumu



Fig. 3: Fish pond, influenced by the tides, near Kilifi



Fig. 4: Fish, cooked in salty water before drying, near Vanga