Integration of smallholder farmers in international CO₂-markets in Western Kenya

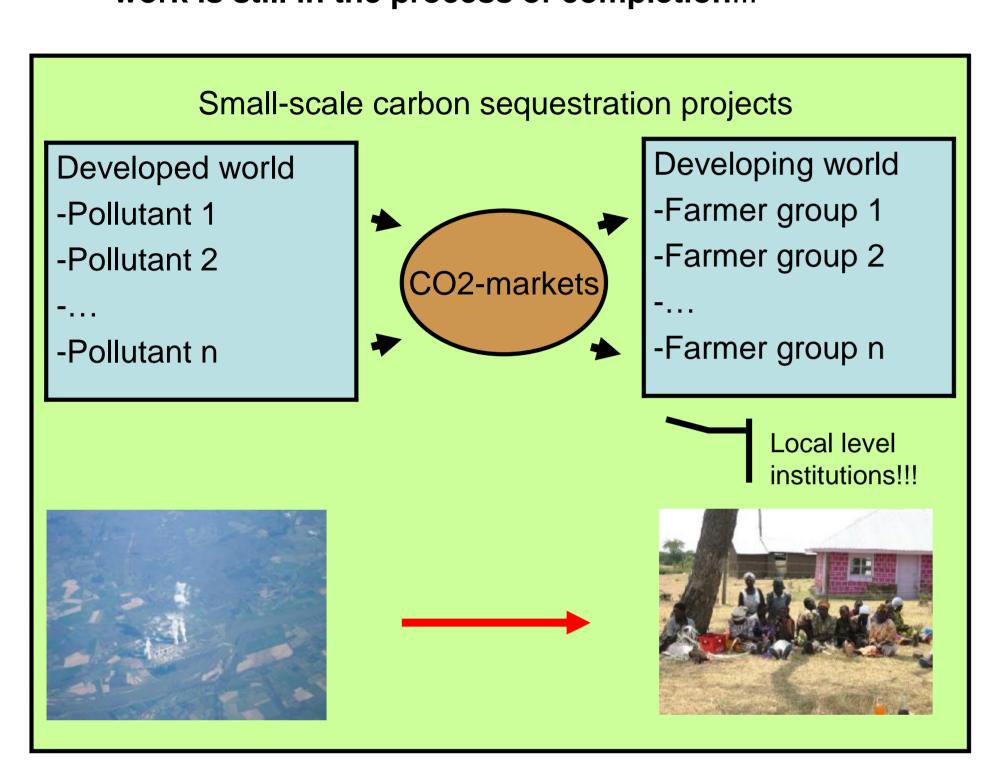
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INTRODUCTION

International CO₂-markets based on **carbon sequestration projects** are presently rarely to non-existing, in particular by focusing on small-scale projects. Two major reasons for this, are 1) the lacking political will on the international level, but also 2) the lacking experience on the local level.

The focus of the presented research is set on **local level institutions** by integrating smallholder farmers in international CO₂-markets, by targeting the densely populated and highly degraded **Nyando & Yala river basins** in **Western Kenya**.

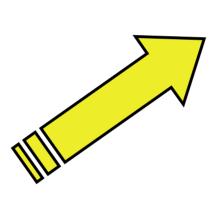
As base of a M.Sc. thesis at the chair of resource economics, Humboldt University Berlin, the presented work is still in the process of completion!!!



OBJECTIVES

In order to this figure out, if the integration of smallholder farmers in international CO₂-markets is possible due to local level institutional arrangements, driving and constraining factors have to be identified, by focusing on <u>3 major issues</u>:

- i) Mobilisation & empowerment of individual smallholder farmers for tree growing activities/ agroforestry practices (land, labour, capital; knowledge & skills; group structures),
- ii) **perception** of individual smallholder farmers towards tree growing activities/ agroforestry practices & climate issues in terms of design, implementation and enforcement of adequate activities (external development activities; group by-laws),
- iii) as well as **distribution of benefits** gained by tree growing activities/ agroforestry practices in terms of improved livelihood of individual smallholder farmers.



WORK IN PROGRESS

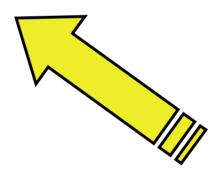
SUMMARY

Pursuing the objective to integrate smallholders in international CO₂-markets, **further mobilisation & empowerment** is needed.

Therefore use of **best-practice examples**, farmer-to-farmer approach, i.e. transfer of knowledge & skills from groups to individuals as well as beyond to communities, but also further farmer-oriented training & extension.

Aim should be the **bundling of various small-scale projects** in order to have smallholder farmers as a charming and reliable partner for investors in international CO₂-markets (role of intermediary bodies?)!!

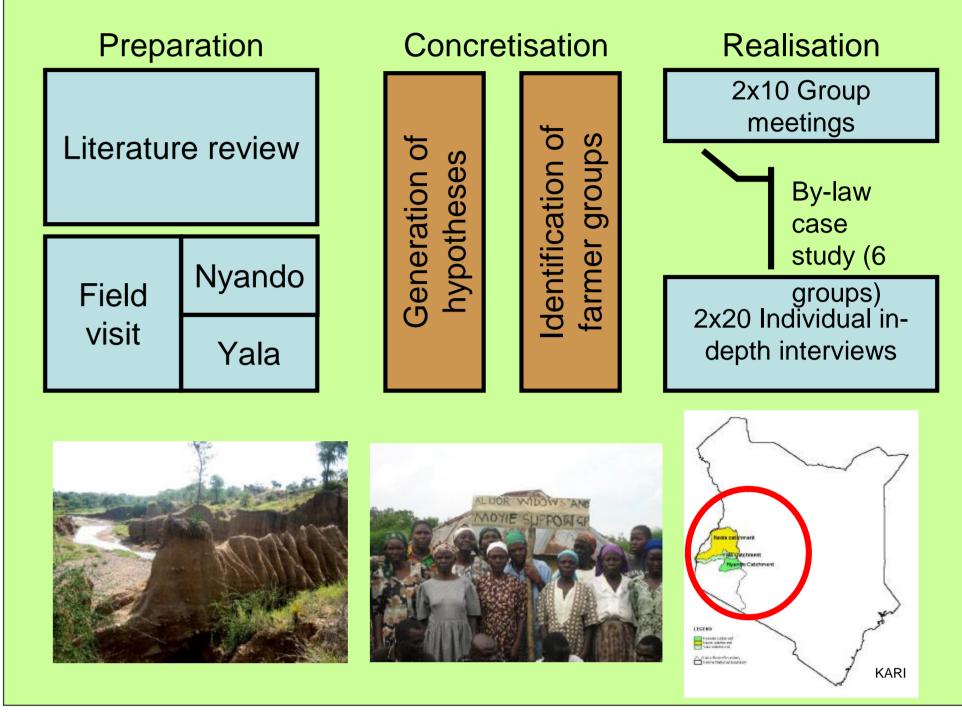


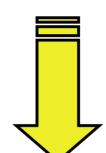


CONCLUSIONS

- ü Smallholders and international CO₂-markets as a **new field of research** (lack of knowledge & skills)
- i) Heterogeneity among groups in terms of arranging well-functioning group composition & group processes, in particular for tree growing activities/agroforestry practices
- ii) Due to the fact that tree growing activities/ agroforestry practices are young disciplines in Western Kenya, still need for **training & extension**, further **adaptation & spreading of by-laws**
- iii) Same refers to addressing and implementing external development activities, there are already good examples e.g. in proposal writing, but also need to be further institutionalised, in particular **addressing donors & funds**
- iv) In terms of distribution on benefits, smallholder farmers have different ideas, however in common that primarily groups should be approached.

METHODOLOGY





RESULTS

Focus on local-level institutional arrangements in terms of ...

- Ø ... land, labour and capital (i.e. having shared group nurseries, but individual trees being planted, group + individually done work, group income + individual financial contributions like merry-go-around)
- Ø ... knowledge & skills, i.e. common training & extension which is passed to individual group members/ community (i.a. by tree-planting days)
- Ø ... group composition & group processes, i.e. having clear structures: officials + ordinary group members, activity managers & consensus/ majority rule in decision-making, commonly carried out work, clearly defined responsibility
- Ø ... group by-laws according to objectives (like soil & water conservation measures), i.e. on defined land & given benefits like seedlings, formulated in an participatory approach, arranging work to be done, contributions, distribution of benefits ... (still young)
- Ø ... given external development support: proposal writing, assistance in managing given & own resources: in kind/ in cash (i.a. training & extension, seedlings, tools)
- Ø ... distribution of benefits: preferred as group, either in advance or bit by bit, in kind or cash

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