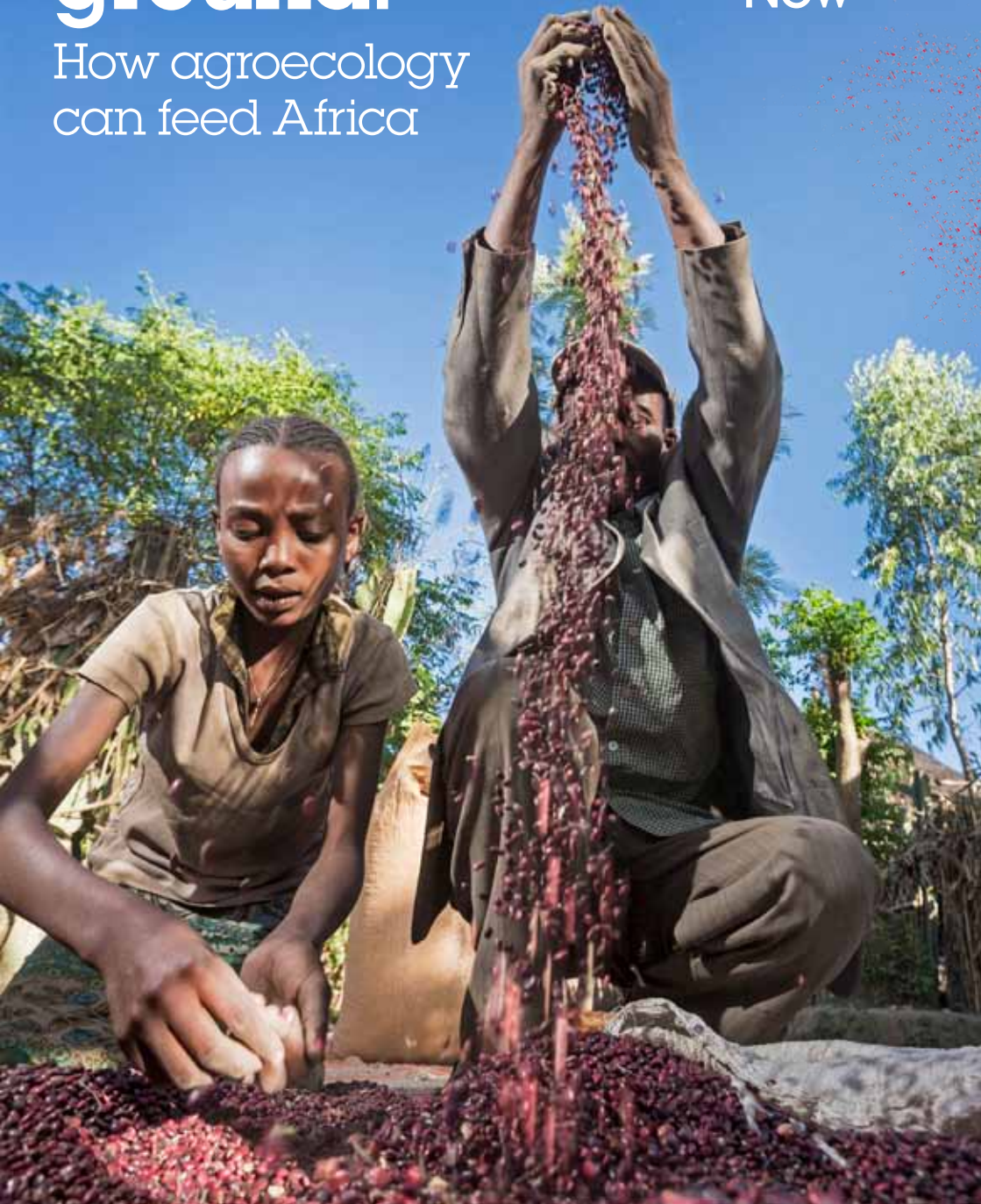


On solid ground:

How agroecology
can feed Africa

 **Global
Justice
Now**



Agroecology isn't just a set of farming practices – it's also about who controls our food.

How we produce food is a deeply political issue that affects the lives and livelihoods of billions of people. In our global economy, it is not the amount of food produced which dictates whether people eat or starve. This is decided by who controls the food supply and how that power is used.

We know that millions of people in Africa suffer from hunger and malnutrition. We are also told by the media, agribusiness companies and many large NGOs, that Africa can only be fed by large-scale commercial agriculture. But this form of corporate-controlled agriculture relies on large amounts of expensive inputs and is associated with land-grabs, export-oriented plantations and the production of biofuels.

Not only can small-scale, sustainable farming feed the world, but it can do so better than intensive corporate-controlled agriculture. In fact, it is already feeding millions of people. In Africa, small-scale farmers already produce 70% of Africa's food by using, in many cases, sustainable agriculture methods, also known as agroecology.

What is agroecology?

Agroecology is the science of sustainable farming as well as a political movement that aims to improve the food system.

Fundamentally, agroecology is about shifting the way our food system is controlled. It is about challenging the control of land, seeds, markets and labour by big business.

What is food sovereignty?

Food sovereignty is about the right of peoples to define their own food systems.

Advocates of food sovereignty put the people who produce, distribute and consume food at the centre of decisions on food systems and policies.

Food sovereignty, therefore, provides the framework within which agroecological systems and techniques should be developed.



“Agroecology encourages a holistic approach and the integration of humans, plants, animals and the environment, into a system where all involved help each other and create important relationships which result in healthy people, healthy plants, healthy animals and a healthy environment”

Janet Maro, Sustainable Agriculture Tanzania

“As a way to improve the resilience and sustainability of food systems, agroecology is now supported by an increasingly wide range of experts within the scientific community, and by international agencies and organisations, such as the United Nations Food and Agriculture Organization (FAO), UNEP and Biodiversity International.”

Olivier De Schutter, United Nations Special Rapporteur on the right to food, 2008– 2014

Agroecology in action

Agroecology is not a marginal practice carried out by a handful of farmers. It is already widely practised by farmers across Africa and helps to feed millions of people. In many cases the techniques are inexpensive, simple and effective, which means there has been little commercial interest in researching, developing and distributing them. But the evidence is unequivocal. Agroecology can increase food yields, income, employment, agricultural biodiversity, and health and nutrition, and help to mitigate the impacts of climate change. Here are some examples of agroecology in action:

Agroforestry

Agroforestry is a farming system where woody plants (trees, shrubs, bamboos) are grown together with agricultural crops and/or animals. Some of these plants, like the *Faidherbia* tree, provide food for animals during the dry season, while helping to protect crops from wind and water erosion and improving soil quality. In Malawi, growing crops with *Faidherbia* has increased crop yields by up to 400% for maize, cotton, peanut, sorghum and millet.

World Agroforestry Centre



Conservation agriculture

Conservation agriculture (CA) is a farming technique that requires very little digging of the soil, using cover crops to increase soil fertility, and reducing chemical inputs. Conservation agriculture has been hugely successful and is estimated to be spreading rapidly. In Southern Africa, more than 50,000 farmers now practice CA. A survey of farmers in Zimbabwe showed that CA farmers had yields up to six times higher than on conventional farms as well as lower financial and labour inputs.

T. Samson/CIMMYT





CDKNetwork/flickr

Mulching

By covering the soil with a layer of plant material such as leaves, grass clippings, wood chips and even cardboard, a practice known as mulching, farmers are able to reduce soil loss, increase soil quality and reduce weed cover. In dry parts of Kenya, mulching has helped increase the length of the growing season. In the Democratic Republic of the Congo it was found that mulching could double crop production from 10 tonnes to 20 tonnes per hectare.



olingo/flickr

Zai pits

Zai pits, which are shallow holes filled with manure, are used in dry parts of Africa to protect plants and fertility from being washed away. They can lead to crop yield increases of up to 500% in some cases. In Burkina Faso's Central Plateau, soil water conservation techniques like zai pits have helped to rehabilitate over 300,000 hectares of land.



Georgina Smith/CIAT

Push-pull technology

Push-pull technology is the idea of using plants to either trap pests or repel them. For example, Napier grass traps pests by producing a sticky substance while molasses grass emits a chemical which repels them. Over 30,000 farmers in East Africa have adopted this agroecological approach to help manage pests. Farmers in Kenya using push-pull technology were able to earn three times more income than farmers using chemical pesticides.

Can agroecology really produce enough food?

One study (based on research in 57 developing countries) showed that farmers switching to sustainable methods on average increased their yields by 73%. An analysis of 40 agroecological projects, covering almost 13 million hectares in twenty African countries, showed that crop yields more than doubled as a result of agroecological approaches, with additional benefits in terms of absorbing carbon, reductions in pesticide use and soil erosion. Finally, research by the UN showed that switching to agroecological farming

methods has increased yields across Africa by 116% and by 128% in East Africa compared to conventional farming.

Not only can agroecology produce enough food to feed us, it provides sustainable livelihoods, protects biodiversity, addresses climate change and benefits women. Essentially, agroecology gives small-scale farmers control over the resources needed to grow food, as well as the power to decide what and how to grow it.

What are the barriers to agroecology?

Despite agroecology's numerous advantages, governments, development agencies and funders continue to favour industrial agriculture despite its negative impact on small-scale farmers and the environment. A number of economic and political barriers prevent agroecology from being more widely adopted. These barriers include trade policies that favour industrial agriculture, as well as low levels of research and investment into agroecology, and long standing problems of access to land and inequality of land ownership.

The most significant barrier is the ideological bias towards large-scale industrial agriculture and the power and influence of corporations. For example, the New Alliance for Food Security and Nutrition initiative, backed by over £600 million of UK aid, aims to create policy changes that will help corporations increase their control of agricultural markets and resources in Africa.

Despite these barriers, there is a growing movement across the world calling for food sovereignty and agroecology to challenge corporate power in the food system as well as feed communities and build resilient livelihoods.



“The issue seems to be political or ideological rather than evidence or science based. No matter what data is presented, governments and donors influenced by big interests marginalize agroecological approaches focusing on quick-fix, external input intensive ‘solutions’ and proprietary technologies such as transgenic crops and chemical fertilisers. It is time for the international community to recognize that there is no other more viable path to food production in the twenty-first century than agroecology.”

*Miguel Altieri, Professor of Agroecology
at the University of California, Berkeley, USA*



CGIAR/flickr



Annie Bungeiroth/CAFOD Community Eye Health



What can you do?

We need a complete shift in who controls our food system. Power must be taken away from corporations and put back into the hands of the people and communities that produce and consume food. Only a movement of people calling for food sovereignty and agroecology will create this sort of change.

- **Call on the UK government to support agroecology** instead of corporate-controlled farming in Africa. Check www.globaljustice.org.uk/food for the latest actions
- Join the UK food sovereignty movement www.foodsovereignty.org.uk

Global Justice Now campaigns for a world where resources are controlled by the many, not the few. We champion social movements and propose democratic alternatives to corporate power. Our activists and groups in towns and cities around the UK work in solidarity with those at the sharp end of poverty and injustice.

Join Global Justice Now to challenge the injustice of poverty and help build a more equal future for people around the world. www.globaljustice.org.uk/join

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We used to be the
World Development Movement

