Beekeeping adoption and livelihood impacts in Kenya

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Favourable factors for beekeeping adoption

- **Available knowledge and skills** (Nightingale & Crane, 1983)
- **Only 17% of honey potential exploited** (FAO, 2018)
- **Ready market** (Bees for Development, 2006; Carroll, Kinsella, 2013; FAO, 2016)
- **Presence of various actors supporting beekeeping development** (Government of Kenya, 2013)
- **Decline of cultural restrictions against women keeping bees** (Carroll, 2012).
Beekeeping in Kenya

http://millenniumvillages.org/field-notes/honey-money-sustains-mbola-millennium-village/

Some research findings

1. Pathways for beekeeping adoption
2. Livelihood impacts
3. Factors preventing:
   ▪ Beekeeping adoption
   ▪ Intensification of beekeeping systems
   ▪ Value addition & marketing activities.
Research methodology (1/2)

- Qualitative research methods
- Semi-structured interviews:
  - 67 face-to-face interviews
  - 24 follow-up phone interviews.

<table>
<thead>
<tr>
<th>Informant</th>
<th>Face-to-face interviews</th>
<th>Phone interviews</th>
<th>Interviewer</th>
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</thead>
<tbody>
<tr>
<td>New-becauseers</td>
<td>41</td>
<td>20</td>
<td>Local researchers</td>
</tr>
<tr>
<td>Non-adopters</td>
<td>26</td>
<td>0</td>
<td>Local researchers</td>
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<tr>
<td>Group leaders</td>
<td>11</td>
<td>4</td>
<td>Local researchers</td>
</tr>
<tr>
<td>Village elders</td>
<td>10</td>
<td>0</td>
<td>Local researchers</td>
</tr>
<tr>
<td>Children</td>
<td>5</td>
<td>0</td>
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</tr>
<tr>
<td>Key stakeholders</td>
<td>26</td>
<td>0</td>
<td>Me</td>
</tr>
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## Purposive sampling.

<table>
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<tr>
<th>Sampling</th>
<th>Rationale</th>
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| Agro-pastoral zone (AP)          | - Many beekeepers (HTB)  
                                  - Mostly extensive systems                                               |
| Mixed-farming zone (MF)          | - Few beekeepers (LTB)  
                                  - Mostly intensive systems                                               |
| Irrigated cropping zone (IR)     | - Few beekeepers (LTB)  
                                  - Mostly extensive systems                                               |

HTB: High traditional beekeeping area  
LTB: Low traditional beekeeping area  

Extensive systems  
Intensive systems
1. Pathways to beekeeping

**Intra-familial**

**APPRENTICESHIP PATHWAY**
- Extra-familial
  - Non-beekeeping household → On-the-spot training [Indigenous knowledge] → BEEKEEPING ADOPTION

**TRAINEESHIP PATHWAY**
- Non-beekeeping household → Formal training [Formal knowledge] → BEEKEEPING ADOPTION

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"Mr X introduced me to beekeeping. He taught me how to harvest and he invited me to go with him and practice it before I embarked on starting on my own"  
(NE5, a 35 year-old in IR)
2.1 Impact on livelihood security

-Debts and dependence on outsiders [MCF hives]
-Deforestation [log hives]

**Household’s total income**
- Higher income stream.

**Education**
- Ability to pay school costs.

**Health**
- Ability to pay health care
- Traditional remedies [Ap-Pat].

**Food**
- Ability to purchase extra food
- Food supplement [Ap-Pat].

"I earn a lot [from beekeeping] even when the drought emerges. This season, everything was dry due to lack of rainfall but I harvested honey" (NE2, a 30 year-old man in AP)

"I was able to buy myself a sewing machine which I use to make clothes and to sell to the people in the village" (NE3, a 33 years old woman in AP)

Ap-Pat: Apprenticeship pathway
2.2 Impact on psycho-social wellbeing

- **Women empowerment**
  - Less restrictions
  - Additional income
  - More control on income
  - More freedom of movement

- **Social inclusion**
  - New social networks
  - Participation to socio-cultural life [Ap-Pat]
  - Potential conflicts due to bee stings.

- **Others**
  - Earned respect
  - Increased self-esteem
  - Sense of hope

"It has enabled me to earn my own income as a woman. I can also spend my money to do whatever I want with it."
(GL2, a woman in IR)

3. Factors preventing beekeeping adoption

- Lack of awareness and knowledge [LTB]
- Negative perceptions of beekeeping [LTB and young educated people]
- Priority to other activities [LTB, young educated people and women]
- Socio-cultural restrictions [women]
- Fear of bees and neighbour complaints [LTB]
- Risk of floods [IR]
- Limited access to beehives, principally MCF hives.

LTB: Low traditional beekeeping area
IR: Irrigated cropping area

“People think it is for poor people who have no other choice”
(GB5, a livestock officer in MF)
4. Factors preventing beekeeping intensification

- Lack of knowledge and skills
- Limited access to MCF hives
- Lack of harvesting tools & fear of bees
- Traditional beliefs
- Beekeeping is not their priority
- Resistance to change [Ap-Pat].

Ap-Pat: Apprenticeship pathway

“Bees are taking care of themselves”
(NE38, a 28 year-old man in MF with both types of beehives)

“They fear manipulating their beehives because they don’t have protective clothes”
(GB1, a national livestock officer)
5. Factors preventing marketing and VA activities

- Urgent need for cash
- High local demand for un- and semi-processed honey
- Lack of knowledge and skills
- Lack of processing tools
- Beekeeping is not their priority
- Transportation constraints [remote areas].
Recommendations

1. Increasing awareness on beekeeping benefits

2. Improving formal training
   - Including training on low-cost technologies (e.g. harvesting tools and ‘super log hives’), etc.
   - Intensifying follow-up training.

3. Encouraging and supporting knowledge sharing events & producer organisations

4. Facilitating access to movable comb hives and low-cost processing tools.
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References:
