

How can agroecology strengthen food security in North African countries?

Context and challenges of agriculture in North Africa

To increase national production and meet food security objectives, North African countries have for decades pursued two strategic directions in their agricultural policies: **intensifying production systems and expanding cultivated areas.**

These strategies are now reaching their limits, with significant impacts on natural resources, human development and human health.

North African countries are thus faced with a twofold reality: the inability of current agricultural models to meet the region's food needs, as well as their unsustainability and vulnerability to climate change.

It is therefore necessary for these countries to embark on an agricultural transition toward more sustainable and diversified production models that will improve food security.

How can agroecology strengthen food security in North African countries and address global health challenges?

Definition

Agroecology offers an integrated approach to addressing the challenges of food systems, from production to consumption. It is based on management principles that respect natural cycles and promote the optimal use of resources.

We recommend two strategic priorities to strengthen food security in North Africa by integrating the principles of agroecology:

Integrating agroecology into the intensification of cereal production

Benefits

While North African countries are currently heavily dependent on cereal imports, agroecological practices applied to cereal production can help intensify production while insuring the sustainable use of resources and strengthening crop resilience to climate change.

Examples of agroecological practices applied to cereal farming:

- Implementing sustainable water management techniques (rainwater harvesting and storage, optimized irrigation, etc.)
- Enriching soils with organic matter from natural plant and/or animal sources (compost, mulch, etc.)
- Maintaining living hedges (e.g. prickly pear cacti along field edges) and integrating tree species (such as olive trees) into cereal cultivation
- Limiting monocultures and promoting crop rotations and intercropping
- Prioritizing the use of seeds adapted to water constraints

How can North African states support the integration of agroecological principles to develop a productive and sustainable cereal sector?

- **Supporting investment in agroecological infrastructure and equipment**

Modernize irrigation equipment, develop rainwater harvesting infrastructure, etc.

- **Strengthening seed systems and access to organic inputs**

Evolve legal frameworks to promote seed autonomy; support the creation of farmers' seed banks; improve access to climate-resilient seeds (public-private partnerships, research support, etc.); strengthen access to organic inputs...

- **Adapting agricultural and economic policies to encourage agroecological practices**

Develop public support for agroecological practices; encourage the development of value chains to improve the marketing of rotation crops (especially legumes); enhance the economic value of cereal products resulting from agroecological practices...

- **Investing in research and training**

Develop action research and support the establishment of reference farms; support the strengthening of local skills and capacities...

Building a locally-based food system based on agroecology

Locally-based food systems aim to **relocalize food systems at the local level by promoting more sustainable models of production and consumption**, in particular by promoting local products via local supply chains.

Benefits

The establishment of territorialized food systems, based on the agricultural potential of family farming in North Africa, helps to **reduce rural poverty** by creating jobs; to **reduce dependence on food imports**; and to **fight against diseases linked to the transformation of diets** by increasing the share of unprocessed food.

How can North African states promote territorialized food systems?

- **Integrating agroecology and its principles into territorial and agricultural policies**

Support local authorities in the integration of agroecology into their development strategies; better integrate food, nutrition and health policies...

- **Supporting rural areas and family farming**

Strengthen local and rural dynamics by supporting the structuring and support of local actors; support the development of agricultural cooperatives; support the development of short circuits.....

- **Strengthening local food policies**

Support the integration of agroecological products in the supply of public institutions; develop consumer awareness campaigns and support the certification of agroecological products...



This position paper is a synthesis of the policy brief [Agroecology and Global Health. How can agroecology strengthen food security in North African countries?](#)



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