Environment: International Experts Convene in Ifrane for SWAT International Conference

 By **Fatima-Zohra Fadaili** On **Mar 7, 2024**

International experts gathered in Ifrane city in the Middle Atlas mountains, for the annual Soil & Water Assessment Tool (SWAT) conference that is being held for the first time in Africa.

From March 4-8, Morocco's Al Akhawayn University in collaboration with the United States Department of Agriculture – Agricultural Research Service (USDA-ARS) and the Texas A&M AgriLife Research government agency, present the SWAT, a watershed-to-river basin model that simulates both ground and surface water quality and forecasts environmental effects of land use, management strategies, and climate change.

It is often used for preventing soil erosion, controlling non-point source pollution, and managing regional watersheds. SWAT has been continuously revised and improved since its inception in the early 1990s.

The five-day conference is bringing together specialists and international institutions focused on river basin management.

Chehrazade Aboukinane, Head of the College of Northern Canada, highlighted the SWAT model's functionality in predicting global water resource levels. "SWAT is a very effective and integral tool that has been used for decades to forecast countries' water resources," she said. "The model is unique in the sense that it can analyze both underground and surface water resources."

"When we're dealing with a drought, as is the case in Morocco, it's essential to be able to predict its severity over the next five, ten or fifteen years, hence the usefulness of a tool like SWAT," stated the expert.

Raghavan Srinivasan, SWAT's co-founder and the Director of the Blackland Research Center at Texas A&M University, discussed SWAT's role in analyzing water quantity and quality as it is impacted by human conduct. "Water is a limited resource that cannot be produced," he said. Therefore, SWAT "contributes to the research and preservation of natural resources," particularly in countries with diverse climates like as Morocco.

Christopher Taylor, Vice President for Academic Affairs at Al Akhawayn University, clarified the essential role of SWAT in the collective attempts of African countries to overcome persistent drought, especially those of Morocco. He highlighted that water is essential for any existence on Earth and will be an urgent concern for governments and societies in the 21st century.

Prior to the main conference, a SWAT workshop provided attendees with training opportunities, including in the most recent advances in

sustainable water resource management, facilitated sharing of information, and new collaborations.