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**Back to the roots and into the future –
combining entomophagous tradition with modern
farming and innovative, yet traditional foodstuffs in
Thailand and Cambodia (IFNext project presentation)**

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Entomophagy is a common food habit for approx. 2.8 billion people worldwide. Traditional entomophagy is based on insect collecting, processing, consumption, and, in some cases, preservation. The latter is typically practiced in relatively dry and warm climate areas, e.g. in the Latin American highlands or East Africa. In humid, tropical regions, no major need to preserve insects seems to have risen, possibly because many species are available in most parts of the year and may be obtained relatively easily. Still, there is long history of preserving effectively animal-based foodstuffs in regions where, because of the climate, drying is not an option.

Cambodia and Thailand are both affected by malnutrition, particularly of mothers and children in rural areas. IFNext ("Bringing insect farming to the next level") is a project that started in 2019 and seeks to improve

the nutritional status of mothers and children in those countries by designing insect farming starter kits so that farmer families may rear their own insects, consume them, and sell surpluses on local markets. During the duration of the project, these kits will be adapted to the specific needs of the farmers. Regarding insect species, the consortium agreed on the Mediterranean field cricket (*Gryllus bimaculatus*) to be reared by everybody, and an additional species with a promising local importance, i.e. the silk worm (*Bombyx mori*) for Thailand, the Cambodian field cricket (*Teleogryllus mitratus*) for Cambodia, and the mealworm (*Tenebrio molitor*) for Germany. The farmers will be involved directly by the consortium when choosing a novel preserved insect-based product, using traditional, low-energy techniques. Among the options are fermenting (cf. shrimp paste, fish paste, fish sauce, etc.), smoking (like shrimps in Western Africa), krupuk-style crackers, and home canning. These products will be developed and their compositional, microbiological, and sensorial quality monitored closely. Results will be published in both scientific and popular magazines, along with social media, in several languages, among them English, Khmer, Thai, and German.

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