

Position Paper for Iran's Role in Advancing Sustainable Agricultural Practices in the Green Transition Committee: Food and Agriculture Organization (FAO)

Country: The Islamic Republic of Iran

School: Emine Örnek Collage Topic: Strategies for Advancing Sustainable Agricultural Practices in the Green Transition

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The Islamic Republic of Iran considers sustainable agriculture as very pivotal, which is linked with food security, economic stability, and environmental protection. To achieve the goals of sustainable agriculture along with the goals of a sustainable environment, Iran was facing various challenges, including the shortage of water, decaying soil, and most importantly, climate change. Iran is committed to this transition towards green and plans measures in order to ensure climate-resilient agriculture, resource management, and food security for a very long period.

Among the many challenges that Iran is facing, water shortage is the most prominent one. Essentially a dry country, Iran has to rely on an effective water management system in order to satisfy the needs of its agricultural industry. As of now, Iran has done a number of things in response to this challenge, including encouraging water-saving irrigation techniques like drip irrigation and modernizing irrigation systems. Added to such technological advancement, Iran has been investing more and more in water-saving methods, seeking alternative ways of supply such as rainwater harvesting. This in turn enables Iran to use its water resources in a more efficient manner without wasting too much of it for the future generations also since water is an indispensable part of agricultural sustainability.

Iran is also actively promoting climate-smart agricultural practices. These practices pursue increased agricultural productivity while reducing greenhouse gas emissions and enhancing resilience to climate change. The government has initiated some programs that encourage the use of drought-resistant crops which would prosper under harsh conditions and minimize dependence on those crops which highly require a large amount of water. Besides, Iran is after soil conservation and fertility management, including practices like crop rotation, organic farming, and cover cropping. These practices help to reduce soil erosion, improve soil health, and raise agricultural productivity in the long term, which is important for the green transition.

In recent years, Iran has emphasized renewable energy sources for its agriculture. By using solar energy for irrigation systems and even exploring biogas as an energy source, Iran reduces dependence on fossil fuels and lessens the environmental impact of its agriculture. Renewable energy contributes to the reduction of greenhouse gas emissions and supports the long-term sustainability of farming practices. Iran is also concerned with sustainable waste management systems, such as composting agricultural waste to produce organic fertilizers, further promoting sustainability within the agricultural industry.

Social inclusion and capacity building are also part of Iran's strategy for enhancing sustainable agriculture. The government educates and trains farmers, especially in rural areas, on the improvement of their skills and knowledge. Such training programs focus on sustainable farming practices, improved resource management, and awareness about environmental concerns. The government also promotes access to finance, modern technology, and technical assistance for small-scale farmers and cooperatives to enable them to carry out sustainable practices and adjust to climatic changes.

Conclusively, Iran is committed to contributing to the development of sustainable agriculture, as this addresses green transition. Iran has thus embarked on a pathway toward a more resilient and

environmentally sustainable agricultural system through the adoption of water-efficient technologies, climate-smart agricultural practices, renewable energy use, and enhanced social inclusion. Iran attaches particular importance to cooperation within a joint effort by FAO and other states in facing the challenges of climate change, food security, and care for the environment. Only together can we make sure that a more sustainable and food-secure future is in store for all.