

SUSTAINABLE AGRICULTURE IN AFRICA: RECONCILING TRADITIONAL PRACTICES

AND NEW APPROACHES

In 2021, approximately 278 million people were affected by hunger in Africa.¹ In Sub-Saharan Africa, 63% of the population was affected by food insecurity in 2021.² To address this, African States are committed to transforming the agricultural sector to achieve sustainable food sovereignty. Agriculture occupies a central and strategic place in Africa, representing 23 %³ of the continent's GDP et employing 55% of the active population. Faced with the challenges of food security and sovereignty, coupled with environmental imperatives, African agriculture needs to transform and evolve in order to be sustainable. While this transformation requires recourse to innovative approaches that are sometimes exogenous, it must also take into account endogenous approaches based on local know-how that is often ignored. What if the ambition of sustainable agriculture was to use adaptive approaches that reconcile local know-how and exogenous approaches?

- TRADITIONAL PRACTICES THAT ARE LITTLE KNOWN OR DISAPPEARING

Traditional practices refer to a set of ancestral techniques and know-how held by local or indigenous populations in several fields such as animal husbandry or agriculture. For example, the Sahelian Fulani pastoralists use their own calendar and distinguish up to five seasons.⁴ This allows them to better understand and anticipate climate risks. In Burkina Faso, an ancestral agricultural technique, the *zai*⁵ allows the soil to regain its fertility and to have better yields. This technique has allowed Yacouba Sawadogo,⁶ the main ambassador of this technique to reforest tens of hectares of desert and "uncultivable" land by growing more than 90 species of trees. In Uganda, the Bahima ethnic group of herders are the custodians of the ancestral techniques of raising Ankole Longhorns,⁷ one of the oldest native cattle breeds in the country. It is a very resistant breed even in arid environments. However, since 1990, with breeding programmes imposed by the Ugandan government, this local breed has been gradually replaced by exotic breeds to the point of being threatened with extinction, with the consequent disappearance of the traditional know-how held by the Bahima shepherds.⁸ On the African continent, many populations hold ancestral know-how has

¹FAO, FIDA, OMS, PAM et UNICEF(2022). <u>Résumé de L'état de la sécurité alimentaire et de la nutrition dans le</u> <u>monde 2022.</u> Rome, p.12.

² FAO(2022). <u>Suivi des progrès des ODD liés à l'alimentation et à l'agriculture 2022.</u> Rome, p.16.

³ Agriculture et Stratégies (2018). <u>Investissement agricole en Afrique : un niveau faible… de nombreuses</u> opportunités

⁴ Séverine Kodjo-Grandvaux. (01/12/2019) <u>En Afrique, les paysans qui pratiquent l'agroécologie résistent mieux</u> <u>au changement climatique</u>. Le Monde Afrique.

⁵ LE MONDE DE L'ARBRE. <u>Yacouba Sawadogo, l'homme qui arrête le désert</u>.

⁶ Idem

⁷ AFSA. (2016). <u>Agroecology – The Bold Future of Farming in Africa</u>. p. 64.

⁸ Idem.



often been ignored in Africa in favour of exogenous practices. For a long time, when it came to improving agriculture in Africa, mechanization and the introduction of exogenous seeds were favoured. In this approach, local practices were directly influenced by international policies. As a result, so-called new exogenous techniques were brought to the fore, relegating local know-how to the background.

2- NOVEL PRACTICES THAT DO NOT TAKE INTO ACCOUNT THE LOCAL DIMENSION

International policies have promoted so-called "new" or "novel" practices as solutions to the various problems facing agriculture. These practices, based on an agricultural paradigm that is now losing ground, have had mixed results for several reasons, including the lack of consideration for the local dimension. Indeed, for decades, policies and programs to preserve soils and forests or to develop agriculture have been implemented without taking into account the local context and its particularities. This has resulted in the side-lining of indigenous peoples or local populations. To explain this situation, one must go back to the colonial era when stories blaming local populations for land degradation and deforestation were used to justify the privatization of the commons. More recently, the same method has been used by African governments (in West Africa, for example) to remove local populations from forest management.⁹ These biased narratives have resulted in the discrimination and marginalization of local people and their knowledge. These non-inclusive, even exclusive, practices have therefore met with relative success due to the fierce opposition of local populations.

In line with this logic, several exogenous seeds (often transgenic) have been imported and promoted to the detriment of local seeds that are more adapted to local realities. Some of these seeds "imposed" by international policies contain genes that prevent the harvested grains from germinating.¹⁰ This practice forces local farmers, accustomed to their local seeds which they used to store, to select naturally and reproduce according to ancestral methods.

Additionally, some so-called new practices are not always environmentally friendly, unlike traditional practices. This is the case of practices supporting an agriculture based on large monocultures that accelerate deforestation and soil degradation because of transgenic seeds and oil-based fertilizers and biocides.¹¹ These practices contribute to the decline of local populations or indigenous peoples whose livelihoods depend on traditional agriculture and forest resources.

Finally, there are also cases where so-called new practices are actually inspired by local practices, without being mentioned. In Brazil, there are examples: in the Andiroba case, multinational

⁹ Clare Bissell (2020). <u>Restoring more than forests: How rights-based forest restoration can empower</u> communities, recover biodiversity, and tackle the climate crisis. FERN. p. 11.

¹⁰ *Ibidem.* p. 22.

¹¹Gladstone Leonel Júnior. <u>The right to agroecology: using the law to support sustainable farming in Brazil.</u> 2018. FERN. p 3



pharmaceutical companies have patented methods of using andiroba (Carapa guianensis),¹² which belong to the traditional and ancestral know-how of the local populations and are transmitted from generation to generation.¹³

- TOWARDS A PARADIGM BASED ON LOCAL KNOW-HOW: AGROECOLOGY

Faced with the mixed results of the non-inclusive approaches observed so far in Africa, several reflections are converging towards a new paradigm based on adaptive approaches. For Coumba Sow, FAO representative in Rwanda, "*traditional knowledge must be used in addition to scientific knowledge to guarantee food security.*"¹⁴ This is also the new approach promoted by international institutions such as the FAO, through agroecology, which designates a system based on local knowledge.¹⁵ It is a system that integrates "*territorial dynamics and social actors carrying the foundations of a sustainable, ecologically sound, economically viable and socially just agriculture.*"¹⁶ It is also a movement that defends food sovereignty and the rights of peasants. It advocates principled and adaptive approaches that take into account new challenges and local contexts.

Including local actors and valuing their traditional practices:

In contrast to previous models that ignored local populations, agroecology places local actors at the centre of the project by valorising their know-how, better adapted to the local context. In Cameroon, for example, the NGO Cameroon Gender and Environment Watch (CAMGEW) has set up several beekeeping projects carried out by local populations. The development of this activity is based on local materials whose manufacturing techniques are owned by these local populations. Beyond this aspect, this model allows local populations to organize themselves in cooperatives according to the sectors to produce crops adapted to local realities. In South Africa, for example, thanks to agroecology, farmers in one municipality supply 589 school canteens with fresh, high-quality fruit and vegetables. This helps reduce obesity among children while allowing farmers to increase their income.¹⁷

The inclusion of all social strata: Agroecology places particular emphasis on the role of women. Often relegated to the background, they nevertheless ensure between 60% and 80% of agricultural

¹² A plant whose seeds and bark are used for medicinal purposes.

¹³ *Ibidem,* p. 21.

¹⁴ Séverine Kodjo-Grandvaux. (01/12/2019) <u>En Afrique, les paysans qui pratiquent l'agroécologie résistent</u> <u>mieux au changement climatique</u>. Le Monde Afrique.

¹⁵ Vincent DAUBY. L'agroécologie. (2020) « <u>la voie pour un modèle agricole durable, résilient et juste</u> ». CNCD11.11.11.

¹⁶ Christophe David et *al.* (2011). « Agroécologie » *in <u>Les mots de l'agronomie - Histoire et critique</u>, P. Morlot et P. Prévost (dir.).*

¹⁷ Observatoire mondial de l'action climat (2022). <u>Bilan mondial de l'action climat par secteur 2022</u>. Climate Chance. p. 187.



production in Africa. Thanks to the development of agroecology, their contribution is increasingly valued. They are increasingly the bearers of initiatives that combine agricultural production, biodiversity protection and local development. This is the case of the beekeeping projects carried out by CAMGEW. It is also the case in Zimbabwe¹⁸ where agroecology has allowed women to increase their income by processing food from their farm produce. With this income, they have started new activities such as fish farming and beekeeping, which they combine with other complementary crops.

Empowering smallholder farmers: The paradigm of intensive agriculture dominated by largescale farmers remains focused on the massive use of environmentally harmful agricultural inputs. Agroecology enables smallholder farmers to resist these changes by growing adapted traditional seed varieties through local knowledge sharing. This allows smallholder farming communities to reduce their dependence on external inputs and invest in other activities to diversify their livelihoods.¹⁹

References:

- FAO, FIDA, OMS, PAM et UNICEF(2022). <u>Résumé de L'état de la sécurité alimentaire et de la</u> <u>nutrition dans le monde 2022.</u> Rome, p.12.
- FAO(2022). <u>Suivi des progrès des ODD liés à l'alimentation et à l'agriculture 2022.</u> Rome, p.16.
- Agriculture et Stratégies (2018). <u>Investissement agricole en Afrique : un niveau faible... de</u> <u>nombreuses opportunités</u>
- Séverine Kodjo-Grandvaux. (01/12/2019) <u>En Afrique, les paysans qui pratiquent</u> <u>l'agroécologie résistent mieux au changement climatique</u>. Le Monde Afrique.
- LE MONDE DE L'ARBRE. <u>Yacouba Sawadogo, l'homme qui arrête le désert</u>.
- AFSA. (2016). <u>Agroecology The Bold Future of Farming in Africa</u>. p. 64.
- Clare Bissell (2020). <u>Restoring more than forests: How rights-based forest restoration can</u> empower communities, recover biodiversity, and tackle the climate crisis. FERN. p. 11.
- Gladstone Leonel Júnior. <u>The right to agroecology: using the law to support sustainable</u> <u>farming in Brazil.</u> 2018. FERN. p 3
- Vincent DAUBY. L'agroécologie. (2020) « <u>la voie pour un modèle agricole durable, résilient</u> <u>et juste</u> ». CNCD11.11.11.
- Christophe David et *al.* (2011). « Agroécologie » *in <u>Les mots de l'agronomie Histoire et</u> <u>critique</u>, P. Morlot et P. Prévost (dir.).*

¹⁸ AFSA. (2016). *Op. Cit.* p. 27.

¹⁹ AFSA. (2016). *Op. Cit.* p. 27.



 Observatoire mondial de l'action climat (2022). <u>Bilan mondial de l'action climat par secteur</u> <u>2022</u>. Climate Chance. p. 187.