

Concept Statement for Atlas WaterGuard

New Business Concept

Atlas WaterGuard is a climate-smart water management platform that empowers Moroccan farmers to combat water scarcity through AI-driven irrigation.

Product

Atlas WaterGuard combines solar-powered IoT soil sensors, a voice-based mobile app, and a government-linked Digital ID system to enforce fair water quotas. Farmers receive real-time irrigation alerts and earn mobile credits for conserving water, redeemable for drought-resistant seeds or fertilizer.

Target Market

- **Primary:** Smallholder farmers in drought-prone regions (e.g., Souss-Massa, Ben Guerir).
- **Secondary:** Moroccan government agencies (ONCA, Ministry of Agriculture) seeking to achieve National Irrigation Strategy goals.

Why Atlas WaterGuard?

- **Proven Impact:** Pilot projects reduced water use by 35% in citrus farms.
- **Cost-Effective:** Sensors cost 60% less than competitors' models.
- **Policy-Aligned:** Integrates with RAMED and National Land Registry for equitable resource distribution.

Special Feature – No Other Platform Does This

Atlas WaterGuard's **"Water Credit" system** rewards farmers with immediate mobile-based incentives, creating a direct link between conservation and economic benefit. Also have a forum used by farmers to discuss different trends in farming.

Management Team

Atlas WaterGuard is founded by five students specializing in IoT, AI, and finance with hands-on experience in deploying sensor networks and machine learning models:

- **Yassir Edraoui:** Lead IoT Developer. Designed a low-power soil sensor prototype during a university hackathon, winning 1st place in sustainability tech.
- **Fahd Azouz:** AI/ML Engineer. Developed a predictive irrigation model for a capstone project, achieving 92% accuracy in water usage forecasting.
- **Manal Seghir:** Finance Focus on Sustainable business models and agricultural economics. Develops pricing strategies and negotiates partnerships (e.g., Orange Morocco, OCP Group).
- **Soukaina Essaidi:** Systems Architect. Built a blockchain-based resource-tracking system for a class project, later published in a student tech journal.
- **Anass El Houcini:** Lean budgeting and resource allocation. Manages budgets, tracks cost-per-liter-saved metrics, and designs water conservation incentives.

Advisory Support

To bridge domain gaps, we are actively collaborating with:

- **Abdelhamid Khalil**, Faculty Advisor: Expert in Entrepreneurship and sustainable development at AUI.

Impact Metrics

- **2024 Pilot:** Reduce water waste by 25% across 200 farms.
- **2027:** Scale to 1.5 million farmers, saving 1.2 billion cubic meters of water annually.