Cross cutting theme on Markets and Partnerships

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24 November 2019
Theme purpose and vision

• Scoping market opportunities for GLDC crops and the responses and impact pathways needed to leverage these opportunities for SDG relevant impacts.
• Amplifying demand signals from market opportunities for research across flagships.
• Identify and build coalitions of partnerships with public and private stakeholders needed to leverage market opportunities.
• Build proposals for integrated agri-food system research and development projects that leverage market opportunities.
Activity 1:
Design principles on effective interventions to develop market opportunities for GLDC crops

2019 Target:
Review paper of global experiences of value chain interventions
Report of pilot study of effectiveness of interventions to bring about behavioral change in dietary habits

Partners: CSIRO, ICRAF and ICRISAT
Transformational change in agri-food systems – review

Andy Hall, Kai Mausch

Draft paper ‘Reframing value chain intervention through an Agri-food system lens: a revisit of pathways, evidence and trade-offs’
Neighborhood Effects to Support Dietary Behavior Change and Food Movements in High-Density Settlements in Kenya

Michael Hauser, Cornelius N. Obino, ICRISAT

Research Rationale

- Informal settlement are densely populated. They are home to low income city dwellers coming to the cities from different parties of the country, and communities often with varying dietary practices.
- This settlements have great potential for neighborhood focused activism. The social activism may grow into a movement to express positive neighborhood civil agency.
- Psychologically-minded literature suggests that neighborhood challenges motivate residents to solve shared problems.

Research Objectives

- To collate evidence around neighborhood effect from food and non-food sectors and understand their potential contributions to dietary behavior and, eventually spur self-organized food movement

Novelty

Findings potentially advance tradition BCC (behavior change communication) approaches.
Activity 2:
Learning and support to develop market opportunities that increase adoption of research outputs

2019 Target:
Report of strategic analysis of options for FP3, 4 and 5 responses to sorghum utilization policy change in Kenya
Report on scope of sorghum green fodder enterprises in India

Partners: CSIRO, ICRISAT and ILRI
Scoping responses to new flour blending policy in Kenya
Mequanint Biset and Amos Tirra, ICRISAT

The opportunity

• Policy from May 2020 will mandate flour processing firms to blend maize and wheat flour.
• Sorghum and millet have been selected as target crops
• Blending ration target 30%.
• Flour processing firms will have to blend at least 30% of their produce
• Targeting 3,311,687 farmers for production of 14.8 million bags sorghum and millet
Scoping an integrated agri-food system research and development response

Tensions and questions
Who benefits and how?
- Small vs large farmer vs regional trade.
- Rural vs urban
- Food security vs nutrition vs

System needs and unknowns
- Varieties, seeds
- systems, agronomy, soils, markets and supply chains, consumers behavior, regulatory arrangements, political economy, food system capability, capacity and governance

Actions
- Scoping and response implications.
- Identifying a range of possible impact scenarios
- Stakeholder mapping and coalition building.
- Elaborating impact pathway for desirable win win outcomes
- Proposal design for integrated agri-food system research and development project
Opportunities for small scale green fodder enterprise, India

Thanammal Ravichandran and Michael Blummel
Bag silage innovation
Silage making process

- Cutting fodder
- Filling
- Airtight packing
- Silage bags for storage
- Drying silage
## Land use economics: green fodder vs other crops

### For 6 months- one season

<table>
<thead>
<tr>
<th>Crop</th>
<th>N</th>
<th>Revenue</th>
<th>Std. Deviation</th>
<th>Cost of production</th>
<th>Net income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorghum</td>
<td>2</td>
<td>30,000</td>
<td>14,142</td>
<td>10,000</td>
<td>20,000</td>
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<tr>
<td>Maize</td>
<td>57</td>
<td>26,583</td>
<td>18,270</td>
<td>12,000</td>
<td>14,583</td>
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<tr>
<td>Rice</td>
<td>321</td>
<td>33,378</td>
<td>29,842</td>
<td>15,000</td>
<td>18,378</td>
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<tr>
<td>Cotton</td>
<td>132</td>
<td>28,769</td>
<td>18,021</td>
<td>15,000</td>
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</tr>
<tr>
<td>Groundnut</td>
<td>4</td>
<td>15,500</td>
<td>23,402</td>
<td>10,000</td>
<td>5,500</td>
</tr>
<tr>
<td>COFS fodder if sold fresh*</td>
<td>30</td>
<td>42,000</td>
<td>-</td>
<td>3,000</td>
<td>39,000</td>
</tr>
<tr>
<td>Milk yield fed with COFS**</td>
<td>65</td>
<td>1,13,300</td>
<td>-</td>
<td>39200^1</td>
<td>74,100</td>
</tr>
</tbody>
</table>

*For 6 months- one season

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^1 milk production 74,100
Activity 3:
Modeling scenarios of trait value, developing impact pathways and anticipating trends

2019 Target:
Report and journal article of scenario exercise for emerging traits in South Asia
Report on long term functional foods trends for GLDC research agenda

Partners:
CSIRO, ICRISAT and Kantar Market Research PVT
Exploration of market opportunities for functional food traits in India
Thank you

Agriculture and Food
Andy Hall

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