#### **TROPENTAG 2015**

Management of land use systems for enhanced food security – conflicts, controversies and resolutions September 16 - 18, 2015, Humboldt-Universität zu Berlin, Germany



# Understanding influencing factors to the spread of Conservation Agriculture (CA) in sub-Saharan Africa following the QAToCA approach: results from seven case studies

Hycenth Tim Ndah a,b, Johannes Schuler a, Andrea Knierim a,b

a Leibniz Centre for Agricultural Landscape Research (ZALF), Institute of Socio-Economics, Germany, b University of Hohenheim, Institute of Social Sciences in Agriculture, Germany

# Problem and Objectives

In spite reported benefits, CA adoption rate in SSA compared with other continents have remained extremely low.

In view of this, the QAToCA approach complemented with key informant interviews and structured field observations was applied in seven case studies across Western, Southern and Eastern Africa to:

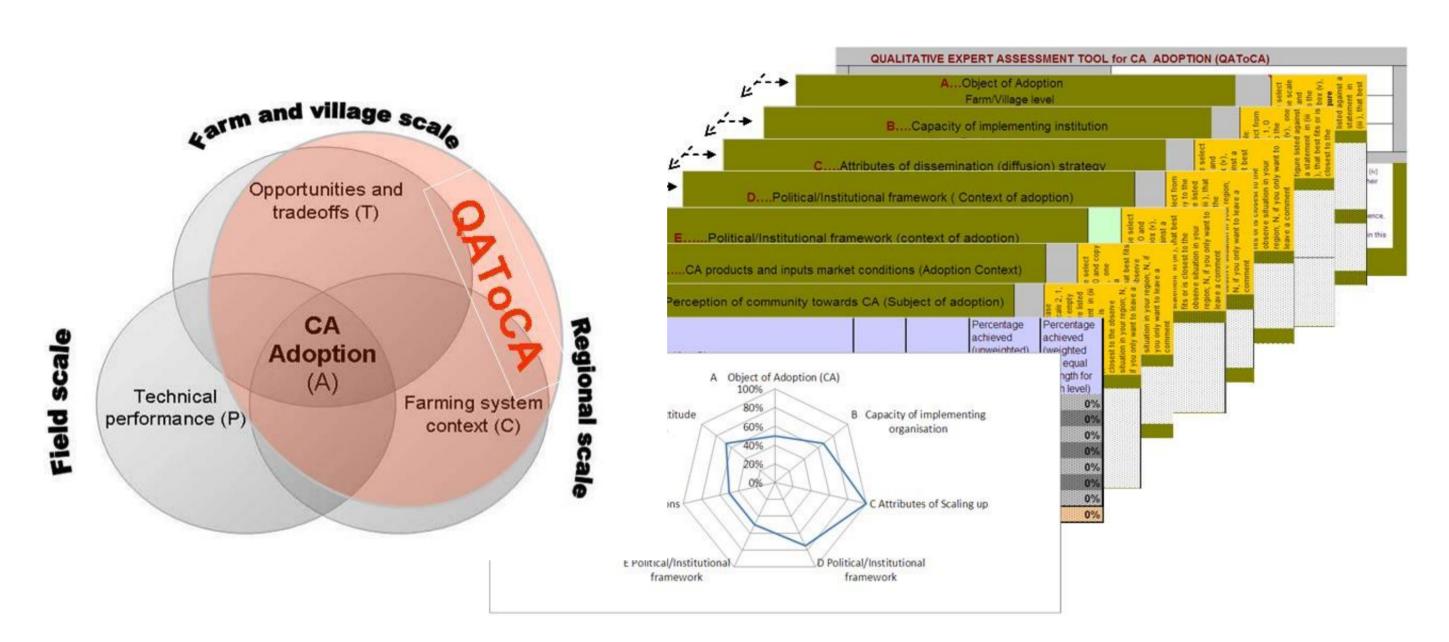
- determine the relative adoption potential of CA,
- assess institutional, socio-economic and cultural influences on its adoption potential and,
- identify site-specific hindering and supporting factors to its adoption potential in SSA.

# **QAToCA** in brief

- QAToCA stands for: a Qualitative expert Assessment Tool for CA Adoption (pronounced: [ka:toka:]
- developed by the EU-funded project "CA2Africa" (www.ca2africa.eu)
- directed to regional experts, research teams and managers of development projects with a focus on CA promotion
- allowing them to self-assess their CA promotion projects along a systematic, expert-based list of questions and criteria, and is
- guided by existing diffusion theories and conceptual models designed to be able to assess the socio-economic and cultural conditions that hinder or promote the adoption of CA under the heterogeneous conditions of Africa.

#### Coverage and thematic categories

- Approach covers seven thematic areas, underpinned with a number of operational questions, indicators and statements,
- The user of the tool has to assess in how far these statements apply to the conditions in a particular region.



- A Object of Adoption (CA)
- B Capacity of the implementing organisation(s)
- C Attributes of Scaling up
- D Political/Institutional framework at regional level
- E Political/Institutional framework at village level
- F Economic conditions
- G Community's attitude towards CA

## Calculating thematic adoption potential

$$RT_{x} = \frac{\sum_{i=1}^{n} a_{i}}{\sum_{i=1}^{n} a_{\max}} *100$$
(equation 1)

with

RT-relative adoption potential for thematic area x (in %)

N -total number of operational questions in thematic area x

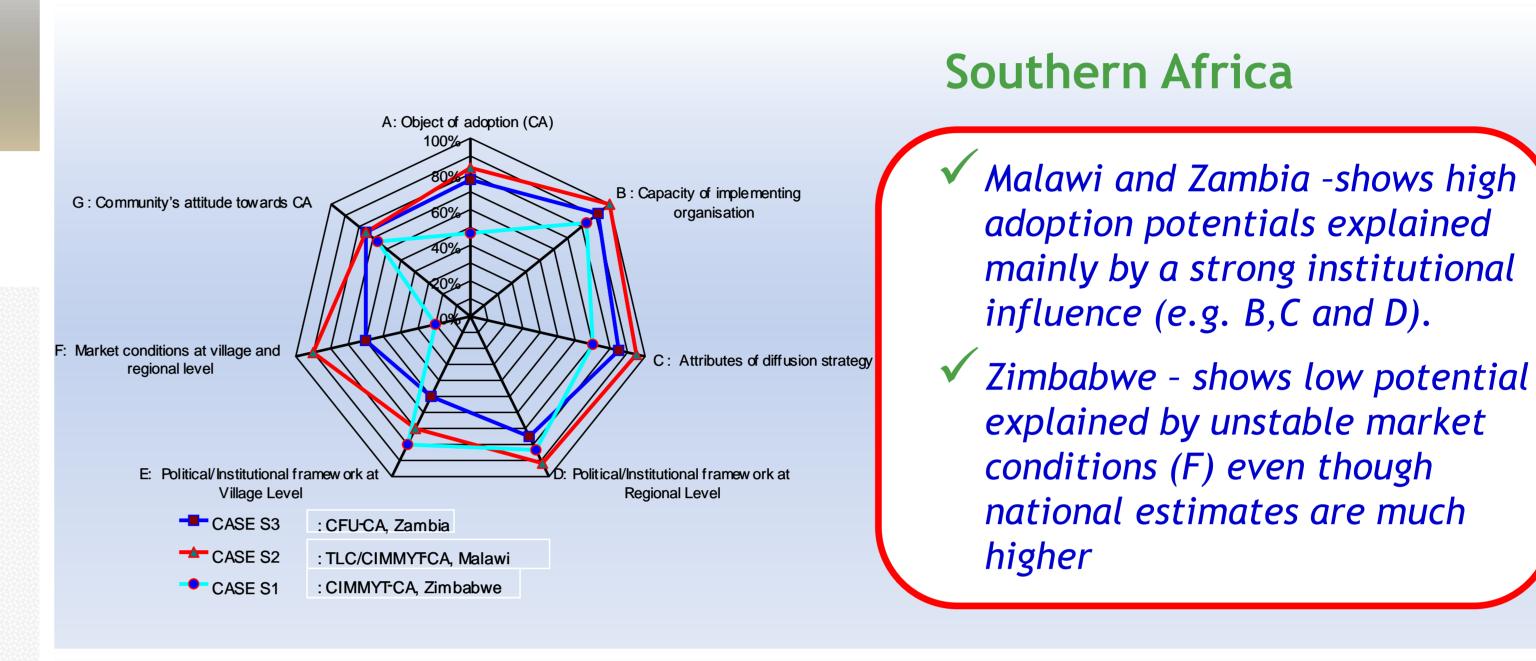
a<sub>i</sub> -value (2, 1, 0) corresponding to the answer statement selected for operational question i

a<sub>max</sub> - maximum possible value (2) for operational question i

# **Application of QAToCA**

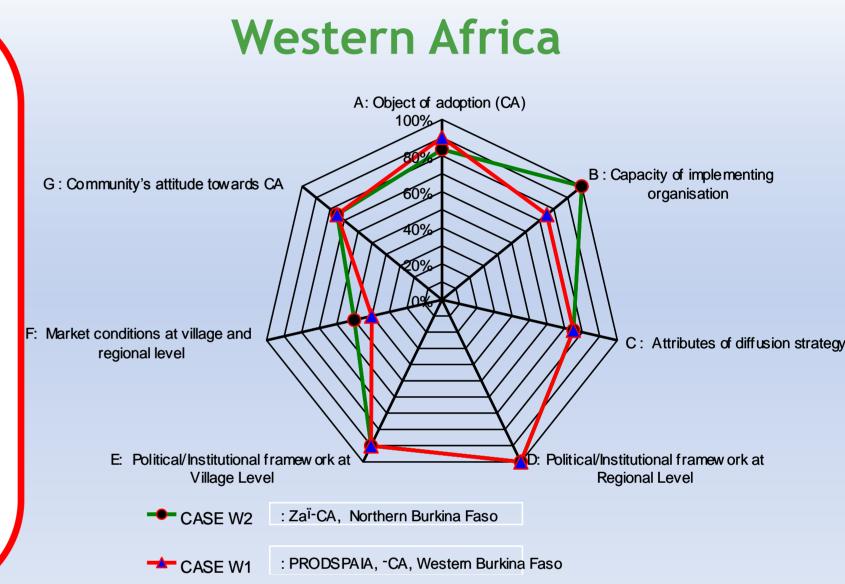
In each of the seven case studies, a one day QAToCA multi stakeholder workshop was organised during the 2nd half of 2011. In average, 10 participants were allowed for each workshop composed of two CA experts, two CA farmers (adopters), two sceptical CA farmers (non adopters), one service provider, and one extension worker.

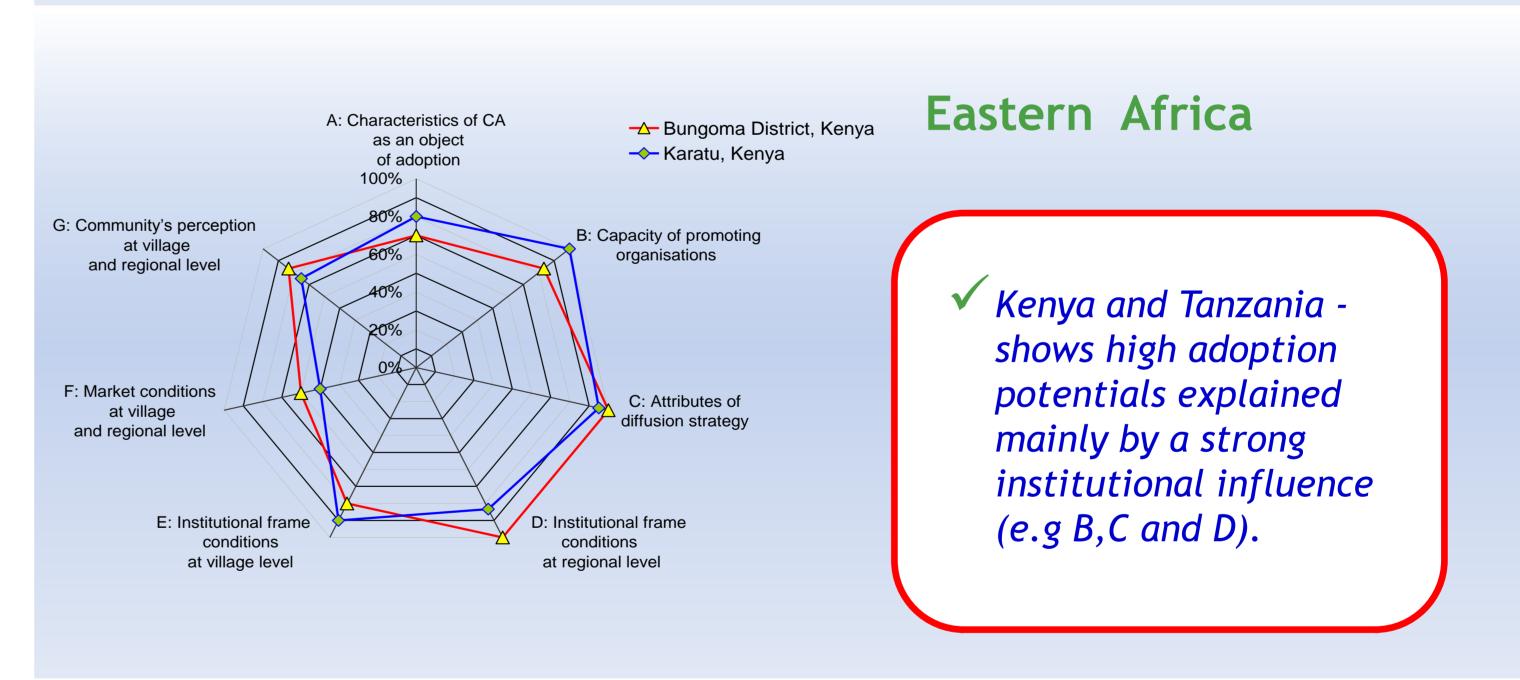
### Results



Western Burkina Faso - shows high potential but in reality number are low. Explanation: high competition between livestock and CA over residue use.

Northern Burkina Faso - shows high adoption potential. Explanation: farmers have no alternative than to adopt CA, the best adapted practice under the given agro-ecological conditions





#### Conclusion on method

Critical concerns for long lasting adoption in SSA calls:

- addressing emerging needs for new input and output market outlets,
- adapting CA to the existing management structures of adopting farms and,
- taking into consideration, the hidden sensitive gender issues between men and women in small scale family structures,
- further developing a supportive political and institutional frame condition at village and regional levels.

## Conclusion on method

The results can help CA researchers, practitioners and other managers of ongoing projects in the selected case study areas to reflect on their CA-related activities and to eventually adjust or redesign them based on a more explicit understanding of where problems and opportunities are found.











