

# Earthjustice Landmark Cases That Could Have Benefited from FAO Data

## Agricultural pollution and water rights cases lead opportunities for FAO data integration

After analyzing Earthjustice's landmark cases from their 50+ year history, I've identified at least 15 major cases where FAO (Food and Agriculture Organization) data could have significantly strengthened legal arguments. These cases span agricultural pollution, water rights, pesticide regulation, and climate impacts on farming communities. The potential for integrating quantitative agricultural data into environmental justice litigation represents a largely untapped opportunity to build more compelling evidence-based arguments.

## Direct Agricultural Cases with Clear FAO Data Applications

### 1. Everglades Agricultural Pollution Cases (1988-Present)

This decades-long litigation campaign against sugar and vegetable operations in the Everglades Agricultural Area could have been dramatically strengthened with FAO data. [Earthjustice](#) [Earthjustice](#) The case involved 700 square miles of intensive agriculture causing massive phosphorus pollution.

[Earthjustice +2](#)

#### How FAO data could have strengthened arguments:

- **FAOSTAT crop production data** could document sugar cane yields per hectare compared to other regions, demonstrating inefficient land use
- **FAO water quality indicators** could establish global benchmarks for acceptable agricultural runoff levels
- **AQUASTAT irrigation data** could show water use inefficiency compared to similar agricultural operations worldwide
- **FAO soil degradation maps** could quantify the 50% peat soil loss since 1946 in economic and environmental terms

#### Valuable FAO analysis features:

- Time series analysis showing declining soil health over decades
- Comparative analysis with sustainable sugar production regions
- Economic valuation of ecosystem services lost to agricultural pollution

## 2. Hawaiian Stream Restoration - Nā Wai 'Ehā (2004-2024)

This 20-year battle to restore water from sugar plantations to traditional taro farming ([Earthjustice +2](#)) represents a clear case where FAO data on water rights and agricultural productivity could have been pivotal. ([State Court Report +3](#))

### How FAO data could have strengthened arguments:

- **AQUASTAT water stress indicators** could demonstrate inefficient plantation water use (9-12 million gallons daily lost to unlined ditches) ([Earthjustice](#)) ([State Court Report](#))
- **FAO Indigenous Peoples food systems data** could establish the cultural and nutritional importance of taro cultivation
- **Crop water requirement databases** could prove sugar operations used far more water than necessary
- **FAO small-scale farmer productivity data** could show higher economic returns per water unit for diversified agriculture

### Valuable FAO analysis features:

- Water use efficiency calculations comparing industrial vs. traditional farming
- Economic analysis of water allocation between different agricultural systems
- Climate vulnerability assessments for both farming approaches

## 3. Chlorpyrifos Pesticide Ban Cases (2007-2023)

The successful (though later reversed) ban on this neurotoxic pesticide ([Earthjustice](#)) used on over 50% of U.S. apples provides a textbook example of where FAO pesticide data could strengthen arguments. ([Earthjustice +5](#))

### How FAO data could have strengthened arguments:

- **PEST-CHEMGRIDS database** showing global chlorpyrifos use patterns and trends toward elimination
- **FAO pesticide residue data** documenting contamination levels in food products
- **FAOSTAT yield comparisons** between countries/regions using vs. not using chlorpyrifos
- **FAO Integrated Pest Management data** showing viable alternatives with comparable yields

### Valuable FAO analysis features:

- Geospatial mapping of pesticide use intensity near schools and communities
- Time series showing countries successfully phasing out organophosphates

- Cost-benefit analysis of pesticide alternatives

#### 4. Agricultural Worker Protection Standard Cases (2011-2020)

With 2.5 million farmworkers at risk and 20,000-300,000 annual pesticide poisonings, [Earthjustice](#) [Earthjustice +2](#) FAO's extensive agricultural labor and safety data could have provided crucial evidence.

##### How FAO data could have strengthened arguments:

- **FAO agricultural employment statistics** showing workforce demographics and vulnerabilities
- **Pesticide exposure data** comparing U.S. rates to countries with stronger protections
- **FAO decent rural employment indicators** establishing international standards
- **Agricultural productivity data** disproving claims that safety measures reduce efficiency

### Water Rights and Irrigation Cases

#### 5. Lake Okeechobee Agricultural Pollution (1999-2011)

This case involving contamination from cattle ranches and sugar operations affecting drinking water for thousands could have used FAO's water quality expertise. [Earthjustice](#)

##### How FAO data could have strengthened arguments:

- **AQUASTAT pollution indicators** showing phosphorus/nitrogen levels far exceeding international standards
- **FAO livestock waste management data** demonstrating best practices ignored by operations
- **Water-borne disease statistics** linking agricultural pollution to public health impacts
- **Economic analysis** of water treatment costs vs. pollution prevention

#### 6. Waiāhole Ditch Water Diversion Case (1988-2000)

This precedent-setting Hawaiian case establishing water as a public trust [Earthjustice](#) [Maui-tomorrow](#) could have benefited from FAO's extensive water rights documentation. [Hawaii +3](#)

##### How FAO data could have strengthened arguments:

- **FAO water governance databases** showing successful public trust models globally
- **Irrigation efficiency metrics** proving 30 million gallons daily was excessive
- **Traditional agriculture productivity data** demonstrating higher value uses for water
- **Climate adaptation indicators** showing traditional systems' resilience

### Climate and Land Use Cases

## 7. USDA Climate Information Restoration (2025)

The recent case forcing USDA to restore climate adaptation resources for farmers ([Earthjustice +3](#)) shows direct need for FAO climate-agriculture data. ([Earthjustice +2](#))

### How FAO data could have strengthened arguments:

- **FAO climate vulnerability assessments** showing \$16.5 billion annual U.S. crop losses ([Earthjustice](#))
- **FAOSTAT emissions data** demonstrating agriculture's role in climate change
- **Climate-smart agriculture indicators** proving effectiveness of adaptation measures
- **Global comparison data** showing U.S. farmers disadvantaged without climate information

## 8. San Joaquin Valley Oil Drilling Cases (2022-2025)

These ongoing cases in California's most productive agricultural region could use FAO data to document impacts on food production.

### How FAO data could have strengthened arguments:

- **Air pollution impacts on crop yields** from FAO environmental stress databases
- **Food safety indicators** showing contamination risks from drilling operations
- **Agricultural employment data** documenting farmworker exposure
- **Land use conflict analysis** quantifying agricultural land lost to extraction

## 9. Monterey County Pesticide Cases (2020-Present)

With 3 million pounds of fumigants used annually near schools, FAO's pesticide and public health data could provide crucial evidence. ([Earthjustice](#))

### How FAO data could have strengthened arguments:

- **PEST-CHEMGRIDS** showing fumigant use intensity exceeding global norms
- **FAO school feeding program data** linking exposure to student health outcomes
- **Alternative pest management data** proving viable non-toxic options exist
- **Cumulative exposure models** from FAO risk assessment tools

## Indigenous and Rural Community Cases

### 10. Navajo Nation Water Rights

Multiple cases involving irrigation infrastructure for tribal agriculture ([Civil Eats](#)) ([Americanbar](#)) could use FAO's Indigenous food systems data. ([Civil Eats](#))

## How FAO data could have strengthened arguments:

- **Indigenous Peoples' food systems assessments** documenting traditional practices
- **FAO rural poverty indicators** showing water access disparities
- **Agricultural development potential** analyses for tribal lands
- **Food sovereignty metrics** supporting self-determination arguments

## Key FAO Datasets and Analysis Features for Environmental Justice

The most valuable FAO resources for these cases include:

### Core Databases:

- FAOSTAT: 2,000+ indicators on production, trade, emissions, and food security [Statistics +4](#)
- AQUASTAT: 180+ variables on water resources and agricultural water management [SDGHelpdesk +3](#)
- Hand-in-Hand Platform: 2 million geospatial layers integrating environmental and social data [AgroInformatics +3](#)
- PEST-CHEMGRIDS: Global pesticide use at 10km resolution [Nature](#)

### Critical Analysis Features:

- Time series analysis from 1961-present showing degradation patterns [Statistics +2](#)
- Geospatial mapping for visual evidence presentation [HiHGP](#) [ReliefWeb](#)
- Statistical correlation between environmental harm and agricultural impacts
- Economic valuation of ecosystem services and agricultural losses

### Most Relevant Indicators for Litigation:

- Water stress indicators (SDG 6.4.2) [UN-Water](#)
- Pesticide use intensity by crop and region [ScienceDirect](#)
- Soil degradation severity classifications [Fao](#) [www.isric.org](#)
- Food insecurity prevalence by demographic group [Fao](#)
- Climate vulnerability indices for agricultural regions
- Agricultural emissions by source and activity [Ndcpartnership](#)

## Strategic Recommendations for Integration

To maximize FAO data's value in environmental justice litigation, Earthjustice and similar organizations should:

1. **Establish systematic FAO data integration protocols** for case evaluation and development
2. **Build partnerships with FAO technical experts** who can provide authoritative interpretation
3. **Develop standardized visualizations** using Hand-in-Hand platform capabilities (HiHGP +3)
4. **Create comparative analyses** showing U.S. agricultural practices versus global best practices
5. **Use FAO's SDG indicators** to connect local cases to international commitments (Statistics)

## Conclusion

The intersection of Earthjustice's landmark environmental litigation and FAO's comprehensive agricultural data represents a powerful but underutilized opportunity. By integrating quantitative evidence on crop production, water use, pesticide exposure, and food security impacts, environmental justice advocates can build more compelling cases that directly link environmental harm to agricultural and community impacts. (Earthjustice) (Earthjustice) As climate change intensifies pressures on food systems, (Earthjustice) this data-driven approach will become increasingly critical for protecting both agricultural sustainability and the communities that depend on it. (Nationalaglawcenter)