The Impact of the COVID-19 Pandemic on Rice Value Chains: Findings from Ethiopia and Tanzania

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Introduction

• The importance of rice in African food systems is growing rapidly in terms of domestic production, consumption and imports

• Linked with rapid urbanization and changing food preferences, the rate of increase in consumption is far higher than the rate of increase in domestic production, forcing African countries to spend their meagre foreign currency on rice import

• The COVID-19 pandemic has exacerbated existing challenges facing the African rice sector

• APRA assessed how COVID-19 has affected the rice value chains in Ethiopia and Tanzania based on surveys conducted in June-July and October 2020 (3rd round planned for February 2021)
Introduction

• The impact of COVID 19 on rice value chain emanates from:
  • the public restrictive measures put in place
  • the type and extent of responses in the commercial behaviours of the different rice value chain actors, and
  • Overall global trends in response to the challenges faced
• Accordingly, we present how these factors affected the rice value chain considering:
  • Agricultural input supply;
  • Rice production and marketing activities,
  • Rice processing and processors’ commercial behaviour, and
  • Public efforts to address the challenges,
Methodology

- The presentation is based on **APRA Rapid Assessment of the Impact of the COVID-19 Crisis on Food Systems and Rural Livelihoods in Sub-Saharan Africa** – 8 countries x 100 hhs each
- Two rounds of surveys and key informant interviews (Jun-Jul 20 and Oct 20) in rice communities in Ethiopia and Tanzania
- The required data were generated through
  - Telephone/ face to face interviews – Rice producers
  - Key Informant Interviews – Community leaders; rice processors
  - Direct observation
  - Secondary data

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COVID 19 prevention measures

• Since the first announcement of COVID 19 in December 2019 in Wuhan, China, different African countries have put in place measures related with:
  • Mobility restrictions and increased cost of transportation
  • Reduced extent of public services
  • Preventive measures (mask and sanitizers, distancing)
  • Regulatory measures (price, product mobility etc)
• These measures have affected the different value chain actors (farmers, rice processors, traders, consumers)
• The effects depend on how the responses of the actors
COVID 19 and observed responses

• Almost all rice farmers reported that they are aware of COVID 19 along with the preventive measures
• Very few abide by measures
• Changes in roles among household members – care responsibilities
• Many reported reduced movements within and outside of villages due to restrictions
• Reported decrease in the number of buyers or traders coming to their village to do business
• Decline of availability of casual labours; increased cost
COVID 19 and observed responses - Ethiopia

### Proportion of Respondents (%)

<table>
<thead>
<tr>
<th></th>
<th>1st Round [June]</th>
<th>2nd Round [October]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Within the Village</strong></td>
<td>52%</td>
<td>38%</td>
</tr>
<tr>
<td><strong>Outside of the Village</strong></td>
<td>71%</td>
<td>56%</td>
</tr>
<tr>
<td><strong>Number of traders coming to the village to do business</strong></td>
<td>13%</td>
<td>14.2%</td>
</tr>
<tr>
<td><strong>Girls: More Housework</strong></td>
<td>61%</td>
<td>58.5%</td>
</tr>
<tr>
<td><strong>Boys: More Housework</strong></td>
<td>9%</td>
<td>24.5%</td>
</tr>
<tr>
<td><strong>Girls: More Farm Works</strong></td>
<td>47%</td>
<td>50.9%</td>
</tr>
<tr>
<td><strong>Boys: More Farm Works</strong></td>
<td>92%</td>
<td>56.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Reduced Mobility</strong></th>
<th><strong>Changes in Roles of Household Members</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of respondent (%)</td>
<td>Proportion of respondent (%)</td>
</tr>
</tbody>
</table>

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COVID 19 and observed responses - Tanzania

Reduced mobility

<table>
<thead>
<tr>
<th></th>
<th>Round 1</th>
<th>Round 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within village</td>
<td>27.5</td>
<td>7</td>
</tr>
<tr>
<td>Outside village</td>
<td>28.4</td>
<td>6</td>
</tr>
<tr>
<td>Number of traders</td>
<td>94.1</td>
<td>82</td>
</tr>
<tr>
<td>coming to village</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Impact of COVID-19

• Limited impact on rice production activities, but...
• Decrease in the availability of agricultural inputs with considerable increase in input prices
• Decline in the ability to sell rice in local markets was reported linked with the mobility restrictions mainly to buyers (collectors, traders);
• Increased wages for casual labours
• Mixed trend in price of paddy and milled rice
  • Ethiopia: Increase in paddy and milled rice
  • Tanzania: Decline in paddy and milled rice
Impact of COVID 19 - Ethiopia

Proportion of respondents reporting decline
[Negative impact of COVID 19]

- Participation of farming: 8% (June), 5% (October)
- Availability of agricultural inputs: 22% (June), 51% (October)
- Availability of loans or credit: 28% (June), 29% (October)
- Availability of agricultural land for rent: 31% (June), 58% (October)
- Ability to sell in the local market: 33% (June), 6% (October)

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Impact of COVID 19 - Tanzania

Proportion of respondents reporting decline [Negative Impact of Covid-19]

- Participation of farming: 66.7% (Round 1), 50% (Round 2)
- Input availability: 14.7% (Round 1), 9% (Round 2)
- Availability of loan/credit: 23.5% (Round 1), 22% (Round 2)
- Availability of arental land: 4.9% (Round 1), 10% (Round 2)
- Ability to sell the locally: 56.9% (Round 1), 60% (Round 2)

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Impact of COVID-19 - Ethiopia

- Farmers enjoyed higher price that increased on average by **5.67%** every month from Jan to May 2020 and
- **14.72%** five-month average price increase (2019 vs 2020)

Monthly average price trends of paddy and milled rice in ETB/Kg (2019 vs 2020)

<table>
<thead>
<tr>
<th>Actor</th>
<th>Type</th>
<th>Year</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers</td>
<td>Paddy</td>
<td>2019</td>
<td>10.34</td>
<td>10.82</td>
<td>10.82</td>
<td>10.82</td>
<td>11.14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2020</td>
<td>10.82</td>
<td>11.61</td>
<td>12.09</td>
<td>14.00</td>
<td>13.36</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.64</td>
<td>7.30</td>
<td>11.74</td>
<td>29.39</td>
<td>19.93</td>
</tr>
<tr>
<td>Processors</td>
<td>Milled rice</td>
<td>2019</td>
<td>16.25</td>
<td>17.00</td>
<td>17.00</td>
<td>17.00</td>
<td>17.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2020</td>
<td>17.00</td>
<td>18.25</td>
<td>19.00</td>
<td>22.00</td>
<td>21.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.62</td>
<td>7.35</td>
<td>11.76</td>
<td>29.41</td>
<td>20.00</td>
</tr>
</tbody>
</table>
Impact of COVID-19: food and nutritional security

• Considerable number of rice farmers reported challenges related with food and nutrition security changes due to COVID 19 pandemic

• About 65% of the rice farmers both in Ethiopia and Tanzania reported concerns about having enough food for their households

• However, the extent of concerns seemed to decline over time (R1 and R2) in Ethiopia but increase in Tanzania
Impact of COVID 19 - Ethiopia

Perceived food security status

- Worried about not having enough food to eat: 65%
- Unable to eat healthy and nutritious food: 39.60%
- Consumption of only a few kinds of foods: 42%
- 34.90%
- 31%
- 33.00%

Proportion (%) 1st round [June] vs Proportion (%) 2nd round [October]
Impact of COVID 19 - Tanzania

Perceived Food security status

- Worried about not having enough food to eat: 76.5% (Round 1), 66% (Round 2)
- Unable to eat healthy and Nutritious food: 50% (Round 1), 71% (Round 2)
- Ate only few kinds of foods: 51% (Round 1), 71% (Round 2)
Impact of COVID 19: Commercial behaviour

• Change in commercial behaviour of rice processors in Ethiopia
  – Considerable shift from milling service provision to buyers of paddy
  – Engaged in hoarding paddy anticipating increased price milled rice late in the year

• Linked with export ban in Asia (India, Pakistan), import of rice has declined resulting in increased price in Ethiopia

• In Tanzania, as surplus producer, the limitation to export due to COVID-19 has affected domestic rice market and led to a considerable decline in price
Impact of COVID 19 - Ethiopia

Trends in rice imports (Q1 2019 vs Q1 2020)

Volume imported (tons)

<table>
<thead>
<tr>
<th></th>
<th>Milled rice</th>
<th>Broken rice</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td></td>
<td></td>
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<tr>
<td>Jan</td>
<td></td>
<td></td>
<td></td>
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<td>Feb</td>
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<td></td>
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<tr>
<td>March</td>
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<tr>
<td>2020</td>
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<tr>
<td>Jan</td>
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<tr>
<td>Feb</td>
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<tr>
<td>March</td>
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</tbody>
</table>

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Impact of COVID 19 – Ethiopia

Trends in rice self-sufficiency

- self-sufficiency (%)
- Production (1,000t)
- Import (1,000t)
- Consumption (1,000t)

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Impact of COVID 19 - Tanzania

Trends in rice self-sufficiency

Year
Self-sufficiency ratio (%) 67 77 76 78 69 77 82 85 143 156 190 209 228 172 224

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Public responses

• The public measures in response to COVID 19 are generally linked with the African quest to ensure rice self-sufficiency;
• Thus, the measures are boosting production and productivity through technological innovations (improved varieties, agronomic practices, pre-harvest, and post-harvest technologies);
• Exploring expansion of production like in Ethiopia there is an initiative to promote rice production in typical lowland areas;
• Measures related to enhancing rice marketing including prohibition of hoarding
Conclusion

• The COVID 19 pandemic has forced governments to put in place different measures/regulations;

• Almost all rice value chain actors are aware of the pandemic and the preventive measures put in place, but very few abide by the regulations;

• The enforced regulations have resulted in different responses by value chain actors that has affected the value chain performance depending on whether the country is rice importer or exporter:
  • In Ethiopia, COVID 19 pandemic has not affected rice producers and processors but consumers
  • In Tanzania, it affected producers, processors and exporter as Tanzania is surplus producers but benefited consumers

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Conclusion

• Due to COVID-19 pandemic that has resulted in changes not only in the performance of the rice value chain but also other economic activities:
  – Majority of the farmers have concerns about declining incomes and food and nutritional security
  – The socioeconomic impact on farmers, processors, traders and exporters/importers is expected to be different in the long run:
    • **Ethiopia**: the new initiative to ensure rice import substitution and the high domestic price are expected to boost domestic production;
    • **Tanzania**: unless the declining export performance is improved, the rice sector will be seriously affected

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Thank you for your attention

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APRA COVID-19 Webpage: https://www.future-agricultures.org/covid-19/

