

## Water's Dilemma Answer Key

### 1. Main Problems

- Lack of reliable access to safe drinking water.
- Contaminated water sources (health risks).
- Overuse of groundwater in South Asia.
- Climate change intensifying drought in dry regions.
- Political tension over shared water resources.

### 2. Three Solutions

- **Desalination plants:** Create new fresh water but are expensive and energy-intensive.
- **Conservation strategies:** Drip irrigation and wastewater recycling reduce waste.
- **Equity-based policies:** Ensure all communities, not just wealthy ones, gain access to clean water.

### 3. Short-term vs. Long-term

- Short-term: **Conservation strategies** (drip irrigation, recycling) are quicker to implement and reduce waste immediately.
- Long-term: **Desalination + equity policies** may be sustainable if paired with renewable energy and fair distribution, though they require investment and cooperation.

### 4. Equity Issues

- Without addressing equity, solutions risk benefiting only wealthy cities or nations. Poor communities may continue to lack access, perpetuating inequality and conflict.

### 5. Model Policy Recommendation

- *A practical plan would combine conservation strategies (drip irrigation to save water in agriculture) with equity-focused policies to ensure that rural and poor communities are prioritized. Desalination could supplement in coastal regions if powered by renewable energy. Together, these strategies balance efficiency, fairness, and sustainability.*

**Teacher Notes** - Encourage debate: Which solution would be most feasible in their own community or country?