Convergence of Sciences

An analysis of innovation processes in artisanal palm oil enterprise
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Expert consultation workshop (4-6th Feb.) CTA Headquarters, The Netherlands

OUTLINE

- Background/context
- Scoping study
- Meeting of stakeholders & Entry point for domain
- Formation of stakeholders' platform and CIG
- Diagnostic study and validation
- Experimentation and CIG activities
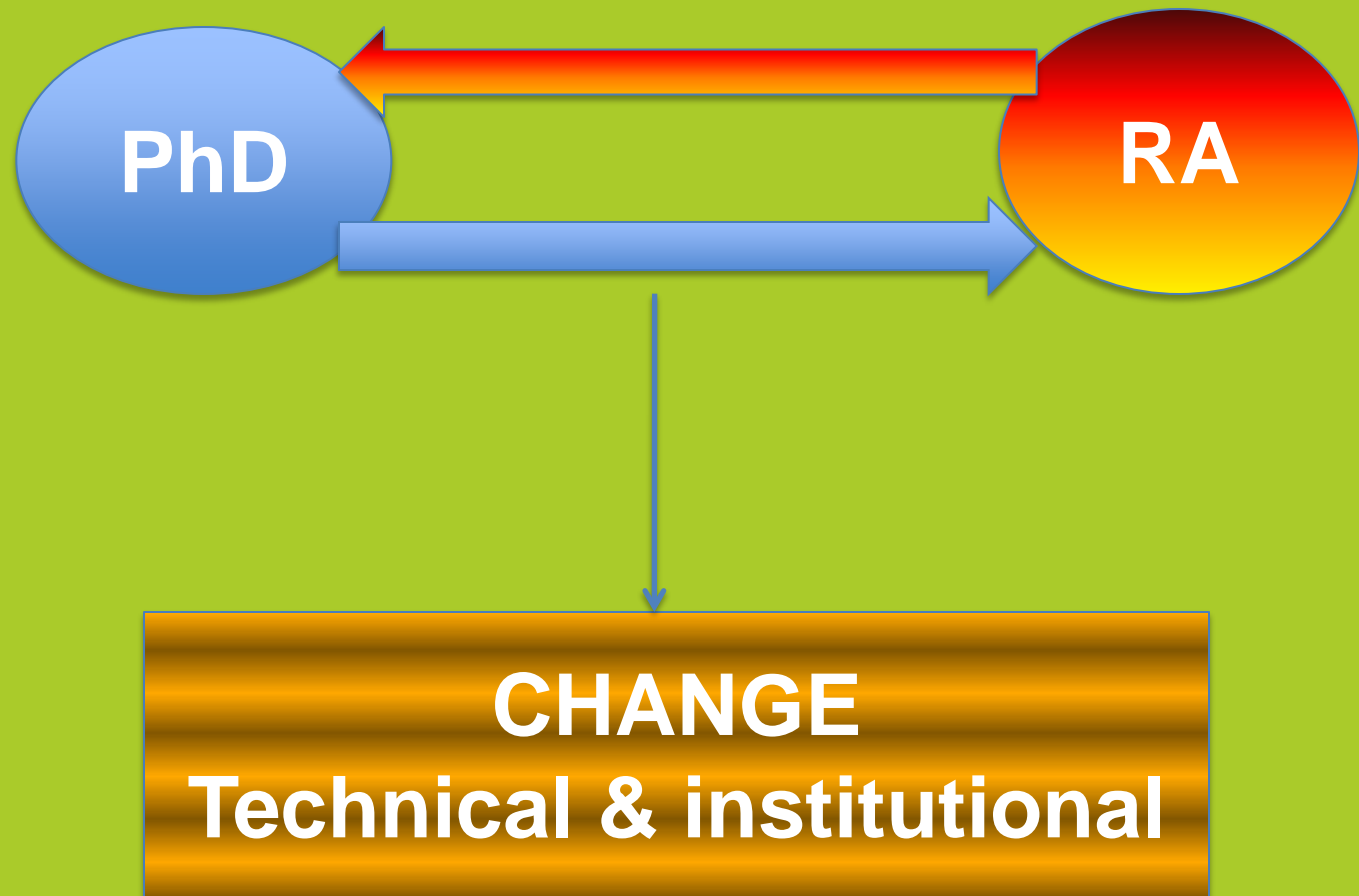- Outcomes of the processes
- Conclusions

The domain

BACKGROUND

- In 2011, 87% oil palm- by small-scale farmers
- Artisanal small-scale processors produce 60-80% of palm oil
- Ghana is a net importer (160,000MT in 2012)

- No policy strategy for improving the enterprise

The Domain in CoS-SIS

PhD

RA

**CHANGE
Technical & institutional**

THE PROCESS

SCOPING STUDY

- Exploratory and Scoping by RA & PhD
- In 3 districts in 3 regions- Ashanti, Western, Eastern

- To explore opportunities & constraints

- Desk-top study
- Key informant Interviews
- Focus groups
- Participant observations

Some findings

➢Few innovations in last decade

➢Most farmers use volunteer seeds

➢Environment hazards from processing

➢Small-scale produce bulk of oil but lack market access

➢Huge demand for palm oil in Ghana, West Africa, World

1st WORKSHOP -ENTRY POINT

2 ENTRY POINTS

- Lack of access to palm oil market all year round

- Environmental concerns of the artisanal processing- Use of tyres as fuel source

STAKEHOLDERS' PLATFORMS

<u>1. Local stakeholders' platform-District</u>

- ➢ Ministry of Food and Agriculture-District
- ➢ Farmers
- ➢ Oil Palm Research Institute
- ➢ Processors
- ➢ Mill owners, workers
- ➢ District assembly

2. CIG platform-National & District

➢Export Promotion Council

➢Ghana Standard Board

➢Environmental Protection Agency

➢Ministry of Food and Agriculture

➢ Ghana Regional Appropriate Technology and Industrial Service

➢Millers' Association

➢Farmers

➢Processors

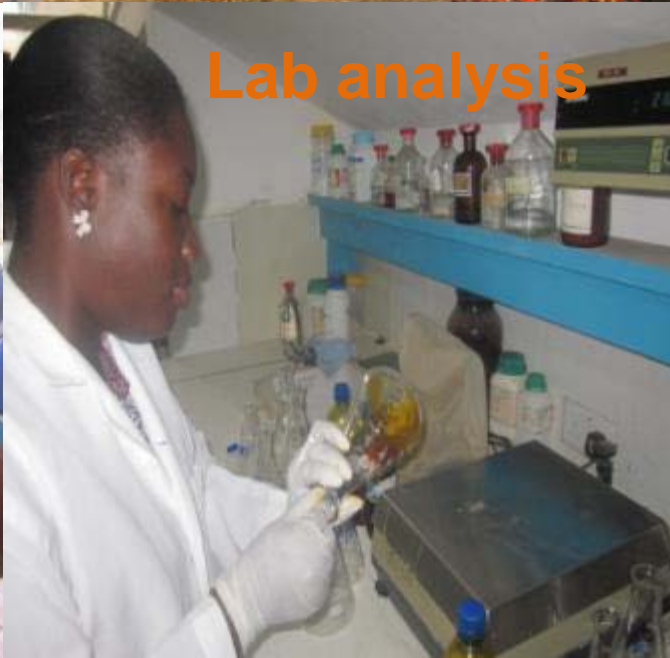➢Buyers

THE DIAGNOSIS

PhD-

In six towns of Kwaebibirem district

- To explore and analyze causes of lack of access to market by artisanal processors

CIG-

- study extent and impact of tyre usage
- explore market opportunities and requirements

How it was done

Community meeting

Ethnographic study

Survey

Fruit/bunch analysis

Lab analysis

Validation workshop

Some findings- PhD

- Long fruit storage period
- Poor quality of palm oil
- No formal processors' association
- Processors not linked to key stakeholders
- Some constraints were beyond processor's level

Some findings- CIG

- Tyre usage has health hazards and effect on palm oil quality

- High demand for good quality palm oil

PhD ACTIVITY

- Joint experimentation- learning on fruit storage period and effect on palm oil yield and quality (FFA levels)

OUTCOMES

- Reduction of fruit storage period

- Improved quality of palm oil

- Packaging good quality palm oil for households

Groups	Overall mean and standard errors of FFA concentrations (%)
Experimental *ex ante*	$20.4 \pm 1.64^{a[1]}$
Experimental *ex post*	11.4 ± 0.85^{b}
Control	19.6 ± 1.56^{a}

CIG ACTIVITY

- Awareness creation on tyre usage
- Engaging assembly and chiefs to stop tyre use
- Linking potential buyers to processors
- Sensitizing processors on need to form association

- Ban on tyre usage
- Efficient mill model- Ghana Regional Appropriate Technology Industrial Service
- Profitability analysis of enterprise
- Processors and mill owner on CIG lead price negotiation process
- CIG as emerging platform
- Processors produce palm oil to met international standard
- Emerging linkages
- MoFA and OPRI are beginning to 'wake up'

Conclusions

- Innovation occurs when there is an incentive (market)

- Joint experimentation and formation of a local stakeholders' platform- new knowledge and enhanced interactions

- Different types of information sharing are necessary and complement each other in addressing constraints

- The simultaneous organisation of stakeholders' platform & CIG for exchange of information is central to initiating technical and institutional change