

Burkina Faso: Long Term Low Emission and Climate Resilient Development Strategy

AFOLU Sector Low Emission Scenario

Methodology

A literature review identified the agro-sylvo-pastoral production sector policy (PS-PASP 2018-2027) as the foundation for all other AFOLU sector policies. Thus, based on the analysis of the sector's development objectives, two scenarios were established: a moderate ambition scenario that includes realistic objectives based on current trends and a high ambition scenario which includes very optimistic objectives.

AFOLU Low Emission Scenarios

The actions of the "moderate ambition" and "high ambition" scenarios will respectively reduce the sector's emissions by 303,000 Gg eq CO₂ and 444,000 Gg eq CO₂ by 2050 compared to the Business as Usual (BaU). This corresponds to a percentage reduction of 267% for the "moderate ambition" scenario and 392% for the "high ambition" scenario.

Sector	BaU (Mt CO ₂ eq)	Moderate ambition (Mt CO ₂ eq)	High Ambition (Mt CO ₂ eq)
AFOLU	113 633 940	-189.7	-33.3
Percentage reduction		267%	392%

The implementation of LEDS measures will allow the AFOLU sector to reach carbon neutrality in 2035 for the "moderate ambition" scenario and in 2028 for the "high ambition" scenario

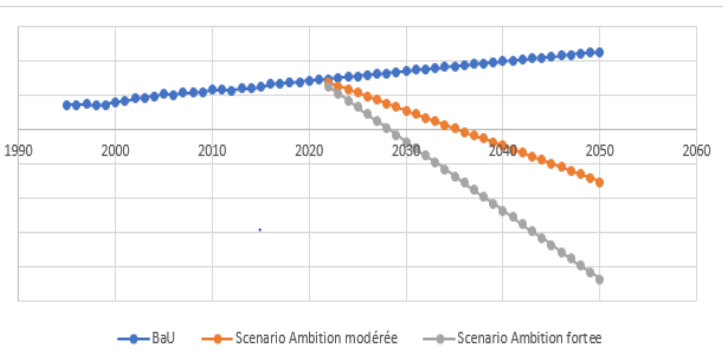


Figure 1: Emissions pathway in the AFOLU sector

Climate resilience in the Agricultural Sector

Burkina Faso LT-LEDS integrates climate change impacts into its long-term scenarios.

Climate adaptation actions were modelled for the agriculture, livestock and forestry sector

Adaptation intervention	Baseline indicator 2020	2030 Target	2050 Target
Reduction of fertilizer usage on sustainable agriculture land	25%	23%	10%
Share of land under sustainable agriculture practices	0%	33%	100%
Share of crop land under solar irrigation systems	0%	33%	100%
Livestock diversification: Shift from cattle to chicken	0	8%	30%
Genetic improvement of livestock	0	20%	50%

Table 2: Climate resilience in the Agricultural Sector

For example, projected losses in crop production due to climate change between 2020 and 2050 is estimated at 59.6 million tons (13% of maximum potential yield). With climate adaptation actions, the crop production losses can be reduced to only 5% of maximum potential yield, which shows the improvement in climate resilience of the agriculture sector

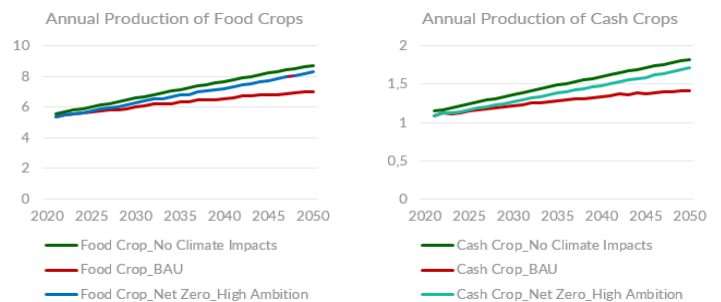


Figure 2 - Development of food crop and cash crop production. The BAU scenario (red) shows the reduction of crop production due to climate impacts. The Net-Zero High Ambition scenario (blue) shows that the losses can be reduced and increased up to the maximum potential level (green) when climate adaptation actions are implemented with the respective ambitions.

Decarbonization priorities

- Develop Sustainable Land Management and Climate Smart Agriculture.
- Create a secure and favorable environment for sustainable low-emission livestock production.
- Preserve and protect forest and wildlife resources in a sustainable manner.
- Strengthen the resilience and mobilization capacity of climate finance.