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# Climate justice in transforming land-use systems for food and renewable energy

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Center for Research and  
Development in Drylands



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AgriCulture & Ecology



## Introduction

- **Past:** Drylands seen as low-potential, marginal and empty
- **Now:** With global climate crisis & need for transition to green energy, tropical drylands gain new value as energy frontier
- **Yet** these are areas where local people produce food (milk & meat) for themselves and the country
- **Danger:** Investments in green energy ignore traditional dryland users



Credit: Petra Dilthey

## Research on impact of large-scale renewable-energy (LSRE) projects on pastoralists in drylands

- 1) Desk study “**Pastoralism & large-scale renewable energy and green hydrogen projects**” for Heinrich Böll Foundation & Bread for the World
- 2) Deeper-going on-the-ground study “**Just transitions? Pastoralism, energy & net zero**” for University of Leicester, with legal document review and key-informant interviews

Focus here on LSRE projects for **wind power in Kenya**



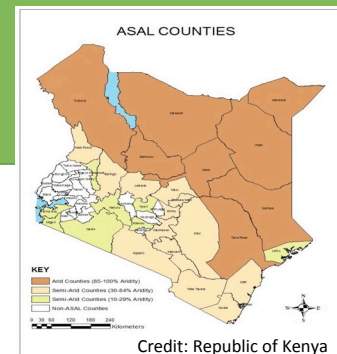
## Current trends in energy sector



- Fast expansion of solar & wind power projects to meet demand for carbon-free energy
- Many countries, including Kenya, target 100% green energy by 2030 (Germany by 2035)
- German quest for green hydrogen intensified with Ukraine war
- **Drylands excellent for generating solar & wind power**

## Case study in Kenya's drylands

- ASALs (arid & semi-arid lands) cover over 80% of Kenya and support primarily pastoralist livelihoods
- Decades of marginalisation led to low levels of development
- Recently, road & communication infrastructure improved – increased investment interest
- Large-scale land acquisition for green energy – and growing opposition by pastoralists – why?



## Pastoralism depends on mobility over diverse landscape

### Large-scale land acquisition in the drylands:

- Dispossesses pastoralists of traditional grazing areas
- Reduces herd mobility and access to key seasonal resources
- Pastoralism becomes less viable.

### Government & investors

- Have little understanding of pastoral systems and underestimate their value
- Do not recognise communal land rights for flexible and mobile pastoral use.



## Lake Turkana Wind Power (LTWP) project

On land of Turkana, Samburu, Rendille & El Molo pastoralists in northern Kenya

**2009:** 60,700 ha ASAL acquired from Kenyan Government

*The lease transferred communal land to investors with no compensation to local communities.*

**2014:** Construction began

**2019:** Energy from 365 turbines fed into national grid



Credit: Twitter KETRACO

## Pastoralists' resistance to LTWP project

### Main points of contention:

- Lack of adequate community consultation during land-acquisition process
- Irregular transfer of land ownership rights from community to investors
- No compensation for land lost
- Of 60,700 ha acquired by project, only 16,187 ha used for wind turbines
- Community feels deprived of remaining land for grazing



Credit: Institute for Security Studies

## Pastoralists' resistance to LTWP project (cont'd)

**2014:** Communities went to court

**2021:** Court ruled *land-acquisition process illegal*,  
but wind park in full operation since 2019

*Court recommended to "regularise" land acquisition,  
but no process for "regularisation" provided*

*Communities not happy with "legalising the illegality"  
– want the land title to be revoked*

**2023:** What is the situation now?



## Most LSRE projects led to lose–lose situations

### Pastoralist communities suffer:

- Blocked access to pasture, water & energy (firewood)
- Interrupted herd migration routes
- Decreased resilience in face of climate change



### Energy companies suffer:

- Conflict with local communities
- Damaged infrastructure
- Construction delays
- Higher costs, including for court cases
- Sometimes even project failure

## But also positive example: Kipeto Wind Power Project

**1993:** Project initiated in southern Kenya but Maasai demanded that developers compensate for land & livelihoods

*Land owned & managed as Maasai group ranches – subdivided among families*

*Land of 60 owners, including 10 women, in Kipeto Wind Power Project footprint*

***Time- & resource-consuming consultations until win-win agreement finally reached***



Credit: Kipeto Wind Power

**2021:** 100 MW project went into operation

## Kipeto Wind Power Project – benefits for pastoralists

### Key benefits for Maasai community:

1. Community members can graze their herds on wind farm
2. Owners of land where turbines erected receive annual lease payments plus 1.4% of gross revenue from each turbine
3. 5% revenue share for community through Community Trust Fund for local development projects



Credit: Petra Dilthey

## Kipeto Wind Power Project – benefits (cont’d)

### Key benefits for Maasai community:

4. Construction of 80 houses for relocated families
5. Several Corporate Social Responsibility (CSR) projects benefiting local community and Kajiado County
6. Implementation of Biodiversity Action Plan with community to monitor & protect birds



How to facilitate just transition to green energy in the drylands

Recommendations for policymakers, energy companies & investment banks

*Green energy, also green hydrogen, only from projects that meet global human-rights standards*



Recommendations for CSOs & researchers, with view to:

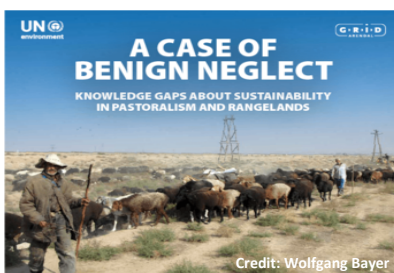
- protecting pastoralists’ rights
- helping them strengthen their position for negotiation with LSRE projects

## Recommendations for CSOs, including pastoralist organisations

- Become aware of existing **international standards & codes of business conduct**
- **Strengthen pastoralists' capacities** to know and defend their rights, e.g.
  - claiming community rights to common land
  - legal advice about human & civil rights
- Facilitate pastoralist involvement in **multistakeholder planning** for multipurpose land use



## Recommendations for researchers



- Fill knowledge gaps on **value of pastoral food-production systems** & their contribution to economy & ecosystem services
- Fill knowledge gaps on **socio-economic consequences** of LSRE projects in drylands
- Participatory action research (PAR) with pastoralists on ways to **integrate green energy, grazing & biodiversity conservation**
- PAR with pastoralists for their **legal empowerment**



## Conclusions

- Global energy transition is necessary: LSRE projects will expand further
- Seek synergies between producing green energy and producing food to sustain local livelihoods
- Win–win situations possible *if* pastoralists' **voice & agency strengthened**
- Governments must manage energy transition in open & inclusive discussion with **well-informed pastoralists.**

***Only then can a just transition to renewable energy be made.***

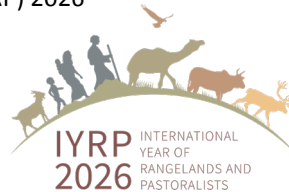


Credit: Alta Wind Energy Cen

## Thanks !

### Thanks for information and support:

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- FAO Pastoralist Knowledge Hub members
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Credit: Christine Matthews