

# Bioenergy conflicts and their management - a global review

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# Introduction

- A study conducted in a partially company funded consortium – a practical orientation, with an aim to find recommendations for bioenergy related companies based on existing studies on bioenergy conflicts.
- Conflict = Not only a clear battle or fighting but also observable differences in opinion, clashes of interest, disagreements or public protests among the stakeholders



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# Specific characteristics of bioenergy conflicts

- Bioenergy conflicts are very much like other conflicts encountered related to the use of natural resources (e.g. forestry, agriculture or mining). However, some specific characteristics can be identified:
  1. Cross sectoral activities, with simultaneous feedstock management, new technological solutions and the opening of new markets
  2. Markets heavily influenced by policy development
  3. Large number of stakeholders in long value chains
  4. Consumers' high expectation on sustainability
  5. Demand for large land areas for biomass production



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# Conflict dimensions



**Figure 1.** A theoretical framework presenting the three dimensions of conflicts following Walker and Daniels (1997, p. 22).

**Substance:** 'what it is about' the concrete issues about which the disputants argue

**Relationship:** 'how people behave' reflecting the cultural differences at individual, organisational and societal levels, and their interaction

**Procedure:** 'how things are done' Implementation of the bioenergy development, organisational procedures etc.



# Materials and methods

- Literature review:
  - 28 peer reviewed journal articles that describe bioenergy conflict onset and/or management
  - Prior, during and after the realisation of bioenergy projects and developments
  - Value chains from feedstock production to consumption
  - Feedstocks: forest biomass, agricultural crops, agricultural waste, municipal waste and algae.
  - 13 countries covering all the continents
- How?
  - Screening of factors and issues that cause conflicts
  - Collecting ideas & experiences in managing the conflicts
  - Analysing them according to the dimensions



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# Factors inducing bioenergy conflicts: Substance

- Risks to human health and wellbeing
  - Degradation of ecosystems and biodiversity
  - Competition with other businesses and forms of income
  - Increasing economic inequality
  - Questioning climate benefit
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- Related to the side-effects of bioenergy production, especially initial stages of value-chain (climate benefit is the exception)
  - Initially involves local stakeholders, but if conflicts escalate new stakeholders further along the value-chain get involved
  - An emphasized role of scientific data, available information and local knowledge



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# Factors inducing bioenergy conflicts: Relationship

- Clashes with culture, way of life and local conditions
  - Lack of trust between stakeholders
  - Lack of connections between stakeholders to transmit information (no relationship)
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- Often about different framings of different stakeholders (esp. neglecting the meaning-making of local inhabitants)
  - Common in the beginning of the value-chain – with escalation potential
  - The role of past behaviors in shaping the future



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# Factors inducing bioenergy conflicts: Procedure

- Deficiencies in governance and institutions
  - Lack of recognizing and respecting on-going land use
  - Abuse of power
  - Exclusion of stakeholders from decision-making
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- Relates to substance and relationship by offering the means to e.g. transmit information – procedures can hide or reveal other types of conflicts
  - Involves essentially governance structures at state and local levels, thus it may be difficult to influence from a bioenergy company's perspective



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# Suggestions for bioenergy conflict management

- Substance
  - Disseminate information
  - Collect more data and information
  - Take improving actions on harmful effects
- Relationship
  - Improve dialogue and communication
  - Increase co-operation
  - Provide capacity building and offer training
- Procedure
  - Increase stakeholder engagement
  - Aim for mediating, harmonization and monitoring of agreements
  - Support, develop and enforce sustainability standards
  - Work with governance



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## Conclusions

- Dimension approach facilitates the understanding of the multiple nature of conflicts and gives ideas for conflict prevention
- All serious conflicts include elements from all the dimensions
- All conflicts are unique: it is possible to draw recommendation lists/ check lists, but surprises are inevitable
- The most important recommendation for companies is to consider the entire value chain of the product, even if the particular company is only involved in a very small part of it
- Some conflicts are inevitable, some can even be constructive



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