

Albania



Organization: Qendra Burimore e Mjedisit ne Shqiperi (Resource Environmental Centre Albania)

Location: Municipality of Shkoder and Municipality of Vore

Solution: Climate-smart agriculture techniques for olive crops and irrigation in Albania

Factsheet Period: First round of UNDP AFCIA funding (16 months)



An initiative supports olive farmers in Albania with climate-smart agriculture techniques @ RECA

74% of farmers in Albania are small family farmers, holding limited land ([FAO, 2018](#)). The agriculture sector has been hit with numerous crises, including rising costs of oil, raw materials and fertilizers, as well as emigration and climate change ([IMF, 2022](#)). Smallholder farmers also struggle with low productivity, underselling of produce, outdated farming methods and limited access to technology. This initiative aims to drive connectivity-fuelled transformation, integrating smallholders and introducing new shred technologies and agrivoltaics solutions. Ultimately, it aims to relieve pressures on farmers, fostering sustainability and resilience of agricultural practices to socio-economic and climate change.



Key achievements

- Created a connectivity-fuelled aggregation of 20 smallholder farmers with a legal and cost-sharing framework
- Implemented solar-based irrigation systems benefiting 20 farmers (eight women)
- Introduced a shredding technology (new to Albania) for olive pruning residues, enhancing soil-based carbon sequestration
- Reduced farmers' working time by 400 hours per 1000 olive trees
- Delivered two new technologies, biomass shredding and renewable water pumping to 20 smallholder farmers, benefiting 57 community members
- Trained 122 high school students and 36 farmers on climate change, emerging low-carbon technologies and gender considerations in sustainability
- Established two farmer collectives led by women farmers



Social impact

- Promotes collaboration with a focus on community involvement and shared responsibility over productive assets
- Empower local communities by increasing resilience and productivity in agriculture





Adaptation benefits

- Enhanced carbon capture and soil health
- Improved water management with solar-based irrigation, increasing water access
- Boosted agricultural efficiency with advanced technologies and mechanization
- Strengthened smallholder farmers' resilience to climate impacts



Innovation

- Enhances sustainability through farmer connectivity and integration
- Improves soil carbon capture, reduces costs and introduces renewable technologies in the olive sector
- Addresses challenges like input costs, productivity and climate vulnerability
- Promotes economic empowerment and resilience among smallholder farmers



Replication potential

- Expanding a connectivity model to include new smallholders
- Distributing technology and knowledge to other regions in Albania, such as Obot and Marqinet, to benefit other farmer communities



Funding snapshot

- UNDP-AFCIA grant: US\$60,000 (initial grant)

Investability

Revenue per year	\$12,250 from increased agricultural production and sales, as well as cost savings due to lower dependence on national energy grid.
Sustaining criteria	Technologies purchased using the UNDP-AFCIA grant have low maintenance costs, as they are more energy efficient and require less labour. The increased crop yields and market access ensure overall financial sustainability without further investment.
Financial innovation	<p>Introducing investment and farmer cost-sharing for new technologies, fostering the development of productive assets and stimulating social and economic growth in rural areas.</p> <p>A collaborative approach mitigates the financial burden on individual farmers and ensures their engagement and commitment, leading to more sustainable and impactful outcomes.</p>