

3 CHALLENGES, 3 ERRORS & 3 SOLUTIONS

TO INTEGRATE FRONTLINE COMMUNITIES IN CLIMATE CHANGE POLICY AND RESEARCH: lessons from California

CHALLENGES

Unawareness of local priorities

Policymakers and scientists do not understand well the concerns in frontline communities, which causes faulty policies and understudied persisting local issues.



Unequal access to natural resources

Frontline communities experience historical water insecurity, extremely low air quality, and lack of access to healthy green spaces; climate change is aggravating these circumstances



Unequal access to public services

Public services are a prerequisite for resilience and effective climate change adaptation and mitigation, including basic public infrastructure, healthcare, socioeconomic opportunities that have been historically suppressed from frontline communities.



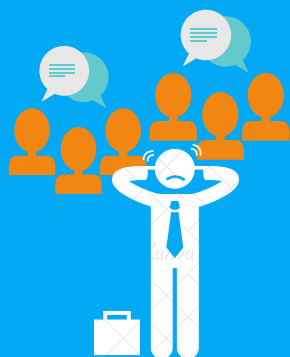
Top-down decision making

Policymakers and scientists assume that they know what frontline communities need without ground-truthing their assumptions, especially regarding environmental justice, which leads to ineffective policies and irrelevant research



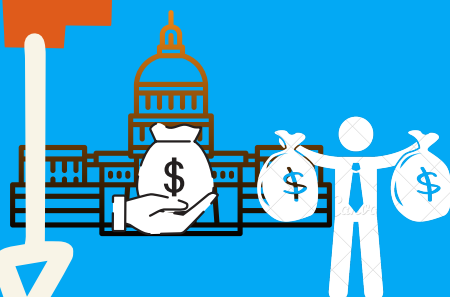
Ignoring local knowledge

Superiority complex and lack of interest by policymakers/scientists to find out firsthand local issues in frontline communities combined with media underrepresentation increase policy and research likelihood to fail



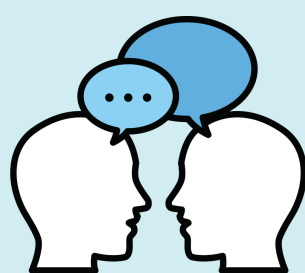
System abuse and tokenism

System abuse (for example, "inverse Robin Hood:" taking from the poor to give to the rich) and tokenism (using vulnerable stakeholders to benefit oneself) prevent frontline communities from benefitting of funding allocated to serve them. These practices benefit the project proponent far more than the intended beneficiary



Information exchange

Engaging community stakeholders in community-related projects and research promotes well-informed decisions that are more likely to succeed, and it creates inclusivity and a sense of belonging for community members



Buffer zones

In rural communities, a physical separation between agricultural lands and oil fields can improve water and air quality; buffer zones can be repurposed into activities with positive externalities for the communities and multi-benefit projects



Multi-benefit projects

Innovative frameworks to manage common pool resources to reverse systemic injustice based on trust and participation among frontline communities, academia, society, non-profit organizations and governments. Land use repurposing can help achieve environmental and socioeconomic justice while promoting diverse income sources for farmers (solar energy, aquifer recharge, clean industry)



ERRORS

SOLUTIONS

Challenges, errors, and solutions to integrate California rural frontline communities into climate change adaptation and mitigation strategies. The challenges are current and inherited circumstances experienced by frontline communities. The errors inhibit the resolution of one or more challenges, stem from actions of policymakers and academics, and are exacerbated by the lack of public and media representation of frontline communities. The solutions intend to resolve the challenges by exploring possibilities to integrate policy and research with landowners, industry, and the broader society towards achieving environmental justice. All challenges, errors, and solutions are interconnected, as the effects of the issues experienced in frontline communities are compounding and greater than the sum of their parts.