

# Climate change and development – strengthening capacities for adaptation to climate change

A research project at DIE

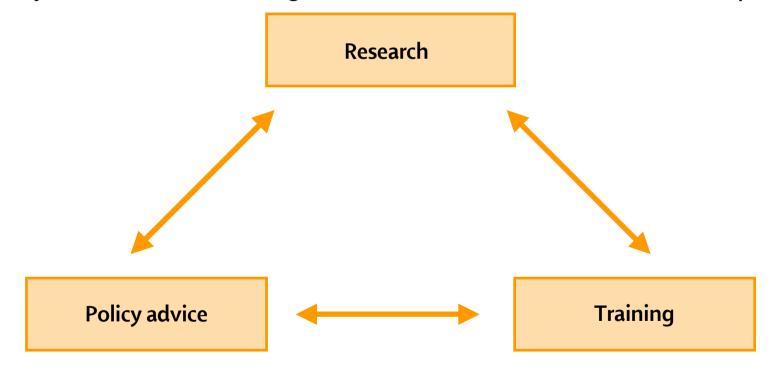
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### **Areas of work**



Since its foundation in 1964, DIE has focused on the interplay between research, policy advice and training. Research-based policy advice and training activities define DIE's distinctive profile.



# **DIE Research Programme**



#### Department 1:

Bi- and multilateral Development Cooperation

#### **Department 2:**

Competitiveness and Social Development

#### **Department 3:**

Governance, Statehood, Security

#### Department 4:

Environmental
Policy and
Natural
Resource
Management

#### **Department 5:**

World
Economy and
Development
Financing

#### Department 6:

Postgraduate
Programme
and Global
Governance
School

#### **Cross-cutting working groups**

Global Governance and Anchor Countries

Development
Cooperation with subsaharan Africa

### Climate change research at DIE



Reduce greenhouse gas emissions



- Mitigation capacities in China, India and Brazil
- Energy efficiency in buildings (China)
- REDD
- Innovations for lowcarbon development

Support adaptation



- Integrating adaptation into German DC
- Adaptation in Subsahara
   Africa and Latin America
- Adaptive water management

Global climate regime



- Interaction with other sectors (security, migration, energy, food)
- Financing mitigation and adaptation
- Future scenarios and implications for DC

# Policy-oriented adaptation research



**Main hypothesis:** Climate change is a factor which will strongly affect development opportunities – adaptation planning needs to be integrated into development planning / poverty reduction.

### **Approaches:**

- Identify climate risks and safeguard measures
- Reduce socio-economic and political vulnerabilities
- Improve policy coordination among sectors and levels

### Research areas



- Role of natural resource management and institutional / governance issues in adaptation

 Concepts for adaptation programmes and measures, for integrating adaptation into poverty reduction / development cooperation

- Systematisation: incremental vs. radical approaches to adaptation, depending on global warming trends

### Research topics



- Adaptation strategies in agriculture in different socioecological contexts (Africa) (Dr. Chinwe Ifejika Speranza)
- Integration of natural resource management and adaptation payments for ecosystem services (PES) as an approach to adaptation in Africa (Isabel van de Sand)
- Adaptation to climate change conceptual challenges for the design and development of institutions (Britta Horstmann)
- Adaptation strategies in Latin America (Fariborz Zelli)
- Adaptive capacities in irrigated agriculture in Usbekistan and South Africa (Elke Herrfahrdt)
- Strengthening coherence between climate and development policies in the EU (Imme Scholz)

# Research topics covered by consultants



- Impact assessment of climate change in Africa what modelling tells us (Christoph Müller, PIK)
- Climate change and urbanisation in Africa (Lutz Meyer-Ohlendorf, consultant)
- Gender and climate change in Africa (Prof. Wanjiku Chiuri and Prof. Francis Lelo, Egerton University, Kenia)
- Gender and adaptation to climate change in German development cooperation (Birte Rodenberg, consultant)
- Strategies for an effective technical assistance in African agriculture with regard to climate change (Dr. Boniface Kiteme, Centre for Training and Integrated Research for Arid and Semi-Arid Lands (CETRAD), Nanyuki, Kenya)

# **Expected results**



- Better understanding of linkages between vulnerability and adaptive capacities in subsaharan Africa
- → How can the promotion of sustainable management of natural resources contribute to the reduction of vulnerability? What is the role of governance arrangements?
- → How can we reduce gender inequality in adaptation?
- → Which institutions and instruments are best suited to funding adaptation strategies and measures?
- → What is the most effective division of labour between the funds under the UNFCCC, and multi- and bilateral development cooperation?