



***Agroecology after the Covid-19 pandemic period in a world that is already suffering under global warming**

<http://repositorio.ufla.br/jspui/handle/1/41743>

In addition to global warming and after this brutal Covid-19 pandemic, there will be another one no less brutal, which will be that of the aggravation of hunger, misery and violence in the world's poorest countries.

Problems with the scarcity of basic and essential foods will reach catastrophic levels and their economic / socio-environmental consequences will be unpredictable, triggering even more, among the various consequences: violence, wars and revolts, arms and drug trafficking and attempts at disorderly immigration to so-called developed countries.

The exodus and random marches of starving populations will be inevitable.

It turns out that Agroecology and its sustainable socio-environmental technologies such as Composting, Biofertilization and Biopesticides, can produce food anywhere on the planet, including in deserts, quickly and at almost zero cost, as well as the respective storage with economical conservation of surpluses..

Peace only with food production. Give a chance to Agroecology!!!

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Participatory Partnerships Proposed by NEAPE/DEA/UFLA

{ Center for Studies in Agroecology, Permaculture and Innovative University Extension }
Engineering Agricultural Department / Lavras Federal University / Brazil

Innovative University Rural Extension based in Economic and Sustainable Socio-environmental Technologies from Agroecology

- 01) Composting and Organic Fertilization: Development, production, application and management;
- 02) Biofertilizers and Biopesticides: Development, production, application and management;
- 03) Biological Control: Pests and diseases on crops and in the domestic environment;
- 04) Septic Tank: Ecological treatment of human waste;
- 05) Storage and Handling for small agricultural production;
- 06) Domestic Pasteurization of the Milk;
- 07) Agroforestry: Consortium on Agroforestry Systems;
- 08) Energy Alternative: Food Dryer and Solar Water Heater. Biodigester;
- 09) Rocket Stove: Higher heat output with less fuel burned;
- 10) Alternative Recipes to Average People with products of family farming;
- 11) Getting a nutritious meal from surplus vegetable production;
- 12) Bread Production: technology with alternative flours;
- 13) Agroecological production of honey;



- 14- *"Relevant Aspects on Irrigation and Water Resources";*
- 15- *"Associativism and Cooperativism ";*
- 16- *"Seeds Tecnology";*
- 17- *"Post-harvest Processing";*
- 18- *"Poultry Breeding. Development and Management on semi-intensive systems";*
- 10- *"Goat Breeding. Development and Management on semi-intensive systems";*
- 20- *"Rabbit Breeding. Development and Management on semi-intensive systems";*
- 21- *"Livestock Breeding. Development and Management on semi-intensive systems";*
- 22- *"Vaccines and Family Health ";*
- 23- *"Horticulture";*
- 24- *"Home Health Programs";*
- 25- *"Culinary Approaches to the Diet Nutritional Enrichment";*



26- Special Offer: "Food Security Program"

Food security program to be applied in schools, with family farming products obtained in an Agroecological way.

It is a program to combat general food insecurity, offering nutritious food to children and that were produced by family farming in an agroecological way.

It also contributes to the generation of worth jobs and income in the communities themselves.

§-REF 01: Smallholders, Food Security, and the Environment

Was prepared for the International Fund for Agricultural Development (IFAD) and the United Nations Environment Programme (UNEP) under the guidance of senior management of UNEP's World Conservation Monitoring Centre (UNEP-WCMC). (2014 - International Year of Family Farming)

1) Smallholders form a vital part of the global agricultural community, yet they are often neglected;

2) Smallholders manage over 80 per cent of the world's estimated 500 million small farms and provide over 80 per cent of the food consumed in a large part of the developing world, contributing significantly to poverty reduction and food security. Yet small-scale farmers often live in remote and environmentally fragile locations and are generally part of marginalized and disenfranchised populations;

3) Smallholder productivity in particular depends on well-functioning ecosystems;

4) Growth in agricultural production to meet rising global needs using prevailing farming practices is unsustainable a transformation is needed.



§-REF 02: *Smallholders face persistent cycles of hunger and poverty.* T

Smallholder farmers own small plots of land, usually less than an acre in size, and rely primarily on family labor to grow enough food for subsistence and if there's a surplus, for sale. However, even though these farmers produce four-fifths of the food consumed in Asia, sub-Saharan Africa and Latin America, according UN/IFAD, low crop yields and uneven seasonal cash flows often mean that farmers face persistent cycles of hunger and poverty. These cycles have existed for generations, but new approaches are emerging to enable smallholder farmers to more effectively obtain the financial support they need to create more sustainable livelihoods for themselves while growing the overall economy.

Available in Network by NEAPE/DEA/UFLA:

****Extension leaflets on biofertilizers and biopesticides in three native African languages: Swahili, Lingala, Kikongo, with English and French versions***

<http://repositorio.ufla.br/jspui/handle/1/42286>

****Biofertilization and composting:***

<http://repositorio.ufla.br/jspui/handle/1/36887>

****Composting and biofertilizants.pdf***

<http://repositorio.ufla.br/jspui/handle/1/31658>



***Experimental Development of "Agroecological Water Filter" for poor communities.pdf**

<http://repositorio.ufla.br/handle/1/15217>

***Suggestions de recettes alternatives pour la consommation humaine avec des produits d'agriculture familiale obtenus de maniere agroecologique.pdf**

<http://repositorio.ufla.br/jspui/handle/1/28515>

***Extensionist information on banana bacterial wilt, caused by the bacterium Ralstonia solanacearum Smith (Pseudomonas solanacearum), race 2.pdf**

<http://repositorio.ufla.br/jspui/handle/1/29472>

***General extension information on tomato disease.pdf**

<http://repositorio.ufla.br/jspui/handle/1/29472>

***CARTILHA A sustainable and safe solution for the treatment of swine wastes.pdf**

<http://repositorio.ufla.br/handle/1/15216>



See also:

Some African Tales (franch):

<http://repositorio.ufla.br/handle/1/11156>

Example of "Carbon Wells": RPPN IcBio (portuguese):

<http://sistemas.icmbio.gov.br/simrppn/publico/detalhe/519/>

RPPN management plan (Carbon Wells) (portuguese):

<http://repositorio.ufla.br/handle/1/12597>

Projeto Carrancas (portuguese):

<http://repositorio.ufla.br/handle/1/13320>

Ecofossa (portuguese):

<http://repositorio.ufla.br/handle/1/15481>

Formas Alternativas de Energia (portuguese)-FAE:

<http://repositorio.ufla.br/simple-search?query=+formas+alternativas+de+energia>

Participatory projects in progress:

– Mozambique (portuguese):

<https://ufla.br/arquivo-de-noticias/11292-projeto-vozes-da-africa-amplia-atuacao-em-mocambique>

– Republic Democratic of Congo (portuguese):

<https://ufla.br/arquivo-de-noticias/11510-projeto-vozes-da-africa-ufla-recebe-autoridades-e-pesquisadores-da-republica-democratica-do-congo>



Afhganistan (portuguese):

<http://www.abc.gov.br/imprensa/mostrarconteudo/1278>

Pakistan (portuguese):

<https://ufla.br/noticias/extensao/12884-projeto-vozes-da-asia-coordenado-por-professor-da-ufla-chega-ao-paquistao>

On participatory construction:

Russia; Guiné-Bissau; Cabo Verde; Myanmar; Colômbia; Bolívia.



See participatory Extensionist Bias on sustainable socio-environmental technologies projects from Agroecology with Proven Scientific validation

(English, French, Portuguese)

(English)

RURAL EXTENSION

<https://ufla.br/noticias/internacionalizacao/13927-vozes-da-africa-lanca-informativos-em-idiomas-africanos-publicacoes-estao-disponiveis-no-repositorio-ufla>

“African Voices Project” launches leaflets in African languages - publications are in the UFLA Repository

The extension project Voices of Africa, coordinated by retired full professor and volunteer extensionist at the Department of Agricultural Engineering (DEA) at UFLA, Gilmar Tavares, has just released bulletins about biofertilizers and biopesticides in three native African languages: Swahili, Lingala, Kikongo.

With the publications, **the project will reach around 60 million people**, with validated and updated technical-scientific information, written in accessible language for those who do not have contact with scientific and technological knowledge, but have great native knowledge.

“This is the first time in the history of Africa that the university has brought modern science and technology from Agroecology to populations in need. Biofertilizers and biopesticides are sustainable socio-environmental technologies, with scientific evidence in the public domain and almost zero cost processes”, explains Professor Gilmar.

All bulletins in native languages are followed by versions in English and French, **to reach 100% of the African community**, in addition to a significant



portion of Asia, Central America and Caribbean. Soon they will also be available in a fourth native African language: Tshiluba.

“The target audience for these translations is the most needy and also the most in need of technical and scientific support to produce basic and fundamental foods worldwide. As there are also bulletins in Portuguese, with these translations **we have reached a huge part of the approximately 500 million family farmers recognized by the United Nations (UN)**”, says Prof. Gilmar.



Women from the partnership “NGO Feminine Solidarity from Maniema /DRC” preparing community biofertilizer.



Leaflets in Swahili language

Publications in all african languages are available, in the form of e-books, at the UFLA Repository [Repositório da UFLA](#)..

The African Voices Project holds a partnership with the Brazilian Cooperation Agency, from the Ministry of Foreign Affairs (BCA/MFA).



(French)

VULGARISATION RURALE

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«Projet Voix de l'Afrique» lance les newsletters en langues africaines - les publications sont dans le Référentiel UFLA



Les femmes du partenariat «ONG Solidariedade Feminina de Maniema / RDC» préparent un biofertilisant communautaire

Le projet de vulgarization Vozes da África, coordonné par le professeur du département d'ingénierie de l'UFLA (DEG / UFLA) Gilmar Tavares, vient de publier des informations sur les biofertilisants et les biopesticides dans trois langues africaines d'origine: swahili, lingala, kikongo. Avec les publications, **le projet atteindra environ 60 millions de personnes**, avec des informations technico-scientifiques validées et mises à jour, rédigées dans un langage accessible pour ceux qui n'ont pas de contact avec les connaissances scientifiques et technologiques, mais qui ont de grandes connaissances natives.



«C'est la première fois dans l'histoire de l'Afrique que l'Université apporte la science et la technologie modernes de l'agroécologie aux populations dans le besoin. Les biofertilisants et les biopesticides sont des technologies socio-environnementales durables, avec des preuves scientifiques dans le domaine public et des processus à coût presque nul », explique le professeur Gilmar.

Toutes les bulletins dans les langues maternelles sont accompagnées de versions en anglais et en français, pour **toucher 100% du public africain**, en plus d'une partie importante de l'Asie, de l'Amérique centrale et des Caraïbes. Bientôt, ils seront également disponibles dans une quatrième langue africaine: le tshiluba.

«Le public cible de ces traductions est le plus nécessiteux et aussi le plus besoin de soutien technique et scientifique pour produire des aliments de base et fondamentaux dans le monde entier. Comme il existe également des bulletins en portugais, **ces traductions nous ont permis d'atteindre une grande partie des quelque 500 millions d'agriculteurs familiaux reconnus par les Nations Unies (ONU)** », déclare Gilmar.

Chombo bora kwa ajili ya matumizi ya biofertilizers kioevu

KUZALISHA MBOLEA YA BIO

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MCHAKATO RAHISI NA UFANISI WA KUZALISHA MBOLEA YA KIKABONI KWA KUENDELEA KUONGEZA UZALISHAJI WA KILIMO BILA KUVURUGA HALI M'ZURI YA MAZINGIRA



Des publications dans toutes les langues sont disponibles, sous forme de livres électroniques, au Référentiel UFLA. [Repositório da UFLA](#).

Le projet Vozes da África a un partenariat avec l'Agence brésilienne de coopération, du ministère des Affaires étrangères (ABC / MRE)

(Portuguese)

EXTENSÃO RURAL

<https://ufla.br/noticias/internacionalizacao/13927-vozes-da-africa-lanca-informativos-em-idiomas-africanos-publicacoes-estao-disponiveis-no-repositorio-ufla>

“Projeto Vozes da África” lança informativos em idiomas africanos - publicações estão no Repositório UFLA

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Mulheres da parceira “ONG Solidariedade Feminina de Maniema/RDC” preparando Biofertilizante comunitário

O projeto de extensão Vozes da África, coordenado pelo professor titular aposentado e extensionista voluntário do Departamento de Engenharia Agrícola da UFLA (DEA/UFLA) Gilmar Tavares, acaba de lançar informativos sobre biofertilizantes e biopesticidas em três idiomas nativos da África: Swahili, Lingala, Kikongo. Com as



publicações, **o projeto irá alcançar cerca de 60 milhões de pessoas**, com informações técnico-científicas validadas e atualizadas, redigidas em linguagem acessível para quem não tem contato com o saber científico e tecnológico, mas detém grande saber nativo.

“Essa é a primeira vez na história da África que a universidade leva ciência e tecnologia modernas da Agroecologia para populações tão carentes. Biofertilizantes e biopesticidas são tecnologias socioambientais sustentáveis, com comprovações científicas de domínio público e processos de custo quase zero”, explica o professor Gilmar.

Todos os boletins nas línguas nativas são acompanhados de versões em Inglês e Francês, para **alcançar 100% do público africano**, além de parcela significativa da Ásia, América Central e Caribe. Em breve também estarão disponíveis em um quarto idioma nativo africano: o Tshiluba. As publicações em todos os idiomas estão disponíveis, na forma de e-books, no [Repositório da UFLA](#).



Informativo no idioma Swahili

“O público-alvo dessas traduções é o mais carente e também o mais necessitado de apoio técnico-científico para produzir alimentos básicos e fundamentais em todo mundo. Como também há boletins em Português, **com essas traduções alcançamos imensa parcela dos cerca de 500 milhões de agricultores familiares reconhecidos pela Organização das Nações Unidas (ONU)**”, afirma Gilmar.

O projeto Vozes da África conta com a parceria da Agência Brasileira de Cooperação, do Ministério das Relações Exteriores (ABC/MRE).

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