
Deliverable 5B: Poverty and Gender Impact Study

Final Report

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List of abbreviations

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| ATT | Average Treatment Effect on the Treated |
| CPI | Consumer Price Index |
| CT-OVC | Cash Transfer for Orphans and Vulnerable Children |
| DAC | Development Assistance Committee |
| DEQ | Detailed Evaluation Question |
| DFID | (UK) Department for International Development |
| DID | Difference in Differences |
| EAC | East African Community |
| EICV | Rwanda Integrated Household Living Conditions Survey |
| EQUALS | Evaluation Quality Assurance and Learning System |
| FGD | Focus Group Discussion |
| FGT | Foster-Greer-Thorbecke Poverty Index |
| GBP | British Pound |
| GDP | Gross Domestic Product |
| HEQ | High-level Evaluation Question |
| HH | Household |
| HSNP | Hunger Safety Net Programme (Kenya) |
| ICT | Internet and Communications Technology |
| KES | Kenyan Shilling |
| KEBS | Kenya Bureau of Standards |
| KIHBS | Kenya Integrated Household Budget Survey |
| NTB | Non-tariff barriers |
| OECD | Organisation for Economic Cooperation and Development |
| OLS | Ordinary Least Squares |
| OPCT | Older Persons Cash Transfer (Kenya) |
| OPM | Oxford Policy Management |
| OSBP | One-Stop Border Post |
| PE | Performance Evaluation |
| PGIS | Poverty and Gender Impact Study |
| PIOs | Programme Intermediate Outcomes |
| PPA | Preliminary Poverty Analysis (deliverable in Phase 1 of the Independent Evaluation) |
| RCT | Randomised Control Trial |
| RGA | Research Guide Africa |
| RWF | Rwandan Franc |
| S1 | Strategy 1 |
| S2 | Strategy 2 |
| SACCO | Savings and Credit Cooperative Organisation |
| SAGE | Social Assistance Grants for Empowerment (Uganda) |
| SCG | Senior Citizens Grant (Uganda) |
| SGR | Standard Gauge Railway |
| SO | Strategic Objective (in TMEA TOC, the top-most programme goal) |
| SSCP | South Sudan Country Programme |
| TASAF | Tanzania Social Action Fund |
| TGIS | Trade and growth impact study |
| TMEA | Trademark East Africa |
| TNPS | Tanzania National Panel Survey |
| TOC | Theory of Change |
| ToR | Terms of Reference |
| TRA | Tanzania Revenue Authority |
| TZS | Tanzanian Shilling |
| UGX | Ugandan Shilling |
| UNPS | Uganda National Panel Survey |
| UWEP | Ugandan Women Empowerment Programme |

VfM Value for Money
VFSG Vulnerable Family Support Grant (Uganda)
VUP Vision 2020 Umurenge Programme (Rwanda)

Executive summary

Trademark East Africa (TMEA) is a high-profile, multi-donor project that seeks to lift existing barriers to trade to bring about positive and sustainable change via regional and national investments of over US\$500 million. TMEA is a large and complex programme, with national and regional dimensions and many sub-projects implemented across a number of countries.¹ TMEA was officially launched in 2011 as a not-for-profit company limited by guarantee, funded by the UK's Department for International Development (DFID), and cooperation agencies in Belgium, Canada, Denmark, Canada, Finland, Netherlands, Sweden, and the US.

DFID commissioned OPM to undertake an independent evaluation of TMEA. The main objective of this evaluation is to assess TMEA processes, results and overall value in an independent and impartial manner consistent with generally accepted principles and standards for professional evaluation, and identify lessons that can inform the ongoing management and redesign of the TMEA programme, as well as future regional trade integration programmes. The Terms of Reference (ToR) set out four key objectives:

1. Test the **theory of change (TOC)**, assessing all causal links and the robustness of underlying assumptions (including links between trade, growth and poverty reduction), and adjusting the TOC² to serve as a reliable guide to interpret the programme and to make programme improvements.
2. Analyse and, to the extent possible, measure: the regional integration programmes' **impact** on regional trade, growth and poverty (and on the various stakeholders – in particular on men and women separately, poor and vulnerable groups, as well as traders and consumers); and **sustainability**.
3. Assess the **effectiveness** of the TMEA programme, including organisational effectiveness, and whether the programme represents **value for money (VfM)**.
4. Throughout, identify **lessons learnt relevant beyond TMEA**, i.e. insights on enabling and constraining factors, critical actions and gaps which would be generalisable to future programmes or to other contexts.³

The independent evaluation is made up of several, interrelated evaluative studies that together meet the objectives of the ToR. This report comprises the Poverty and Gender Impact Study (PGIS), using qualitative and quantitative data from households and communities near and far from trade corridors, to assess potential⁴ impacts related to TMEA. Specifically, the PGIS addresses the following High-level Evaluation Question (HEQ): "What is the likely impact of TMEA on poverty and gender, and what factors are critical in order to ensure the sustainability of positive impacts?" It draws on findings and insights from the first phase of evaluation work, and document review, site visits and interviews from 2018-2019 fieldwork. The PGIS is complemented by Deliverable 3B: Performance Evaluation (PE)⁵, Deliverable 5B: Trade and Growth Impact Study (TGIS)⁶, and Deliverable 6D: Value for Money Assessment (VfM)⁷.

The Poverty and Gender Impact Study

Trademark's TOC posits trade and economic growth impacts as the ultimate aim. As poverty reduction is a key priority for TMEA's donors, TMEA's TOC posits that it will indirectly alleviate poverty (also referred to as long-chain effects), though none of its activities or intermediate impacts specifically

¹ This includes text from the Independent Evaluation Inception Report, November, 2016, where information remains the same.

² Now, the S2 TOC, rather than that of S1.

³ All four studies will identify and discuss lessons learnt (obj. 4). Objective 1 is examined most closely in the PE, while sustainability (obj. 2) and effectiveness (obj. 3) will also be objects of focus. OPM's TGIS and PGIS will look at impacts (obj. 2) and sustainability, while the VfM assessment will focus on value for money (obj. 3).

⁴ This study is in line with the literature around the effects trade may have on poverty, but does not attribute to TMEA any long-chain (indirect) effects found. It does, however, examine effects of TMEA's *direct* projects with poor households, communities, and associations.

⁵ OPM: Keri Culver, Andy Cook, John Spilsbury and Ozlem Akkurt. Independent Evaluation of TradeMark East Africa Deliverable 3B: Performance Evaluation. (forthcoming)

⁶ OPM: Paul R Baker, David Vanzetti, Mohammad Razaque, Neetish Hurry, and Jaime de Melo. Deliverable 5B: Trade and Growth Impact Study. (forthcoming)

⁷ OPM: Frances Hansford, Ozlem Akkurt, Julian King, David Vanzetti, Saltanat Rasulova and Esther Namukasa. Independent Evaluation of TradeMark East Africa Deliverable 6D: Strategy 1 Value for Money Assessment. (forthcoming)

focus on poverty alleviation.⁸ According to economic theory and literature, however, trade can have positive poverty alleviation impacts, and a hypothesis underlying TMEA's work assumes that trade would affect the economy in such a way as to improve the well-being of poor people, particularly those working in sectors and geographic areas more affected by international trade. The evaluation team calls these indirect or 'long-chain' poverty effects. In addition to these indirect or 'long-chain' poverty effects, TMEA also worked directly to support poor households and communities particularly under its Strategic Objective 3 on enhancing business competitiveness. Women and Trade and export capability projects worked to ensure that improvements in trade brought about by TMEA programming would extend to the poor; if found, these would be TMEA's direct or short-chain effects on poverty. The PGIS aimed to identify TMEA's contribution to both types of effects through qualitative research at grassroots levels as well as quantitative analysis of national data.

The PGIS used traditional data collection methods – interviews, group discussions, site visits, and secondary documents and data – in the analysis. The quantitative analysis relied on household survey data representative to the provincial level to estimate overall impacts of exposure to trade on poverty incidence, depth, and severity. Field teams visited a set of sites to speak with households, cooperatives, small and medium enterprises, and local leaders to learn about direct and indirect effects that TMEA's interventions might have had. Triangulation – drawing on and weighing sources internal and external to TMEA – was used to minimise bias, quality-assure data and support conclusions based on the range of findings.

A key limitation of the approved evaluation design, however, is that the quantitative analysis is limited to possible long-chain impacts or impacts that are similar to those to which TMEA *might* have contributed. Further, the design assumes that large sample sizes for all comparison groups provide sufficient basis for comparison, however, it is not clear that some differences (for example, inherent production capacity of different areas) are adequately addressed with this model. A statistical matching approach that allows households to be matched based on a set of criteria would have strengthened the analysis, but it was not possible to do that with the data and resources available. The qualitative data are more closely linked to both long-chain and short-chain impacts, but they are limited in that it was not possible to verify every claim that respondents made. Therefore, any claims that changes are attributable to TMEA must be tempered. In view of this limitation, the PGIS team considered alternative explanations to trade and focused its assessment on contribution rather than attribution, i.e. that trade was a contributing factor, but not the only factor leading to the changes identified in the data.

Main Findings

⁸ The three intermediate impacts reflected in TMEA's TOC are increased physical access to markets, enhanced trade environment, and improved business competitiveness.

| Evaluation Questions | Main Findings |
|---|--|
| <p>HEQ4 What is the likely impact of TMEA on poverty and gender, and what factors are critical in order to ensure the sustainability of positive impacts?</p> | <ul style="list-style-type: none"> • Based on an analysis of household survey data, being in the trade corridor was correlated with poverty reduction (as measured by consumption) in Kenya, Rwanda, and Uganda, primarily through the income channel. Which form of income was most critical differed by country and by location – in some cases wages were critical and others non-agricultural sales were critical. It did appear that being located in the trade corridor generally improved opportunities for income generation. It is likely that TMEA’s contribution to trade in the region could produce results consistent with those found. Similar impacts were not found in Tanzania, however, which merits further exploration than was possible in this study. • Employment in the tradable⁹ sector was correlated with improved consumption for all households in Kenya, and also in Rwanda and Uganda when agriculture was excluded. However, in all countries, and especially Tanzania, agriculture was a key sector in which the benefits of trade liberalisation did not accrue to households. This represents a significant gap, as 56 to 68 percent of the workforce in each of those countries is employed in agriculture. • Exposure to trade contributed to highly variable indirect or long-chain results on a sex-disaggregated basis. In Kenya, exposure to trade (either living in the trade corridor or working in a tradable sector) reduced incidence of poverty more among female-headed households than among male-headed households. However, poverty incidence was reduced more among male-headed households than female-headed households in Tanzania and Uganda. In Rwanda, exposure to trade contributed to decreased in poverty incidence in all households and female-headed households equally. Given the range of outcomes, exposure to trade alone does not appear to be sufficient to mitigate poverty among female-headed households. Patterns of employment and income (through any number of means, as noted above) seem to be critical as well. • Key factors in ensuring sustainability of positive impacts include: the continued reliability of the OSBP and port systems and public confidence in the effectiveness of those systems; continuation and expansion of participatory processes that enable women traders and other key stakeholders to have a voice in the border committees; ongoing dissemination of information to border communities and others about cross-border trade systems and regulations; institutionalization of effective training and orientation systems for OSBP personnel and border committees; improved organizational capacity among women’s cooperatives and others who support women entrepreneurs and traders to provide a wider variety and more intensive supports to business people interested in trade; and focusing export capability projects in tradable sectors in which women are heavily concentrated. |
| <p>DEQ4.1 What is the nature – and, where possible, scale – of the likely impact of the overall programme and of key TMEA projects in the portfolio on the poor—direct and indirect? Who is affected by potential short- or long-term impacts, both positive and negative, how, and how is the causality working?¹⁰</p> | <ul style="list-style-type: none"> • A number of factors played into the finding that being in the trade corridor was correlated with decreased poverty: <ul style="list-style-type: none"> ○ In Kenya and Tanzania, unemployment decreased in the trade corridor, compared to areas far from the corridor, as it did in Kigali (but not in other areas of the trade corridor in Rwanda). ○ In both Kenya and Uganda, there was a significant increase in self-employment in the trade corridor, which seems to indicate that more individuals are working multiple jobs rather than having steady, formal employment. ○ In Uganda, there was a rapid shift from employment in agriculture to service and manufacturing jobs in the trade corridor, whereas it remained constant (mainly in agriculture) far from the corridor, which likely reflects both the impact of trade and the inherent differences in economic potential in and far from the trade corridor. • There were significant dislocations of workers (wealthier and poorer), particularly as clearing agents, truckers (in the port communities), and small-scale vendors. These dislocations have ripple effects throughout their communities, and the greater efficiencies in trade sought through TMEA and EAC reforms were predicated on some of these dislocations – eliminating those service providers and/or the lag time in which those businesses could sell their wares and services – is precisely what makes the system more efficient. Therefore, it would have been sound planning to work with government, other donors, and/or local community-based organisations to ensure that some transition plans or mechanisms were in place for those affected in border and port communities beyond the outlays to the displaced businesses at the entrance to the ports. While TMEA should not necessarily have implemented active labour market measures itself, it would have been advantageous to have identified partners for that piece of the process. • Although there were fewer of them, the wealthier beneficiaries of the direct interventions, as well as the wealthier indirect beneficiaries, more universally reported improved income and consumption than did their poorer peers over the same time period. It would be useful to follow up this finding with additional research on the distributional impacts of trade, specifically by sector. • TMEA’s Women and Trade projects seemed to have yielded considerable benefits for many of the participants. These included increased cross-border trade, increased income, improved ability to save money, greater self-confidence and self-reliance, and the ability to take on new roles in the community as a result. The spread effects of these positive impacts typically included improved access to food, education or higher quality education, and health services for their families and installation of electricity in their homes and/or businesses. |
| <p>DEQ4.2 In particular, who has benefited from reduced trade</p> | <ul style="list-style-type: none"> • While prices increased overall, based on the household data analysis, prices increased more slowly in the trade corridor than far away from the corridor in Rwanda, Uganda, and to a lesser |

| Evaluation Questions | Main Findings |
|--|---|
| <p>costs? How are the benefits in reduced transport time and cost being passed on to poor people through lower prices or lower price increases?</p> | <p>extent in Kenya. Tanzania experienced a different pattern, in which the data show prices far from the corridor dropping to come into line with the lower price level existing on the trade corridor.</p> <ul style="list-style-type: none"> • Food prices increased more than other goods and services in all countries (for a range of reasons), impacting poorer households disproportionately. • A limited analysis of wholesale and retail prices on one common staple crop indicated that those prices did not change over time in the same way, which may or may not have been true for other food stuffs. This means that the link between changes in trade – which would tend to affect wholesale prices more directly – and changes in retail (consumer) prices is complex. • Both direct and indirect beneficiaries reported that their costs were decreased as a result of the OSBPs, but they did not lower their prices in the markets unless competition required them to do so (as competition is the driver of price reductions rather than cost). They benefitted from higher profit margins, which allowed them to improve the standards of living for their families. |
| <p>DEQ4.3 Are complementary policies being adopted to translate the benefits of increased trade into poverty reduction?</p> | <p>Each country has a national development plan that includes strategies for expanding trade (and other avenues of economic growth) and for decreasing poverty, including expanded use of cash transfers. There is no evidence, however, that Ministries of Finance prioritise pro-poor expenditures, nor that TMEA was mandated to work toward that end. Many complementary policies could be implemented alongside interventions designed to increase trade, such as active labour market programmes for displaced workers, but these were neither designed as part of TMEA nor organised in collaboration with other donors or government agencies.</p> |
| <p>DEQ4.4 Are measures being taken, and are they successful, in mitigating potential negative impacts on any sub-groups – in particular poor people in localised areas?</p> | <p>Very little has been done to mitigate the negative impacts of TMEA's interventions by TMEA, local or regional governments, or donor or civil society programmes. Among poorer populations, particularly in areas far from the trade corridors, neither government nor TMEA provided support, and households rely on informal networks of reciprocity or government transfers. Among truckers and displaced workers in border or port communities, few supports are in place. While some government compensation was provided to business owners whose premises were demolished to expand the ports, most reported this to be insufficient to start up their businesses again elsewhere.</p> |
| <p>Cross-cutting Issues</p> | |
| <p>DEQ4.5 To what extent has the programme benefited women and girls (noting that the programme design did not purport to benefit them equally)? Have there been any negative consequences for women and girls? Has the programme had an impact on relations, including power and influence, between girls/women and boys/men? How could the programme increase benefits to women and girls within its trade focus?</p> | <ul style="list-style-type: none"> • As noted in DEQ4.1 above, the Women and Trade projects had positive impacts on many beneficiaries in terms of increased income, savings, and self-confidence. The spread effects of these positive impacts typically included improved access to food, education or higher quality education, and health services for their families and installation of electricity in their homes and/or businesses. Others reported continued struggles including higher prices for both business inputs and household consumption, and reduced access to government services. This was particularly true among poorer beneficiaries. • Respondents indicated that these impacts resulted in changes in relations among men and women. Within the household, women's positions seemed to improve overall, as they had greater influence over household expenditures. But some respondents, particularly men, noted that these changes strained marriages, as women were outside of the home more and likely expected to have greater voice in household decisions. A few female respondents noted that when their businesses were unsuccessful, conflict rose within the household. |
| <p>DEQ4.6 What factors are critical in order to ensure the sustainability of positive impacts?</p> | <ul style="list-style-type: none"> • A significant lack of understanding remains, even in border communities, about the reciprocal freedom of individuals to conduct cross-border trade. This engendered protectionist attitudes, particularly among poorer respondents. • Key factors in sustainability of positive TMEA impacts include: ensuring a steady flow of information to the public related to trade regulations and opportunities, the institutionalization of practices through training for OSBP and port personnel, sustained participatory processes that enable women traders and others to have a voice in the border committees, continued commitments from government, and public confidence in the effectiveness of the system. |

Key recommendations follow in order of priority based on the judgment of the PGIS team. Given that many of the findings discussed in this report are illustrative of the kinds of impacts that TMEA may contribute to, a number of the recommendations relate to undertaking additional studies or analyses that clarify the actual impacts of TMEA's contribution to improvements in well-being of local communities (directly or indirectly). Additional recommendations focus on the micro level based on the feedback of the women and trade programme participants and sustainability of the benefits of TMEA.

⁹ Trade sectors are defined as follows: Agriculture: Agriculture, forestry and fishing; Tradable: Mining and Quarrying, Manufacturing, Mixed: "Electricity, gas, steam and air conditioning supply, Water supply; sewerage, waste management and remediation activities, Wholesale and retail trade; repair of motor vehicles and motorcycles, Transportation and storage, Accommodation and food service activities, Information and communication, Financial and insurance activities, Professional, scientific and technical activities, Activities of extraterritorial organizations and bodies; Non-tradable: Construction, Real estate activities, Education, Human health and social work activities, Arts, entertainment and recreation, Other service activities, Activities of households as employers; undifferentiated goods- and services-producing activities of households.

¹⁰ Tracing causality rigorously, this far along the results chain, is outside the scope of the evaluation.

Recommendations for Long-chain Impacts:

1. **Ensure that the concerns of vulnerable women, people with disabilities, and other marginalised groups continue to be heard and addressed by border committees.** Female traders and women in trade association representatives reported important gains from their ability to provide ongoing feedback and be represented within border committees. Traders with disabilities should be represented on border committees. These opportunities should be continued to ensure needs continue to be addressed.
2. **Work with appropriate agencies to put supports in place for workers who are likely to be dislocated when new OSBPs begin operations.** Local and national government agencies or civil society organisations may be able to provide targeted services to those workers who are likely to be dislocated as new OSBPs begin their operations. While it is beyond TMEA's mandate to undertake active labour market measures, efforts to smooth the transition for dislocated workers should yield positive results both in economic and political terms.
3. **Focus on impacts in the agriculture sector (in and far from the trade corridor) and identify strategies for ensuring that benefits of trade liberalisation reach households working in that sector, particularly producers of raw goods.** As benefits from being in the tradable sector disappeared when households in agriculture were included in the analysis in three of the four countries, and as large concentrations of the workforce in each country are employed in agriculture, it is critical that this sector is included in benefits from trade. TMEA should consider partnering with other organisations to further assist agricultural producers to identify value addition opportunities that would improve the producers' likelihood of benefitting from trade.
4. **Consider a range of additional studies or data collection activities that would support further project learning, including:**
 - A concerted effort to diagnose why results in Tanzania were so different from the other countries should be made, as the PGIS study was not able to develop a comprehensive explanation from the quantitative and qualitative data collected.
 - Further investigation of the distribution of benefits of trade within the agriculture sector., which may include analysis of competition in the value chains of key commodities. For example, households employed in tea, coffee, or horticulture (all large export crops for the region) may have had very different experiences than households working in other areas. It would be useful to disentangle impacts for those working in key exports to areas outside the region from those working in crops that are largely consumed within the region.
 - Examining more frequent and targeted data on targeted households and consumption – possibly through a TMEA-supported household-level study, as has been proposed. Such a study should be designed and analysed externally with requisite attention to the literature about poor and 'very poor' households, women-headed households, informal trade, and the critical intersections between gender and poverty. Such a study should also be guided by a detailed theory of change about how TMEA's projects would directly and indirectly affect poverty and gender and should include wholesale and retail price and inflation data on the typical market basket. Since TMEA's interventions with women in trade are generally linked to particular types of employment and entrepreneurship, such a study would also need to include examination of business inputs and costs, to track whether any increases in income have real effects on the businesses and on the households they support. Regarding income and relevant sector(s) of employment/earnings, such research should also look at the range of income sources in households, given that income precariousness often means different types of employment and income could be relevant at different times of year, as well as all the source of consumed goods (home-grown/homemade versus purchased) and use of coping strategies (substitution of foods, borrowing money, reducing consumption, etc.).

- Tracking medium to long-term employment and income impacts on displaced business and workers (i.e., truckers in port cities and clearing agents), as it would be useful to know if the impacts reported in this study were short-term outcomes that may reverse themselves in the long-term or become indicators of long-term unemployment and reduced earning power.
 - Tracking of whether the shifts observed in Kenya and Uganda (from formal employment to self-employment in both and from agriculture to services and manufacturing in the latter) are sustained over time and continue to grow.
 - Where consumption decreased, study whether or not increased access to markets and trade enabled households to sell produce that they would have once consumed. This may have had the paradoxical effect of increasing income, while reducing consumption.
 - Examination of the distributional benefits of trade by sector of employment and level of wealth. As the focus groups were not stratified by sector, it is not possible to identify which sectors might have been more or less affected, but that would be worth exploring in future studies.
5. **Work with donors to advocate for governments to prioritise funding of pro-poor services and programmes when improvements in trade revenues are realized.** Although the PGIS team was unable to access any data on changes in government revenue from trade, given the estimates for increased trade that OPM's Trade and Growth Impact Study¹¹, produced, additional revenue may have been generated or may be generated in the future. Frameworks, in the form of national development plans, are in place, but sustained prioritisation of pro-poor government funding requires political commitment. This is beyond TMEA's mandate and should be an effort coordinated with other donors working in the country (at a minimum through encouragement of regular reporting of progress towards national development plan targets).

Recommendations for Short-chain Impacts

6. **Expand existing programmes that work with women, and through capacity building or partnerships with other organisations, provide “bundled” services that are more effective for reaching the ‘very poor’.** At OSBP sites (new and existing), as well as in remote areas where TMEA's interventions have yet to reach, there is an opportunity to build capacity of women's producer/trade organisations, and/or to partner with other organisations to provide “bundled” support beyond TMEA's mandate, which research indicates work better with the ‘very poor’.
7. **Consider focusing export capability projects in tradable sectors in which women are heavily concentrated.** As noted in the OPM Performance Evaluation (2019)¹², in Strategy 2, these investments should perhaps be more narrowly strategically focused, and targeting industries with large concentrations of female workers can help increase TMEA's impact on women.
8. **Consider a range of additional studies or data collection activities that would support further project learning, including:**
- Tracking the extent to which support services provided at OSBPs, day care centres, creches, and storage facilities, are used by small-scale traders (female and male). The PGIS was not able to capture feedback from a critical mass of respondents who had used these facilities. While those who did not use them reported that they were useful to others, it would be worth verifying whether or not this investment helps improve incomes (as those respondents who did use them claimed).
 - Testing the extent to which OSBPs are truly accessible to individuals with disabilities. Given that the PGIS was not able to capture feedback from a critical mass of people with disabilities, it would be useful to undertake targeted testing to verify the accessibility of OSBPs for individuals with a range of physical and sensory impairments and to better

¹¹ OPM: Paul R Baker, David Vanzetti, Mohammad Razzaque, Neetish Hurry, and Jaime de Melo. Deliverable 5B: Trade and Growth Impact Study. (forthcoming)

¹² OPM: Keri Culver, Andy Cook, John Spilsbury and Ozlem Akkurt. Independent Evaluation of TradeMark East Africa Deliverable 3B: Performance Evaluation. (forthcoming)

understand what additional supports could be provided or changes could be made to better meet their needs. Such research should be culturally sensitive, given that OPM researchers found that local respondents appeared to define disability differently to how donors do.

9. **Consider expanding existing women and trade programming.** As the Strategy 1 programming had positive impacts for a seeming majority of the participants, TMEA may wish to consider expanding its offerings in new OSBP locations, in remote areas to reach those who have not yet benefitted from increased trade, and in existing locations as additional opportunities may emerge. Consider basic organisational capacity building, as sustainability of Strategy 1 efforts was called into question in OPM's Performance Evaluation (2019) and earlier TMEA gender assessments. It also provides an opportunity to learn from prior programming in addressing the different ways poor and 'very poor' women take up and use new learning, and various support services that may be necessary to reach more marginalised individuals, including access to finance and gender-sensitive extension services for women entrepreneurs and farmers, or 'bundled services' packages that have proven most successful among economic development programming for 'very poor' women in the developing world.¹³
10. **Work with partners (national and/or local government, donors, and community-based organisations) to provide transition support to displaced workers as new OSBPs begin operations and in port communities.** One direct way in which TMEA can mitigate negative impacts on localised populations is in ensuring that workers who will be displaced through the opening of new OSBPs or expansion of port activities have other opportunities to earn a decent livelihood. These activities may include active labour market programmes, information campaigns about social transfers that may help them in the transition period, or sources of mentoring and financing for entrepreneurs developing new business plans to mitigate the effects of dislocations among more vulnerable workers.
11. **Consider partnering with other organisations that can provide support to cross-border traders and exporters beyond TMEA's mandate.** A large number of respondents, both direct and indirect beneficiaries, asked for skills training or skills upgrading. They are seeking sustained education and advisory services in formats that are modular and accessible to busy adults. While this may be beyond TMEA's current mandate or what TMEA's donors want the programme to achieve, there are a wide range of organisations in each country that do offer some of those services and might be interested in a partnership opportunity.

Recommendations for Sustainability

12. **Ensure that government partners (national and/or local) have effective strategies in place for ongoing information dissemination about trade and OSBP procedures to enable a wider range of individuals and households to take advantage of cross-border trade opportunities.** Most respondents in border communities could not pinpoint when the information campaign occurred or how long it lasted. Unless they were involved in cross-border trade, they had poor recall on the content of the campaign. In some communities, government, or trade group outreach officers have direct and frequent engagement with officials and traders, particularly on market days, which seems to work quite well.
13. **Ensure that EAC government partners at OSBPs have strong training systems in place to institutionalise training on standard procedures.** As lack of institutional memory and staff turnover were cited as presenting challenges and delays for small-scale women traders, it appears that training systems could be strengthened to ensure that new personnel are prepared to execute their job functions as intended when they join the staff at the OSBPs. If no orientation is currently included on providing appropriate services to individuals with disabilities, that should also be included in the staff training.

¹³ Buvinic, Mayra and O'Donnell, Megan. 2016. Revisiting what works: Women, Economic Development, and Smart Design. Center for Global Development. Available at: http://www.womeneconroadmap.org/sites/default/files/CGD-Roadmap-Update_v4.pdf

14. **Work with EAC government partners to ensure that data management systems and personnel performance measures support the operationalisation of OSBP and port procedures.** Aligned with the prior recommendation, data management systems should capture performance information and that information should be used by senior administrators to adjust operations as needed to meet performance targets. Similarly, personnel management systems should be aligned with performance standards and targets to ensure that better performance is appropriately incentivized and recognised. For example, performance indicators should set expectations for border staff – new and continuing – to incentivise behaviours for which the new border posts were designed: timeliness, fair treatment of all crossers, and adherence to Simplified Trade Regime (STR) standards.

1 Introduction

1.1 Trade and the EAC: programme context and development issues

The East African Community (EAC) was revived with the Treaty for the Establishment of the East African Community signed in 1999 by Kenya, Uganda, and United Republic of Tanzania. It was further enlarged with the admission of Rwanda and Burundi in July 2007 and South Sudan in 2016. The EAC Single Customs Territory became operational in July 2014 for the common market with further integration to be achieved according to an ambitious calendar. The EAC aims at widening cooperation among partner states in economic, social, and political arenas for their mutual benefit. The aim of EAC is to establish a Political Federation of the East African States.

The EAC is home to 172 million citizens, with the population expected to grow to about 200 million by the year 2030, and a land area of 2.5 million square kilometres. Its combined Gross Domestic Product (GDP) is of US\$172 billion (EAC Statistics for 2017)¹⁴ which makes it one of the fastest growing regional economic blocs in the world.

The EAC member countries have diverse features¹⁵: Kenya is the region's largest economy and is a regional trade, finance, communication, and manufacturing hub. Uganda is the region's breadbasket and distribution centre. Tanzania has a strong agricultural base, natural resources, and the largest population among the EAC economies. Rwanda and Burundi have small economies; Rwanda is famous for its zero-tolerance to corruption, and Burundi is still recovering from a long civil war but is undertaking significant economic reforms. At present, the EAC Partner States present generous business and investment opportunities in various sectors from agriculture to manufacturing, tourism, financial services, and ICT. EAC is the second largest market in Africa, with a growing middle-class and demand for products and services. Its business-friendly environment is improving, making EAC the world's fastest reforming region.¹⁶

Despite these significant achievements, key challenges remain. The economic literature hypothesises that trade influences poverty through three distinct channels: prices, employment and wages, and public spending. The countries in the EAC region experienced several years of economic growth, but that trend has slowed, as shown in Table 1 below.¹⁷ Poverty has decreased significantly in Kenya and Uganda over the past 15 years, but only single data points were available for Rwanda and Tanzania.

Table 1: Key economic indicators

| Country | Kenya | | Rwanda | | Tanzania | | Uganda | |
|---|------------------------|-------|------------------------|-------|------------------------|-------|------------------------|-------|
| | Most Recent Year Value | Trend | Most Recent Year Value | Trend | Most Recent Year Value | Trend | Most Recent Year Value | Trend |
| GDP growth (%) | 4.9 | ↓ | 6.1 | ↓ | 7.1 | ↔ | 3.9 | ↓ |
| Poverty headcount ratio, national poverty lines (%) | 36.1 | ↓ | 38.2 | N/A | 34.4 | N/A | 21.4 | ↓ |
| GINI coefficient | 40.8 | N/A | 43.7 | N/A | N/A | N/A | 42.8 | ↓ |
| Agriculture, forestry, fishing value added (% GDP) | 34.6 | ↑ | 31.0 | ↑ | 30.1 | ↑ | 24.6 | ↔ |
| Industry value added (% GDP) | 16.5 | ↓ | 15.8 | ↓ | 26.4 | ↑ | 20.3 | ↔ |

¹⁴ <https://www.eac.int/overview-of-eac>

¹⁵ EAC. 2013. East African investment guidebook published at [https://d3n8a8pro7vnm.cloudfront.net/eatradehub/pages/948/attachments/original/1434448417/EAC_Investment_Guide_2013_\(1\).pdf?1434448417](https://d3n8a8pro7vnm.cloudfront.net/eatradehub/pages/948/attachments/original/1434448417/EAC_Investment_Guide_2013_(1).pdf?1434448417)

¹⁶ EAC. 2013. East African investment guidebook published at [https://d3n8a8pro7vnm.cloudfront.net/eatradehub/pages/948/attachments/original/1434448417/EAC_Investment_Guide_2013_\(1\).pdf?1434448417](https://d3n8a8pro7vnm.cloudfront.net/eatradehub/pages/948/attachments/original/1434448417/EAC_Investment_Guide_2013_(1).pdf?1434448417)

¹⁷ Data were generally not available for South Sudan and Burundi, and they are therefore excluded in the tables that follow.

| Country | Kenya | | Rwanda | | Tanzania | | Uganda | |
|--|-------|-----|--------|---|----------|---|--------|---|
| Exports of goods and services (% GDP) | 13.2 | ↓ | 18.2 | ↑ | 15.1 | ↓ | 18.1 | ↔ |
| Imports of goods and services (% GDP) | 24.1 | ↑ | 32.8 | ↔ | 17.5 | ↓ | 25.3 | ↓ |
| Merchandise trade (% GDP) | 28.3 | ↓ | 34.5 | ↓ | 27.8 | ↓ | 31.7 | ↑ |
| Net intake rate to grade 1 of primary school * | N/A | N/A | 71.43 | ↓ | 47.92 | ↓ | 56.35 | ↓ |

N/A indicates not available.

Source: World Bank, World Development Indicators, accessed on March 5, 2019. Most recent year data for GDP growth was 2017. Most recent year for poverty headcount ratio at national poverty lines was 2016 for Rwanda and Uganda, 2015 for Kenya, and 2007 for Tanzania. Most recent year data for GINI coefficient was 2016. For all other data, most recent year data was 2017.

*Source: UNESCO Institute for Statistics, <http://data.uis.unesco.org/Index.aspx?queryid=127#>, accessed on March 5, 2019. Most recent year data was 2017.

Trade in goods and services has increased across the region in step with growing economies as shown in Table 2, even if three or five year trends are decreasing according to the data shown in Table 1.

Table 2: Total trade in goods and services (in USD millions, current dollars)

| Country | Kenya | | Rwanda | | Tanzania | | Uganda | |
|-------------------------|-------|------|--------|------|----------|------|--------|------|
| | 2010 | 2017 | 2010 | 2017 | 2010 | 2017 | 2010 | 2017 |
| Total trade in goods | 5098 | 5779 | 297 | 1050 | 4324 | 4898 | 2134 | 3032 |
| Total trade in services | 3772 | 4648 | 387 | 998 | 2046 | 3850 | 1304 | 1635 |

Source: UNCTADSTAT, accessed on August 9, 2019.

Total trade figures only illuminate part of the story. Kenya, Rwanda, Tanzania, and Uganda all have negative trade balances, importing more than they export. Top exports vary by country, but the top import for each is refined petroleum, with palm oil and packaged medicaments also figuring prominently in each country's imports, as shown in Table 3.

Table 3: Exports and Imports, 2017 (in USD millions)

| Country | Value of Exports (2017) | Top Exports (2017) | Value of Imports (2017) | Top Imports (2017) |
|----------|-------------------------|--|-------------------------|---|
| Kenya | 6170 | Tea (22%), Cut Flowers (11%), Refined Petroleum (4.8%), Coffee (4.3%) | 17100 | Refined Petroleum (14%), Palm Oil (3.2%), Cars (2.9%), Packaged Medicaments (2.5%) |
| Rwanda | 223 | Coffee (27%), Tea (22%), Niobium, Tantalum, Vanadium and Zirconium Ores (18%), Tin Ores (6.4%) | 1110 | Refined Petroleum (6.5%), Packaged Medicaments (6.2%), Broadcasting Equipment (4.8%) |
| Tanzania | 5300 | Gold (29.3%), Coconuts, Brazil Nuts, and Cashews (11.6%), Raw Tobacco (6.5%), Coffee (3%), Fish Fillets (3%) | 8170 | Refined Petroleum (16.6%), Packaged Medicaments (4.1%), Palm Oil (3.2%), Wheat (2.2%) |
| Uganda | 2790 | Coffee (19.9%), Gold (14.9%), Dried Legumes (3.5%), Fish Fillets (3.1%) | 5840 | Refined Petroleum (16%), Palm Oil (4.4%), Packaged Medicaments (4.0%) |

Source: Observatory of Economic Complexity, accessed on August 9, 2019.

In addition to the macroeconomic and trade data, it is useful to understand the rate of participation in the labour force and the distribution of the labour force across the economy. Table 4 shows the employment to population ratios. Rwanda leads the region with the highest employment to population ratio and little disparity between men and women (in terms of overall employment), while the other

countries lag. Employment to population ratios have been relatively stable in recent years. Table 5 below shows the distribution in Kenya, Rwanda, Tanzania, and Uganda. Kenya leads the region in the shift from agriculture to services, and the service sector is growing in the other countries as well.

Table 4: Employment to population ratios

| 2018 Employment to Population (15+) | Kenya | Rwanda | Tanzania | Uganda |
|-------------------------------------|-------|--------|----------|--------|
| Employment to total population | 60.1 | 83.1 | 81.6 | 69.8 |
| Employment to female population | 57.7 | 82.8 | 77.5 | 65.7 |
| Employment to male population | 62.6 | 83.3 | 85.9 | 74.0 |

Source: World Bank, World Development Indicators (ILO modelled), access on May 16, 2019

Table 5: Labour force by sector of employment

| Sector | Kenya (% of labour force) | Rwanda (% of labour force) | Tanzania (% of labour force) | Uganda (% of labour force) |
|------------------------------|------------------------------|-------------------------------|---------------------------------|-------------------------------|
| Agriculture | 37.2 | 65.7 | 66.0 | 68.4 |
| Industry | 14.3 | 8.3 | 6.1 | 7.0 |
| Services | 48.5 | 26.0 | 28.0 | 24.6 |
| Unemployment Rate (official) | 9.3 | 1.0 | 1.9 | 1.7 |

Source: 2018 ILO data, accessed on March 5, 2019

Informal employment remains high across the region. ILO estimates, based on labour force surveys, indicate that 68.2% of workers in Rwanda (2017), 71.8% of workers in Tanzania (2014), and 83.2% of workers in Uganda (2012) are in informal employment (including unregistered workers in registered enterprises, workers in unregistered enterprises, own account workers, contributing household members, and workers holding informal jobs).¹⁸ Table 6 shows the most recent year estimates of employment category, with own account worker and contributing family member typically being informal.

Table 6: Employment by employment category

| Employment Category | Kenya (% of workers) | Rwanda (% of workers) | Tanzania (% of workers) | Uganda (% of workers) |
|----------------------------|-------------------------|--------------------------|----------------------------|--------------------------|
| Employee | 38.5 | 31.3 | 14.5 | 21.7 |
| Employer | 8.0 | 0.1 | 2.7 | 3.2 |
| Own Account Worker | 17.5 | 39.5 | 48.5 | 59.7 |
| Contributing Family Worker | 36.0 | 29.2 | 34.2 | 15.5 |

Source: 2018 ILO data, accessed on March 5, 2019

Trade is a key strategy for economic growth in the EAC, as demonstrated by its centrality in national planning.¹⁹ Each country also has a wide variety of agreements with bilateral and multilateral donors to support economic growth, social safety nets, and improved social services, all of which aligned with the goals outlined in the national development plans and/or the United Nations (UN) Sustainable Development Goals (SDGs).

1.2 Trademark East Africa

The Trademark East Africa programme (Trademark, or TMEA) is a high-profile, multi-donor project that seeks to lift existing barriers to trade to bring about positive and sustainable change via a combination of regional and national initiatives and an investment of over US\$500 million. TMEA is a large and complex programme, with national and regional dimensions and many sub-projects implemented

¹⁸ ILO website. Informal Employment. https://www.ilo.org/ilostat/faces/oracle/webcenter/portalapp/pagehierarchy/Page3.jspx?MBI_ID=524&_adf.ctrl-state=64bct6nd2_74&_afLoop=1041297601447161&_afWindowMode=0&_afWindowId=64bct6nd2_71#!. Accessed on March 5, 2019.

¹⁹ Each country in this study has a national development plan in place (Kenya Vision 2030/Third Medium-Term Plan 2018-2022; Rwanda's 7 Year Government Programme: National Strategy for Transformation (NST1) 2017-2024; Tanzania's National Five Year Development Plan 2016/17-2020/21; and Uganda Vision 2040/Second National Development Plan (NDPII) 2015/15-2019/20), in which development in each major sector of society is discussed and for which targets are presented.

across several countries.²⁰ During its Strategy 1, from 2010 to 2017, TMEA aimed to increase trade in East Africa through targeted infrastructure and trade facilitation investments to reduce transport time and costs. The programme also worked to enhance the business environment to enable greater use of the improved system.

TMEA was launched in 2011 as a not-for-profit company limited by guarantee, funded by the UK's Department for International Development (DFID), which has commissioned this study, and by cooperation agencies in Belgium, Canada, Denmark, Finland, Netherlands, Sweden, and the US. Funding reached US\$560m USD in Strategy 1. In 2017, the donors agreed to fund Strategy 2. The programme's high-profile is amplified by current events in the UK and Europe around Brexit, highlighting increased interests in continued development work on trade.

The TMEA TOC from 2014 forms the backbone for the evaluation to follow TMEA programme logic toward the goal of increased trade. The TOC features three Strategic Objectives (SOs): Increased Physical Access to Markets; Enhanced Trade Environment; and Improved Business Competitiveness.²¹ These SOs are comprised of ten programmatic components, also called Programme Intermediate Outcomes (PIOs).

As poverty reduction is a key priority for TMEA's donors, TMEA's TOC posits that it will indirectly alleviate poverty (also referred to as long-chain effects). According to economic theory and literature,²² trade can have positive poverty alleviation impacts. The literature identifies three main transmission mechanisms by which trade can reduce poverty: (1) **prices** (a reduction in trade barriers can lead to the convergence of local prices and world prices – whether changes are beneficial or detrimental to poor households depends on whether they are net producers or consumers of traded goods); (2) **employment and wages** (a reduction in trade barriers is likely to benefit some producers through access to larger markets and lower import prices, but it may harm those that are producing above world market prices; structural changes and productivity changes are critical); and (3) **public spending** (a short-term reduction in tariffs should be offset in the longer term by revenues from taxes on increased international trade and associated growth, assuming spending is focused on pro-poor measures).

Given the variety of activities encompassed by TMEA's three SOs, including direct programming with poor households and their livelihoods, it is plausible that the programme may have had both direct and indirect impacts on poverty at micro levels, and indirect impacts on poverty at macro levels.

TMEA itself represents multiple donors' efforts to coordinate their work and thereby have more impact. Its donors and others also offer complementary programmes that support TMEA inputs, including education, vocational and entrepreneurial training, social transfers, financial markets strengthening, physical infrastructure development, and others. Given the wide variety of actors, programmes, and ministries involved, the overall aid picture is fragmented, which complicates efforts to coordinate or leverage impacts across donor programmes.

1.3 The independent evaluation

DFID contracted OPM to undertake an independent evaluation comprised of a set of studies. Several of these are complete and available from DFID. Earlier work mapped TMEA's 200+ projects,²³ examined project-level outputs and outcomes for 60 sampled projects,²⁴ and conducted several studies: a formative evaluation of the ports and border posts;²⁵ an institutional and organisational

²⁰ This includes text from the Independent Evaluation Inception Report, November, 2016, where information remains the same.

²¹ For details on the TOC, the resulting Results Framework, and how these were used during S1, please see the Performance Evaluation.

²² For more information, see Berg & Krueger, 2003; Dollar and Kraay, 2004; Hertel and Reimer, 2005; Hoekman and Olarreaga, 2007; Hoekman et al, 2001; McCulloch et al., 2001; Ravallion, 2005; Winters et al., 2004.

²³ OPM: Otter, Thomas and Rasulova, Saltanat. Workstream 2; Deliverable 2A. Preliminary Output Assessment. 31 October 2017

²⁴ OPM: David G.V Smith, Joel Moktar, Timothy Hobden, Theo Sands, Antony Wahome and Caroline Raes. Workstream 2: Deliverable 2D/2E: Effectiveness and Outcome-level Evaluation SO2 and SO3 Revised Draft. March 2018

²⁵ OPM: Ian Scott, Philip Lacey, Peter Omondi, Godfred Shuma, Thomas Otter, David Smith, Alex Hurrell and Saltanat Rasulova. Strategic Objective 1. Deliverable 2C: Effectiveness and outcome-level evaluation And Deliverable 3A: Consolidated Formative Evaluation of Ports and OSBP projects. March 2018

assessment;²⁶ a preliminary poverty assessment;²⁷ and a relevance and sustainability assessment.²⁸ These were summarised in an interim evaluation synthesis.²⁹ The sample of 60 projects was split between those ‘priority’ projects TMEA selected (17) and those selected purposively by the evaluation team, to cover thematically ‘what TMEA typically does’³⁰ by matching TMEA portfolio characteristics, within a set of DFID-approved selection criteria. Forty projects were visited directly, and twenty were covered via a desk review to minimise costs; in some of the latter, phone interviews were added to supplement and clarify the data available in reports.

The next step in the evaluation process was to examine that operationalisation by understanding the component level results chains, or pathways. The TOC posits that the three strategic objectives will be met by the combined success of eleven Programme Intermediate Outcomes (PIOs). The evaluation team undertook the pathway mapping to test the theory of change for 10 pathways. Using the TOC, the RF indicator data, and data collected in the outputs and results mapping processes, the evaluation team examined the set of projects and the degree to which the hypothesised mechanism worked to build from project outcomes to PIOs. However, in earlier reporting what was not delivered is “outcome-level evaluation” component, which was intended to assess the extent to which TMEA programming can be said to have caused or contributed to outcome targets, through a theory-based exercise to link conclusively the project outputs to programme-level outcomes. This is what the latest round of evaluations in 2019 aimed to do, informed by the earlier reports.

The 2019 evaluation deliverables and their main focus areas are:

- **Performance Evaluation (PE)**³¹ which traces Strategy 1 outcomes and answers questions on TOC, coherence, and coordination, serving as an input for the studies that follow.
- **Trade and Growth Impact Study (TGIS)**³² examines whether outcomes have led to trade impacts, through a range of economic data and econometric and modelled analyses.
- **Poverty and Gender Impact Study (PGIS)** uses qualitative and quantitative data from households and communities near and far from trade corridors, to assess potential³³ impacts related to TMEA.
- **Value for Money Assessment (VfM)**³⁴ reviews TMEA expenditures and outcomes to assess the 5 E’s of the intervention, primarily based on programme financial data and interviews.

1.3.1 Purpose of the evaluation

The overall evaluation has two specific purposes:

- **Accountability:** Assessing TMEA processes, results, and overall value in an independent and impartial manner consistent with generally accepted principles and standards for professional evaluation.
- **Learning:** Identifying and feeding lessons learnt into the management of the remainder of the current programme and the design of any potential continuation of the TMEA programme, as well as future regional trade integration programmes.

The PGIS examines the impacts TMEA *might* have had on poor people, communities, and livelihoods, and any potential sustainability of those impacts. Trademark’s TOC posits trade and economic growth impacts as the aim. Based on the recent literature cited above, a hypothesis underlies TMEA’s work that assumes trade would affect the economy in such a way as to alleviate poverty indirectly, particularly among those working in sectors and geographic areas more affected by international trade. The evaluation team calls these indirect or ‘long-chain’ poverty effects. Using household survey

²⁶ OPM. Workstream 2 – Deliverable 2B: Institutional and Organisational Assessment. (forthcoming)

²⁷ OPM: Neil McCulloch, Sebastian Silva-Leander, Chris Hearle, Alastair Haynes. Preliminary Poverty Assessment. 7 June 2017

²⁸ OPM: Thomas Otter with support from Robert Kirk, Peter Omondi, Chris Hearle and David Smith. Preliminary Relevance and Sustainability Assessment. (forthcoming)

²⁹ OPM: David G.V. Smith, Alex Hurrell, Patrick Ward and Saltanat Rasulova. Workstream 6: Deliverable 6B/2F. Summary of Preliminary Evaluation Findings. (forthcoming)

³⁰ Ibid, page 34.

³¹ OPM: Culver et al. Deliverable 3B: Performance Evaluation, Draft Report. September, 2019

³² Baker et al. Deliverable 4A Final Report 2019

³³ This study is in line with the literature around the effects trade may have on poverty, but will not attribute to TMEA any effects found. It will contribute to the evidence base on trade and poverty. The PGIS will examine effects of TMEA’s *direct* projects with poor households, communities, and associations.

³⁴ OPM: Frances Hansford, Esther Namukasa, Julian King and David Vanzetti. TradeMark East Africa (TMEA): Value for Money Framework. April 2019.

data was a relatively low-cost option to indicate what impacts TMEA may have had at the household level, but a key limitation is that changes identified in the extant data cannot be attributed to TMEA. The household survey data was augmented by the collection of qualitative data at grassroots levels focused on changes in communities as a result of TMEA investments in trade infrastructure and systems. TMEA also worked to support poor households and communities directly, particularly under its Strategic Objective 3 on enhancing business competitiveness. Women and Trade and export capability projects were designed to help small-scale women traders (many from poor households) and other vulnerable groups take advantage of any improvements in trade brought about by TMEA programming. If found, these would be TMEA's direct or short-chain effects on poverty. The PGIS aimed to identify these effects through qualitative research in selected communities where activities were concentrated.

DFID, and the other donors, made the decision to continue funding TMEA for an additional six years, from 2018 to 2023. As a result, the accountability purpose of the evaluation takes on new importance, as a backward-looking exercise designed to capture the extent of TMEA processes, results, and value relative to the scope and potential of its original design and funding. Where possible, the evaluation reports provide lessons to inform TMEA's ongoing work, and for efforts beyond TMEA in trade and regional integration. At the same time, the evaluation team acknowledges the significant learning that TMEA have put into action for their current Strategy 2 activities.

Given these circumstances, and the focus on accountability, the chief audiences for the evaluation are DFID London, the Africa Regional Department, DFID Country Offices in East Africa, the trade team, and parallel audiences from among TMEA donors. TMEA is also an important audience, to the extent that the evaluation team can offer useful insights from Strategy 1 for implementing Strategy 2. Secondary audiences include other trade programmes for whom TMEA's experience could be instructive.

1.4 Evaluation questions

The PGIS report addresses the following evaluation questions, from HEQ4.

Table 7: HEQ and DEQs to be answered in the PGIS

| |
|---|
| HEQ4: What is the likely impact of TMEA on poverty and gender, and what factors are critical in order to ensure the sustainability of positive impacts? |
| DEQ4.1 What is the nature – and, where possible, scale – of the likely impact of the overall programme and of key TMEA projects in the portfolio on the poor—direct and indirect? Who is affected by potential short- or long-term impacts, both positive and negative, how, and how is the causality working?³⁵ |
| DEQ4.2 In particular, who has benefited from reduced trade costs? How are the benefits in reduced transport time and cost being passed on to poor people through lower prices or lower price increases? |
| DEQ4.3 Are complementary policies being adopted to translate the benefits of increased trade into poverty reduction? |
| DEQ4.4 Are measures being taken, and are they successful, in mitigating potential negative impacts on any sub-groups – in particular, poor people in localised areas? |
| <i>Cross-cutting issues</i> |
| DEQ4.5 To what extent has the programme benefited women and girls (noting that the programme design did not purport to benefit them equally)? Have there been any negative consequences for women and girls? Has the programme had an impact on relations, including power and influence, between girls/women and boys/men? How could the programme increase benefits to women and girls within its trade focus? |
| DEQ4.6 What factors are critical in order to ensure the sustainability of positive impacts? |

The remainder of the report discusses the methodology for the PGIS and the findings, positive and negative, to each of the evaluation questions listed. Findings for the questions are summarised in the Executive Summary.

³⁵ Tracing causality rigorously, this far along the results chain, is outside the scope of the evaluation.

1.5 Timing

The PGIS team began field work in late February 2019, continuing through April. In development evaluations of complex programming, and those looking to measure impacts through non-experimental designs, the analytical process relies on source triangulation, respondents' validation, consideration of alternative explanations, making explicit connections between findings and conclusions, and auditable documentation of the process.³⁶ Each draft report was reviewed by DFID and TMEA, including its Evaluation Committee, and then by DFID's quality control function, EQUALS. The team will share lessons learnt in face-to-face workshops or a verification exercise. Where possible, events will be combined to conserve resources, but in principle they follow successful delivery of the evaluation deliverables, including the PGIS.

³⁶ Stern, Elliot, et al. 2012. Broadening the Range of Designs and Methods for Impact Evaluations. Report of a Study Commissioned by the Department for International Development. P. 70, *inter alia*.

2 Poverty and Gender Impact Study (PGIS) design and methods

2.1 Trade and poverty reduction

The literature on trade and economic growth suggests that trade may influence poverty, or household and individual well-being through three channels: prices, wages and employment, and public spending. The PGIS, therefore, focused on both the macro and micro effects of TMEA's interventions and is intended to capture the 'long-chain' effects (the indirect or spread effects of trade) hypothesised to result in the TOC, focusing on how communities, men and women, people in poverty and people of relative wealth, people with disabilities and people with no disability have experienced changes in well-being as a result of interventions intended to reduce barriers to trade within the EAC region. OPM's Preliminary Poverty Assessment (PPA)³⁷ report also hypothesised that increased trade, supported by TMEA, could impact poverty faster closer to the trade corridor, and among households whose primary income comes from tradable sectors.³⁸ Poverty would also decrease faster in households that produce and/or consume more tradeable goods.

To examine the macro level impacts, the PGIS used nationally representative household datasets to gauge changes in consumption using a difference in differences technique, as poverty and consumption are closely correlated. While household survey data typically provides valuable information, they sometimes lack answers to why certain changes occur. Therefore, the survey data was supplemented with qualitative data collection and content analysis to capture the 'why' and 'how' of the survey data and to also capture impacts at the micro level.

Based on this objective, the study included respondents who were direct beneficiaries of TMEA interventions, respondents who live and/or work in communities where TMEA-sponsored activities were held but had no direct contact with TMEA, and respondents who lived in communities that had no TMEA interventions.

To assess the short-chain (direct) effects of TMEA's programming on poverty and gender at the micro level, the study drew specifically on beneficiaries of the nine projects under the SO3 Women and Trade programme and export capability projects, which were targeted at supporting export-ready woman-owned businesses and/or small-scale female cross-border traders who might benefit immediately from the One Stop Border Posts (OSBPs).

The PGIS team, using a mixed methods approach, examined those hypothesised mechanisms, triangulating them with information collected through document review and the qualitative component of the study. From this data, the evaluation team answers the evaluation questions below.

2.2 Evaluation framework

The PGIS supplemented OPM's Performance Evaluation³⁹, in validating the TOC (long-chain effects), assessed programme impacts on key populations of interest (poorer and wealthier men and women, people with disabilities), and identified lessons learnt, specifically around sustainability of impacts. The design is multi-faceted and mixed method, to address the broad and complex nature of TMEA.

The PGIS comprises two distinct parts: a quantitative study and a qualitative study. Both expanded on the findings of the OPM Performance Evaluation (2019),⁴⁰ to examine the three channels defined by

³⁷ OPM: Neil McCulloch, Sebastian Silva-Leander, Chris Hearle, Alastair Haynes. Preliminary Poverty Assessment. 7 June 2017

³⁸ Trade sectors are defined as follows: **Agriculture**: Agriculture, forestry and fishing; **Tradable**: Mining and Quarrying, Manufacturing, **Mixed**: "Electricity, gas, steam and air conditioning supply, Water supply; sewerage, waste management and remediation activities, Wholesale and retail trade; repair of motor vehicles and motorcycles, Transportation and storage, Accommodation and food service activities, Information and communication, Financial and insurance activities, Professional, scientific and technical activities, Activities of extraterritorial organizations and bodies; **Non-tradable**: Construction, Real estate activities, Education, Human health and social work activities, Arts, entertainment and recreation, Other service activities, Activities of households as employers; undifferentiated goods- and services-producing activities of households.

³⁹ OPM: Culver et al. Deliverable 3B: Performance Evaluation, Draft Report. September, 2019

⁴⁰ OPM: Culver et al. Deliverable 3B: Performance Evaluation, Draft Report. September, 2019

economic theory through which trade is thought to effect poverty, namely: (1) the price channel, (2) the wage and employment channel, and (3) the public expenditure channel.⁴¹

The PGIS is a theory-based analysis of possible contribution, as opposed to an attribution analysis or RCT, and the results obtained from the analysis of the outcome variable (poverty) are only indicative of possible underlying relations between trade and poverty. The study examines each of the three channels mentioned above and looks at possible alternative factors that may have affected poverty during this period (e.g. climate shocks or political changes).

The PGIS focused on capturing the longitudinal impact of trade on poverty generally (in the quantitative analysis) and the impacts of trade-related interventions and the sustainability of results (in the qualitative analysis). This study examined the actual, ex-post changes that have taken place in each country over the life of TMEA (using datasets as close to the start and end of TMEA's Strategy 1 as possible) by comparing poverty indicators at the two points in time, disaggregated by relevant factors, and by collecting perspectives from an extensive number of key stakeholders among populations of interest in selected sites.

To serve the accountability purpose, the PGIS focused on the micro level impacts, direct and indirect, on individuals, households, and communities. The analysis is particularly concerned with gendered impacts and impacts on the most vulnerable individuals and households.

The PGIS used traditional data collection methods – interviews, group discussions, site visits, and secondary documents and data – in the analysis for HEQ4. Triangulation – drawing on and weighing sources internal and external to TMEA – was used to minimise bias, quality-assure data and support conclusions based on the range of findings. Although the evaluation's Design and Work Plan (Annex B) proposed four countries for data collection (Kenya, Rwanda, Uganda, and Tanzania), a low-cost opportunity to collect data from South Sudan arose. A South Sudanese consultant was quickly brought on-board to the study and its aims and conducted the interviews for that Country Programme (SSCP) at roughly the same time as other fieldwork.

2.2.1 Stakeholder involvement and transparency

A significant delay in the overall independent evaluation process⁴² had an alienating effect on TMEA stakeholders, and OPM's initial task in re-starting the evaluation included presenting the design transparently, listening closely to concerns, and working to address these in the design and the day-to-day conduct of the evaluation. OPM's Performance Evaluation team laid the groundwork for this, and the PGIS team continued the practice by leveraging interviews that OPM's Performance Evaluation team had completed, and focusing additional PGIS data collection only on the gaps in information needed to answer the questions for this study. OPM was in close contact with TMEA throughout the fieldwork, allowing for informal 'check ins.' When difficulties arose in scheduling interviews with some respondents (for example, government staff), TMEA was supportive with additional letters to those offices as requested.

Many of the data collection instruments used in the PGIS, although not designed in a participatory fashion, were semi-structured, which provided latitude for respondents to highlight the issues most crucial to them. Along with several participatory methods used in data collection, as described below, the overall PGIS design encouraged high-levels of stakeholder involvement.

The evaluation design relies on team experience and expertise and their scrutiny of the evidence, to quality assure our conclusions. Quality assurance is also conducted by OPM specialists. Reports are further validated through the review process with DFID and TMEA. The evaluation team leader and qualitative research lead are members of relevant evaluation networks and subscribe to their principles of professional behaviour, and work to ensure the team also maintains those standards and to act in accordance with the Paris Declaration principles.

⁴¹ See Berg & Krueger, 2003; Dollar and Kraay, 2004; Hertel and Reimer, 2005; Hoekman and Olarreaga, 2007; Hoekman et al, 2001; McCulloch et al., 2001; Ravallion, 2005; Winters et al., 2004.

⁴² Please see the introduction of the Performance Evaluation, Deliverable 3B, for details.

In addition to the internal reviews of the evaluation design and data collection instruments, the evaluation team sought and received research approvals from the Tanzania Commission for Science and Technology (13 March 2019, permit number 2019-95-NA-2019-69) and the Rwanda Ministry of Trade and Industry (6 March 2019, Ref. number 378/15.02/PLAN/20). Neither body identified concerns with the design, instruments, or protections provided to the respondents. At the time of data collection, neither Kenya nor Uganda required approval from a national ethical review commission, and therefore no further review was completed by bodies within those countries.

Although not fully participatory in the design and therefore lacking country ownership, the evaluation team did attempt to be as country-centred as possible. In the spirit of alignment, we used the existing household survey data collected by national research bureaus. Further, local data collection teams were contracted in each country, and training for the teams included principles of trade and trade improvement interventions, research ethics, positionality, and specific data collection methods. The local data collection teams also reviewed the data collection instruments and suggested edits to make them more sensitive (for example, around discussions of gender relations and corruption), as well as working through the translations of each instrument into local languages (including use of slang and dialects where appropriate). Throughout the data collection period, the qualitative data collection lead maintained at least weekly contact with each team and any difficulties they encountered were resolved with solutions they identified as being most appropriate. The PGIS team and other evaluation teams (PE, TGIS, VfM) also harmonised efforts and minimised duplication of efforts in terms of data collection and analysis.

After the research was completed, each local data collection team debriefed with the qualitative research lead and developed a set of recommendations they thought were most critical. These recommendations are reflected in the recommendations list included in the report. Finally, the TMEA team and DFID had the opportunity to review two rounds of draft reports, which provided them the opportunity to vet findings for reasonableness and recommendations for utility and feasibility, and the evaluation team responded to each of the comments as requested and made edits where appropriate.

2.2.2 Quantitative study component

Data sources

The PGIS drew upon household survey data to simulate the potential impact of trade-related changes in prices, wages, employment, and public expenditure on poverty. Table 8 shows the household data set used for each country included in the analysis, one approximating conditions at the beginning of Strategy 1, and one approximating condition closer to the end of Strategy 1. Each of the surveys selected is a nationally representative survey, which contains information on household characteristics, consumption, and other relevant welfare indicators. They are statistically representative down to the province level. Households were grouped into different categories, depending on their proximity to the trade corridor, and relevant indicators were estimated for each province separately, or for the group as a whole, depending on the needs of the analysis. Data used to identify the trade corridors in each country were obtained from the Transit Facilitation Agency. South Sudan and Burundi were not included, as representative datasets were not available at the relevant time intervals.

Table 8: Household datasets used for the PGIS

| Country and dataset | Approximate Baseline | Most Recent Data | Notes | OSBP operations start dates |
|--|----------------------|------------------|--|--|
| Uganda National Panel Survey (UNPS) | UNPS 2011/2012 | UNPS 2015/2016 | 2015/2016 data collected between March 2015 and March 2016 | Busia June 2016 Malaba July 2016 Mutukula June 2016 Mirama Hills Dec 2015 |
| Tanzania National Panel Survey (TNPS) | TNPS 2009/2010 | TNPS 2014/15 | Income indicators were not available in a comparable format in TNPS 2009/10, so for these indicators, TNPS 2012/13 was | Mutukula June 2016 Kabanga June 2014 |

| Country and dataset | Approximate Baseline | Most Recent Data | Notes | OSBP operations start dates |
|---|----------------------|------------------|---|--|
| | | | substituted as the baseline. Sample size for 2012/13 was 5,010. 2014/2015 date collected between October 2014 and October 2015 | Holili May 2015 |
| Kenya Integrated Household Budget Survey (KIHBS) | KIBHS 2005/2006 | KIBHS 2015/2016 | 2015/2016 data collected between September 2015 and August 2016 | Busia June 2016 Malaba July 2016 Taveta May 2015 |
| Rwanda Integrated Household Living Conditions Survey ⁴³ (EICV) | 2010/2011 EICV3 | 2016/2017 EICV5 | 2016/2017 data collected between October 2016 and October 2017 | Kagitumba Dec 2015 |

The sample sizes are found in Table 9, below, for both the baseline and the most recent data relevant to the TMEA time frame. Also included is the critical percentage and figure for female-headed households (FHH) for each country, including the percentage of the sample that corresponds. These are used throughout the report to discuss differentiated effects by sex. Most households were male-headed (MHH), and most of these would also have women in the household; however, the only way to use the existing data to examine effects by gender is through looking at the sex of the household head. These figures, in whole or broken down by country and by other categories within each country, are used and noted throughout the report.

Table 9: Household data sets sample size, and percentage and number of FHH for each

| Country | Baseline sample size | FHH (#) | FHH (%) | Most Recent Data sample size | FHH (#) | FHH (%) |
|----------|----------------------|---------|---------|------------------------------|---------|---------|
| Uganda | 2,795 | 2,795 | 26.9% | 3,426 | 987 | 28.8% |
| Tanzania | 3,924 | 3,924 | 21.5% | 3,352 | 2,708 | 24.1% |
| Kenya | 12,617 | 12,617 | 26.4% | 21,773 | 6,663 | 30.6% |
| Rwanda | 13,808 | 13,808 | 22.8% | 14,580 | 2,829 | 19.4% |

It is important to note two key limitations of the quantitative data sets used in this study. First, none of the years align perfectly with TMEA interventions though Rwanda is closer than the other countries. Most of the TMEA OSBPs began operations in 2015/2016 or later, as shown in Table 8, and data collection had started in each country prior to the opening of the OSBPs except in Rwanda and Kabanga in Tanzania. Depending on the timing of data collection in those specific areas of the country (which is not readily available), the data sets may or may not reflect household impacts of TMEA's OSBP investments. Therefore, the results are *illustrative* of how increases in trade supported by TMEA may have had similar impacts.

A second limitation is that these data sets were designed for purposes other than assessing trade impacts on poverty. Therefore, the variables collected, and the measurements constructed are not necessarily what would have been ideally selected to answer the evaluation questions set forth for this study. Although the four countries included slightly different variables in some cases, much of the data overlaps and creates the opportunity to examine trade impacts through the three channels identified in the literature.

⁴³ Rwanda's poverty statistics have been questioned by international researchers who assert that price data discrepancies and the use of a new formula for the household food basket erroneously show that poverty decreased in 2014 data. Ansoms, An, et al. 2016. Statistics versus livelihoods: questioning Rwanda's pathway out of poverty, in Review of African Political Economy, 2017, VOL. 44, NO. 151, 47–65. <https://doi.org/10.1080/03056244.2016.1214119>.

Data analysis

Based on the economic theories underpinning the logic of trade potentially having ameliorative impacts on poverty, the PGIS team used nationally representative household data sets to examine trade impacts on poverty along three channels:

- **Changes in prices:** downwards convergence of prices of tradeable goods towards world prices would positively affect net consumers of those goods but may negatively affect net producers.
- **Changes in employment:** increase trade due to larger export markets may open employment opportunities in tradeable sectors, but uncompetitive sectors could also be negatively affected.
- **Changes in public spending:** increased public revenue because of increased trade and economic activity could enable increased spending on social sectors that tend to benefit poverty reduction.

The quantitative analysis was conducted using the Foster-Greer-Thorbecke (FGT) poverty index for poverty incidence (P0) and depth of poverty (poverty gap ratio - P1) as the outcome variables, calculated based on real household consumption per adult equivalent. In order to answer the evaluation questions, the results were disaggregated by sector of employment of the household head (tradeable versus non-tradeable sectors), and distance from the trade corridor (that is, on the corridor versus more than fifty kilometres from the corridor). In addition, the results were also disaggregated by sex of head of household. This allowed the team to tease out factors contributing to poverty reductions and the extent to which these were due to changes in prices, employment, and public expenditure, or to identify alternative hypotheses.

The quantitative analysis of impact is based on the comparison of a range of indicators between ‘treatment’ households (i.e. households located in the trade corridor, or households working in the tradable sector) and ‘control’ households. The key impact measure is the Average Treatment Effect on the Treated (ATT) which is estimated using a difference-in-difference approach. The ATT estimator for the direct effects of exposure to trade on selected households is defined as:

$$ATT = E[Y_i | T_i=1] - E[Y_i | T_i=0] \quad (1)$$

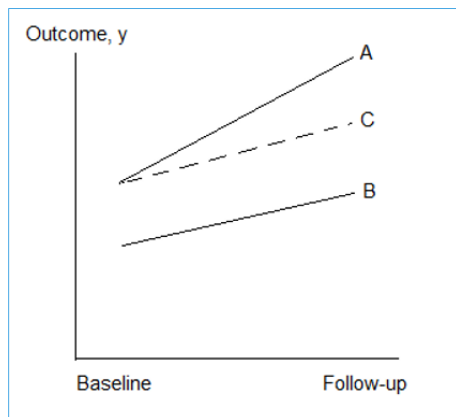
where Y is the outcome variable and ‘i’ indexes households. T is the treatment indicator, with a value of 1 if it a household is ‘treated’, 0 if in a ‘control’ household. The ATT compares the outcome variable for ‘treatment’ households and ‘control’ households. Equation (1) shows the expected outcome among households that have been exposed to trade (i.e. located in the trade corridor or working in the tradable sector) minus the expected outcome among households not exposed to trade.

The difference-in-differences (DID) estimation method is designed to be used in the context of randomised control trials (RCTs) and similar experimental and semi-experimental design settings. In this case, the study is using secondary data, which means that no ex-ante design could be used. This means that there is no guarantee that our ‘treatment’ and ‘control’ groups will be comparable. In fact, there are strong reasons to believe that the two groups are not identical, since the poverty profile conducted in 2015 showed large differences between these different groups. These differences need not in themselves be problematic, so long as the factors influencing change over time have been the same for the different groups.

Indeed, one key assumption in the DID approach is the assumption of a common trend. The assumption specifies that control households must evolve from the baseline to the follow-up period in the same way treatments would have done had they not been treated. This assumption, which is needed for the consistency of the DID estimator, imply that treatment and control households are affected in the same way by macro shocks.

A graphical representation of common trend is presented in the figure below. When applying first difference in outcome, the trend of the control (line B) is substituted for the counterfactual situation for the treatment households (non-treatment) (or line C). If this assumption holds the unbiased estimate becomes the difference in the trend between line A and C.

Figure 1: Graphical representation of common trend



This is a key implicit assumption that must hold for the results in this report to be interpreted as representing the ‘treatment’ effect of being exposed to trade. This is an assumption that cannot be verified, and therefore must be an inherent limitation of this study.

The difference in difference model is estimated in the following functional form:

$$Y_{it} = a + b_1T_i + b_2t + b_3T_i * t + c_t (X_{it}) + e_{it} \quad (2)$$

where the indicator for treatment or control for household i (T_i) is interacted with a dummy indicating the follow-up round (period 1). The equation incorporates a population time trend (captured by parameter b_2), and a group fixed effect indicated by the parameter b_1 . The DID estimator is provided by parameter b_3 .

In the case of binary outcomes, model specification (2) was estimated using a logit model, though the coefficients on the treatment and interacted dummy respectively cannot be directly interpreted as the marginal treatment effect on probability without the necessary transformation of the probability function. For non-binary variables Ordinary Least Squares (OLS) regressions were used. For the depth and severity of poverty indicators (FGT1 and FGT2), Tobit regressions were used, where the lower limit truncation was set to zero. This reflects the fact that there are variations in wellbeing above the poverty line that will not be captured as the poverty measures are, by definition, truncated at the poverty line.

Conclusions from the quantitative analysis were then summarised in country reports and shared with the qualitative research lead. As each country report was completed, the qualitative research lead asked for additional information and break-downs (such as on disability, where available, categorisation of employment to align qualitative instruments with quantitative data, and availability of information on government transfer payments). In particular, the quantitative and qualitative leads conducted multiple working sessions to review the findings of each study component and identify most likely and alternative hypotheses.

Personnel and positionality

Dr. Sebastian Silva Leander served as the quantitative research lead for the PGIS. He has extensive experience working with national household data sets, including prior experience on OPM’s PPA for TMEA. He is familiar with various critiques of the data sets and has footnoted those where relevant.

2.2.3 Qualitative study component

The causal pathways assumed in the quantitative work were explored in more depth through a set of interviews with key stakeholders, a range of participatory methods, and focus group discussions (FGDs) in selected communities (see Design and Work Plan, Chapter 4). There are two main caveats to the qualitative research. Firstly, disentangling the precise impact of TMEA activities from the impact of wider economic changes will be impossible. Hence, the PGIS focused on providing evidence about

the contribution that TMEA interventions may have made.⁴⁴ Secondly, there is the issue of recall bias, as respondents were asked to reflect on changes over a multi-year period. To minimise recall bias, we carefully corroborated claims made in the FGDs to findings from the quantitative research and chose a period of time to query (from 2016 to the present) that was more likely to garner more realistic results.

Site Selection

Sites for qualitative fieldwork were selected based on the locations of TMEA programming under S1, sites visited for OPM's PPA, and a range of comparison sites. As the team wanted to capture macro impacts in and far from the trade corridor, (at least 50 km away) as well as impacts in specific project sites, the categories of sites selected included the two port cities, four OSBPs border communities, four project sites, and capital cities, which hosted some project activities and also the headquarters for many of TMEA's partner organisations. Given the timing of their opening and the extent of activities, the OSBP border communities selected were Busia, Kenya/Busia, Uganda, Taveta, Kenya/Holili, Tanzania, and Kagitumba, Rwanda/Mirama Hills, Uganda. As an additional opportunity arose to collect information in South Sudan, the team added Nimule, South Sudan/Elegu, Uganda to the list. Project sites were selected in conjunction with TMEA's women and trade partners to ensure that the team captured the range of programming conducted. These sites included Kaviani, Kenya, Kagitumba, Rwanda, Dodoma, Tanzania⁴⁵, and Hoima, Uganda.

To serve as points of comparison in the overall analysis, the team also selected one non-OSBP border site, Rusumo, Rwanda/Rusumo, Tanzania, to gain a better understanding of TMEA's specific contributions at the other border posts, and communities that lie more than 50 kilometres from the trade corridor. These remote communities were selected for convenience based on distance from the corridor and relative logistical ease for the data collection teams. The remote sites included Chuka, Kenya, Ruhengiri, Rwanda, Mpwapwa, Tanzania, and Pallisa, Uganda.

Table 10: Sites for qualitative fieldwork, by type of site, by country

| Countries | Ports | OSBP borders | Non-TMEA OSBP | Project sites | Sites >50km from Trade Corridor | Capital cities * |
|-------------|---------------|----------------------------|---------------|---------------|---------------------------------|------------------|
| Kenya | Mombasa | Busia, Taveta | | Kaviani | Chuka | Nairobi |
| Rwanda | | Kagitumba | Rusumo | Kagitumba | Ruhengiri | Kigali |
| South Sudan | | Nimule | | | | Juba |
| Tanzania | Dar es Salaam | Holili | Rusumo | Dodoma | Mpwapwa | Dar es Salaam |
| Uganda | | Busia, Mirama Hills, Elegu | | Hoima | Pallisa | Kampala |

N.B.: In the case of Tanzania, because many of the partner organisations are located in Dar es Salaam, that was treated as a capital city site, as well as a port site, while Dodoma was treated as a project site.

Data sources

Sources included documents (Annex C, References) and 20 site visits to ports, OSBPs, project sites, capital cities, and towns more than 50 km away from the trade corridors. During the site visits, the data collection teams conducted interviews, walking ethnographies, mapping exercises, focus groups, and stories of change, as shown in Table 11. The scope for this study initially included only Kenya, Rwanda, Tanzania, and Uganda, but OPM was able to conduct additional qualitative data collection in South Sudan within the budget parameters, so those two sites are also included in the table below. More details about each data source follows.

⁴⁴ Mayne, J. 2011. Addressing Cause and Effect in Simple and Complex Settings through Contribution Analysis. In *Evaluating the Complex*, R. Schwartz, K. Forss, and M. Marra (Eds.), Transaction Publishers.

⁴⁵ Given that much of TMEA's activities in Tanzania centred around the port is Dar es Salaam and that the partner organisations were headquartered there, Dar es Salaam was treated as a capital city site and Dodoma was treated as a project site.

Table 11: Qualitative data sources: PGIS respondents by data collection method and type of site

| Sites | Interviews | Direct Effects FGDs | Indirect Effects FGDs | Walking Ethnographies | Mapping Exercise | Total |
|---|------------|---------------------|-----------------------|-----------------------|------------------|------------|
| TMEA OSBPs (4) | 36 | 8 | 12 | 5 | 6 | 67 |
| Non-TMEA border post (1) | 5 | 0 | 2 | 1 | 0 | 8 |
| Port communities (2) | 16 | 0 | 8 | 0 | 6 | 30 |
| Community > 50 km from trade corridor (4) | 20 | 0 | 8 | 0 | 0 | 28 |
| Capital cities (5) | 23 | 9 | 0 | 0 | 0 | 32 |
| Project sites (4) | 8 | 8 | 0 | 0 | 2 | 18 |
| Total (20) | 108 | 25 | 30 | 6 | 14 | 183 |

In addition, some 34 stories of change were collected from among the interviews and direct effects focus group participants (that is, from TMEA direct beneficiaries). These are not included in the table above to avoid double-counting.

Prior to the finalisation of the instruments, the quantitative research lead reviewed the questions to be asked and identified additional areas for probes, and additional questions for the data collection teams in Tanzania, as the preliminary review of quantitative data yielded differing results from the other countries.

To collect the qualitative information for the PGIS, OPM partnered with Research Guide Africa (RGA), which assigned senior researchers in each country to the project. Each researcher had prior experience with trade and economic growth and gender-related research and was assigned to a team of two data collectors. Each team had responsibility for three to four sites. Drawing on their prior experience, the data collectors attended a four-day training on the instruments in Limuru, Kenya. The training included an orientation to TMEA, sessions on research ethics and consent, training on the specific data collection tools, role playing with the tools, pilot testing of the focus group guide, and training on sampling and recruitment for the study.

Each of the data collection instruments used can be found in Annex D, Data Collection Instruments. Further details on each data collection instrument follow.

Interviews

The PGIS team developed interview guides based on the respondents' different roles and trade impacts that any individual might experience or observe. The guides were used with the following groups: traders, truckers, local leaders, owners of displaced businesses, associations representing women in trade, revenue authorities, border officials and border committees, and TMEA programme staff. Our semi-structured, open-ended interview guides were built by the team and based on the HEQ4 evaluation questions. The data collection teams in each country participated in extensive training on each instrument, and in that process, the sequencing of questions and the translation of key concepts was critiqued, revised, and harmonised. Although a formal pilot test was not conducted with each instrument, each team shared any issues or suggestions after their first two interviews with an instrument with all the other data collection teams. No questions were changed, but various data collection teams made suggestions for probes that could be used on the displaced business, trucker, and associations representing women in trade interview guides.

Respondents were sampled purposively by role (TMEA staff, border officials, revenue authorities, women's associations, local leaders) or for convenience through snowball techniques (traders, truckers, displaced businesses). The length of the interviews ranged from 15 minutes to 74 minutes, depending on the role of the individual and how much they opted to share with the data collectors.

Table 12: Interviews by respondent type, by type of site

| Sites | Traders | Truckers | Local Leaders | Displaced Businesses | Women's Associations | Revenue Authorities | Border Officials/ Committees | TMEA Staff | Total |
|---|-----------|-----------|---------------|----------------------|----------------------|---------------------|------------------------------|------------|------------|
| TMEA OSBPs (4) | 10 | 5 | 7 | 0 | 5 | 5 | 4 | 0 | 36 |
| Non-TMEA OSBP (1) | 1 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 5 |
| Port communities (2) | 5 | 4 | 2 | 5 | 0 | 0 | 0 | 0 | 16 |
| Community > 50 km from trade corridor (4) | 8 | 5 | 7 | 0 | 0 | 0 | 0 | 0 | 20 |
| Capital cities (5) | 4 | 0 | 6 | 0 | 10 | 1 | 0 | 2 | 23 |
| Project sites (4) | 3 | 0 | 1 | 0 | 3 | 0 | 0 | 1 | 8 |
| Total (20) | 31 | 15 | 25 | 5 | 18 | 7 | 4 | 3 | 108 |

In addition to the individuals interviewed by the PGIS team directly, the analysis included interviews completed by the Performance Evaluation team with TMEA staff (5); port and revenue officials at the ports (4), and some border and revenue officials at the OSBPs, as questions were similar in many cases, and the team was cognizant that repeated requests from OPM evaluation teams within a few weeks would cause respondent fatigue. This also enabled us to reach some of the same individuals who participated in OPM's PPA in Mombasa and Taveta-Holili. Some local leaders had been in their positions for several years, but staff turnover at the OSBPs meant that the individuals available to participate were not in their positions when OPM's PPA was completed.

It is also useful to understand the relative wealth of the traders and displaced business owners who participated in interviews for the study. Table 13 below shows the distribution of interviewees by relative poverty or wealth. It should be noted that those judgments were relative to the overall level of prosperity in a particular site. In sites where the evaluation design called for indirect focus groups to be conducted with wealthier men and women, the data collection teams were instructed to target poorer traders for their interviews, and conversely, wealthier traders where poorer men and women were included in indirect focus groups.

Table 13: Trader and Displaced Business Interviews by site

| Sites | Poorer Woman | Wealthier Woman | Poorer Man | Wealthier Man | Total |
|-------------------------|--------------|-----------------|------------|---------------|-------|
| Busia, Kenya | 0 | 1 | 2 | 0 | 3 |
| Chuka, Kenya | 1 | 1 | 0 | 0 | 2 |
| Kaviani, Kenya | 0 | 0 | 0 | 0 | 0 |
| Mombasa, Kenya | 1 | 1 | 3 | 2 | 7 |
| Nairobi, Kenya | 0 | 1 | 0 | 1 | 2 |
| Taveta, Kenya | 0 | 1 | 0 | 1 | 2 |
| Kagitumba, Rwanda | 0 | 1 | 1 | 0 | 2 |
| Kigali, Rwanda | 0 | 0 | 0 | 0 | 0 |
| Ruhengiri, Rwanda | 0 | 0 | 0 | 2 | 2 |
| Rusumo, Rwanda | 0 | 0 | 0 | 0 | 0 |
| Dar es Salaam, Tanzania | 4 | 2 | 0 | 0 | 6 |
| Dodoma, Tanzania | 1 | 1 | 0 | 0 | 2 |
| Mpwapwa, Tanzania | 2 | 0 | 0 | 0 | 2 |
| Holili, Tanzania | 1 | 0 | 0 | 0 | 1 |

| Sites | Poorer Woman | Wealthier Woman | Poorer Man | Wealthier Man | Total |
|----------------------|--------------|-----------------|------------|---------------|-----------|
| Busia, Uganda | 1 | 0 | 0 | 0 | 1 |
| Hoima, Uganda | 0 | 0 | 0 | 1 | 1 |
| Kampala, Uganda | 0 | 0 | 0 | 0 | 0 |
| Mirama Hills, Uganda | 1 | 0 | 0 | 0 | 1 |
| Pallisa, Uganda | 0 | 0 | 2 | 0 | 2 |
| Total | 12 | 9 | 8 | 7 | 36 |

Note: All displaced business participants (5) in Mombasa and Dar es Salaam completed Mapping Exercises (see below).

Finally, the evaluation design document called for the team to interview as many traders with disabilities as possible. The team conducted interviews with three individuals with physical impairments, including one walking ethnography, but only one of the individuals considered themselves to have a disability, as the impairments did not prevent them from pursuing their livelihoods. The team was not able to identify individuals with sensory impairments who were engaged in cross-border trade for interviews, although indirect beneficiary focus groups in border towns indicated that there are certainly people with sensory impairments involved in cross-border trade. One team member was able to have an abbreviated conversation at an OSBP with a trader with a disability, and that is included in the discussion below.

Focus group discussions

The team used two focus group protocols, one for direct beneficiaries of TMEA-sponsored women in trade training (direct effects), and one for people who had no contact with the TMEA programme (indirect effects). The guides were very similar, but the direct beneficiary guide had a short section of questions on the utility and impacts of their TMEA-sponsored intervention. The FGD guides asked respondents to talk about prices, income/employment, and government programming, and to talk about changes in each since 2016. Though the evaluation wishes to look at the whole period of Strategy 1, having FGD respondents think back to 2010 or earlier risked capturing an excess of exogenous factors and poor recall. Choosing the 2016 date aligned with election cycles in most countries and gave respondents a concrete reference point from which to reflect on their experiences since then, which coincides with OPM's PPA, providing a consistent basis for our comparisons.

The data collection teams conducted pilot tests of the indirect effects protocol in Limuru, Kenya on February 28, 2019. The guide worked as expected, but the data collection teams identified one concept that required clarification, which was employment, and what qualified as self-employment. As a result, the question and probes were changed to capture formal employment, contracted work, and casual work. The term poor was found to be off-putting, so it was replaced with the phrase economically disadvantaged.

The data collection teams conducted two focus groups with a sample of women who were direct beneficiaries in each of the OSBP sites, the project sites, and the capital cities (the exception being in Juba, where only one FGD was held) for a total of 25 direct beneficiary focus groups. For the capital city focus groups, sampling was random. The PGIS team had lists of beneficiaries, the lists were randomised, and people were contacted until a group had been filled. The focus groups at the project sites and OSBPs were selected for convenience or snowballed, as the data collection teams did not have full beneficiary contact lists for those projects, but rather organised groups with the assistance of the TMEA partners that administered the programme locally.

The composition of the direct beneficiary focus groups reflected the characteristics of the individuals targeted for TMEA interventions. At the OSBP border communities, most of the training targeted small-scale women traders who are relatively poor by national standards and were classified as poorer in the analysis, as were most of the project sites because the women traders targeted were typically not well off by local standards. Although the team made efforts to include women traders with disabilities, the partner organisations' efforts did not specifically target women traders with disabilities

in Strategy 1⁴⁶. In the capital cities, programs targeted export-ready firms (mostly with female ownership, but not exclusively), whose owners are reasonably well off by local standards, and they were thus classified as wealthier for the purposes of analysis. As these are larger firms, however, the owner or principal was not always the training participant, and the focus groups thus reflected the sex of the training participants.

Table 14: Direct FGDs by type of site

| Sites | Poorer Women | Wealthier Women | Mixed - Wealthier Women & Men | Wealthier Men | Total Groups | Total Participants |
|---------------------------|--------------|-----------------|-------------------------------|---------------|--------------|--------------------|
| TMEA OSBPs (4) | 8 | 0 | 0 | 0 | 8 | 49 |
| Project sites (4) | 7 | 1 | 0 | 0 | 8 | 57 |
| Capital cities (5) | 0 | 6 | 1 | 2 | 9 | 56 |
| Total Groups | 15 | 7 | 1 | 2 | 25 | 162 |
| Total Participants | 101 | 43 | 7 | 11 | 162 | 162 |

Note: Numbers in parentheses indicate the total number of participants. All direct FGDs included the Mapping Exercise (see below). The mixed sex group was in Juba and comprised six women and one man.

The 30 indirect focus groups drew respondents from among populations that had no contact with TMEA. These groups were single-sex, and in any given community, at least two were conducted, one male and one female. To try to capture some of the differences on impacts among wealthier and poorer groups, the data collection plan specified whether groups were to include relatively poorer or wealthier respondents by local standards. To identify appropriate respondents, the data collection teams first interviewed local leaders to present research approvals, as required in Rwanda and Tanzania, and to gain an initial perception of local conditions. The team then used a screener and recruited from among people in markets and business associations to fill the groups with individuals meeting the screening requirements.

Table 15: Indirect FGDs by type of site

| Sites | Poorer Women | Poorer Men | Wealthier Women | Wealthier Men | Total FGDs | Total Participants |
|---|--------------|------------|-----------------|---------------|------------|--------------------|
| TMEA OSBPs (3) | 3 (22) | 3 (20) | 3 (21) | 3 (22) | 12 | 85 |
| Non-TMEA border post (1) | 0 | 1 (6) | 1 (6) | 0 | 2 | 12 |
| Port communities (2) | 2 (16) | 2 (16) | 2 (15) | 2 (16) | 8 | 63 |
| Community > 50 km from trade corridor (4) | 2 (12) | 2 (12) | 2 (15) | 2 (14) | 8 | 53 |
| Total FGDs | 7 | 8 | 8 | 7 | 30 | 213 |
| Total Participants | 50 | 54 | 57 | 52 | 213 | 213 |

Walking ethnographies

One innovative data collection method used in the evaluation was the walking ethnography of women traders. Because this was new to some researchers on the team, this was an extensive part of the training. To conduct these ethnographies, data collectors spent about half a day shadowing a trader going through the border. Initial interviews were conducted in advance, and a plan for the day was set prior to conducting the ethnography. Typically, these occurred on market days when large numbers of traders went through the OSBPs. The data collectors used the note function on their mobile phones to jot down their observations throughout the day, rather than carrying more conspicuous notepads or clipboards. Their observations of the physical infrastructure of the OSBPs and the interactions between the traders and the officials provided a means of triangulating the information received from the interviews and focus groups. Although a single observation of each is not representative, it can be informative.

⁴⁶ Interview with TMEA WIT Director, July 31, 2018.

Originally, the team planned to conduct 10 ethnographies, two at each of three OSBPs and the ports. At the time of the data collection, however, Rwanda closed the Kagitumba border to small traders and trucks from Uganda, and the team was unable to conduct those observations as a result. In addition, access to the ports has tightened, and more transactions are done electronically without a physical visit to the port except by the trucker delivering or picking up the freight. As trucking companies generally prohibit drivers from carrying passengers (for liability and other reasons), the team was unable to find a trucker or trader to shadow in the ports. Further, given the extensive number of visits the evaluation team made to the ports, the decision was made to use the existing information available from those visits.

Table 16: Walking Ethnographies by site

| Sites | Poorer Woman | Wealthier Woman | Poorer Man | Total |
|------------------|--------------|-----------------|------------|----------|
| Busia, Kenya | 0 | 1 | 1 | 2 |
| Taveta, Kenya | 0 | 1 | 0 | 1 |
| Rusumo, Rwanda | 1 | 0 | 0 | 1 |
| Holili, Tanzania | 1 | 0 | 0 | 1 |
| Busia, Uganda | 1 | 0 | 0 | 1 |
| Total | 33 | 22 | 1 | 6 |

Note: All walking ethnography participants completed Mapping Exercises. Only two-family group interviews were completed in Taveta and Holili. Traders in Busia and Rusumo came from a distance to the border, and their families were not available to the local research teams.

The team did conduct two additional ethnographies (for a total of six), one at a non-TMEA border post (Rusumo), as a point of comparison, and one with a male trader at Busia to try to identify any gendered differences in perceptions among traders using the OSBP.

Mapping exercise

As part of the direct beneficiary focus groups at the OSBP sites and walking ethnographies, the data collectors asked the respondents to map out their routes and costs associated with their business prior to the TMEA interventions and after them. Although not in the original design, as the team was unable to complete the walking ethnographies at the port sites, the mapping exercise was also done in interviews with displaced businesses at the port sites to provide a sense of some of the spatial and geographical changes that the team hoped to capture through the walking ethnographies.

Using chart paper provided by the moderator or interviewer, the respondents drew a map of their routes from home to market or business location, and they used beans to represent their costs along the way (one bean equalled 100KES, 1,000TZS, 3,000UGX, or 900RWF, depending on the country in which it was being done). The interviewer or moderator took pictures of the before and after routes as part of the reporting on that interview or focus group. The mapping exercise was rapid in some cases, but in others, it engendered a good deal of debate and conversation, so it took anywhere between three minutes and 30 minutes.

Stories of change

Stories of change were drawn from the information initially provided in interviews and focus groups. The interviewer or moderator, upon hearing a particularly insightful analysis on the part of the respondent, followed a sub-protocol to obtain more specific information about conditions prior to TMEA's intervention and after it. These stories are included as examples or text boxes throughout the report.

Data analysis

The qualitative research lead, with inputs from the team leader, local data collection teams, and the OPM coding team, developed a coding framework to mine all relevant data from interview, focus group, and ethnography notes and transcripts for each evaluation question. The team also made use of extensive TMEA data and reports from regional and country levels, along with those data that were

sourced from government, private sector, and civil society partners. The coded segments were then analysed by key stakeholder group, site or characteristic and are summarised in Annex J. Conclusions from the qualitative analysis were then fed into the mixed methods analysis. As noted earlier, the quantitative and qualitative leads conducted multiple working sessions to review the findings of each study component and identify most likely and alternative hypotheses.

Personnel and positionality

Christine Allison served as the qualitative research lead for the PGIS. Ms. Allison has over 20 years of experience with programme evaluation, specifically examining poverty and gender-related programming. She also has experience with programmes across East Africa related to youth, gender, education, vocational training, employment, economic growth, and public health. She is an experienced qualitative and mixed methods researcher, and has led studies in over 20 countries, training local teams to collect data and analysing the results for various donors.

As noted earlier, RGA assigned a team of senior researchers to the PGIS, and their prior experience on trade, economy, poverty, and gender enabled them to quickly understand the content of the study and the approaches that would be most successful in identifying respondents in their sites. At the conclusion of the field work, the qualitative research lead debriefed each data collection team, asking for clarification on any notes that were confusing and for their insights and overarching conclusions for the sites in which they collected data. This debriefing served as a check on assumptions that might be made by an evaluator who is an outsider to the culture and political and economic systems in the region.

2.2.4 Data quality and limitations

Although the team made substantial efforts to ensure that the data collected was valid and reliable, including the use of well-tested data collection and coding methods, a number of limitations are common to studies of this type, and the team worked proactively to mitigate them:

1. The evaluation ToRs required that the PGIS team examine seven evaluation questions for four countries, focusing on concrete impacts of TMEA programming. In the approved evaluation design, however, the quantitative analysis is limited to possible long-chain impacts or impacts that are similar to those to which TMEA *might* have contributed. Further, the design assumes that large sample sizes for all comparison groups provide sufficient basis for comparison, however, it is not clear that some differences (for example, inherent production capacity of different areas) are adequately addressed with this model. A statistical matching approach that allows households to be matched based on a set of criteria would have strengthened the analysis, but it was not possible to do that with the data and resources available. The qualitative data are more closely linked to both long-chain and short-chain impacts, but they are limited in that it was not possible to verify every claim that respondents made. Therefore, any claims that changes are attributable to TMEA must be tempered. In view of this limitation, the PGIS team considered alternative explanations to trade and focused its assessment on contribution rather than attribution, that is that trade was a contributing factor, but not the only factor leading to the changes identified in the data.
2. The household survey data were not designed specifically to support this study. For example, only one country (Uganda) included a question on income from government transfers, which would have been helpful to have across countries. Further, it would have been useful to have a measure of how much of the consumption reported in each household was produced by the household and how much was purchased in the market, as well as information about sources of income for all household members (not just sector of employment for the head of household). In addition, it was not possible to analyse poverty impacts on household headed by a person with a disability or including a person with a disability, as only the KIHBS included any question about disability, and only in the 2015/2016 data set. The quantitative analysis is not comparable to the standards of a difference-in-differences study structured as an RCT since the underlying data was not designed to answer the PGIS evaluation questions. While the qualitative component was designed to fill as many gaps as possible, there may be insufficient quantity and quality of data to reach credible

conclusions on all points. A comprehensive review of the draft report by DFID and TMEA will help to identify these, but it is possible that not all will be resolved.

3. The national quantitative data used for the evaluation may have been captured before most of the OSBPs were opened and fully functioning under the OSBP protocol. In this way, the method may have missed some of the more important changes that might eventually have affected poor and vulnerable households in additional ways. This was unavoidable because of the evaluation team only has access to national studies that have been made public, and later rounds of data collection may or may not have taken place. The qualitative research component mitigates this to some extent, in that its timing should permit capture of more recent developments. However, it does not do so systematically as would quantitative data from the countries.
4. The assumption of common trend – that what has affected the treatment groups will also have affected control groups, and in the same measure – is not verifiable. The team was unable to control for inherent time-invariant differences between sites, such as climate or natural resources, as no comprehensive data set is available that scales economic potential of sites. This, therefore is an inherent limitation of the method and may mask important variations between households that earn from tradable versus non-tradable sectors, or between households on and far from the trade corridor, but it is mitigated in part by sample size.
5. Within the quantitative data there is a challenge that exists across household surveys worldwide: Households headed by men often also include a woman, who may or may not be earning as well. Households headed by women generally do not include a man who is earning, for reasons of cultural practice. Comparing household income, then, by the gender of the head of household, though the best practice yet identified in national and international survey work, is imprecise. There are also far fewer households whose heads are women, and when that sample size is very small, findings often lack statistical significance (meaning it may reflect outliers rather than a real trend or pattern).
6. Most of the qualitative data collection relied on participants' recollections from 2016 forward. In each location, a significant national or local election was referenced to ensure that the time frame would be remembered as accurately as possible. It is still possible, however, that participants' perceptions of changes over time are not fully accurate. The design intended to interview the same informants as in the Preliminary Poverty Assessment, but there were limited opportunities to visit the same individuals, resulting in the use of recollections of 2016 rather than more explicitly comparing responses at the two points in time.
7. The team was unable to identify as many respondents with disabilities as initially hoped, and particularly individuals with sensory disabilities. Therefore, much of the information gathered about impacts on people with disabilities is based on impressions from other respondents and local research teams' observations, which may or may not align with the personal experiences of individuals with disabilities. Additional, focused research on barriers and effective supports for people with a variety of disabilities would be useful to inform future programming.
8. Some limitations reinforce each other, such as the significant scope of the present evaluation (across OPM's PE, TGIS, PGIS, and VfM) and the evaluation fatigue expressed at TMEA. TMEA and partners often had a prepared power point presentation to save time on the multiple requests for repeated evaluation interviews like ours. Interviews were scheduled for 30 minutes, and respondents often had other commitments immediately afterwards, which in some cases meant the PGIS data collection team was not able to complete the questions. While respondents were gracious, the additional demands of such a broad evaluation, with repeated contacts, were burdensome, particularly for TMEA and for some of their most important partners conducting or participating in grassroots-level programming. Survey or evaluation fatigue in such cases has a cost in terms of VfM – lost time on task – and in terms of the quality of responses. OPM's PE, PGIS, and TGIS followed closely after the DFID Annual Review process, and the team learned of two other upcoming evaluations in process during fieldwork. Where possible, teams consolidated interview requests of TMEA staff, TMEA partners, and key government staff to mitigate evaluation fatigue to the extent possible within the teams' ability.

9. Risks of bias are always present, including social desirability bias in which respondents wish to please the interviewers; sponsor bias in which responses are conditioned by interviewees' independent perceptions of donors, donor countries, or of TMEA; and on the part of researchers, confirmation bias, in which prejudgements about research findings cause the team or a team member to overlook contrary or unexpected findings. For the former two possibilities, the experienced team attempted to build rapport to gain genuine and thoughtful responses; in the case of confirmation bias, the team agreed and worked to challenge one another's ideas using the evidence gathered, as well as their sectoral and regional experience.
10. Respondents are reluctant to speak about corrupt practices, though an understanding of these is essential to grasp how transport systems function in the region. The team kept abreast of public developments in these issues at Mombasa Port, key agencies, and government leadership. The issue, however, is mostly underground.
11. Much of the quantitative analysis relies on national household data sets or normalised data available from international donors, such as the World Bank (WB). Ideally, the PGIS team would have had access to trade volume, trade value, and revenue figures for each port and OSBP prior to and after TMEA interventions to determine the extent to which trade and revenues increased as a result. International organisations' data is insufficiently granular, as were public data sources in each country. Despite a request from DFID, government sources were reluctant to provide detailed data to support this analysis. Lacking disaggregated data, available national revenue and budget figures are used as a proxy, but may not reflect any actual increases (or lack thereof) from the border posts and ports, and significantly weaken the team's ability to draw conclusions on key questions. Documents and data are subject to critical team review by the team and data quality commentary is included where relevant.

3 Answering the evaluation questions: Long-chain results (HEQ4, DEQ 4.1, DEQ 4.5)

This chapter presents the PGIS team’s findings with respect to the long-chain results or indirect impacts of TMEA’s activities (based on the evaluation questions for this study, found in Table 7 above, and as postulated by the economic literature on the impacts of trade). The questions represent the interests of DFID and the other TMEA donors with respect to the ways in which TMEA inputs, outputs and outcomes *may* have affected poor households indirectly over the life of Strategy 1. Qualitative and quantitative data are triangulated in this chapter to provide thorough responses to the questions.

3.1.1.1 HEQ4: What is the likely impact of TMEA on poverty and gender, and what factors are critical in order to ensure the sustainability of positive (long-chain) impacts

OPM’s Trade and Growth Impact Study⁴⁷, estimated total welfare gains from trade in the EAC region to be US\$582 million, which the household survey data indicates is correlated with reductions in poverty (as measured by consumption) in the trade corridors in Kenya, Rwanda, and Uganda through positive changes in household income. Wages were most frequently the critical component of increasing incomes, but in some cases, incomes from non-agricultural sales were more important. It does appear, however, that being located in the trade corridor generally improves opportunities for income generation.

Exposure to trade through employment in the tradable sector also resulted in reductions in poverty in Kenya, and in Rwanda and Uganda when agriculture is excluded (though the remainder represent small proportions of households – less than five percent in each case). The benefits of being in the tradable sector did not hold for agriculture in Rwanda, Uganda, or Tanzania.

Sex-disaggregated data show that exposure to trade had highly variable indirect or long-chain results on female-headed households. In Kenya, female-headed households that were exposed to trade had greater reduction in the incidence of poverty⁴⁸ than did male-headed households also exposed to trade, but the reverse was true in households in Tanzania and Uganda: male-headed households exposed to trade had greater reduction in the incidence of poverty than did female-headed households also exposed to trade. In Rwanda, all households and female-headed households in the trade corridor benefitted similarly. Given the range of outcomes, exposure to trade alone does not appear to be sufficient to reduce poverty among female-headed households, who tend to be poorer and universally had higher incidence of poverty at both time points. Patterns of employment and income (through any number of means) seem to be critical as well.

Trade time and costs both decreased significantly, yielding benefits to both poorer and wealthier consumers in the form of more reliable supplies of goods (if not lower prices). Based on the increases in prices, and particularly food prices that typically disproportionately burden poorer households (Green et al., 2013), and the qualitative data, poorer indirect beneficiaries do not seem to have benefitted as much from trade as wealthier indirect beneficiaries. It would be useful to follow up this finding with additional research on the distributional impacts of trade, specifically by sector.

Very little has been done to mitigate the negative impacts of TMEA’s interventions. Among poorer populations, particularly in the agriculture sector and in areas far from the trade corridors, no support has been provided, and households rely on informal networks of reciprocity or government transfers. Among truckers and displaced workers in border or port communities, few supports are in place. While some compensation was provided to business owners whose premises were demolished to expand the ports, it appears that most found it to be insufficient to start up their businesses again elsewhere.

⁴⁷ OPM: Paul R Baker, David Vanzetti, Mohammad Razzaque, Neetish Hurry, and Jaime de Melo. Deliverable 5B: Trade and Growth Impact Study. (forthcoming)

⁴⁸ It is in this component of the analysis that the Foster-Greer-Thorbecke (FGT) poverty measure indices are used: **incidence** of poverty, also known as the headcount ratio; **depth** of poverty; and **severity** of poverty. This is explained in greater detail in the Methods section above.

3.1.1.2 Short-chain impacts

Overall, TMEA's Women and Trade (WAT) interventions appear to have yielded considerable benefits for many of the participants. These included increased cross-border trade, increased income, improved ability to save money, greater self-confidence and self-reliance, and the ability to take on new roles in the community as a result. The spread effects of these positive impacts typically included improved access to food, education or higher quality education, and health services for their families and installation of electricity in their homes and/or businesses. Not all beneficiaries shared these good experiences, however. Those whose businesses did not flourish reported reductions in income and savings, decreased household consumption, and taking children out of school. In many cases, men felt left behind by the programmes offered to women and believed that opening some programming to anyone in the community would be beneficial.

Respondents indicated that the improvements in their earnings resulted in changes in relations between men and women. Within the household, women's positions seemed to improve overall, as they had greater influence over household expenditures. But some respondents, particularly poorer men, noted that these changes strained marriages, as women were outside of the home more and likely expected to have greater voice in household decisions. A few poorer female respondents noted that when their businesses were unsuccessful, i.e. their earnings did not increase, conflict arose within the household with detrimental impacts on them.

3.1.1.3 Sustainability

To ensure that the positive impacts of TMEA's investments continue, sustainability planning should occur along multiple axes. As there is a significant lack of understanding, even in border communities, about the reciprocal freedom of individuals to conduct cross-border trade, mechanisms should be set in place to provide a steady flow of information to the public related to trade regulations and opportunities is made available in border communities in particular but also more broadly, and further ensure that the messaging is targeted to a variety of audiences.

Another key area that was identified as a challenge by respondents was that turnover at OSBPs reduced the efficiency of the system, as women cross-border traders found their time (and costs) once again increased with new personnel who did not fully understand how systems were intended to work. The institutionalisation of practices through effective training and orientation for OSBP personnel and border committees would assist with maintaining the benefits cited by respondents of the OSBP system.

Along with institutionalisation of capacity within the OSBPs and public information flows, improved organisational capacity among women's cooperatives and others who support women entrepreneurs and traders to provide more intensive support to business people interested in trade (again, at multiple levels targeted different beneficiary groups) will be important to increase confidence and capacity to engage in trade – particularly for poorer or more vulnerable individuals, as noted in the OPM Performance Evaluation (2019).⁴⁹ Similarly, sustaining impacts for women could be improved by focusing export capability projects in tradable sectors in which women are heavily concentrated. This might be one approach to narrowing the focus of those projects, as recommended in the OPM Performance Evaluation (2019).⁵⁰

In addition, sustained participatory processes that enable women traders and other key stakeholders to have a voice in the border committees are vital. Many respondents pointed to important changes that were made in OSBP operations based on the input of women traders or women in trade associations.

Finally, and perhaps most critically, it is necessary to ensure the continued reliability of the system and public confidence in the effectiveness of the system. When queried whether or not they thought changes were permanent, most respondents believed that the new systems in place would remain in

⁴⁹ OPM: Culver et al. Deliverable 3B: Performance Evaluation, Draft Report. September, 2019

⁵⁰ OPM: Culver et al. Deliverable 3B: Performance Evaluation, Draft Report. September, 2019

place, but that requires sustained effort and political will that has to be cultivated, typically through demonstrations of the widespread benefits of the system to people across communities and at all levels of society.

DEQ4.1 What is the nature – and, where possible, scale – of the likely impact of the overall programme and of key TMEA projects in the portfolio on the poor—direct and indirect? Who is affected by potential short- or long-term impacts, both positive and negative, how, and how is the causality working? AND

DEQ4.5 To what extent has the programme benefited women and girls (noting that the programme design did not purport to benefit them equally)? Have there been any negative consequences for women and girls? Has the programme had an impact on relations, including power and influence, between girls/women and boys/men? How could the programme increase benefits to women and girls within its trade focus?

OPM's Trade and Growth Impact Study⁵¹, concluded that 'total welfare gains, including ports and corridors interventions, are estimated at USD 582 million, with the gains attributable to TMEA amounting to USD 16.8 million' (p. 58). It therefore is likely that some groups benefitted from trade, and others may have suffered a loss of well-being. As noted above, although the data do not align directly with the increases in trade, it is useful to examine the distributional impacts of those changes as best possible with the available data, with the caveat that other factors may also be contributing to changes. To do so, the first step is to examine changes in poverty among those exposed to trade (either by location of their homes or by the sector in which they are employed). (For specific country poverty profiles, see Annexes F, G, H, and I.)

Although TMEA's design did not purport to benefit men and women equally, it is also critical to understand the gendered impacts of changes in well-being (resulting at least partially from trade). First, the team examined the poverty outcomes (discussed in DEQ4.1) by sex, looking at male and female-headed households. The team also attempted to analyse the poverty outcomes by disability status, but the household surveys used did not contain questions about disability with one exception (the 2015/16 KIHBS). Beyond the poverty impacts, the Women and Trade projects did focus on specific benefits to women, and prior reviews of these projects indicated that outputs were achieved (if later than scheduled). The PGIS team followed up with several the beneficiaries in interviews and focus groups, and the gender-based impacts are reported in this section.

Changes in poverty and consumption by country

The key question is the extent to which increased trade in the region contributed to any changes in poverty, as measured by household consumption. In this section, the PGIS team presents the analysis of household survey data by the head of household's sector of employment by distance to the trade corridor for the incidence, depth, and severity of poverty, as well as for per capita consumption. First, the team examined the overall poverty outcomes (DEQ4.1) and then specifically at female-headed households' poverty outcomes (DEQ4.5). The team also attempted to analyse the poverty outcomes by disability status, but the household surveys used did not contain questions about disability with one exception (the 2015/16 KIHBS).

Kenya

In Kenya, the data strongly indicates that poverty and consumption improved more rapidly among the groups exposed to trade (in the trade corridor or working in tradable sectors), than among the groups that were not exposed to trade (far from the trade corridor or working in non-tradable sectors). Poverty incidence decreased by 15 percentage points between 2005/06 and 2015/16 in the trade corridor, from 50.4% to 35.4%, but decreased much less – from 51.0% to 47.3% in areas located far away from the trade corridor (see detailed results in Annex I). Similar, but less pronounced, trends are observed for depth of poverty (decreased from 13.3% to 7.6% in the trade corridor compared to a decrease from 15.5% to 12.6% far from the trade corridor) and severity of poverty (decreased from 6.2% to 3.0% in

⁵¹ OPM: Paul R Baker, David Vanzetti, Mohammad Razzaque, Neetish Hurry, and Jaime de Melo. Deliverable 5B: Trade and Growth Impact Study. (forthcoming)

the trade corridor, compared to a decrease of 8.4% to 6.3% far from the trade corridor). All results show a statistically significant treatment effect, meaning that poverty decreased more along the trade corridor than far away from the corridor.

Further, incidence of poverty decreased by almost 10 percentage points amongst households employed in the non-agricultural tradable sector from 38.2% to 28.2%, while it increased slightly in the non-tradable sector, from 29.8% to 32.7%. When agriculture was included in the tradable sector, poverty incidence is much higher, but still decreased, from 50.6% to 44.9%. In 2005/06, poverty was significantly higher in the tradable than in the non-tradable sector. But by 2015/16, the positions had been reversed for the non-agricultural tradable sector, and poverty was higher in the non-tradable sector (though not when agriculture was included). The results for depth and severity of poverty show similar trends and reversals of poverty rankings between non-agricultural tradable (decrease in depth of poverty from 9.3% to 6.2% and in severity from 4.3% to 2.6 %) and non-tradable sectors (decrease in depth of poverty from 7.4% to 6.9% and in severity from 3.5% to 2.8%). All results show that the treatment effect of being in a tradable sector is statistically significant, meaning that employment in a tradable sector is correlated with lower poverty.

Table 17: Treatment effect of exposure to trade on poverty of all households in Kenya (2005/06-2015/16)⁵²

| | Trade corridor | | Tradable sector | |
|-------------------------------|---|---|---|---|
| | Excluding Nairobi/ Adjacent to Trade Corridor | Including Nairobi/ Adjacent to Trade Corridor | Excluding Agriculture/ Mixed sector | Including Agriculture/ Mixed sector |
| Poverty incidence | -0.470*** | -0.244** | -0.590*** | -0.140 |
| Depth of poverty | -0.082*** | -0.043** | -0.100*** | -0.019 |
| Severity of poverty | -0.046*** | -0.022* | -0.049*** | -0.009 |
| Consumption per capita | 0.159*** | 0.058 | 0.240*** | 0.149*** |

Source: Authors' calculations based on KIHBS 2005/06 and 2015/16

While the treatment effect on poverty incidence of being exposed to trade was positive for everyone, female-headed households' poverty incidence decreased more than did male-headed households' poverty incidence (treatment effect of being in the trade corridor: -0.55 for female-headed households vs. -0.47 for all households; treatment effect of working in the tradable sector: -0.79 vs -0.59). Poverty incidence for female-headed households in the trade corridor decreased from 54.7% to 38.7%, while for those far from the trade corridor, it only decreased from 54.5% to 52.0%. Similar decreases occurred in depth of poverty (from 14.2% to 8% in the trade corridor and from 18.8% to 15.4% far from the trade corridor) and severity of poverty (from 6.4% to 3.5% in the trade corridor and from 11.2% to 8.3% far from the trade corridor). Among female-headed households in the non-agricultural tradable sector, poverty incidence also decreased from 49.6% to 36.7%, while it increased among female-headed households in the non-tradable sector from 29.3% to 35.0%. When agriculture is included, however, the positive result disappears. Depth and severity of poverty decreased for both groups, and the differences were not statistically significant. Table 18 shows the treatment effect on the incidence, depth, and severity of poverty.

The overall sample is available at Table 9; for analyses in this section on female- and male-headed households the sample size for the former (FHHs or female-headed households) in Kenya is as follows:

⁵² In Tables 16-24, * denotes statistical significance at .10, ** denotes statistical significance at .05, and *** denotes statistical significance at .01, representing progressively less likelihood that a result occurred by chance alone. Note that treatment effect refers to the additional drop in poverty experienced by households exposed to trade (treatment group in this case), compared to households not exposed to trade (control group). A negative treatment effect indicates that poverty fell faster in the treatment group than in the control group. For consumption, a negative treatment effect would indicate that consumption rose more slowly in the treatment group than in the control group.

Table 18: Percent and number of FHHs in Kenya, by key variables

| Country | Baseline | | Most Recent Data | |
|--|----------|-------|------------------|-------|
| | % | # | % | # |
| FHHs (Nairobi only) | 17.1 | 2,158 | 20.3 | 4,420 |
| FHHs on the corridor <i>excluding</i> Nairobi | 25.5 | 3,217 | 29.6 | 6,445 |
| FHHs in tradable sector <i>including</i> agriculture | 28.8 | 3,634 | 38 | 8,274 |
| FHHs in tradable sector <i>excluding</i> agriculture | 22.9 | 2,889 | 27.7 | 6,031 |

Table 19: Treatment effect of exposure to trade on poverty of FHHs in Kenya

| | Trade corridor | | Tradable sector | |
|------------------------|---|---|---|---|
| | Excluding Nairobi/ Adjacent to Trade Corridor | Including Nairobi/ Adjacent to Trade Corridor | Excluding Agriculture/ Mixed sector | Including Agriculture/ Mixed sector |
| Poverty incidence | -0.550*** | -0.382** | -0.790** | 0.065 |
| Depth of poverty | -0.079** | -0.054* | -0.091 | 0.052 |
| Severity of poverty | -0.039* | -0.022 | -0.034 | 0.040 |
| Consumption per capita | 0.138** | 0.066 | 0.292** | -0.007 |

Source: Authors' calculations based on KIHBS 2005/06 and 2015/1616

As noted above, questions on disability were only included in the 2015 KIHBS, but it is useful to at least benchmark the incidence, depth, and severity of poverty of persons with disabilities. The survey included two questions that are useful for understanding how poverty and disability are related: the presence of a person with a disability in the household and whether that disability prevents the household member from working. Table 20 shows the differences between households that responded positively and negatively to those questions. As might be expected, households in which at least one member has a disability have a greater incidence of poverty, but also greater depth and severity of poverty. Those households reporting that the disability prevents the household member from working have higher rates for all three as well. In the future, it would be useful to track the exposure to trade among persons with disabilities and its impact on them as a distinct sub-group to ensure they are not excluded from the benefits of trade.

Table 20: Poverty incidence, depth, and severity and disability in Kenya (2015/16)

| | Presence of disability in household | | Inability to work due to disability | |
|---------------------|--|--|---|--|
| | No Household Members with Disabilities | At Least One Household Member with Disability | No Household Members Unable to Work Due to Disability | At Least One Household Member Unable to Work Due to Disability |
| Poverty incidence | 0.359801 | 0.416276 | 0.359888 | 0.457276 |
| Depth of poverty | 0.08065 | 0.113359 | 0.080733 | 0.134964 |
| Severity of poverty | 0.034576 | 0.052907 | 0.034613 | 0.065671 |

Source: Authors' calculations based on KIHBS 2015

Rwanda

The EICV data strongly indicates that between 2010/11 (EICV 3) and 2016/17 (EICV 5) in Rwanda, poverty and consumption improved more rapidly in the trade corridor, where it decreased from 46.6% to 38.4%, than far from the corridor, where it increased from 47.1% to 48.0% (see Annex F). Depth and severity of poverty decreased in the trade corridor (from 14.2% to 10.4% and from 6.6% to 4.3%, respectively), while it remained unchanged far from the trade corridor (from 14.0% to 13.9% and at 6.2% for both time points, respectively).

Poverty incidence also decreased slightly among households in the tradable sector (from 38.5% to 35.2% for non-agricultural and from 48.0% to 44.7% including agriculture) from EICV 3 to EICV 5.

However, poverty incidence was nearly double that of poverty among households in the non-tradable sector, which remained approximately the same at 2010/11-2016/17. Depth and severity of poverty dropped faster in the non-agricultural tradable sector as well (from 12.5% to 8.1% and 6.3% to 3.2%, respectively) than in the non-tradable sector (from 5.9% to 5.2% and from 2.6% to 2.1%, respectively). Finally, the results for per adult consumption show a strong and statistically significant (at 5%) convergence between the average consumption in the tradable and non-tradable sectors. As poverty incidence is still significantly higher in the tradable sector, this suggests that high incomes in the tradable sector have increased faster than average and lower incomes. This means that poorer people in the tradable sector remained poorer, while at the same time wealthier households are consuming significantly more to drive that convergence.

The overall sample is available at Table 9; for analyses in this section on female- and male-headed households the sample size for the former (FHHs or female-headed households) in Rwanda is as follows:

Table 21: Percent and number of FHHs in Rwanda, by key variables

| Country | Baseline | | Most Recent Data | |
|--|----------|-------|------------------|-------|
| | % | # | % | # |
| FHHs (Kigali only) | 21.9 | 3,024 | 18 | 2,624 |
| FHHs on the corridor <i>excluding</i> Kigali | 23 | 3,176 | 20.6 | 3,003 |
| FHHs in tradable sector <i>including</i> agriculture | 25.8 | 3,562 | 24 | 3,499 |
| FHHs in tradable sector <i>excluding</i> agriculture | 11.2 | 1,547 | 6.2 | 904 |

Table 22: Treatment effect of exposure to trade on poverty of all households in Rwanda (2010/11-2016/17)

| | Trade corridor | | Tradable sector | |
|------------------------|--|--|---|---|
| | Excluding Kigali/ Adjacent to Trade Corridor | Including Kigali/ Adjacent to Trade Corridor | Excluding Agriculture/ Mixed sector | Including Agriculture/ Mixed sector |
| Poverty incidence | -0.369*** | -0.457*** | -0.123 | -0.199 |
| Depth of poverty | -0.083*** | -0.107*** | -0.062 | -0.039 |
| Severity of poverty | -0.050*** | -0.061*** | -0.042 | -0.020 |
| Consumption per capita | 0.136*** | 0.200*** | 0.255** | 0.167 |

Source: Authors' calculations based on EICV 3/5

The evidence presented in Table 23 below indicates that poverty incidence, depth, and severity among female-headed households in Rwanda decreased with exposure to trade (in many cases statistically significantly as shown by the asterisks). Women employed in the tradable non-agricultural sector benefited more from trade liberalisation than their male counterparts. The treatment effects for female-headed households are much larger and statistically significant at the 5% level for all indicators. This reflects the fact that poverty dropped by 25 percentage points (from 50.0% to 25.3%) amongst women employed in the tradable sector, compared to 3 percentage points (from 38.5% to 35.2%), overall, and depth and severity of poverty decreased from 19.4% to 5.7% and from 10.2% to 2.7%, respectively. Female-headed households employed in the non-tradable sector experienced an increase in poverty incidence from 8.6% to 11.9% over the same period, and their depth and severity of poverty increased (from 1.9% to 3.4% and from 0.7% to 1.4%, respectively), but all three measures were still considerably below those for female-headed households in the tradable sector.

However, when looking at trade exposure by location (trade corridors), there is no major difference between male and female headed households in terms of the treatment effect. Poverty fell by 10 percentage points amongst female-headed households in the trade corridor from 49.2% to 39.7%, compared to 8 percentage points for the whole population, resulting in similar treatment effects of -0.369 for all households and -0.308 for female-headed households – though these effects were

statistically significant in both cases. Also, when agriculture is included in the tradable sector, the difference between treatment effects for male- and female-headed households all but disappears. This suggests that the gender-positive effect of trade is limited to women employed in manufacturing and mining (see Annex F for more details). Those female-headed households far from the trade corridor did not experience similar improvements in poverty incidence, as it only decreased 2 percentage points from 50.4% to 48.5%, and depth and severity of poverty showed only small improvements (from 15.8% to 15.0% and from 7.2% to 6.9%, respectively).

Table 23: Treatment effect of exposure to trade on poverty of FHHs in Rwanda

| | Trade-corridor | | Tradable sector | |
|------------------------|--|--|---|---|
| | Excluding Kigali/ Adjacent to Trade Corridor | Including Kigali/ Adjacent to Trade Corridor | Excluding Agriculture/ Mixed sector | Including Agriculture/ Mixed sector |
| Poverty incidence | -0.308** | -0.378*** | -1.449* | -0.206 |
| Depth of poverty | -0.073** | -0.092*** | -0.439** | -0.055 |
| Severity of poverty | -0.042** | -0.051*** | -0.234** | -0.028 |
| Consumption per capita | 0.091 | 0.145*** | 0.556** | 0.138 |

Source: Authors' calculations based on EICV 3/5

Tanzania

In Tanzania, overall poverty decreased slightly in areas far from the trade corridor (from 29.5% to 28.8%) and increased in the trade corridor (from 26.2% to 31.5%). A similar pattern is observed for depth of poverty (increased in trade corridor from 6.2% to 6.5% while decreasing far from the trade corridor from 6.8% to 6.2%), while severity of poverty decreased somewhat for both (from 2.9% to 2.4% far from the trade corridor and from 2.8% to 2.6% in the trade corridor). The latter two are statistically significant; see Annex H for details. The TNPS data does not provide any indication of positive treatment effects resulting from exposure to trade in areas close to the trade corridor. In fact, poverty appears to have increased slightly along the trade corridor over the study period.

When agriculture is excluded from the sectoral analysis, the results show that the incidence of poverty decreased by more than 15 percentage points amongst households employed in the tradable sector, from 26.4% to 11.1% and by 10 percentage points in the non-tradable sector from 22.1% to 11.6%. Depth of poverty decreased from 6.3% to 2.9% in the tradable sector (excluding agriculture) and from 5.3% to 2.4% in the non-tradable sector, while severity of poverty decreased from 3.4% to 1.3% in the tradable sector and from 2.6% to 0.9% in the non-tradable sector (although the differences between the tradable and non-tradable sectors are not statistically significant). When agriculture is included in the tradable sector, however, the positive treatment effect is reversed, showing increases in incidence (from 31.4% to 34.1%), depth, and severity of poverty, and it becomes strongly statistically significant. This suggests that the people employed in the agricultural sector did not benefit from trade liberalisation or that other factors dominated in that sector (see Annex H), and economically disadvantaged people who engaged in subsistence agriculture may have been negatively impacted.

Table 24: Treatment effect of exposure to trade on poverty of all households in Tanzania (2009/10-2014/15)

| | Trade corridor | | Tradable sector | |
|------------------------|------------------------------|------------------------------|------------------------------------|------------------------------------|
| | Excl. Dar/ Adjacent to TC | Incl. Dar/ Adjacent to TC | Excl. Agriculture/ Mixed sector | Incl. Agriculture/ Mixed sector |
| Poverty incidence | 0.29 | 0.03 | -0.28 | 0.85*** |
| Depth of poverty | 0.05** | -0.01 | -0.04 | 0.16*** |
| Severity of poverty | 0.02** | -0.01 | -0.03 | 0.09*** |
| Consumption per capita | 0.01*** | 0.20*** | -0.01 | -0.51*** |

Source: Authors' calculations based on TNPS 2010/2015

The overall sample is available at Table 9; for analyses in this section on female- and male-headed households the sample size for the former (FHHs or female-headed households) in Tanzania is as follows:

Table 25: Percent and number of FHHs in Tanzania, by key variables

| Country | Baseline | | Most Recent Data | |
|--|----------|-----|------------------|-----|
| | % | # | % | # |
| FHHs (Dar es Salaam only) | 21.4 | 840 | 26.2 | 878 |
| FHHs on the corridor <i>excluding</i> Dar es Salaam | 22.3 | 875 | 20.1 | 674 |
| FHHs in tradable sector <i>including</i> agriculture | 19.8 | 777 | 25.3 | 848 |
| FHHs in tradable sector <i>excluding</i> agriculture | 20.1 | 789 | 14.2 | 476 |

Overall in Tanzania, female-headed households that were exposed to trade experienced an increase in the incidence, depth, and severity of poverty. Within the trade corridor, incidence increased from 25.0% to 42.4% while depth increased from 5.8% to 8.0% and severity increased from 2.6% to 3.0% compared to decreases in incidence from 36.9% to 30.8%, in depth from 9.4% to 6.2%, and severity from 4.4% to 2.2% far from the trade corridor. A similar increase occurred in the tradable sector, with incidence of poverty increasing from 21.1% to 39.8%, depth of poverty increasing from 3.9% to 12.3%, and severity of poverty increasing from 1.5% to 5.5%. In comparison, all three measures decreased for female-headed households in the non-tradable sector, with incidence dropping from 30.5% to 9.2%, depth falling from 7.4% to 1.5%, and severity moving from 3.4% to 0.5%. It is not clear to what extent employment and sources of income shifted, if at all, for female-headed households in this period and if those shifts could account for some of the change. This could reflect a concentration of female-headed households employed in agriculture and subsistence agriculture, given the negative results overall for agriculture. As female-headed households tend to represent some of the most vulnerable or poorest households, it appears that during this period in Tanzania, the distribution of benefits of trade was not pro-poor.

Table 26: Treatment effect of exposure to trade on poverty of FHHs in Tanzania

| | Trade corridor | | Tradable sector | |
|------------------------|---|---|-------------------------------------|-------------------------------------|
| | Excluding Dar es Salaam/ Adjacent to Trade Corridor | Including Dar es Salaam/ Adjacent to Trade Corridor | Excluding Agriculture/ Mixed sector | Including Agriculture/ Mixed sector |
| Poverty incidence | 1.06*** | 0.55* | 2.37** | 1.63*** |
| Depth of poverty | 0.18*** | 0.09 | 0.54** | 0.28*** |
| Severity of poverty | 0.10*** | 0.05 | 0.32** | 0.16*** |
| Consumption per capita | -0.10 | 0.14 | -0.58 | -0.72*** |

Source: Authors' calculations based on TNPS 2010/2015

Uganda

Similar to the results in Kenya and Rwanda, the UNPS data strongly indicates that between 2011/12 and 2015/16, poverty and consumption improved more rapidly in Uganda amongst the groups exposed to trade (in the trade corridor or working in tradable sectors), than amongst the groups that were not exposed to trade (far from the trade corridor or working in non-tradable sectors, see Annex G). Changes to depth and severity of poverty were statistically significant both in the corridor and in the tradable sector, while changes to consumption were only statistically significant in the trade corridor.

Poverty incidence decreased by almost 7 percentage points between 2011/12 and 2015/16 in the trade corridor from 39.7% to 33.0%, but less than 1 percentage point in areas located far away from the trade corridor (from 47.4% to 46.6%). The decreases are even more marked for depth of poverty (from 14.1% to 8.6% in the corridor, compared to a decrease from 15.7% to 14.1% far from the corridor) and severity of poverty (from 7.2% to 4.3% in the corridor while it remained constant at 7.4%

far from the corridor), indicating that living conditions improved most for the worst-off households. The treatment effect for depth and severity of poverty is statistically significant at the 5% level, meaning that poverty decreased more along the trade corridor than far away from the corridor. The data also shows that per capita consumption has increased in the trade corridor, while it decreased far away from the trade corridor. The effect is statistically significant at the 1% level.

The results show that the incidence of poverty decreased by almost 15 percentage points amongst households employed in the tradable sector when agriculture is excluded (from 47.6% to 32.9%), while it only decreased by 2 percentage points in the non-tradable sector (from 34.3% to 31.9%). In 2011/12, poverty was significantly higher in the non-agriculture tradable than in the non-tradable sector. But by 2015/16, the two poverty rates were almost identical. The results for depth and severity of poverty are even stronger, with decreases in depth from 15.7% to 8.0% and severity from 7.8% to 3.4% in the non-agricultural tradable sector. As with incidence, the final rates for depth of poverty (decreased from 10.4% to 8.1% in the non-tradable sector) and severity of poverty (decreased from 4.9% to 3.5% in the non-tradable sector) were almost identical between the non-agricultural tradable and non-tradable sectors. When agriculture is included in the tradable sector, however, poverty incidence in the tradable sector only decreased from 48.0% to 45.9%, largely erasing the positive treatment effect, which suggests that the people employed in the agricultural sector did not benefit from trade liberalisation or that other factors dominated in that sector (see Annex G), and economically disadvantaged people who engaged in subsistence agriculture may have been negatively impacted.

Table 27: Treatment effect of exposure to trade on poverty of all households in Uganda (2011/12-2015/16)

| | Trade-corridor | | Tradable sector | |
|------------------------|---|---|---|---|
| | Excluding Kampala/ Adjacent to Trade Corridor | Including Kampala/ Adjacent to Trade Corridor | Excluding Agriculture/ Mixed sector | Including Agriculture/ Mixed sector |
| Poverty incidence | -0.210 | -0.123 | -0.505 | 0.084 |
| Depth of poverty | -0.083* | -0.057 | -0.129* | 0.007 |
| Severity of poverty | -0.061** | -0.042 | -0.076* | 0.006 |
| Consumption per capita | 0.252*** | 0.147 | 0.082 | -0.104* |

Source: Authors' calculations based on UNPS 2011/12/201516

The overall sample is available at Table 9; for analyses in this section on female- and male-headed households the sample size for the former (FHHs or female-headed households) in Uganda is as follows:

Table 28: Percent and number of FHHs in Uganda, by key variables

| Country | Baseline | | Most Recent Data | |
|--|----------|-----|------------------|-----|
| | % | # | % | # |
| FHHs (Dar es Salaam only) | 21.4 | 840 | 26.2 | 878 |
| FHHs on the corridor <i>excluding</i> Dar es Salaam | 22.3 | 875 | 20.1 | 674 |
| FHHs in tradable sector <i>including</i> agriculture | 19.8 | 777 | 25.3 | 848 |
| FHHs in tradable sector <i>excluding</i> agriculture | 20.1 | 789 | 14.2 | 476 |

In Uganda, female-headed households did not benefit as much from trade as male-headed households in the trade corridor. Although depth and severity of poverty decreased (from 14.5% to 9.5% and from 7.5% to 4.2%, respectively), incidence increased slightly from 37.4% to 29.1%. The treatment effects were generally smaller in absolute terms for female-headed households than for male-headed households, and they were statistically insignificant in all cases, meaning that it is not possible to say with certainty whether poverty improved more among female-headed households exposed to trade, than among those not exposed.

In the case of female-headed households employed in the tradable sector, we find a sizable 18 percentage point drop in poverty from 60.2% to 42.6%, compared to 1 percentage point in the non-tradable sector from 31.3% to 30.1% (see Annex G for more details). This is nominally higher than the overall drop in poverty for households working in the tradeable sector (15 percentage points), however, due to the limited sample size, the results are not statistically significant. Female-headed households employed in the tradable sector also experienced decreases in depth and severity of poverty (from 17.1% to 9.6% and from 7.8% to 3.6%, respectively), as did female-headed households in the non-tradable sector (from 11.9% to 6.1% and from 6.4% to 1.9%, respectively).

Table 29: Treatment effect of exposure to trade on poverty of FHHs in Uganda (2011/12-2015/16)

| | Trade corridor | | Tradable sector | |
|------------------------|---|---|---|---|
| | Excluding Kampala/ Adjacent to Trade Corridor | Including Kampala/ Adjacent to Trade Corridor | Excluding Agriculture/ Mixed sector | Including Agriculture/ Mixed sector |
| Poverty incidence | 0.241 | 0.325 | -0.657 | 0.149 |
| Depth of poverty | -0.012 | 0.009 | -0.064 | 0.017 |
| Severity of poverty | -0.026 | -0.009 | -0.023 | 0.023 |
| Consumption per capita | 0.242 | 0.138 | 0.110 | -0.221 |

Source: Authors' calculations based on UNPS 2011/12 – 2015/16

Conclusion on Changes in Poverty

Kenya, Rwanda, and Uganda experienced decreases in poverty incidence, depth, and severity in trade corridors that exceeded decreases in poverty in areas far from the trade corridors. As location itself is a differentiating factor in economic potential (as confirmed by the fact that results in capital cities were generally better than results along the rest of the trade corridor), the impact of location cannot be disentangled from other variables related to economic potential of certain areas over others.

Exposure to the tradable sector through employment contributed to poverty reduction for both male- and female-headed households in Kenya, and also in Rwanda and Uganda when agriculture was excluded, which the PGIS team believes is attributable largely to trade. When agriculture was included however, positive results were negated, especially in Tanzania, thus agriculture was a key sector in which the benefits of trade liberalisation did not accrue to households. This is a critical finding, as 57.5 percent of the Kenyan workforce, 66.4 percent of the Tanzanian workforce, 70.8 percent of the Ugandan workforce, and 66.6 percent of the Rwandan workforce are employed in agriculture⁵³ as of 2018. The team feels that trade likely contributes to this outcome as well, but this finding requires more study to understand the value chains and competitive landscape for the various agricultural commodities produced in the region. It is important to note that the analysis by sector of employment of head of household is somewhat problematic because it is entirely possible that within a household, one member is employed in the tradable sector while another works in the non-tradable sector, or the head of household may work in multiple sectors. It is not even clear that the majority of the household's income is derived from the sector in which the head of household is recorded as being employed. However, the results of poverty remaining concentrated in the agriculture sector (and likely in the raw production segments of the value chain where the poorest workers tend to be concentrated) deserve significant attention.

The differentiated impacts of trade on male- and female-headed households may reflect the concentration of male and female employment in various sectors. In Tanzania, female-headed households exposed to trade became poorer, and in Uganda the effects were uncertain. In Rwanda, female-headed households in the tradable sector experienced greater poverty reduction than male-headed households, except in the trade corridor where this gender difference was not seen. In Kenya,

⁵³ ILO. (2018). ILOSTAT Database,

https://www.ilo.org/ilostat/faces/oracle/webcenter/portalapp/pagehierarchy/Page33.jspx;ILOSTATCOOKIE=pHuLTGLIMRYQHGCINrdfMkv--LWV0czJnL_LP2InyMmimiywf7dW_!-612270756?locale=EN&MBI_ID=33&_afzLoop=2416597027530471&_afzWindowMode=0&_afzWindowId=null#!%40%40%3F_afzWindowId%3Dnull%26locale%3DEN%26_afzLoop%3D2416597027530471%26MBI_ID%3D33%26_afzWindowMode%3D0%26_adf.ctrl-state%3Di3mcr0lj3_4

female-headed households experienced greater poverty reduction than male-headed households both in the trade corridor and in the tradable sector in terms of the reduction of poverty incidence., though it is important to note that poverty rates were higher and remain higher for female-headed households in all countries.

Poverty was higher for households with a person with a disability in Kenya, according to the 2015/1616 data; there were no questions asked about disability in the baseline, so no trend data is available. Data were not available in the other countries, and the experiences of people living with disabilities could not therefore be analysed for the other countries.

In spite of the limitations of the data, the PGIS study team is fairly confident that the results discussed above – reductions in poverty along trade corridors and sometimes the tradable sectors excluding agriculture – are partially attributable to trade over the past decade, as is the continued concentration of poverty among agricultural workers. Assuming that the results of the quantitative analysis are representative of the types of indirect impacts that TMEA interventions would have, it will be important to understand the dynamics of how the channels for influencing poverty are working. As the economic theory posits that price, income and employment, and public spending are the channels through which trade influences poverty, which are discussed in the sections below.

Indirect Impact: Prices

As barriers to trade are reduced and trade increases, in theory, competitiveness should increase, and prices of goods should converge towards world market prices, and OPM's Trade and Growth Impact Study,⁵⁴ found that improvements in port performance did expand opportunities for East African goods to reach international markets (presumably at higher prices than they could command locally) and diverted trade away from intra-regional trade with the ultimate effect of boosting both exports and imports overall. Overall, the consumer price indices (CPI) for each country show that prices increased during the time of TMEA's interventions, and particularly food prices (see Table 30, Table 31, Table 31, and Figure 2). In each country, the increase in food prices was higher than the general increase in prices - 10.2% higher in Uganda, 22.5% in Tanzania, 32.7% in Rwanda, and 53.7% higher in Kenya – which, as noted in OPM's PPA, is usually most burdensome on the poorest households.

Table 30: Changes in Consumer Prices Food Indices, January 2010-January 2018

| Country | January 2010 | January 2018 | % Change |
|-----------|--------------|--------------|----------|
| Kenya | 97.54934 | 212.7673 | 118.11 |
| Rwanda | 105.5683 | 160.8595 | 52.37 |
| Tanzania* | 106.16 | 212.1797 | 99.87 |
| Uganda | 109.1952 | 194.2017 | 77.85 |

Source: FAOSTAT, November 21, 2018

*Note: Tanzania data from 2011, as 2010 data were not available.

Table 31: Changes in Consumer Prices General Indices, January 2010-January 2018

| Country | January 2010 | January 2018 | % Change |
|----------|--------------|--------------|----------|
| Kenya | 98.70543 | 174.5344 | 76.82 |
| Rwanda | 102.8079 | 143.3741 | 39.46 |
| Tanzania | 97.94325 | 177.7936 | 81.53 |
| Uganda | 99.18244 | 168.5017 | 69.89 |

Source: FAOSTAT, August 2, 2019

The qualitative data, which focuses on respondents' recall specifically from 2016 to the time of fieldwork, support this conclusion. Across the board, perceptions among PGIS respondents were that

⁵⁴ OPM: Paul R Baker, David Vanzetti, Mohammad Razzaque, Neetish Hurry, and Jaime de Melo. Deliverable 5B: Trade and Growth Impact Study. (forthcoming)

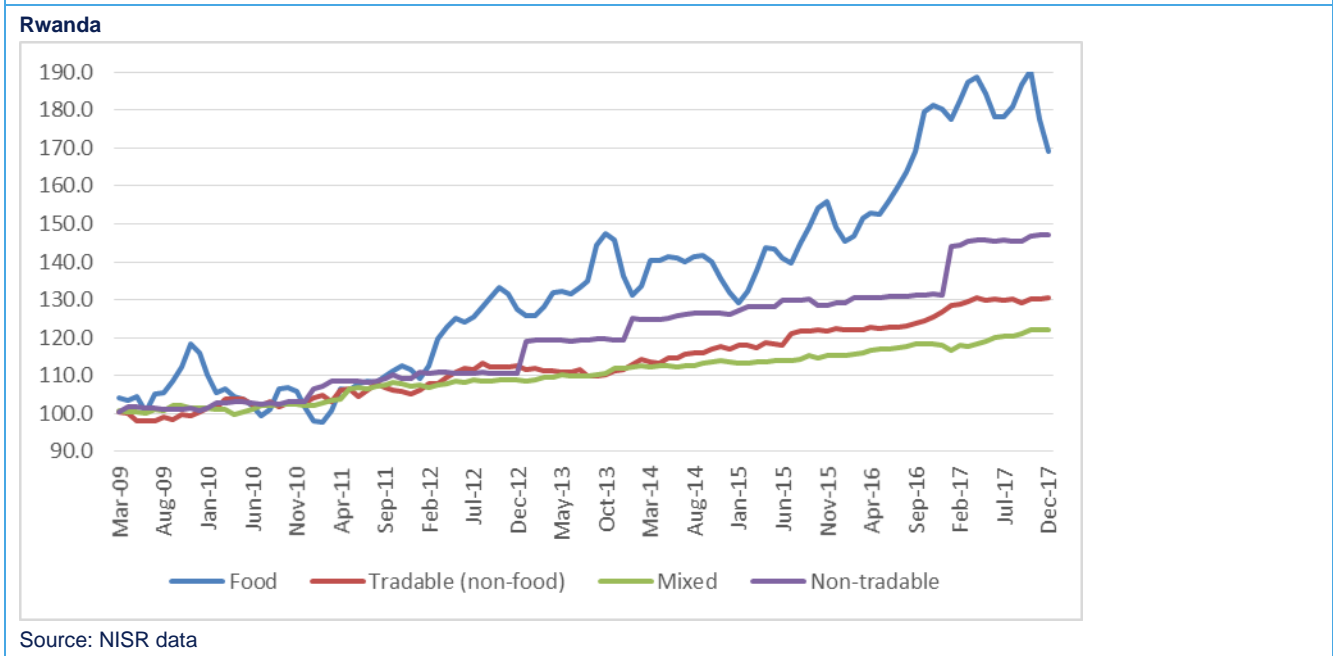
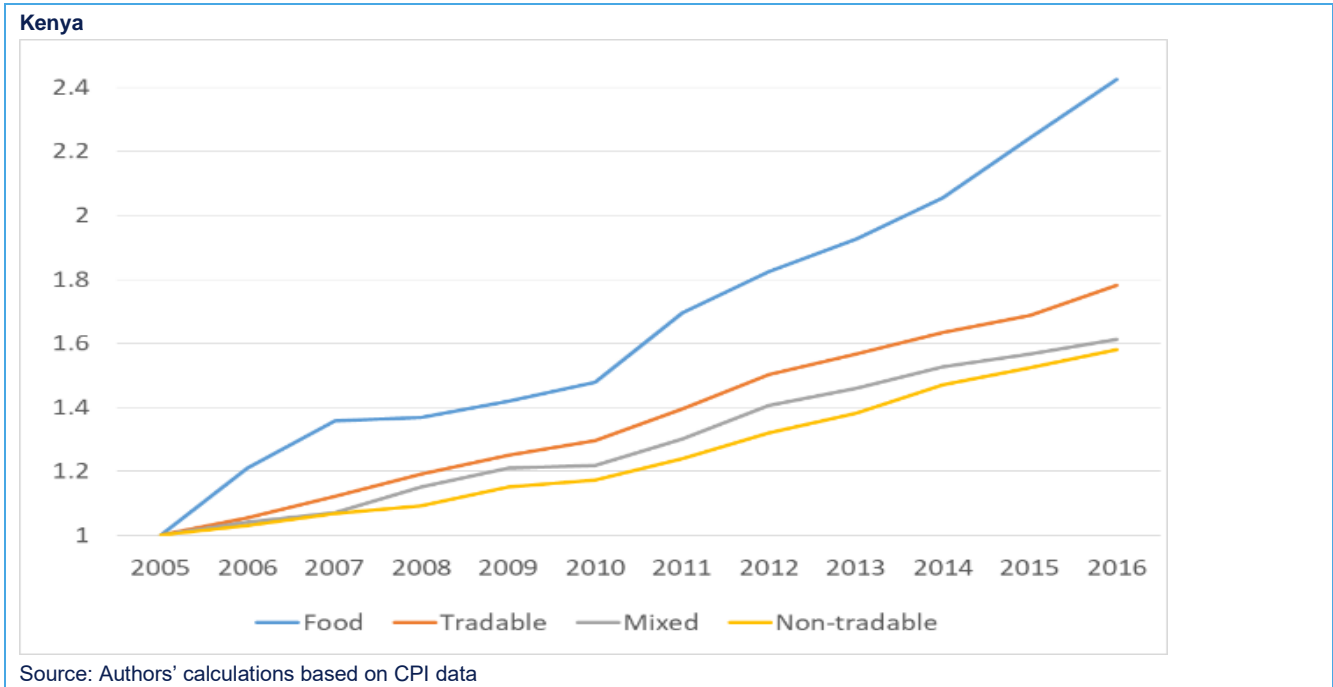
prices had increased during that period.⁵⁵ Whilst one would expect most items to increase in nominal terms, given inflation rates in the region over the past several years, the specific items they cited had often increased by more than inflation would account for. As one focus group respondent said, 'I used to buy flour at 75 but now it is 100 or 110. It is not the only one. Pampers - originally, we could get it at 20, but now it is 30. The local ones were 15, but now they go for 30. Things have become more expensive.' Another trader noted, 'It is expensive. Like Tukituki, I used to pay 300 – now I pay 600. When you say you will raise the prices for the schools I supply, it is not possible because they can't afford [it]'. Respondents attributed this increase in prices to inflation, new taxes, and corruption and/or misuse of funds. In addition, it is highly likely that food prices increased as a result of consecutive drought years in the region as well, but none of the respondents mentioned that as a cause.

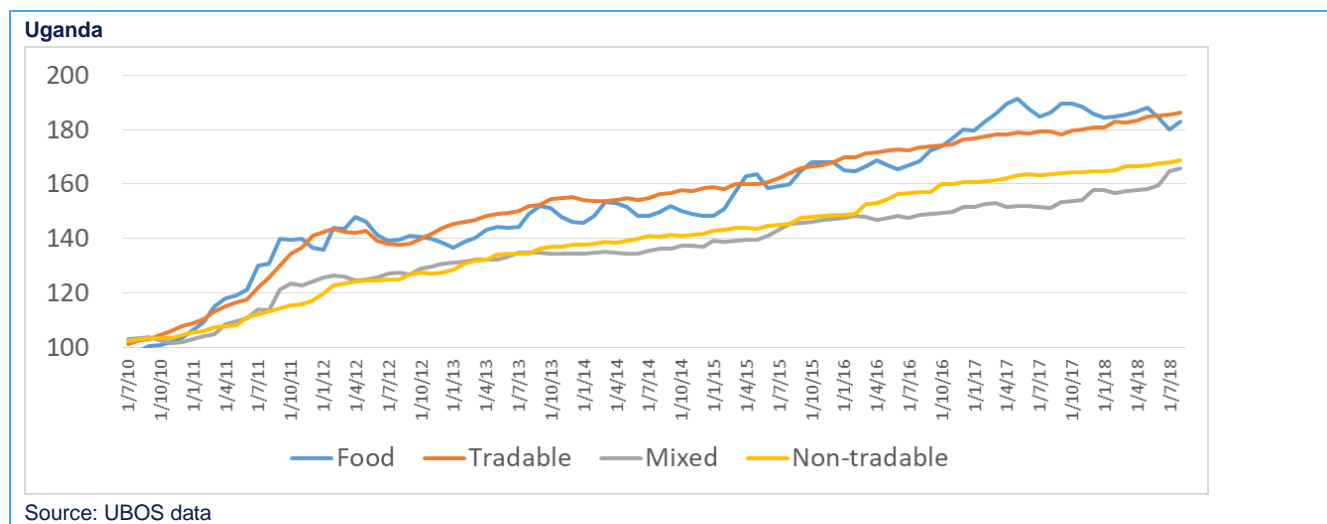
Focus group respondents only noted a few items for which prices had decreased, and some of those were very local changes. In Dar es Salaam, for example, respondents reported that food prices had decreased since 2016 because there had been two years of overproduction (indicating that those goods were not able to be traded in other markets due to a government ban on grain exports in June 2017). In Busia, Kenyan FGD respondents said that prices for milk, maize flour, and sugar had decreased on the Ugandan side of the border (but not on the Kenyan side, which experienced drought conditions in 2015, 2016, and 2017).

Overall, the evidence the respondents offered suggests generalised increase in prices. Given the agreement between the qualitative and quantitative data, it does not appear that recall bias is an issue.

⁵⁵ Given that respondent recall weakens over longer periods of time, the PGIS used a recall period only from 2016 to the present in FGDs and interviews. This time period also more closely aligns with the time frame when many TMEA intervention efforts were realized – such as the full implementation of OSBPs – and which therefore should reflect the most important time frame during S1 in terms of price changes that would affect respondents' market options.

Figure 2: Change in sector CPI





Note: No CPI data were available for Tanzania.

A range of recent studies has found that increases in prices, particularly food prices, are typically most burdensome on the poorest households (Green et al., 2013), which aligns with the findings from the focus groups. Although price increases affect everyone, those with the fewest resources are most likely to reduce consumption, substitute less preferred foods, or resort to other coping strategies such as risky borrowing or eliminating non-essential spending. If wages increase at the same rate as do consumer prices, then the effect is largely neutralised. Many respondents did recognise that their wages had increased as well, but where this happened, it was no more than the increases in the costs of goods and was often reported to be less. As one wealthier focus group respondent in Tanzania noted, 'Earnings have gone up, but the cost of life has gone up too so in actual sense it cancels out.'

The two common themes that emerged in these discussions were corruption and unfair trade practices. Many respondents cited corruption as the reason for prices increasing but could not provide a coherent explanation of how that occurred. From a broader political economy perspective, however, it may be useful to note that in all four countries, perceptions gleaned from the qualitative data indicates that individuals think some other party is better off as a result of trade liberalisation and increased prices, which does not contribute to political stability and support for further reductions in trade barriers.

A recent study has found that women pay more in informal routes than men, perhaps supporting their willingness to use formal routes⁵⁶ whether corrupt practices persist there too.

On the unfair trade practices, for example, in most of the indirect focus groups (particularly among poorer respondents, but among some wealthier respondents as well), one or more respondents indicated that traders from another country could come to their country and trade freely, but that they could not travel there to do the same. In groups in Busia, Kenya, the Kenyan respondents said Ugandan or Tanzanian traders could come, but they could not go to Uganda or Tanzania, while on the Uganda side of the border, the Ugandans said that Kenyans could come to Uganda and trade freely, but they could not do the same in Kenya. As one FGD respondent in Taveta said, 'We have not seen any benefits of EAC, maybe the leaders are the ones benefitting from the EAC.' (More wealthier respondents seemed to have a clearer understanding of the reciprocal nature of EAC trade agreements.) Although the perceptions were incorrect, they were generating dissatisfaction with the current trade agreements and represent missed opportunities for trade.

Variance in price increases

Respondents noted that prices for some key goods vary by season – food may be less expensive during the rainy season and more expensive during the dry season, but transportation costs may

⁵⁶ Siu, Jade. 2019. Trade costs, trade facilitation and formalization of trade: Evidence from One Stop Border Posts in Uganda. Economic and Social Research Council, p. 21.

increase during the rainy season and decrease during the dry season. Transportation prices also fluctuate with fuel prices. While prices increased overall, based on the household data analysis, prices increased more slowly on the trade corridor than far away from the corridor in Rwanda (statistically significant at the 1% level), Uganda (statistically significant at the 10% level), and to a lesser extent in Kenya (statistically significant at the 15% level). Tanzania experienced a different pattern, in which the data shows prices far from the corridor dropping to come into line with the lower price level existing on the trade corridor (statistically significant at the 1% level).

The qualitative responses do not reflect any acknowledgement that prices might have increased more slowly along the trade corridors, but one explanation for this is that respondents do not know, what they do not know. They know prices increased, but they may have no sense of how much more they might have increased or how much they increased elsewhere, so they do not perceive that the growth in prices for them has been slower than for their peers elsewhere. Even in Tanzania, where the quantitative data show a price convergence, the respondents' perceptions do not reflect that change. On the trade corridor, one respondent said, '[The] steady rise in the price of commodities since 2016 is making it very difficult to trade as purchasing power of customers has steadily dropped, meaning we traders make very little profit.' Far from the trade corridor, there was more optimism, but no lower prices yet as one respondent claimed, 'Transport has become more expensive especially from Mbande because of the rough road but if they finish building the road, I think prices might go down.' This may, however, reflect the specific situation of the site selected for data collection off the trade corridor.

Wholesale and retail prices

Beyond capturing overall increases in consumer costs, it is also useful to understand the relative changes in retail and wholesale prices on goods in the same timeframe and to determine the extent to which changes in prices reflect real changes in the cost of production and distribution versus the potential profit margins for those in the production and distribution chain. Baseline wholesale and retail price data was neither collected by TMEA nor as part of OPM's PPA, and the PGIS team therefore has to rely on publicly available data for key commodities and retail prices collected by international organisations, primarily the FAO and the Famine Early Warning System (FEWS). The FAO and other organisations only track data for a few key staples in each country that are often most critical to meeting basic food needs, and in this region, the common staple that is tracked across Kenya, Rwanda, and Tanzania is maize (wholesale prices were not available for Uganda). Table 32 shows the change in the wholesale prices of maize over the same timeframe as the changes in consumer price indices above, and the changes in the wholesale prices of maize differ significantly from the consumer price index changes. In Kenya and Tanzania, wholesale prices increased significantly less than the overall consumer food price index, whereas in Rwanda, the increase in wholesale maize prices exceeded the increase in the overall consumer food index.

Table 32: Changes in Maize Wholesale Prices, January 2010-January 2018

| Country | Jan. 2010 Price per Tonne (local currency) | Jan. 2018 Price per Tonne (local currency) | % Change |
|-------------------------|---|---|----------|
| Kenya, Eldoret | 24,178 | 28,084 | 16.16 |
| Kenya, Kisumu | 26,406 | 34,526 | 41.47 |
| Kenya, Mombasa | 25,208 | 30,389 | 20.55 |
| Kenya, Nairobi | 27,283 | 42,269 | 54.93 |
| Kenya, Nakuru | 24,739 | 26,173 | 5.8 |
| Rwanda, Kigali | 220,473.01 | 410,377.02 | 86.13 |
| Tanzania, Dar es Salaam | 550,154.03 | 675,082.03 | 22.71 |
| Tanzania, Arusha | 375,564.02 | 548,535.03 | 46.06 |
| Tanzania, Iringa | 499,759.02 | 399,742.02 | -20.01 |
| Tanzania, Mbeya | 464,277.02 | 350,204.02 | -24.57 |

Source: FAOSTAT, November 21, 2018

Staple grains, of course, are only one component of the consumer prices food index, and the FAO also publishes retail prices for a few items, including maize meal in Nairobi, Kenya and maize in Kampala and Lira, Uganda. According to their retail price data, the retail cost of maize meal in Nairobi only increased 35.71 percent (from 84.10 KES to 114.00 KES) between January 2010 and January 2018, compared to a 54.93 percent increase in the wholesale price in that same period.⁵⁷ Although wholesale data is not available for Uganda, the differences in increases in retail prices for maize are instructive of the differences that may be seen in and far from the trade corridor. In Kampala (in the trade corridor) between January 2010 and October 2017,⁵⁸ retail maize prices increased by 24.1 percent (725 UGX to 900 UGX) while in the same period in Lira (far from the trade corridor), they increased by 42.9 percent (700 UGX to 1000 UGX),⁵⁹ a significant difference, though both are lower than the consumer prices food index increase. This may have been due to greater competition in the trade corridor (greater availability of the product and/or more sellers in the market), which might yield the result in Nairobi – lower increases in retail prices than wholesale prices, or it might reflect some use of cost-based pricing,⁶⁰ in which sellers' prices reflect their costs, in this case, lower costs in the trade corridor than far from it. It may also reflect a larger pricing strategy on the part of grocery retailers to keep the prices of certain staples low to ensure strong customer loyalty, and to charge higher profits on other key products. For a number of reasons, including varying retail operations costs by location, desire to move or retain inventory, losses to be covered, competition in the sector, or use of value-based pricing rather than cost-based pricing, retail prices may move separately from wholesale prices.

Conclusion on Prices

The team's primary conclusion on prices is that trade likely contributed somewhat to higher prices of consumer goods, particularly food, between 2010 and 2018. Several other factors also contributed, however, including inflation, government policies (specifically, Tanzania's ban on food exports), seasonality, consecutive years of drought and fluctuations in fuel prices. Based on the qualitative information collected and the broader literature, the price increases had negative impacts on poorer households. To the extent that female-headed households, households including persons with disabilities, and other vulnerable groups tend to be poorer than male-headed households or households that do not include persons with disabilities or other vulnerable groups, they would have borne the impact of higher food prices disproportionately. Poorer households living in the trade corridors in Kenya, Uganda, and Rwanda should have been somewhat less affected than those living in remote communities, as the price increases were smaller in the trade corridors. The poor in remote communities are those who will fail to benefit from increases in well-being and standard of living resulting from trade in those three countries. In Tanzania, the levelling of prices between the trade corridors and areas far from the trade corridors means that the burden of increased prices is shared more evenly across communities, but along with changes to wages and employment to be examined in the next section, it may also explain the relative increases in poverty in the trade corridor.

Indirect Impact: Employment

Overall, exposure to trade appears to have had important impacts on employment in most of the countries in terms of unemployment, activity by sector, and type of employment. In Tanzania, unemployment increased faster between 2010 and 2015 in areas located far from the trade corridor (statistically significant at the 10% level, see Annex H), which may indicate that trade helped stabilise employment in the trade corridor. In Kenya, unemployment decreased more rapidly on the trade corridor than in other areas (statistically significant at the 5% level, see Annex I). In Uganda and Rwanda, trade had no statistically significant effects on rates of unemployment or paid employment⁶¹, though when Kigali is included in the analysis for Rwanda, a treatment effect becomes more

⁵⁷ FAOSTAT, November 21, 2018.

⁵⁸ No data were available for January 2018. October 2017 was the closest time frame for which data were available.

⁵⁹ FAOSTAT, November 21, 2018.

⁶⁰ Please see also the response to DEQ4.2, where the evaluation team discusses how no evidence of consistent cost-based pricing was found.

⁶¹ By paid employment we mean paid employees or employers, as opposed to unpaid family workers, apprentices or other type of work. We do not mean that they are employed in the formal sector.

pronounced and is statistically significant at the 1% level, indicating that employment improved more in Kigali than in other areas (see Annex F).

Over this period, many households changed the sectors in which they worked. In Uganda, the data shows a rapid shift from employment in agriculture to service and manufacturing jobs in the trade corridor, whereas it remained constant (mainly in agriculture) far from the corridor (statistically significant at the 1% level), which likely reflects both the impact of trade and the inherent differences in economic potential in and far from the trade corridor (see Annex G). Self-employment and employment Rwanda's agricultural sector decreased in all areas, but the decline was less pronounced in the trade corridor, resulting in statistically significant treatment effects for these variables (statistically significant at the 5% and 1% levels, respectively, see Annex F).

In Kenya, there was a significant decrease in the proportion of formally employed individuals in tradable sectors, and a correspondingly large increase in the proportion of self-employed individuals (see Annex I). Similarly, there was a significant increase in self-employment in the trade corridor in Uganda, while it decreased in areas far from the corridor (see Annex G). In Rwanda, the opposite occurred as self-employment decreased more rapidly in the non-agricultural tradable sector than in the non-tradable sector (statistically significant at the 1% level). At the same time, formal employment increased in the tradable sector, relative to the non-tradable sector (significant at 10% level, see Annex F).

In Rwanda, the trends point towards a possible formalisation of the tradable sector. In principle, the shifts in Kenya and Uganda could mean either a deterioration in employment standards (i.e. a shift from formal employment to insecure day-labour type work) or voluntary changes related to increased entrepreneurship.

Based on the interviews and focus groups conducted with both direct and indirect beneficiaries in all four countries studied by this evaluation, it appears the majority of this shift is the former – increasing efficiencies have reduced demand for labour in key areas, and rather than having one steady job, individuals are finding they need to have multiple jobs and more casual work to make ends meet. Some of the changes are also due to shifts in the businesses in the sites, as one respondent observed: 'Labour-intensive firms like the ice making company closed and have been replaced by non-labour-intensive like the oil depots.' Respondents' perceptions were that employment had contracted, overall. Many focus group respondents noted having seasonal jobs, particularly the poorer FGD participants (men and women). Wealthier FGD participants (men and women) reported steadier employment. Poorer respondents across all countries also said it was harder to find work now than in 2016, even in cities. The responses of wealthier participants were more mixed, with some saying it had not changed, and others saying it was harder.

Nepotism, favouritism, and corruption were all important elements of discussions around employment among men and women, and particularly among poorer respondents. In almost all sites across countries, nepotism was cited as an important factor in finding employment. One respondent relayed her experience, 'To get a job...you must have someone you know. You can apply online as they say, but if you know someone then you can get a chance, if you are taken by your MP [Member of Parliament] or councillor, otherwise they will use you before they give you some work, especially women.' Without a connection, many respondents (poorer and wealthier) indicated that bribery was the only way to secure a good job. As one wealthier respondent in Mombasa reported, 'I have a son who has done [a Bachelor's in Communications] ... and someone told me if I want him to get a job, I [have to pay] 100,000.' In Uganda, respondents indicated that three months' pay was typically the expected kickback for the individual making hiring decisions. These practices introduce additional barriers for the most vulnerable job seekers.

Some countries also experienced gendered differences in changes in employment. In Kenya, among female-headed households living in the trade corridor, the 10% decrease in unemployment was likely a positive factor in poverty reduction, as it was double the decrease of all households (see Annex I). In Rwanda, Uganda and Tanzania, self-employment increased among female-headed households in the non-agricultural tradable sector and formal employment decreased when agriculture was included in

the tradable sector (see Annex F for Rwanda, see Annex G for Uganda, and see Annex H for Tanzania). Given that the interviews and focus group discussion indicated that the trend from employment to self-employment was not positive, particularly for more vulnerable households, these changes may have made female-headed households in Rwanda, Uganda, and Tanzania less secure financially.

Gendered patterns of economic activity persist in all countries. As one woman in Mombasa relayed, 'There was a time I was following up on a job in the port. I took my papers twice, and later they told me that the jobs they have are too difficult for the lady, that I should come next time when they need a receptionist.' Men were frequently cited in focus groups as being concentrated in fields that required more innovation, more capital investment, and higher mobility – professional positions, value-added agriculture and agro-processing, animal husbandry, drivers, etc. Women were frequently cited as being in lower wage, lower mobility, and lower risk fields – small-scale businesses, weaving, farming, and tailoring. Some respondents noted that men and women do the same work, but others indicated that women would be exposed to physical or sexual harassment if they engaged in certain kinds of trade, such as charcoal trade over panya routes.⁶² Among the most vulnerable, FGD respondents indicated that men typically engage in physical labour, such as pushing carts for wealthy traders, while women engage in sex work. Since living with a disability correlates with greater poverty incidence, women living with disabilities may be more vulnerable to sex work as one of limited employment options; however, this was not studied explicitly in the present research.

Given that questions about disability status were not included in the surveys, it is not possible to track changes in employment among persons with disabilities. However, interviews and focus group discussions identified tailoring, retail, and shoe repair – self-employed, non-tradable sector occupations that required low mobility – as being the most common ways for people with disabilities to earn money. It is not clear whether those perceptions are accurate, as the team was unable to interview a significant number of individuals with disabilities, but to the extent that people with disabilities are concentrated in self-employed, non-tradable sector jobs, they may not benefit from trade effects on employment.

Conclusions on Employment

Overall, unemployment decreased more along the trade corridors in Kenya and in Kigali, and it did not increase in the trade corridor in Tanzania, which the team concludes is likely at least partially attributable to trade. Further, female-headed households in Kenya experienced a larger decrease in unemployment than all households. In Kenya and Kigali, Rwanda, employment may have had some impact on poverty. In Uganda and Rwanda, many households shifted from agriculture to other sectors, which likely shifted workers from less productive agricultural jobs to more productive jobs in other sectors. But it appears from the qualitative data that the shifts from employment to self-employment seen in Kenya and Uganda meant a decrease in stable work and negatively impacted more vulnerable households, and that may also hold for the increase in self-employment among female-headed households in the tradable sector in Rwanda, Uganda, and Tanzania. As far as changes in employment lead to increases in wages and income, they may reduce poverty; this is explored in the next section.

Indirect Impact: Income

Where prices have increased, it would be reasonable to expect that income might have increased too. Income was defined differently in each household survey, but it was a combination of several of the following factors: wages, agricultural sales, non-agricultural sales, transfers, and/or remittances. It is important to note that the quantitative analysis does not address the distribution of income or wealth, so the qualitative data provides a clearer understanding of the daily realities at the community level. In each country, climatic factors, such as drought, influenced income, particularly farm income and agricultural sales, but the extent to which those factors may have affected the information collected is not clear.

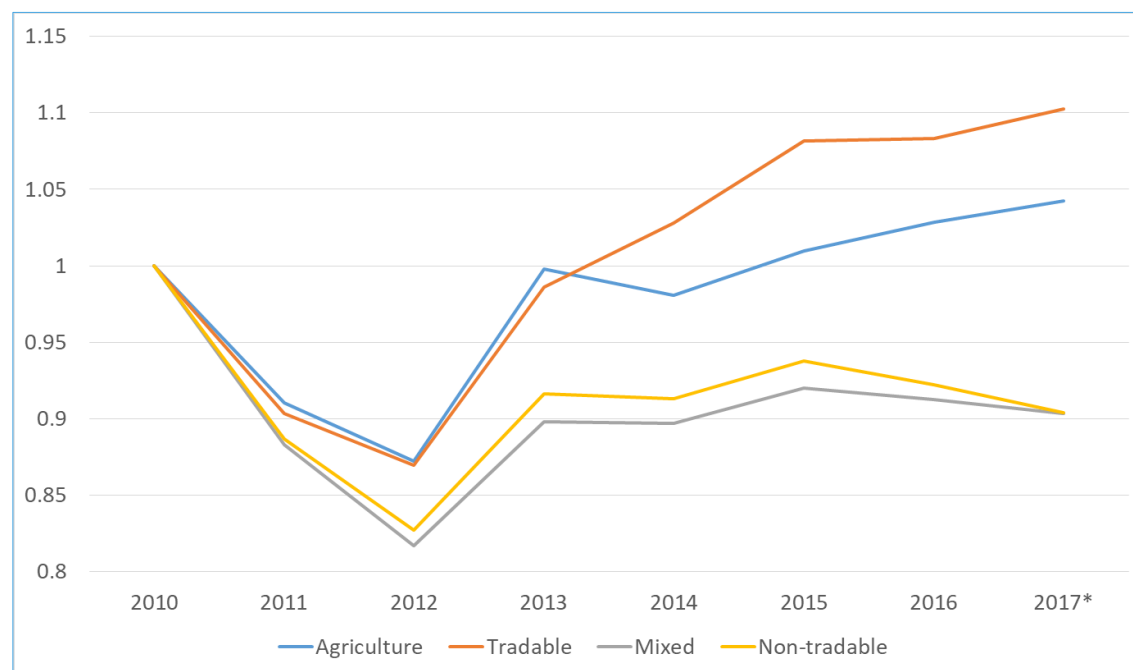
⁶² Panya routes are informal border crossing routes used to transport goods and people without following border crossing protocols.

Kenya

In Kenya, income from wages increased in all areas, but the increase was less pronounced in the trade corridor than in other areas, resulting in a negative treatment effect (significant at 1% level, see Annex I). However, income from non-agricultural sales increased more rapidly in the trade corridor than elsewhere, and income from agricultural sales increased slightly in the trade corridor, while it decreased in areas far from the trade corridor (although the effect is not statistically significant). When areas adjacent to the trade corridor are included in the analysis, however, the effect becomes statistically significant, indicating that income from agricultural sales increased more rapidly in the trade corridor than in the rest of the country. For female-headed households living in the trade corridor, the increase in agricultural sales (+0.88 vs. +0.85) was larger than for the entire population. Finally, income from remittances and social transfers decreased far from the corridor, but not in the corridor, resulting in a positive treatment effect (significant at 5% level).

A very sharp increase in wages occurred among households employed in tradable sectors, while wages in non-tradable sectors barely changed. This finding is confirmed by aggregated wage data from the Kenyan Statistics Institute, which shows that real private-sector wages in the agricultural and tradable sectors increased from 2010 to 2017, while they decreased in the mixed and non-tradable sectors over the same period (see Figure 3 below). Non-agricultural sales also increased sharply (in relative terms) amongst households working in tradable sectors, compared to those working in non-tradable sectors.

Figure 3: Evolution of real private-sector wages (2010-2017), by trade sector⁶³



Source: Authors' calculations based on aggregated data from economic surveys.

The qualitative data reflects the results by corridor and sector. In Mombasa, the wealthier focus group participants noted they were richer than they had been in 2016, and key sectors were growing: 'real estate [development] also is benefiting. They have constructed so much of the rental houses and the values of the plots are going up, because of the constructions of roads and SGR.' They also cited profits in the construction industry and government. At a much smaller scale, a group of poorer men at Busia suggested that things had improved, noting that, 'Women at the Kenyan borders have greatly

⁶³ Trade sectors are defined as the unweighted averages of the following sectors: Agriculture: Agriculture, forestry and fishing; Tradable: Mining and Quarrying, Manufacturing, Electricity, gas, steam and air conditioning supply, Mixed: 'Electricity, gas, steam and air conditioning supply, Water supply; sewerage, waste management and remediation activities, Wholesale and retail trade; repair of motor vehicles and motorcycles, Transportation and storage, Accommodation and food service activities, Information and communication, Financial and insurance activities, Professional, scientific and technical activities, Activities of extraterritorial organizations and bodies; Non-tradable: Construction, Real estate activities, Education, Human health and social work activities, Arts, entertainment and recreation, Other service activities, Activities of households as employers; undifferentiated goods- and services-producing activities of households.

improved and it is evident even by the way they are dressing lately and the inputs they are putting in their families to improve the standards of living. Households are being run mostly by women since they are free to move and trade more since the opening of the OSBP.' Similarly, a male trader in Taveta said, 'In my household I have children; it has helped me to support my family through food, education, health among other things. Even I am better off than before thanks to the OSBP.'

Several other (poorer) respondents in Busia and Taveta, however, commented on the reduced purchasing power of people around the border. 'We are not selling as we used to,' one business owner explained, 'There used to be a lot of activities at the border as most clearing processes were done there. Now clearing happens at the manufacturer's location unlike before – this has resulted in a dip in sales.' In Chuka, the Kenyan site far from the trade corridor, both wealthier and poorer respondents (men and women) agreed that income had decreased, and their ability to save was significantly affected, as was their ability to continue their businesses. Local administrative fees for market stalls, for example, were getting to be too burdensome.

The poorer men in Busia and Taveta also said, however, that women use their earnings to pay school fees, but as income has been reduced, they do make other trade-offs, including foregoing milk in their tea, eating ugali or porridge rather than preferred foods, fewer and less nutritious meals per day, working multiple jobs to ensure basic needs are met, and, on occasion, withdrawing children from school. The poorer women at Busia confirmed the use of those coping strategies and said they crossed into Uganda to purchase many goods there, as they were less expensive than in Kenya.

In summary, as prices increased less in the trade corridor than elsewhere, wages also increased less in the trade corridor than elsewhere. More income was earned, however, from agricultural and non-agricultural sales in the corridor (reflecting the shifts in employment discussed in the section above and the greater opportunities available from being in the corridor), and remittances and social transfers remained stable in the trade corridor. But the ultimate perceptions of the indirect beneficiaries who were poorer or far from the trade corridor, was that they were worse off than in prior years. The wealthier groups in the trade corridor felt they were at least equally as well off as or prospering more than in the past. Those in tradable sectors also benefitted from trade in the form of higher wages.

Rwanda

In Rwanda, income from wages increased very significantly on the trade corridor, compared to areas located far from the corridor (statistically significant at the 1% level) but the increases are somewhat smaller when Kigali and areas adjacent to the trade corridor are included in the analysis (see Annex F). Income from agricultural sales decreased, while income from non-agricultural sales increased (more so when Kigali and areas adjacent to the trade corridor are included), but the changes are not statistically significant. Transfers also increased slightly, but less so when Kigali and areas adjacent to the trade corridor are included. Among female-headed households, the treatment effects for wages are smaller in absolute terms than for male-headed households and are not statistically significant. The only significant increase was in income from non-agricultural sales, and only when Kigali and areas adjacent to the trade corridor were included (statistically significant at the 10% level).

In examining income data by sector, there was a positive treatment effect on wages for people working in the tradable sector (though a smaller increase when agriculture is included than when it is excluded). Income from non-agricultural sales decreased amongst households employed in the tradable sector, resulting in a negative and significant treatment effect for this variable. This might reflect the fact the increased wages reduced the need for side activities for households working in the tradable sector. The data shows no detectable treatment effect for income from agricultural sales or for social transfers. This suggests that wages were the main channel through which incomes increased among households working in the tradable sector in Rwanda.

For female-headed households in the tradable sector, excluding agriculture, income from wages, agricultural sales, and non-agricultural sales increased (though not statistically significantly), however, those positive outcomes are reversed when agriculture is included, and then income from wages,

agricultural sales, and non-agricultural sales all decreased. That would indicate that female-headed households in agriculture earned significantly less than male-headed households. Transfers, however, had a statistically significant effect on female-headed households, which appeared to have increased among female-headed households employed in agriculture, at the same time as formal employment decreased for this group in both absolute and relative terms. This suggests that transfers might have played a mitigating role, compensating for the loss of other sources of income among this group.

The focus groups and interviews in Rwanda confirm some of the findings of the quantitative data. In Ruhengiri, the site far from the trade corridor, poorer and wealthier respondents indicated that although prices had increased (some dramatically), their incomes had not. Poorer respondents said that they had reduced their consumption of household goods in the last few years and had had problems paying school fees. They also noted that they are willing to take any job that pays: 'There is no shamefulness when it comes to work.'

In addition, poorer women in Kagitumba (in the trade corridor) said they were earning less than a few years prior and were chronically indebted, but they were optimistic that their earnings would increase again. However, in Rusumo, in the trade corridor near a comparator OSBP, poorer men reported only decreases in earnings, while wealthier women reported mixed results – some reported higher incomes, some reported lower incomes. Where families experienced decreases in income, this resulted in families no longer saving, reducing their consumption, and not paying school fees. One respondent noted that he received assistance through the Government's VUP programme (see DEQ4.3). Among the respondents whose incomes had increased, the positive impacts included purchasing family health insurance, shifting children from public to private schools, providing loans to neighbours, construction of new houses, expansion of businesses, and greater influence in assisting other women cross-border traders to use the formal system and join co-operatives.

Across the country, women and men and poorer and wealthier respondents indicated that more women were taking up paid work to improve household income, and men were generally supportive of this. In most cases, women indicated that they continued to have primary responsibility for unpaid, domestic work, but they generally controlled the money they earned. One focus group of poorer female respondents also indicated that men were, in their opinions, making better choices about how they spent their earnings, and that was seen as an increase in their incomes.

In summary, the results suggest that improvements in living conditions along the trade corridor were attributable primarily to increases in wages, particularly in tradable sectors. It is notable, however, that the income channel appears not to have played the same important role among female-headed households as it did among male-headed households, and those in the agriculture sector seem to not benefit as much as others, particularly female-headed households in that sector.

Tanzania

Of the four sources of income, the only indicator for which there was a statistically significant treatment effect in Tanzania's trade corridor was social transfers (statistically significant at the 5% level, see Annex H). This indicates that the observed increase in poverty in the trade corridor cannot be explained through the income channel. However, it appears that increased social transfers might have helped to mitigate the impact of price increases in the trade corridor, meaning that poverty might have increased even more in the trade corridor, had it not been for social transfers.

Changes in income by sector in Tanzania differ from the other countries included in the study. When agriculture is excluded, no treatment effect is evident on income. When agricultural households are included in the analysis, however, there is a positive and statistically significant treatment effect on wages for people employed in the tradable sector. This suggests that wages increased in the agricultural sector, despite the finding that poverty increased among those in agriculture.

In most cases, the treatment effects are larger for female- than for male-headed households, especially as regards the decrease in agricultural sales and increases in wages for females employed in the tradable sector (when agriculture is excluded). However, those effects are still not statistically significant, partly due to the smaller sample sizes when looking at female-headed households only.

The qualitative data indicated that wages did not increase, and wealthier respondents in and far from the trade corridor (Mpwapwa, Dar es Salaam, Holili) believed poverty had increased, which aligns with the quantitative findings for the trade corridor (although not for areas far from the trade corridor). Poorer respondents in several locations around the country indicated that people are taking on side work to try to supplement their incomes as their pay decreases. Workers in agriculture noted that income is very seasonal, and at times they have steady income, but through much of the year, they do not. People who had steady work are finding it to be less regular (in Mpwapwa, which aligns with the quantitative findings, but elsewhere in the trade corridor as well), and in Dar es Salaam and Dodoma, focus group respondents noted that government jobs were being cut, which ripples throughout the community as those customers buy less, less frequently, and shift to less expensive products.

There were marked differences between the impacts of decreasing income for the wealthier and the poorer respondents. The wealthier respondents in indirect beneficiary focus groups noted that they decreased their expenditures by limiting their family outings, reducing the number of visits to the salon, staying home to watch television rather than going out for the evening, or limiting their daily alcohol consumption to two beers. Among the poorer respondents, impacts included a shift from private to public schools for their children's education, starting kitchen gardens rather than buying vegetables in the market, a decrease in consumption of meat, a decrease from three meals per day to one or two meals per day for many families, and bartering work for food.

The main causes to which respondents pointed included: tax reforms that reduced profitability among small and medium-sized businesses, the abundance of fee-based licensing authorities in addition to the Tanzania Revenue Authority (TRA) (including municipalities, the food and drug and standards bureaus, veterinary department, and environmental management agencies), and the overall burden of taxes and levies of businesses. One set of poorer focus group respondents also noted that the stresses that have come with decreasing incomes have strained the networks of reciprocity that serve as safety nets in many communities. Several respondents noted that they had to reduce the numbers of their friends, and of those select carefully. Relatives and extended families also found that their resources were depleted, and they were unable to provide support to family or clan members as they might have at other times.

In summary, it does not appear that the income channel was effective in reducing poverty. It is not clear the extent to which some of the changes, such as the increase in agricultural wages might be tied to trade, as poverty among households employed in agriculture increased as well. One possible concern is that, as poverty was measured by consumption, increased trade enabled families to sell produce that they would have once consumed, thereby increasing money earned but also reducing what was consumed. Further research on this pattern specific to Tanzania in this study would be useful to better understand what might be an impact of trade and what might be the result of other factors.

Uganda

In Uganda, income from wages and non-agricultural sales increased very significantly on the trade corridor, compared to areas located far from the corridor (statistically significant at the 5% and 1% levels, respectively, see Annex G), and the treatment effects are larger for female-headed households (also statistically significant at the 5% and 1% levels, respectively). In areas far from the corridor, non-agricultural sales decreased in absolute terms between 2011/12 and 2015/16. These results suggest that improvements in living conditions along the trade corridor were attributable primarily to increases in wages and non-agricultural sales. This aligns with the data on employment, where the shift from agriculture to other sectors seems to have contributed to increasing wages and decreasing poverty in the trade corridor, as people moved out of the lower-paying agricultural employment and into higher-paying manufacturing and service jobs.

The analysis by employment sector showed no positive effect on wages for people employed in tradable sectors, and female-headed households employed in the tradable sector (excluding agriculture) saw a relative increase in their wage income (although not statistically significant). However, when agriculture is included, a strong negative effect is evident (statistically significant at the

1% level), indicating that wages in agriculture decreased, though the treatment effect was smaller and not statistically significant for female-headed households. Income from non-agricultural sales decreased among households in the tradable sector (statistically significantly at the 1% level for all households and at the 5% level for female-headed households when agriculture is included), and those sales decreased in absolute terms among households employed in tradable sectors. At the same time, there was a sharp and statistically significant increase in agricultural sales among households employed in tradable sectors. When the analysis base is expanded to include households in all tradable sectors (non-agriculture and agriculture), however, the positive effect of agricultural sales largely disappears. This suggests that the noted increase in agricultural sales amongst this small group of households employed in the tradable non-agricultural sector does not reflect a general improvement of the agricultural sector.

The qualitative data largely confirms the quantitative findings in Uganda. Wealthier respondents (male and female) in Busia (in the trade corridor) noted that their income had been steady or improved, but it was dependent on the exchange rate with the Kenyan shilling. They also noted, however, 'Unfortunately in the village some women are languishing in poverty, especially those who solely depend on farming because it is seasonal', which aligns with the decrease in wages in agriculture discussed above. In Mirama Hills, wealthier male respondents said they were earning a little more than they had in the past, while wealthier female respondents said they were earning less than they did a few years ago. The men said as a result, they were able to improve the nutrition and health of their families, to afford decent homes, and have a better lifestyle. The women said the impacts of lower income included reduced savings, inability to pay school fees, stresses that compromised their health, and 'marital misunderstandings, which can be a trigger for domestic violence.'

In Pallisa, outside the trade corridor, wealthier respondents indicated that some households had improved their incomes, while others had experienced a decline. Those who had reduced incomes were having trouble meeting basic daily needs – food, medicine, and school fees. This may have been related to the sector in which they worked, as the qualitative data collection did not stratify respondents by sector.

Similar to Rwanda, more women seem to be taking up paid work, largely with the support of the men in their families. But even those who were doing better experienced negative repercussions. Female focus group participants indicated that '[Some] men have absconded from their responsibilities and left them to the earning women.' Thus, under some circumstances, with increased income through trade, women may bear more responsibility for both paid and unpaid work within the household.

In summary, being in the trade corridor had positive impacts on income, though not uniformly, as female focus group respondents indicated a decrease in income in the trade corridor. And the data from wealthier groups far from the trade corridor seems to indicate that negative impacts of being remote may not be evenly distributed, as some of the wealthier respondents experienced increases in income over this period. However, employment in the tradable sector does not seem to generate improvements in income, and employment in agriculture resulted in significant decreases in income.

Conclusion on Income

It appears that overall, income is an important channel through which trade might impact poverty outcomes in EAC countries, but the results for income vary significantly by country. In Rwanda and Uganda, wages increased significantly more in the trade corridor than far from it, which the PGIS team attributes partially to trade through increased value of goods that can now be exported more easily and, in Uganda, partially to the shift from agriculture to service sector (presumably into more productive jobs). Increasing formalization of enterprises in both countries is also likely a contributing factor, as payment of wages may be more regularized than in informal employment arrangements. In Kenya, wages increased less in the trade corridor than elsewhere, likely partially as a result of strong competition, and were supplemented by agricultural and non-agricultural sales, to which trade likely contributed in the trade corridor. In Tanzania, no source of earned income (wages, agricultural sales, and non-agricultural sales) increased in the trade corridor.

In Kenya and especially Rwanda, those in the tradable sector benefitted from higher wages, but in Kenya, female-headed households benefitted more than average while in Rwanda, female-headed households benefitted less than average. But being in the tradable sector (excluding agriculture) had no discernible effect on income in Uganda and Tanzania. The agriculture sector in Rwanda lagged notably, particularly for female-headed households, and in Uganda, employment in the agriculture sector was correlated with decreased wages. Tanzania was the exception to this finding, in which wages increased in the agriculture sector. Strong competition in the agriculture sector, to which trade contributes, is likely a major factor in the stagnation or decrease in income among households employed in that sector.

Given the interplay between prices, employment, and income, perceptions of relative improvements or deterioration of well-being is also important. Across the board, poorer respondents in the trade corridor and far from the trade corridor felt they were worse off now than a few years before (particularly in Kenya, Rwanda, and Dar es Salaam), but the respondents in Rwanda in particular were hopeful for the future, whereas the others were not. This raises the question of to what extent improvements in income were distributed across income groups. Wealthier respondents' perceptions were more mixed, where some reported being better off, some the same, and some worse off than a few years prior. Those reporting being worse off were more often women rather than men (particularly in Uganda). As the focus groups were not stratified by sector, it is not possible to identify which sectors might have been more or less affected, but that would be worth exploring in future studies.

Indirect Impact: Public Spending

The third hypothesised transmission channel from trade to poverty reduction is the public spending channel: if increased trade generates increases in public revenue and if these additional resources are spent on pro-poor activities, then this could theoretically contribute to reducing poverty. Although revenue data was requested, the PGIS team did not receive the information needed to determine whether the trade increases identified in OPM's Trade and Growth Impact Study⁶⁴, resulted in greater revenue to the governments of the region. The available data only allowed us to focus on two aspects of pro-poor spending, namely spending on public health and education, which should be interpreted to mean that conclusions in this section are weaker as they are based on more limited data. It is also important to note that public expenditure data may not reflect all spending in either the health or education sector, as some countries receive targeted budget support from donors and it is not clear whether or not those funds are reflected in the expenditure data (typically not). Another potential public spending channel through which public spending could have a direct effect on poverty is through social transfers. Consolidated data on government spending on social protection is not readily available in most countries and could not be accessed for this study. The discussion follows by country.

Kenya

Overall, the proportion of households with *all* school-aged children (aged 6-17) enrolled in school increased sharply on the trade corridor (from 72.7 percent to 86.9 percent), but not in areas located far from the trade corridor (from 67.4 percent to 69.2 percent).⁶⁵ At the same time, the data shows that the proportion of children enrolled in public schools has decreased over the period, both in the trade corridor and elsewhere, and the share of out-of-pocket expenditure on education in total household expenditures has increased over the period, both in the trade corridor and elsewhere.

The breakdown by sector of employment shows clearly the role of private education in increasing the school attendance rates. In both tradable and non-tradable groups enrolment increased, and at a similar level (increase from 75.7 percent to 83.7 percent in the non-tradable sector and from 74.5 percent to 83.6 percent in the tradable sector.). However, among households employed in the tradable sector, there was a clear increase in the percentage of children attending private school, while public school attendance decreased from 74.8 percent to 65.2 percent. Among households employed in the non-tradable sector the percentage of children attending private school decreased much less, from

⁶⁴ OPM: Paul R Baker, David Vanzetti, Mohammad Razzaque, Neetish Hurry, and Jaime de Melo. Deliverable 5B: Trade and Growth Impact Study. (forthcoming)

⁶⁵ Data on enrolment come from the KIHBS study, and therefore report for 2005/06 and 2015/16.

71.5 percent to 70.5 percent. While school attendance rates improved among households in both tradable and non-tradable sectors, in the former case, the increase appears to have been largely carried by the private sector, as the proportion of children enrolled in public schools decreased sharply. In non-tradable sectors, the proportion of children enrolled in public schools remained almost constant, despite the overall increase in school attendance.

This suggests that there might also have been a qualitative element to this change, as better-off households in tradable sectors appear to have moved increasingly towards private education over the decade. There is no theoretical reason to think that public expenditures would target those two groups differently.

This evolution probably reflects the general improvement in living standards on the trade corridor, rather than any specific public spending on education in these areas. This is confirmed by public expenditure data from the WB,⁶⁶ which shows that public expenditure on education decreased both as a percentage of total public expenditure, and in per capita terms, between 2005 and 2015. Furthermore, the data shows that the proportion of public expenditures going to primary education decreased sharply over this period. This suggests that education expenditures became less pro-poor, as poor people are more likely to use primary education services rather than secondary and tertiary education.

The public expenditure data indicates that public expenditures on health decreased as a percentage of total government expenditure between 2005 and 2015, while increasing in absolute terms due to strong economic growth over this period. The proportion of households who did not consult a medical centre at their last sickness fell more sharply in the trade corridor and among households working in tradable sectors than for the households located far from the trade corridor or employed in non-tradable sectors. At the same time, the proportion of total household expenditures going to health care did not increase as rapidly amongst the groups exposed to trade as in the other groups. However, there is no evidence of any difference between the two sets of groups in terms of their usage of public versus private health facilities. Indeed, the proportion of households having used public health facilities rather than private appears to have increased at the same rate among households exposed to trade as among households not exposed to trade.

The KIHBS does not contain detailed information on social transfers from government. Consequently, this channel could not be explored here.

The focus groups in Kenya confirmed that the public services respondents think of most are education and health care. Only a few local leaders mentioned social transfer programs, primarily those to support the elderly and people with disabilities. Both wealthier and poorer respondents indicated that costs of education had increased, which concurs with the quantitative analysis. Poorer groups, particularly women but also men, noted that when their incomes increased, they sent their children to private school rather than public (and conversely, when incomes decreased, they sent their children to public school rather than private), confirming the theory from the quantitative data that changes in enrolment patterns are related to living standards. Perceptions of changes in health care costs were more varied, but that may be a result of individuals' own experiences with the health care system and the specific services that they needed. In some trade corridor communities, such as Taveta and Busia, respondents noted that the availability and quality of care had increased in recent years, but it is not clear that this was linked to any increase in trade revenues (as opposed to a long-term plan for improved health service delivery (see DEQ4.3).

In summary, education expenditure declined over the period, with the proportion going to primary education declining most rapidly - a result that the literature considers particularly deleterious in terms of pro-poor spending. Health spending increased in absolute terms but declined as a percentage of GDP; inconclusive data from the survey point to some increased use of public health facilities but with no difference between households that were or were not exposed to trade. These two types of expenditures therefore did not appear to have been a significant channel through which trade

⁶⁶ World Development Indicators, World Bank. <https://data.worldbank.org/>

influenced poverty in Kenya. Private expenditures increased in education, and many households chose to spend their income on private education rather than public education when they could. The health expenditure information is a little less clear, but use improved for both those in and far from the trade corridor and in the tradable and non-tradable sectors. Given the lack of information about social transfers and other forms of social spending, however, it is possible that public spending may play a critical role that is not clear from the data available.

Rwanda

Public expenditures on education have decreased in Rwanda over the period of interest for this study (2011-2017) both as a percentage of total government expenditures and in per capita terms. This indicates that if education expenditures have had any effect at all on poverty, it would have had to be through the type and distribution of public spending, rather than through the amount. However, the proportion going to primary education decreased over the period, suggesting that spending might have become less pro-poor (poor households are more likely to use primary education, rather than secondary and tertiary).

The proportion of households with all school-aged children enrolled in school increased more rapidly in areas located far from the corridor (from 64.8 percent to 74.7 percent) than in areas located in the corridor (from 68.9 percent to 72.4 percent). This improvement appears to be driven at least partially by increases in public school attendance, as the proportion of children enrolled in public schools increased in those areas (from 11.7 percent to 17.5 percent), while it decreased slightly in the trade corridor (from 29.1 percent to 26.0 percent). Multiple factors could have driven these increases: public expenditure on education playing an equalising role in Rwanda, donor and other non-household based private expenditure effectively targeted for equitable results, and/or increases in living standards driving increases in enrolment.

When agriculture is excluded, the results suggest that increased public spending on education benefited those employed in tradable and non-tradable sectors equally. When agriculture is included in the tradable sector, however, the PGIS team found positive treatment effects for attendance and the share of public-school enrolment (significant at 1%). Since agricultural households tend to be located farther away from the trade corridor, and they experienced smaller increases in incomes than other households in the tradable sector, this finding would seem to argue for the seemingly equalising role of public education spending or donor and other non-household based private expenditure. Without additional information on patterns of non-government spending, it is unclear of the extent to which public or private spending (or both) are responsible for the more equitable outcomes, and whether or not the source of that public spending was derived from trade.

Public expenditures on health decreased as a percentage of total government expenditure and as a percentage of GDP between 2011 and 2015, but then rose sharply in 2016. Yet, because the economy grew during the same period, the absolute per capita spending increased over the period. The disaggregated results by distance from the trade corridor showed that the proportion of households who did not consult a medical centre at their last sickness fell in similar proportions in the trade corridor and elsewhere.

At the same time, the proportion of households using public health facilities converged over the period, meaning that they increased more rapidly in areas located far from the corridor (statistically significant at the 1% level). This indicates that health expenditures may have played a similar equalising role as education expenditure, reaching priority areas that benefitted the least from trade. Usage of public health facilities also remained the same across employment sectors, suggesting that increased public spending on health benefited both groups in equal measures.

The EICV allowed the team to estimate the transfers received by households. Since the EICV sample is nationally representative, the total transfers received by households should correspond to total government expenditures on social transfers. Information extrapolated from the EICV indicates that between 2010/11 and 2016/17, the average amount of government transfers received by Rwandan households increased in nominal terms from 892 RWF (0.78 GBP) to 1044 RWF (0.91 GBP) per

person per year.⁶⁷ However, this increase is not statistically significant, and the increase is lower than inflation over this period, which suggests that transfers decreased in real terms over the period. As many households' wages increased over this period, and the Government transfer programmes are means-tested, this result would be consistent with the decreases in poverty found in Rwanda.

In focus groups, respondents indicated that they use public education and health services, but more people enrol their children in private schools than in public schools. The shifts in the quantitative data between public and private schooling were not evident in the qualitative data. Many of the respondents were aware of the social transfer programmes sponsored by the Government, and one poorer respondent said he was a beneficiary of the VUP programme (see DEQ 4.3).

In summary, the public expenditure channel in Rwanda may have had some positive impacts through health spending and education spending, particularly among households far from the trade corridor. In other areas, however, the changes are likely attributable to improvements in income cited above.

Tanzania

Overall, public expenditures on education decreased from over US\$30 per capita to US\$25 per capita between 2010 and 2014. However, when looking longer term, public expenditure levels appear to be within historical ranges in per capita terms. Furthermore, the proportion of public education going to primary education, which tends to be the most pro-poor, has been fairly stable over time.

The team found no statistically significant differences between trade corridors and other areas in terms of school enrolment (decreasing from 41.1 percent to 36.6 percent in the trade corridor and 59.6 percent to 53.2 percent far from the trade corridor) and in terms of the proportion of children enrolled in public schools (from 92.5 percent to 90.6 percent in the trade corridor and from 92.7 percent to 91.1 percent far from the trade corridor). It is likely that the decrease in the percentage of families sending all their children to school reflects a decrease in the standard of living. However, the share of out-of-pocket expenditure on education in total household expenditures decreased substantially for both areas and was almost even in 2015 (3.9 percent in the trade corridor and 3.8 percent far from the corridor). Taken together, these findings suggest that public expenditure on education probably did not play a significant part in explaining the changes in poverty over this period, rather significant changes in education funding reached those who did have their children in school.

The breakdown by sector of employment shows no statistically significant effect on school enrolment, nor on the use of public schools. This suggests that public spending on education equally benefited those employed in tradable and non-tradable sectors.

Public expenditures on health remained almost constant in per capita terms between 2010 and 2015. There was an increase in public health expenditure in 2016, but this could not affect the survey results, as the survey was conducted in 2014/15. The household survey results, when disaggregated by distance from the trade corridor, shows that the proportion of households using public health facilities fell in both areas; but there is no detectable difference between the two in terms of the size of the fall. However, the proportion of households who did not consult a medical centre at their last sickness, decreased in communities far from the trade corridor, while it remained constant in the trade corridor (statistically significant at the 1% level). This is also confirmed by the fact that the share of household spending directed to health increased rapidly in areas far from the trade corridor than in the corridor itself. This suggests that households paid out-of-pocket for their additional consultations, rather than without charge through increased public spending on health services in those areas. The improvements in utilisation of health services in areas far from the trade corridor are likely to be driven by general improvements in living conditions in these areas, which would correlate with the levelling of prices seen in Tanzania.

The TNPS allowed the team to estimate the transfers received by households. Since the TNPS sample is nationally representative, the total transfers received by households should correspond to total government expenditures on social transfers. The TNPS indicates that between 2009/1010 and

⁶⁷ Official government figures on transfers were not available to validate these amounts.

2014/15, average government transfers received by Tanzanian households increased by 1268 TZS (0.44 GBP) to 2074 TZS (0.71 GBP) per person per year. However, this increase is not statistically significant, as might be expected, since the conditional cash transfer programme was in pilot phase during this time, and too limited in its coverage to cause a significant change (see DEQ4.3). The finding above, however, that income from transfers was significant in the trade corridor, could be interpreted to mean that poverty in the trade corridor would have increased in the absence of those transfers.

The qualitative data does not fully align with the quantitative data, but most of the focus group respondents in Tanzania were wealthier based on the sampling plan. Many of them mentioned that poverty had increased, as noted prior, and that in some families, children were no longer going to school, but staying home to help their families. Similar to other countries, the discussions on health care varied depending on the individual's needs and experiences. Only a few of the local leaders mentioned the social transfer programmes but given the sampling it is likely that most of the respondents would not have been eligible. Finally, it is notable that in general, the tone of the respondents in Mpwapwa, far from the trade corridor, were more hopeful than those in other locations. While their answers did not differ concretely, they indicated they thought things would improve in the near-term, which differed from other respondents.

In summary, the public spending channel did not increase either in health or education, but this was the same for households near and far from the corridor. As poverty increased in those areas, it is likely that the programme helped mitigate depth and severity of poverty amongst its beneficiaries. It was not possible, however, to tie those results to increased revenue from trade.

Uganda

Public spending on education remained fairly stable in Uganda between 2012 and 2015, both as a percentage of total government expenditure and in absolute terms (USD per capita), though the figures represent a significant decrease since a peak in 2005, when education spending represented up to 20% of total government expenditures. The proportion of households with all school-aged children enrolled in school increased sharply in the trade corridor (from 52.8 percent to 69.9 percent), but not in areas located far from the trade corridor (58.0 percent to 61.0 percent) (statistically significant at the 1% level), with more households sending their children to private school in both cases. Public school attendance decreased from 77.1 percent to 61.1 percent far from the trade corridor, and from 57.9 percent to 48.5 percent in the trade corridor. At the same time, the share of out-of-pocket expenditure on education in total household expenditures increased over the period, in similar proportions in the trade corridor and elsewhere, reflecting the shift from public to private schools. This evolution may reflect the general improvement in living standards in the trade corridor, rather than any specific public spending on education in these areas.

When analysed by sector of employment, similar shifts are evident with increases in overall enrolment and decreases in public school attendance in both the tradable and non-tradable sectors. Given the lack of statistically significant differences by sector of employment, public expenditure on education probably did not play a significant part in explaining any changes in poverty over this period.

Public expenditures on health decreased as a percentage of total government expenditure and in per-capita terms between 2012 and 2016 in Uganda. Consequently, public health spending would not be expected to be one of the channels that contributed to decreasing poverty overall in Uganda over this period. The disaggregated results by distance from the trade corridor show that the proportion of households who did not consult a medical centre at their last sickness fell in the trade corridor, while it increased amongst households located far from the trade corridor. The effect is statistically significant but only when Kampala is included in the corridor.

At the same time, the proportion of households using public health facilities increased sharply in the trade corridor, while it decreased in other areas. This effect is statistically significant at the 1% level. The proportion of total household expenditures directed toward health care decreased both in the trade corridor and far from the corridor, without any detectable difference between the two in terms of

the comparative rate of decrease. This suggests that the improved consultation rates in trade corridor areas are likely correlated with improved access and use of subsidised public health facilities in these areas. As public spending did not increase, it is possible that donor, or other private funding, handled these improvements, but it is not clear from the available data.

The PGIS team was able to mine some data on social transfers in Uganda since the UNPS sample is nationally representative. Total transfers received by households should correspond to total government expenditures on social transfers. The UNPS indicates that between 2011/12 and 2015/16, average transfers received by Ugandan household decreased from 5353 UGX (1.12 GBP) to 4126 UGX (0.87 GBP) per person per year. However, this decrease is not statistically significant. Furthermore, the UNPS does not clearly specify the source of the transfer. Consequently, some of these transfers could come from charities, family members, or other private sources.

The qualitative data confirms the quantitative findings. Similar to Kenya, respondents indicated that when incomes increased, they were able to enrol their children in school, or shift them from public to private schools. Many respondents used health services, and they were perceived to be more available in some communities, but individual experiences differed in terms of cost and quality. None of the focus group respondents indicated that social transfers were important, but most of the respondents in Uganda were wealthier; based on the focus group distribution, and they would likely not have qualified for any transfers.

In summary, use of education and health services increased in the trade corridor, which correlates with the decreases in poverty in these areas. Based on the decreased public expenditure on health and education over this period, however, it does not appear that public spending in education, health, and social transfers were the cause. Increased income enabled families to spend more on education, and it is possible that donor or other funding that comes from neither the government nor households was partially responsible for these improvements as well.

Conclusion

As the public expenditure data is even more limited than the survey data, the results should be interpreted with caution. The PGIS team's assessment is that current public spending does not appear to have influenced poverty based on the data available from the most recent administrative data, with perhaps the exception of public spending on education in areas far from the trade corridor in Rwanda, and social transfers in the trade corridor in Tanzania. As recent enrolment data from Rwanda indicate that boys and girls are enrolled at similar rates in primary school, there may be no discernible gender effect⁶⁸ in enrolment, but there may not be parity in the outcomes.

However, it is not clear that the public expenditure data available represents the total current investment in those sectors. Running the analysis with total spending, including donor and other non-governmental, non-household spending may yield different results. Based on the international development literature, it is entirely likely that the aggregation of earlier investments in health and education (given the long-term nature of return, particularly of the latter) did contribute to overall growth and poverty reduction in the region through higher wages as workers have higher skill levels than they did a generation ago.

Although it is not clear from available administrative data, survey data revealed transfers were an important channel for increasing income in Tanzania in the trade corridor, with the impact of potentially preventing more people from falling into poverty, or mitigating the depth and severity of poverty in some households. While the household survey data for Tanzania indicated there was no statistically significant difference between female-headed households and all households in the trade corridor with regard to transfers, there was a small but significant impact on female-headed households in the tradable sector when agriculture was excluded. This indicates that transfers might have potential for influencing poverty, but they must be carefully targeted and have sufficient coverage to reach the intended beneficiaries (for additional discussion, see DEQ 4.3).

⁶⁸ World Bank. 2019. World Development Indicators. <https://databank.worldbank.org/source/world-development-indicators>

Conclusions on Changes in Poverty

Based on the data available, it appears that the income channel did (and could further with continued economic growth) have significant impacts on poverty and consumption in spite of increasing prices, and that being in the trade corridor is a key factor in benefitting from trade in Kenya, Rwanda, and Uganda. It is not clear, however, that employment alone or public expenditures in areas such as education or health are influential. Transfers have potential for reducing poverty, but only if they have sufficient coverage. It is also not clear that the improvements in income alone explain the reductions in poverty, which were extensive in some cases. Beyond the impact of transfers (from all sources, not just government), one factor that might be emerging is credit or borrowing (formal, semiformal, or informal), as financial services are becoming more widespread and targeted to the poor throughout the region. In indirect focus groups, respondents indicated that borrowing was becoming more common, and in most groups, an example was cited of someone who was unable to repay their debts. Much of that lending targets poorer women in particular, and they may both have greater access to funds that do not require collateral and be more at risk of being unable to repay those debts. In any future examination of impacts of trade on poverty in this region, it would be useful to obtain clearer data on both transfers and borrowing behaviours to better understand the full picture.

Other Indirect Impacts on Border and Port Communities

In addition to the long-chain effects on poverty through prices and income, TMEA's contribution to trade and improved systems had many indirect impacts on the local communities. Other investments have combined with TMEA's to compound some of the changes resulting at the local community level, and it is difficult to entirely disentangle the impacts, as discussed below.

Time and Costs

In conjunction with the TMEA-funded changes made at the port, the Government of Kenya's Standard Gauge Railway (SGR) project at Mombasa has reduced time and cost by moving large amounts of cargo directly from the port to inland destinations, but has created winners and losers in doing so. Some wealthier traders (female and male) reported that the time to import and export their wares had decreased and that the improved road conditions aided them in getting products to their customers faster. Poorer traders (female and male) typically did not comment on import times, but the improved road conditions generally helped them as well in terms of their time and transport costs.

While demand for trucking services at the ports seemingly exceeded supply in the past, now truckers (who are predominantly male and wealthier) may wait one or two weeks without having a load. Employers used to offer incentives to get the truckers to be as efficient as possible, but now the decreased demand has reduced the opportunity for truckers to earn higher wages. One said, 'We stay a long time before getting work. We depend on mileage and get good money, but when you are just stuck like now, you get just your salary.' Another explained, 'Once you leave there, your boss promises you 5000 more if you come back to collect the cargo. So, when you see that, you come faster to pick the cargo. But now, you do not get the calls that we used to get on our way back. Right now, he is not tracking the vehicles like he used to do before.' Focus group participants in Mombasa reflected on the changes in the trucking industry, 'So many truck drivers lost their jobs. Some lost their trucks because they could not pay on the loans and their trucks were auctioned.'

The SGR has also changed the market price for transportation of goods. As the SGR costs now represent the new market rate, it puts pressure on the trucking system to be more efficient. The costs of fuel float with world prices, and that creates further downward pressure on capital and labour costs. As one respondent noted, 'The fuel stays the same, but if the costs of transporting goes down further, it won't make sense for owners and truckers.' While overall improvements in efficiency are desirable, between the decreased demand and the downward pressure on wages, some truckers noted their livelihoods had been seriously constrained, and few had other prospects for income generation in the short-term.

Unlike the truckers based in the port communities, the local truckers in Busia, Taveta/Holili, Mirama Hills/Kagitumba, and in the remote sites indicated that they were busier since the opening of the

OSBPs, and they were earning more money than before. Most indicated they were able to make more trips than before within a month due to the reduced travel time required. The improved roads also reduce wear and tear on their vehicles, and the technology available for scanning registered containers reduced time significantly. One trucker stated, 'There are no delays in Busia. [We] enter and exit within 24 hours, unlike at Malaba border where there are delays. We have to stay there for a week as trucks are many.'

Dislocations of businesses and workers

Aligned with the reduced costs that truckers cited at the borders and ports, local businesses have seen a contraction in their services and livelihoods. One business owner in Dar es Salaam described the change, 'There was overcrowding at gate five and there was money. We could also get in and out of the port so easily, that is why we were able to do a lot of business. Today gate five looks like a ghost gate; no trucks parked, no traffic queue, you see very few people and most of them are broke.'

According to the displaced business owners at both ports, their earnings decreased as a result of the changes at the ports. For example, one businesswoman in Dar es Salaam shared, 'Business was very good before the expansion of the port because I could cook 11 kgs of rice and 5 kgs of maize flour and sell everything. Today, I struggle to sell 1.5 kgs per day. I used to sell food at 3000 to 4000 shillings a plate, but today I sell at 2000 and sometimes even as low as 1500.' Both volume and value of the goods and services has been depressed. The families of the poorer business owners seem to have been affected more severely, as shown in the contrasting descriptions of how the income decrease affected wealthier and poorer business owners in Dar es Salaam.

[My] family was negatively affected because during the period we were kicked out is when they closed gate 5 for expansion. I was lucky that a fellow trader took me in but there was no business. The family suffered, especially the school-going children, who were now forced to live on two meals a day. – Poorer displaced business owner

My household was deeply affected because this was the only source of income, I had to remove my child from private to public school. I was not the only one affected it was a whole community because there were many businesses at the port, and many have never recovered. – Wealthier displaced business owner

According to the local leaders and displaced business owners, many of the displaced businesses did not survive the relocation. A number of reasons were cited: they lacked the capital to support themselves through the relocation process (as finding new locations took a long time by most counts), their new locations were not advantageous, their customer base shrank too much to support the business. Most business owners indicated that their customer base was the truckers coming through the port, and many of the businesses were not connected at all to the local community outside the port. Therefore, as the number of truckers declined (and the time they spent there decreased), their customer base shrank and could not be replaced by customers from the local community.

Box 1: Local trader perspective on changes at Dar es Salaam port

Before 2016 trucks would pack all over around here sometimes for up to two weeks, there were so many clearing agents, so many clerks and so many transport agents. The gate was very lively and teeming with people, Mohammed enterprises would hire around 2,000 casuals and the cooperative dealing in coffee also used to hire around 1000 casuals. Business was good: people used to book food because by 2pm you would not get food anywhere.

In 2016 they closed the gate for repairs and when they re-opened there were a lot of changes: all local trucks were now using gate 8 and all workers in the port gate 3. To make matters worse TANROADS banned roadside parking, they would come and tow away any truck parked on the sidewalk. We organized ourselves as traders and went to protest at Tanroads because our businesses were suffering; they offered us the alternative of paying for parking which they were charging at square metre! The fee was so high we could not afford it. Today business is so bad we just do not have any alternative otherwise I would have moved from here.

Employment by businesses serving the truckers has also declined as a result. Among the displaced business owners interviewed (both male and female, mostly poorer and one wealthier), most employed four or five workers prior to the changes at the ports. Most of them have now reduced their employees to one, and in one case a businessperson no longer has any employees.

Businesses near the border posts and major stopover points along the trade corridors have been similarly affected, according to local leaders and truckers. One trucker noted, 'Honestly the shop owners have been affected mostly.' Another mentioned, 'Like before we used to sleep in Mariakani, now no one sleeps. The ones that are benefiting are the ones at the [Malaba] border.' A trucker in Busia observed that, 'since 2016 food and lodging costs have reduced because of the efficiencies at the Busia border. At non-OSBP borders, truckers noted that, 'the local community at the border likes it when there is long queue because one way or another, the drivers and the turn boys have to spend.' They did mention that few used hotel services for sleeping anymore, however. Most truckers indicated that they sleep in their trucks, and only buy food and shower services from locals at the border.

The local business owners at the borders concurred that they had largely lost their source of income with the deployment of the OSBPs. In Holili, in particular, women in the focus group noted, 'Before the one stop border, businesswomen used to get a profit daily, but now you can even stay the whole month and not get money for rent.'

Gender roles

In many locations, the PGIS team heard that women are now encouraged by their spouses to 'get out and make some income', but at the same time, in the FGDs with poorer respondents, people laughed bitterly when asked if things have gotten better or worse, saying it is really bad and has had a negative effect on marriages. It is particularly notable that in Mombasa, respondents in both men's FGDs, wealthier and poorer, felt there was favouritism towards women and people with disabilities. One respondent summed up the situation, saying, 'They easily get tenders, and it is harder for the able-bodied man.' It is not clear that this is borne out in the women's experiences, however, as the poorer women's FGD respondents indicated it was harder to find employment for women than for men.

Changes in gender roles are frequently challenging, at both household and community levels, and some of that shift is occurring, as both male and female respondents in FGDs viewed themselves as being their family's main breadwinners. In some cases, respondents indicated that the shifts were relatively smooth, 'My household supports me, actually they are also learning on how to make the ornaments [that I sell], so they all help including my husband.' In Busia, however, a respondent had a different experience, 'Men want things on the table. If you do not make money, you will be dumped, and he will get someone else who can make money. It can lead to domestic violence.'

Accessibility of border posts

The physical accessibility of the OSBPs also appears to have improved conditions for traders with disabilities and any other travellers with disabilities who might choose to cross the borders at those locations. During the walking ethnographies conducted by the PGIS local data collection teams, data collectors checked the conditions of the facility, including restrooms, to determine whether they were accessible to individuals with physical or sensory impairments. The facilities were mostly accessible for individuals with physical impairments. They had accessible restrooms and ramps were available for individuals who might have trouble with stairs. While most of the staff were behind windows, most of the facilities had staff at the entrance to provide guidance and assistance, but the local data collectors did not have the opportunity to observe them interacting with anyone with a severe physical impairment or a sensory impairment, and whether they engaged appropriately with those individuals.

Although the facilities are more accessible, when conducting walking ethnographies, the PGIS team only observed and spoke with a few traders with disabilities. The Busia border is accessible to individuals in wheelchairs, and some traders observed that they are frequently hired by other traders to carry goods across the border. They do not have any difficulties with the border crossing formalities and the OSBP is better than the old facilities, according to one informant who was in a wheelchair, though they may face difficulties beyond the border point. At the Holili border, where some traders claimed that people with disabilities were engaged to carry goods across the border, an immigration official said, 'I have never seen a group of disabled.... I have never even attended to a disabled person since I started working. We normally have books both for the small traders along the border to write their names as they cross to do business. Everybody who crosses writes their names and I have

never seen a disabled person writing his/her name.’ (It should be noted that this respondent may not have noticed less severe mobility or sensory impairments in some traders.) FGD participants noted that people with disabilities do not pay levies and taxes, and this was utilised by some traders as a means of getting goods across the border without being stopped; this was highlighted in a press report during the evaluation fieldwork as well.⁶⁹ However, other respondents noted that the extra expenses some traders with disabilities incur to employ others to help carry their goods, and theft of their goods because of their immobility, as factors that discourage them from engaging in cross-border trade. Thus, the extent to which individuals with disabilities use OSBPs is unclear.

Further, the extent to which an individual with a sensory impairment would be able to navigate the border posts was unclear. Although braille is used in all four countries, at least for Kiswahili, Luganda, and Kinyarwanda, the local data collectors did not notice braille signs in any of the OSBPs visited (noting that they may have missed small signs as they went through the facility). The teams were also unable to determine whether individuals with hearing impairments would be able to successfully navigate the borders. Focus group participants in Kagitumba noted the lack of audio instruction mechanisms and ability to use sign language at the border for those with sight and hearing impairments, respectively. In some sites, signs are posted, but the teams were unable to identify any staff who were familiar with local sign language(s) or determine if any guidance on providing appropriate services to persons with disabilities was included in staff orientations at the OSBP.

Conclusion

In addition to the channels through which trade can produce long-chain impacts identified in the economic literature, the PGIS team documented an array of indirect impacts from TMEA investments, including reduced transit times and costs (confirmed by both OPM’s Trade and Growth Impact Study⁷⁰, and OPM’s PE), increases in accessibility of border facilities for individuals with disabilities, decreases in productivity in trucking in the port communities, decreases in productivity and employment in services in the ports and border communities, and increases in productivity in trucking in areas away from the ports. The impacts reported were more strongly associated with higher levels of wealth (versus lower levels) than they were by sex. Individuals with disabilities (who tend to be poorer) could potentially benefit from improved access and mobility across borders, though the low incidence of people with disabilities in the study sample precluded validating this assertion. Wealthier traders, male and female, reported positive impacts while most of those (both male and female) who were displaced in either the port or border communities (for example, the employees of the food service outlets) were poorer. Truckers, who tended to be wealthier and male, nevertheless differed in their experiences of their industry in recent years. At the ports, they said their trucking work contracted, while around OSBPs, work was reported to have expanded. It is neither possible to determine the scale of the changes, nor to calculate a final net benefit or cost to communities with the data collected, but it is instructive to note those patterns of benefits.

⁶⁹ kbf. 2018. How crafty traders use children and disabled to evade tax at the borders, Standard, December 29, 2018. Available at: <https://www.standardmedia.co.ke/article/2001307761/how-crafty-traders-use-children-and-disabled-to-evade-tax-at-the-borders>

⁷⁰ OPM: Paul R Baker, David Vanzetti, Mohammad Razzaque, Neetish Hurry, and Jaime de Melo. Deliverable 5B: Trade and Growth Impact Study. (forthcoming)

4 Answering the evaluation questions: Short-chain effects (DEQ 4.1, DEQ 4.5)

This chapter presents the PGIS team’s findings with respect to the short-chain results or direct impacts of TMEA’s activities (based on the evaluation questions for this study, found in Table 7 above). TMEA have worked directly in projects at grassroots levels, supporting women entrepreneurs, for example, or export-ready enterprises in key sectors. The questions represent the interests of DFID and the other TMEA donors with respect to the ways in which TMEA inputs, outputs and outcomes affected beneficiaries’ households directly over the life of Strategy 1. The data for this section comes from the qualitative data collected for the PGIS, OPM’s PE, and OPM’s Trade and Growth Impact Study⁷¹, data.

DEQ4.1 What is the nature – and, where possible, scale – of the likely impact of the overall programme and of key TMEA projects in the portfolio on the poor—direct and indirect? Who is affected by potential short- or long-term impacts, both positive and negative, how, and how is the causality working? AND

DEQ4.5 To what extent has the programme benefited women and girls (noting that the programme design did not purport to benefit them equally)? Have there been any negative consequences for women and girls? Has the programme had an impact on relations, including power and influence, between girls/women and boys/men? How could the programme increase benefits to women and girls within its trade focus?

Although TMEA’s design did not purport to benefit men and women equally, it is critical to understand the programme’s gendered impacts. TMEA’s Women and Trade (WAT) programme was its major effort to address gender disparities, targeting informal women traders at borders and export-ready women entrepreneurs and farmers with a five million USD investment focused on improving women’s participation in trade. The WAT had both individual-level and systemic goals. At the systems level, the projects under this programme worked to develop gender-sensitive frameworks and to engage government to implant such frameworks around cross-border trade and other gender-related issues, which TMEA championed, although government and other partner buy-in was not robust. At the individual level, approximately 30,000 women were trained on key trade processes and procedures, such as the Simplified Trade Regime, according to TMEA’s RF. TMEA projects also worked with women’s groups to provide financial training and peer support to help women take entrepreneurial risks they might not otherwise have taken in restrictive societies.⁷²

According to the OPM Performance Evaluation (2019)⁷³, WAT projects supported business competitiveness, including technical assistance to support traders and organisational strengthening of civil society organisations and business associations. TMEA claimed an increase in export revenues for the entities supported. FPEAK data show French beans exports increased in value by 36 percent and 24 percent from two project sites (see Table 33). Tea brokers reported better prices and profits, and a final evaluation of another project⁷⁴ showed increased export values in Rwanda.

Table 33: Key Export Capability Outcomes

| | Kenya | Rwanda | Uganda |
|--|---|--|----------------------------------|
| Increase in export revenue on TMEA-supported interventions | Tea: ~33% average gain Horticultural: 24-36% gain | Contributed to strong gains in national exports | Maize: 300% Maize flour: 500% |
| Improved (re)access to new markets | FPEAK: 140 farmer groups with 3,557 farmers accessing new markets | 13 of 16 participating groups exported to EAC; RF cites US \$1m in sales | |

⁷¹ OPM: Paul R Baker, David Vanzetti, Mohammad Razzaque, Neetish Hurry, and Jaime de Melo. Deliverable 5B: Trade and Growth Impact Study. (forthcoming)

⁷² Cassar, Alessandra and Katz, Elizabeth. 2016. “Gender, Behavior, and Women’s Economic Empowerment” CGD Background Paper. Washington, DC: Center for Global Development. <http://www.cgdev.org/sites/default/files/gender-behavior-womens-economic-empowerment.pdf>

⁷³ OPM: Keri Culver, Andy Cook, John Spilsbury and Ozlem Akkurt. Independent Evaluation of TradeMark East Africa Deliverable 3B: Performance Evaluation. (forthcoming)

⁷⁴ AYAAB ENTERPRISES Ltd. 2016. The Export Capability Programme (Rwanda and Burundi): Final Draft Evaluation report

| | Kenya | Rwanda | Uganda |
|---|--|--|---|
| Reduction in rejections of the goods exported | Tea rejection dropped from 4 cases to 1 case | Unquantified in report but cited award-winning tea | Reductions differed by region but prominent improvement |

To explore these outcomes further, the PGIS team followed up with several the WAT programme beneficiaries in interviews and focus groups, and the gender-based impacts are reported in this section.⁷⁵

Direct Impact: Time and Costs of Cross-Border Trade

Among the direct beneficiaries of TMEA women and trade interventions, the data collection teams asked specific questions about the costs of trade and the time required for cross-border trade or export activities prior to and after the OSBP and port improvements were made. The mapping exercises they did illustrated the number of points at which traders were stopped along their routes, and the relative time and cost savings once the OSBPs were in place.⁷⁶

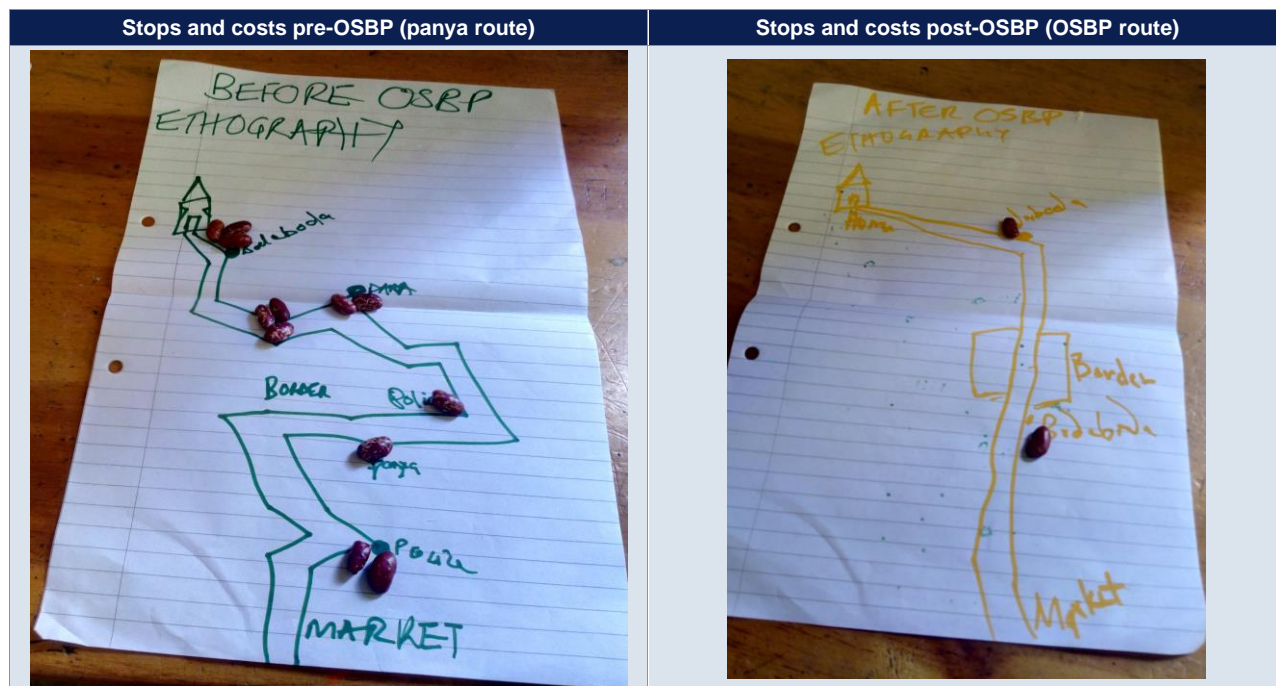
Overall, traders were very positive about the TMEA-sponsored programmes in which they had participated and about the results they saw at the borders. In Tanzania, one respondent noted, ‘TMEA has brought great changes at the borders, right now crossing the border is so easy. In the past it was hell. We had to pay to pass through with our goods, we had to pay bribes, and some women had to bribe with their bodies, and some were raped because they were forced to sleep in the open with their goods.’

In Figure 4, one trader drew out the route she would take from home to the market across the border, with at least six stops and a cost of 1200 KES (approximately 9.30 GBP). However, with the opening of the OSBP at Busia, she is now able to reduce her stops to three en-route – at the border itself and hiring a bodaboda driver on each side of the border – and as a small-scale trader is not paying tariffs or duties on the goods she is trading, so the current cost is 200 KES (1.55 GBP). Further, she can stay on the main road and has a better security situation than along the panya routes. Respondents in many focus groups cited similar experiences. As one Rwandan respondent said, ‘It reduced smuggling because we used to cross illegally and make our purchases, [then] we would hire someone to help us to move the goods.’ Another added, ‘The program facilitated easy movement of goods and people. It helped us expand our businesses, we are doing businesses in a secure environment and that has helped us to pay our health medical insurance, tuition for our children, and solve some other issues for our households.’

⁷⁵ Under S1, WAT did not include any focus on women or men with disabilities, and therefore, the focus groups and key informant interviews did not include individuals with disabilities. As that is a new programming stream under S2, future research should include differential impacts on and outcomes for participants with disabilities.

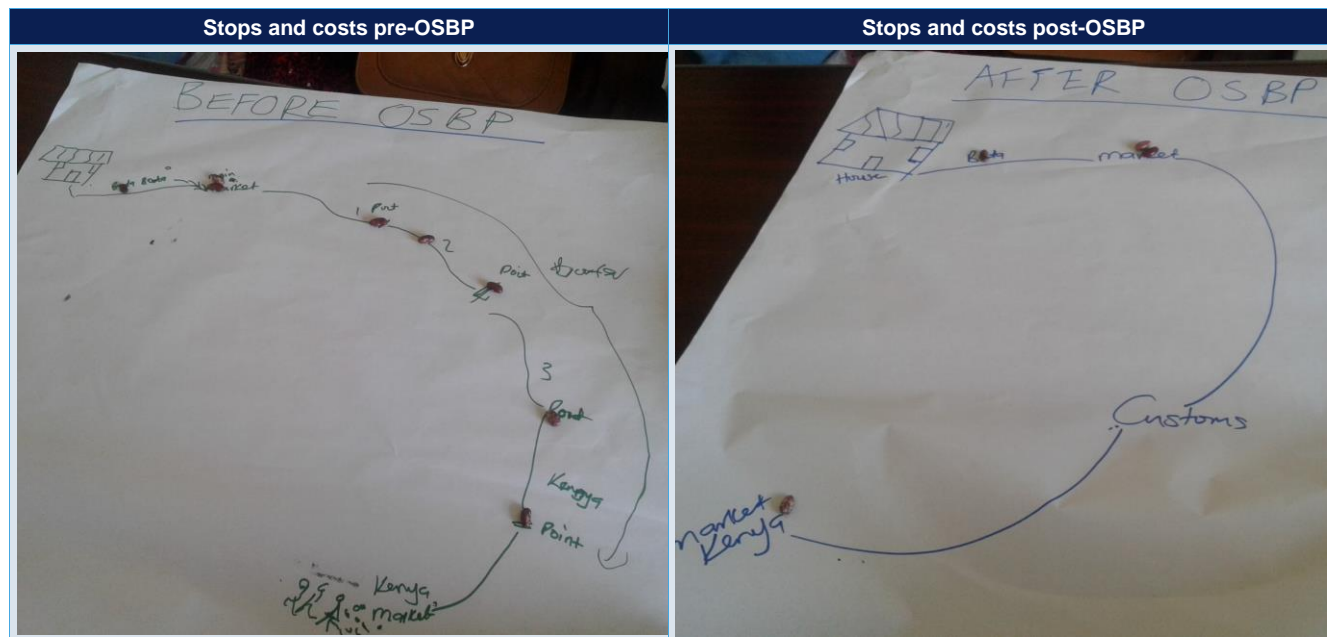
⁷⁶ TMEA did not work specifically with people living with disabilities in their programming, and as such the evaluation team had to seek to speak with traders with disabilities only as part of indirect impact research.

Figure 4: Routes and costs before and after OSBP Busia, Kenya side



In a focus group of direct beneficiaries on the Ugandan side of the Busia border, the women noted that the route had not really changed (Figure 5), but the points at which they had to stop had decreased. Thus, the time had been reduced just by the number of stops decreasing, and the costs had decreased from 21,000 UGX (4.38 GBP) to 12,000 UGX (2.50 GBP).

Figure 5: Routes and costs before and after OSBP Busia, Uganda side



Some OSBPs have offered support for women whose child-rearing responsibilities might otherwise restrict their trading. In Taveta, one focus group respondent commented, ‘There is a day care centre that has really helped women to be able to go to work. They pick [up] their children in the evening and then go and do their domestic chores.’ A creche was constructed at a Rwandan border post to assist women traders on trading days as well. Mothers included in focus groups at and near these border posts confirmed the utility of this service.

Other respondents noted that their businesses are more profitable than before. For example, one Rwandan focus group participant said, 'Before I joined the co-operative, I used to operate a small local business which hardly brought in profit, but after I joined the co-operative, I made a big profit which sometimes gets to amount of four hundred thousand Rwandan francs monthly.' Another added, 'Before I joined the co-operative, I used to operate a small grocery business and when the borders integrated my business expanded as it was carried out in a more secure environment and this has increased our profits which led to improvement in our living style.' This was attributed specifically to the demystification of taxation and improved management they received from the TMEA and Profemme-Twesehamwe capacity building and financial support programme, through increased volume of business and trade, which in turn increased their income.

Box 2: Creating alternatives to prostitution in Mirama Hills

My sister had started engaging in prostitution in both Mirama Hills and Ntungamo town. I started engaging in selling sesame both within the district and across the border. This business became lucrative, and I needed a helping hand as I couldn't manage being in the shop and crossing the border. For many days I would close my shop and take the sesame across the border. This made me lose up to three days by closing the shop. In January 2018, I engaged my sister to join me in the business to take care of my shop while I was away. Luckily, she accepted, and we even managed to enrol her in the Mirama women cross border association. Because we kept her busy and she was earning decent income, I have been able to secure my sister from the bondage of prostitution. My sister has reciprocated this act of kindness and managed to convince some of her colleagues to join the association and do decent work. This has been a great contribution of the association to the women prostitutes of Mirama Hills.

Another challenge to exporting was identified by beneficiaries in Nairobi. While the training offered was deemed excellent around the technicalities of exporting goods, some respondents did not have enough supply to sustain it. Without additional support beyond the training, primarily financial, they were unable to scale their operations to actually become exporters.

Direct benefits for women and girls

The direct beneficiaries of TMEA WAT activities identified a range of direct benefits of their participation in the programme. First, and very consistently, respondents said that they learned how to cross the border and the requirements for trading across the border. In Holili, for example, one FGD respondent claimed, 'We got to understand how easy it is to cross the border and stopped using the panya routes where women used to be raped.' A second added that, 'After I attended the training, those of us who did not have a business started small business, and we do cross the border freely.'

Their statements about the ease of engaging in cross-border trade also reflect an increase in their self-confidence and self-reliance. Women noted that, 'It helped us to be able to do business with confidence.' A local leader described the changes this way, 'Women have become heroines and become brave.' Representatives of TMEA's partners, associations of cross-border women traders and advocacy organisations, also reported significant improvements in the confidence and self-reliance of their trainees. While it seems clear that the women who described their businesses as succeeding or thriving also attributed increased confidence to the programme, but the results are less clear among those whose businesses are struggling. Few of those who described failed or struggling businesses discussed any improvement in self-confidence.

Box 3: Poor women's entry into trade in Kagitumba

Women who began as small-scale traders initially imported goods from Uganda using panya routes to maximise their income. Upon joining a cooperative supported by TMEA, they began crossing at the OSBP border. They became safe, and their goods were safe too. They started purchasing large quantities because they use cars for transport (while in the past, they carried their goods on their heads).

Both male and female respondents in Busia felt that men had been left out of the benefits of the OSBP because there were no programmes targeting male traders or men who had worked as clearing agents who lost their jobs with the operationalisation of the OSBP. Within the TOC, it seems there may be an inherent assumption that women face more barriers to crossing the border to trade than men, but the need for increased self-confidence with regard to conducting cross-border trade is not limited to women. As one male trader in Dar es Salaam said, 'My income has improved because of the changes because I am no longer afraid to pass through the border.' Although there were few male beneficiaries, they may have benefitted as much in terms of self-confidence as the women. We can

extrapolate that the OSBP system then likely benefits a much wider range of both women and men than just those who benefited from TMEA-sponsored programmes.

Many of the direct beneficiaries who participated in FGDs indicated that their income had increased. One respondent said, 'Women have increased their business stocks, started new businesses, improved the businesses they had, built their houses and even put electricity in their homes and even at workplaces.' It was not universal, however, and in some groups, fewer than half of women reported an income increase. While one respondent described the situation as, 'The one stop border has benefitted both the rich and the less fortunate, the rich people are transporting large stock to Kenya, while the less fortunate too have increased their stock as they trade more. Both have benefited in one way or another. At the border, all are treated equal.' But others had a different experience, as shown in the story of change below.

Box 4: Local trader experience in Dodoma

I have been doing mushroom farming for quite some time, in 2016 after the TWCC sponsored workshop I formalised my business. Things however did not go as planned as my business collapsed. I had two employees who I had to release after the business failed. These two young men went to Dar es Salaam and instead of looking for jobs they used the skills they had gained from me to start mushroom farming. One of them invited me to visit and advise him. Today he supplies even Lusaka, Zambia. The other one is doing well, too. He cannot satisfy the market in Dar. I am so happy for them and glad that I helped pass skills to youth.

Another very clear trend in the data is how the proceeds of improved income from trade are used. Very consistently, direct beneficiaries (women and men) indicated that they used their income for school fees and expenses (either public or private school, depending on the respondent), 'We are able to send our children to school and live a good life.' The women did not differentiate between boys and girls, rather were pleased to support all their children's education. Some also mentioned having money for medicine when needed or being able to have three meals per day rather than two. Particularly among more vulnerable households, these improvements in standard of living are significant, i.e. attending school regularly, having regular access to basic medical care, and improving caloric intake are all likely to improve children's prospects for the future.

Beyond having the resources for a better standard of living, some women also mentioned that they are now able to save some money, 'I am able to save, and I was unable to save before.' Savings can help women establish formal businesses, 'I had no business and was able to start a business through small savings from which I borrowed.' Some women have also been able to access small lines of credit, as one respondent in Taveta described, 'My business has grown - I have low capital, but when I get into table banking, I can borrow and capitalize to get [inventory].'

Further, while small-scale self-employment or household businesses are the norm for many of the cross-border traders who participated in TMEA-sponsored programmes, some have found gainful employment in the ports. As a trucker in Mombasa described, 'The port has employed so many women. Before the men use to drive equipment, but now it's the women who drive them.'

Finally, although the impetus to engage in trade likely preceded TMEA's interventions, the impacts of the training, subsequent success in cross-border training or export activities, and increased self-confidence and self-reliance yielded significant changes in the lives of at least some of the beneficiaries. In Taveta, one respondent was excited about the opportunity to exchange ideas with other women. Another in Holili said, 'Now that I do business, my life has changed. I no longer stay at home.' This shift for some women out of the household into the community places them in a very different role. In Uganda, Kenya, and Rwanda some respondents claimed that women had increased decision-making in the household, and in Uganda, one respondent claimed that the downstream impact of the training was decreased domestic violence (see more below).

Some beneficiaries of TMEA projects reported knowing their rights and having support for their trading activities, which allowed them to trade across the border without problems. This was particularly noted at Busia, where there appears to be a critical mass of trained traders and co-operatives, and at Nimule/Elegu, where women traders praised the removal of a checkpoint prior to the border crossing (into South Sudan) where bribery had once been commonplace. Other traders, however, reported still

being subject to payments whether passing through formal or informal channels, and this has also been seen in other studies on cross-border trade in the region.⁷⁷ Direct beneficiaries of TMEA projects report that they now know their rights under the Simplified Trade Regime and simplified Certificate of Origin, and have support through trade information desks and co-operatives; however, corrupt practices take advantage wherever there is lack of knowledge and support, and the poorer and less educated are particularly susceptible.⁷⁸

Negative impacts and externalities for women and girls

While TMEA's interventions had many positive outcomes for most of its participants, some respondents cited negative impacts or externalities as a result of their programme experience or as a result of broader changes in trade. Some felt that insufficient information was provided or available on developing sound business plans, financial planning, and credit, which left women vulnerable to extortionate business practices and unscrupulous lending practices. For example, one respondent suggested that, 'Women have difficulty paying their business premises' rent, and in some cases result into conflict with their spouses when they come to learn of it.' Another said, 'Also, there is little sound information on proper borrowing. Women have found themselves in trouble with lending firms when they are unable to repay their loans.'

As many respondents indicated that any increase in income translates into benefits for their children, so too did decreases in income. In Dar es Salaam, poorer FGD respondents said that families most affected by the changes at the port had pulled their children out of private schools and sent them to public schools or sent them upcountry to stay with relatives. Similar patterns emerge far from the trade corridor as well, such as in Chuka, Kenya, where a respondent said, 'Children are given less food or don't eat well like before. Some households refrain from buying luxurious foods like bread.' As with the positive impacts, respondents did not differentiate between boys and girls, but indicated that all children in a family would be affected. These impacts are consistent with the quantitative data findings on the impacts of trade exposure on poverty.

Another factor that exacerbates negative impacts on women are the gender norms around self-assertion and conflict management. Multiple respondents, particularly in Tanzania, provided examples of women not being paid per a verbal contract. One respondent described the phenomenon this way, 'The daily rate for men is 5000 [shillings] and for women is 3000 shillings as per agreement, but it can go down if sales per day are not good. The scenario of pay going down is more applicable to women though, as men tend to insist on being paid the agreed amount.'

One final impact on women and girls was the overall increase in burden of adding paid work outside of the household to the unpaid work inside the household. Child-rearing and elder care typically fall disproportionately on women and girls, and many economically disadvantaged households depend at least in part on subsistence agriculture. A few of the respondents indicated that their new business opportunities are additive, and it is not clear how easily paid and unpaid work can be balanced. One respondent said, 'So far it has not affected my domestic responsibilities because I have been working from home but I already have a rented shop, so I plan to move my operations there. I believe I can do my domestic work without a problem because I was able to do it when I was employed and running a business at the same time.' Based on recent enrolment rates,⁷⁹ it would appear that primary school enrolment remains high for both sexes, but then drops off for secondary in Tanzania and Rwanda (and likely in Kenya and Uganda as well, though data are not currently available for secondary enrolment). Thus, one interpretation might be that older children, both boys and girls leave school to assist their families with paid or unpaid work. With the current data, however, it is not clear whether girls are disproportionately affected.

⁷⁷ See for example Tyson (2018), Siu (2019), Eberhard-Ruiz and Calabrese (2017) and UNCTAD (2018).

⁷⁸ Tyson, Judith E. (2015). Effect of Sub-Saharan African trade corridors on vulnerable groups. Overseas Development Institute, p. 32 Available at: <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/10136.pdf>

⁷⁹ World Bank. (2019). World Development Indicators.

Relations between women and men

As the data demonstrate that there have been both positive and negative impacts on women and girls, the results for changes in relations between women and men are mixed.

Among wealthier respondents, reported changes were largely positive. As one respondent in Holili said, 'Women are doing very well, and their husbands are recognising it. They even support the women if they need small funds for table banking. Women are now brave and can do it. The women have been congratulated by their husbands for the job they are doing well for the family.' Another in Kagitumba said, 'I have been able to explore many business opportunities, which has made me earn more and bring respect to my household. The community respect towards my expanded business has enhanced my clout.' Similarly, in Nairobi, one said, 'We are sure of ourselves more; we no longer depend on our husbands or boyfriends to do stuff for us at home.'

Box 5: Business diversification in Hoima

A beneficiary in Hoima previously owned a craft shop with her husband. In May 2017, she was invited to be part of a team of women that were selling crafts. She was convinced that the group had made headways in identifying markets beyond Hoima where they could collectively sell their products at a higher price. She immediately heeded the call and paid membership. She has seen major changes, notably, among members with similar businesses, they have enhanced production, widened markets, and now sell their products to buyers in Kampala. Now, she is able to sell her products both individually and collectively as the team. Her husband takes care of the shop, while she meets with the women in the co-operative to sell as a group. Three months ago, she and her husband acquired a motorcycle with their savings, with a top up from the co-operative. That way they have been able to create an extra income stream through business diversification. They have created employment by engaging the services of her sister who is now taking care of the first craft shop, as the husband manages the boda-boda business. She attributes her success to working together with her husband who has also encouraged her to independently join the women co-operative. The co-operative has exposed her to doing business in a formal way.

In one case in Uganda, however, a female trader's husband exploited the benefits of the project by marrying another woman (unbeknownst to his first wife) and ensuring that she participated in the project as well to then have two wives supporting him. While no cases of abuse were discussed among TMEA participants, the discussion above regarding the tension with changing gender roles applies to them as well.

Opportunities to strengthen benefits to women and girls

In its WAT programming with direct beneficiaries, TMEA could consider expanding its offerings to reach more women in local communities (and perhaps poor men, as well). In addition, TMEA has opportunities to extend its offerings or partner with other organisations to provide next-step services to the beneficiaries. In many cases, women traders specifically identified additional training in business management, marketing, or other areas to help them expand their businesses. They understand that the field of competition has changed, but they are not necessarily prepared to excel in this new arena. In addition, seed funding is critical for many of the small-scale businesses. In addition, given the challenges women have enforcing verbal contracts, some training on contract negotiation, enforcement, and self-assertion may also be useful. For girls, addressing those norms earlier and providing them with training on self-expression, communication, and financial literacy would hold them in better stead in the future. While it is outside TMEA's current scope to provide these types of services directly, several of TMEA's donors support programmes that provide these or similar services. Coordination with other organisations on the ground may enhance the outcomes among TMEA beneficiaries without significant additional programming or outlays on TMEA's part.

Conclusions

Overall, TMEA Women and Trade interventions seemed to have yielded considerable benefits for the participants. Leveraging TMEA's infrastructure and systems investments (along with investments by EAC governments and other donors in the trade system), these interventions contributed significantly to improving the well-being of their participants. However, benefits were not universal, and gender discrimination is a complicated phenomenon that can be manifested in a multitude of ways. The household survey data indicate that trade can have a whole range of gendered impacts, from benefitting female-headed households more than male-headed households (Kenya), benefits for all

households (Rwanda), no significant differences (Uganda), or benefitting male-headed households more than female-headed households (Tanzania). Given the range of outcomes, exposure to trade alone does not appear to be sufficient to mitigate poverty, particularly among female-headed households. Patterns of employment by sector and income (through any number of means) seem to be critical as well.

5 Answering the evaluation questions: Distribution of benefits (DEQ 4.2)

DEQ4.2 Who has benefited from reduced trade costs? How are the benefits in reduced transport time and cost being passed on to poor people through lower prices or lower price increases?

As might be expected in any systemic changes to an economy, changes in the system of trade in East Africa are likely to have benefitted some while others potentially lose out from the reforms introduced. Based on the data collected, the PGIS team has traced to whom the benefits seemed to have accrued. The PGIS team acknowledges that this is not an exhaustive analysis, as there may be other stakeholder groups the respondents did not include in the discussion. However, key constituencies and respondent types proposed in the evaluation's design were reached successfully.

Beneficiaries

Consumers in the trade corridors in Kenya, Rwanda, and Uganda, where prices increased more slowly than elsewhere, were one major beneficiary group of TMEA's investments. These benefits accrued to poorer and wealthier consumers alike, but more of the gains were likely concentrated with wealthier consumers, as the prices of food items, which comprise a larger proportion of poorer households' spending, increased faster than non-food items.

Formal enterprises (including state-owned enterprises) engaged in import and export activities through the ports benefited in important ways, as OPM's Trade and Growth Impact Study⁸⁰, noted that TMEA-funded improvements specifically in the ports accounted for an additional \$7.7 million in exports and \$12.5 million in imports per year (29% of the gains in exports and 85% of the gains in imports – almost half of the total annual gains). In order to engage in import and export operations, firms must be registered and typically have a sizable supply pipeline, which means these firms are typically medium to large firms. In addition, it is likely that large, formal firms also capture some of the remaining \$18.9 million increase in exports and \$1.8 million increase in imports that is not directly attributable to the port interventions.

Truck drivers report being in a relatively weak position within the structure of transport businesses, even when conditions are improving for transport as an industry. In part because companies contract out much of their work (see discussion under DEQ4.3), many are able to pass the costs of losses to the contracted workers, as explained by a trucker in Dar es Salaam: 'The company has gained because they pass the costs to their clients, and in case of [cargo] loss I am surcharged as the driver, so either way the company doesn't lose.' Another trucker indicated that, 'The challenge is that in the office they budget and pay you for the days you are supposed to take on the road. You don't get anything extra if you spend more days than planned', so delays due to traffic or queues at the border are at the expense of the worker rather than the company. Thus, they reap the benefits of the improvements without bearing the costs of some of the externalities that still cause inefficiencies in the system. Similarly, governments have benefited as well. As a truck driver in Taveta explained, 'The tea I carry is government tea, so I can't exactly tell the exact amount they get, but really there is profit according to the figures I see in the papers and invoices I handle during transportation. As for me I am paid according to the mileage I have travelled. There are profit gains because little is used for the transportations costs compared to before when a lot of money was spent on the way.'

In addition, large businesses can take advantage of trade at scale, which is impossible for the smaller traders. As one respondent noted:

The wealthy people benefit a lot in businesses; they can afford to buy large stock quantities. They also have lorries which help them in transporting the products.... The poor cannot afford to get large stock. They also spend more money to take their commodities to the market. The poor are not recognised anywhere. Instead of helping

⁸⁰ OPM: Paul R Baker, David Vanzetti, Mohammad Razzaque, Neetish Hurry, and Jaime de Melo. Deliverable 5B: Trade and Growth Impact Study. (forthcoming)

the poor to reach the level the rich have reached, the poor are being stretched to a position where they cannot. There are more poor people while the rich are becoming millionaires. – **FGD Respondent, Taveta**

Competitive business processes also favour larger firms according to respondents. 'The tenders are also given to the rich people because you must pay a bribe to get the work, even when your quotation is the best. When a poor person goes to get money by borrowing from the rich, the rich go and take the tender, and the poorer person misses out on it.'

Business owners large and small who rely on a steady flow of imported goods have benefitted. One trucker observed that, 'The owner, [now] he can stock his shop in time, but before, it reached the owner once he has run out of stock and closed. Before they were complaining because we got to them late. But now the government has made it easy to clear at the port, and on the road, there is no traffic jam, and the goods get to the owner in time.' The infrastructure improvements reduce the time required to transport goods, and the OSBP borders clearly have sped up the transport of goods across national boundaries, which overall also benefits all consumers of those goods. However, this has also reduced some employment opportunities for the poor, as described by one Kenyan FGD respondent: 'Business has been for the rich since 2016. We used to buy maize in small quantities and sell but now the rich buy in bulk and clear it at customs.'

The cross-border traders (direct beneficiaries) who participated in interviews and focus groups indicated that their trade costs were generally reduced; this was true for both wealthier and poorer respondents. The reduced insecurity seemed to benefit poorer traders more, as the wealthier traders were already employing others to take some of the risks that they were unwilling to take.

The reduced traffic around both ports has brought some improvement in quality of life among local community members there, but business owners report displacement, as described above. In the case of Mombasa, the community also has lost access to what respondents considered to be better value services (i.e. from the health clinic at the port). By contrast, the health facilities at one TMEA OSBP are in use by the public as necessary, though that OSBP is not well-trafficked, and that benefit might be lost if the OSBP becomes as active as it was designed to be.

Even the indirect focus groups and interviews highlighted several direct impacts of TMEA activities in terms of reduced time and cost. Many respondents noted the importance of the changes in clearing customs and tracking cargo at the ports and borders. For example, one trucker explained, 'Going and coming, they have made it easy for us to load, we could take 2 to 3 to even 4 days loading, right now, and you can go and load and leave the same day.... I am now able to manage the money that I have. Before you could use all your money going and coming.'

Transit times have also decreased, according to all the truckers interviewed. One trucker in Mombasa said, 'Like now the company has given us 5 days to reach town. As a driver, I can use 3 days to Malaba from Mombasa and from Malaba to Kampala, only some hours, to Sudan I can use 4 or 5 days but before I used to take 5 days or 7 days.' The non-OSBP borders provide a strong contrast, as another trucker from Dar es Salaam noted, 'We take much less time at the port but since 2016 we take more time at Tunduma border because there is a long queue of vehicles waiting to cross to Zambia so it could take days.'

The direct costs are similarly reduced. One trucker explained, 'From Mombasa to Kampala, I used to use 15000, but nowadays I can use half that amount.... We were being given 30000 from here to Kampala, but now 25000 is what is given. It helps you because you will live well, leave some money with your family.' He was able to gain a bit of a cushion with the reduction in the costs of transporting wares in his truck, but it is not clear that his experience was representative. Others indicated that they received an allowance based on the number of days it should take them to haul their goods, and that no allowance is allocated for delays of any kind, no matter the reason.

One of the variable costs was non-tariff barriers (NTBs), which many traders and truckers noted were still there, but not at the same magnitude as in the past. The truckers in Kenya, Uganda, and Rwanda noted that they had little difficulty with NTBs. Most knew of the SMS phone number to which they

could report NTBs, but none had had occasion to use it. But it may also depend on the routes they take, as one trucker from Mombasa noted that, 'It's there, you just have 50 shillings for all the road blocks on the way, it is still there.' The Kenyan government, however, seems to have proactive measures in place to reduce it, as shown by the experience relayed below.

*I was stopped [by the police]. I didn't have any money. I had overstayed in Uganda. I explained myself to him, but he insisted I turn [off] the road, I refused. Someone [from the car behind me] came with a camera, and asked me what do they want. So, I told him, they wanted 1000. He gave me the money to pay it, and I did, and the policeman was arrested. That is when I realized [the passengers in the car behind] were anti-corruption. That is the only one I know of. – **Trucker from Mombasa***

In Tanzania, more truckers reported problems with NTBs. One noted, 'This job is very difficult when you reach Vigwaza just after the weighbridge and again at Mikumi. The police are notorious for identifying defaults that are true and false. They are good at creating a situation just to take bribes.' When asked about the NTB reporting mechanism, one Dar es Salaam trucker said, 'I know there is a number to call and report but I have never used it because I know they can't help, it is just a waste of time and money.'

The higher costs of complying with import/export requirements have discouraged some traders. Some of the (poorer) men in a focus group in Taveta noted, 'OSBP has made prices higher as there is a lot of documentation to be done which costs money, so we manage our costs by using panya routes'. Some respondents in Busia, Uganda felt the same way, indicating that they continue to use the panya routes as well.

Box 66: Rationale for continued use of panya routes in Busia

One respondent mentioned that she spends less money when she goes through the panya routes. She also said that the people who carry the luggage along these routes also need money and food on their tables, so if no one uses the panya routes, then someone somewhere will suffer. She added that many women have educated their children by carrying luggage for people from Uganda to Kenya, hence the decline in business along panya routes is a disappointment to many of them. However, this last was not reported directly by such women to the evaluation team.

Data on the use of panya routes is notoriously scarce, according to a donor respondent for the OPM Performance Evaluation (2019)⁸¹, who nevertheless said it was 'common knowledge' that informal traders move more low-quality maize through panya routes than acceptable-quality maize through border posts, in order to avoid paying duties. Press reports⁸² also noted that price differentials for beer, charcoal, and other products kept informality and panya routes active, even near OSBPs. Border disputes, as between Rwanda and Uganda during the evaluation fieldwork, also can spur their use.⁸³ At the same time, most women and trade participants report using the OSBPs exclusively and extensively. The use of panya routes is likely to remain complex and closely tied to poverty, prices, and security, if the EAC countries demarcate their borders.

Translation of cost reductions to lower prices

As indicated by the price analysis above, prices did not decrease over the course of TMEA's Strategy 1, and the retail and wholesale prices of items do not necessarily move in concert. The lower costs in the transport of goods did not necessarily translate into lower prices for their customers, rather it typically meant an improvement in their profit margins (as many respondents indicated that their income had

⁸¹ OPM: Keri Culver, Andy Cook, John Spilsbury and Ozlem Akkurt. Independent Evaluation of TradeMark East Africa Deliverable 3B: Performance Evaluation. (forthcoming)

⁸² See, for example, from the OPM PE: PPU Reporter. 2019. Traders to reap big as Kenya, Uganda sign pacts, Office of the President of Uganda. Reproduced at: <https://www.trademarka.com/news/kenya-news/traders-to-reap-big-as-uganda-kenya-sign-pacts/>; Radoli, Musa. 2018. Cross-border charcoal trade booms in Busia, in People Daily, July 20, 2018. Available at: <http://www.mediamaxnetwork.co.ke/452487/cross-border-charcoal-trade-booms-in-busia/>; Mondoh, John. 2016. Close down border markets, Kenya-Uganda officials say, in The Standard Digital, July 31, 2016. Available at: <https://www.standardmedia.co.ke/article/2000210420/close-down-border-markets-kenya-uganda-officials-say>; Economist (uncredited). 2018. Informal trade is ubiquitous in Africa, but too often ignored. In The Economist, September 1st, 2018. Available at: <https://www.economist.com/finance-and-economics/2018/09/01/informal-trade-is-ubiquitous-in-africa-but-too-often-ignored>

⁸³ The Nile Wires. 2019. Border Closure: Rwandans Continue Crossing into Uganda through 'Panya' Routes. <https://thenilewires.com/featured/border-closure-rwandans-continue-crossing-into-uganda-through-panya-routes/> April 24, 2019.

increased and they were now able to afford an improvement in living standards – more, healthier food; education for children; improved housing; medical services; and increased savings), or went to offset emerging costs. When asked, most traders indicated that they continued the practice of selling their goods at the price the market would bear (value-based pricing rather than cost-based pricing), and it varied by season for many products, though some noted that the decreased costs allowed them to be more competitive if they needed to be.

Improved quality and quantity of goods produced have also not necessarily translated into improved income. Beneficiaries who were agricultural producers in Kaviani, Kenya indicated that while the training they received was useful, incomes had not necessarily improved. As one participant noted, 'Out of the training personally I improved, I gained new skills and I became empowered in terms of knowledge, but in terms of income not really.' Another stated they were, '...selling more than we used to do before, but they promised us higher returns.' When asked what they had expected, a third participant said, 'We have more quantity, but the market forces affected the prices. Eight avocados are going for 10 shillings unlike what they had promised to buy in a range of 7 to 10 per piece.' One key factor in this situation appears to be that producers often sell to brokers, and increased production in the area may be part of what has depressed prices. In a second focus group, participants noted that, 'I can say we expanded in the sector, but for the income, I cannot say that the income increased because we would still sell to the brokers.' Based on their replies, it appears that any gains in profits in this case are captured by the brokers and are not transmitted to the growers.

In the price analysis above (see DEQ4.1), the PGIS team concluded that prices were increasing overall, but that the increases were slower on the trade corridors. As noted above, this trend may not have been apparent to the interview and focus group respondents.

Conclusions

It appears that TMEA has contributed to reduced costs and time of trade, but the benefits of those savings are not evenly distributed among those in the trade system. Given that trade through the ports can only be undertaken by formalised firms, and those are typically medium to large enterprises to support consistent trade traffic, if formal firms capture even a fraction of the non-port increases in trade (which logically, they must), then formalised firms have more than half the total gains from trade. This aligns with the perceptions reported in the qualitative data, that more gains seem to have been captured by the wealthy or larger, formal businesses than by the poor and small-scale traders, but it is not possible to calculate the scale of those gains in each category. Efficiency gains at the ports and borders have led to key labour resources (clearing agents, loaders, and truckers) and capital resources (trucks) being underutilised. The team also found increases in unemployment, particularly among the most marginal and vulnerable workers, and reductions in wages for truckers and some in the service industry in port and border communities in the short-term.

6 Answering the evaluation questions: Mitigation of negative impacts and redistribution and sustainability of positive impacts (DEQ 4.3, DEQ 4.4, DEQ 4.6)

DEQ4.3 Are complementary policies being adopted to translate the benefits of increased trade into poverty reduction?

The third channel through which the economic literature purports that trade can influence poverty is through public spending, and as shown above, pro-poor spending in health and education appeared to be decreasing as trade increased during the Strategy 1 period (note that education results usually lag behind expenditures by several years). The PGIS team was unable to identify any policies that had been adopted specifically to translate trade benefits into poverty reduction, initiated either by TMEA or by the national governments. Each country in this study had, at the time of Strategy 1, and currently has a national development plan in place (Kenya Vision 2030/Third Medium-Term Plan 2018-2022; Rwanda's Seven Year Government Programme: National Strategy for Transformation (NST1) 2017-2024; Tanzania's National Five Year Development Plan 2016/17-2020/21; and Uganda Vision 2040/Second National Development Plan (NDPII) 2015/15-2019/20), discussing development in each major sector of society and presenting targets. Trade plays an important part in each, but the domestic economy is presented either as equally critical or more so. It is not possible to demonstrate that changes in the provision of nationally funded services such as education and health are linked to increased trade, rather they typically are part of an integrated long-term plan at the national level. Comprehensive, holistic plans have been developed in the four countries included in the study, which do include poverty reduction and an increase in pro-poor services.

In some cases, locally funded services may have increased the availability of pro-poor services, such as in the case of Kenya's devolution exercise. However, a full examination of local government budgets and spending was outside the scope of this evaluation.

Poverty reduction/ Income support programmes

Poverty alleviation is an important social component of national development plans, and the use of cash transfer programmes to reduce poverty has expanded significantly across the region over the past several years with support from a variety of international donors. This development cannot be tied to trade specifically. Kenya is developing its National Safety Net Programme (NSNP), for example, which, in addition to programmes in agriculture, disaster relief, education, and health, includes five cash transfer programmes to assist in meeting the basic needs of some of the most vulnerable groups in society: (1) the Hunger Safety Net Programme (HSNP), for chronically food-insecure poor people; (2) the Cash Transfer for Orphans and Vulnerable Children (CT-OVC); (3) the Older Persons Cash Transfer (OPCT); (4) disability grants, which target people with disabilities and institutions serving people with disabilities; and (5) the Urban Food Subsidy for poor households in urban areas.⁸⁴ Uganda adopted the Social Assistance Grants for Empowerment (SAGE) programme in 2010, which encompassed the Vulnerable Family Support Grant (VFSG) and the Senior Citizens Grant (SCG). The VFSG was phased out in 2015, but the SCG continues to be administered by the Ministry of Gender, Labour, and Social Development to those aged 65 and older. Also, in 2010, Tanzania initiated Community-based Conditional Cash Transfers programme⁸⁵ under the Tanzania Social Action Fund (TASAF), which was successful in improving health and education outcomes among children in the

⁸⁴ Mwanyumba, Robert Maganga. (2013). Portability of Social Protection Benefits across the East African Community: A Case Study of Kenya, Uganda, and Tanzania. Nairobi: University of Nairobi (Master's Thesis).

⁸⁵ Evans, David K.; Hausladen, Stephanie; Kosec, Katrina; Reese, Natasha. (2014). Community-Based Conditional Cash Transfers in Tanzania: Results from a Randomized Trial. World Bank Study. Washington, DC: World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/17220> License: CC BY 3.0 IGO.

pilot phase and is being scaled up across the country.⁸⁶ Finally, Rwanda established the Vision 2020 Umurenge Programme (VUP) to provide cash transfers and other supports to vulnerable families.⁸⁷

Interviewees and focus group participants rarely cited existing programmes (except in Rwanda), and one local leader interviewed indicated that in many cases, the only people who applied were those who were connected to local elected leaders or government employees. Most people in the community were unaware of the programmes' existence or that they might be eligible for benefits, he said. As many of these programmes were initiated as pilot programmes, their coverage was limited, and according to the most recent data available from the WB (see Table 34), even in the lowest income quintile where coverage should be highest, very few people benefit from these programmes. Poverty headcount reduction for the lowest income quintile for all social protection measures was low for all countries – 4.8 for Rwanda, 2.0 for Kenya, 1.5 for Tanzania, and 0.8 for Uganda.⁸⁸ Thus, it does not appear that households might be beneficiaries of programmes unknowingly.

Table 34: Social protection benefits coverage in poorest quintile (most recent year)⁸⁹

| Benefit | Kenya (2015) | Rwanda (2013) | Tanzania (2014) | Uganda (2012) |
|---------------------------------|--------------|---------------|-----------------|---------------|
| Cash Transfers (rural) | 3.7% | 1.7% | 0.0% | 0.9% |
| Cash Transfers (urban) | 2.9% | 1.3% | 0.0% | 0.8% |
| Social Pensions (rural) | 1.5% | 0.3% | 0.0% | 0.0% |
| Social Pensions (urban) | 1.8% | 0.3% | 0.0% | 0.0% |
| In-kind (rural) | 7.2% | 1.4% | 5.9% | 0.0% |
| In-kind (urban) | 2.7% | 2.0% | 5.7% | 0.0% |
| Other Social Insurance (rural) | 0.0% | 17.3% | 0.0% | 0.0% |
| Other Social Insurance (urban) | 0.0% | 15.1% | 0.0% | 0.0% |
| Other Social Assistance (rural) | 1.9% | 15.5% | 1.7% | 75.3% |
| Other Social Assistance (urban) | 3.4% | 14.3% | 6.7% | 68.2% |

Source: World Bank, ASPIRE data base

Given the limitations of the coverage and its estimated impact, it is not clear to what extent existing social protection measures can alleviate poverty at scale. In Tanzania, a few of the poorer focus group participants were familiar with TASAF, and they were critical of its coverage. While some thought corruption was the problem, one respondent said, 'People say TASAF is corrupt, but I don't think they understand. TASAF gives quotas. For example, they can say we have money for 80 poor families in Mpwapwa, but in the district there could be more that 500 poor households. Whichever way you choose the 80 households, many will see it as unfair.'

In spite of the difficulties, some individuals may have in regard to determining that there may be government or donor-funded cash transfer programmes that could assist them, increases in transfers have been an important feature of poverty reduction in recent years in at least two EAC countries. In Uganda, in particular, transfers had a significant effect on income among those working in tradable sectors (excluding agriculture) in Uganda from 2011/12 to 2015/16 (see Annex G for more detail). It is not clear that these transfers were the SAGE programme, but it is not unreasonable to assume a contribution given the coverage shown for other social assistance in Table 34. As the VFSG component of that programme has ended, transfers may no longer have the same impact.

The cash transfers and other social spending may improve consumption and household income, and they may explain increases in both despite declining wages and employment.

⁸⁶ <http://www.worldbank.org/en/programs/sief-trust-fund/brief/tanzania-cash-transfers>.

⁸⁷ Nyhus, Christina and Gibson, Jennifer. (2009). Joint SCUK/UNICEF Study: Rwanda Country Report. London: SCUK and UNICEF.

⁸⁸ World Bank, ASPIRE data base. <http://datatopics.worldbank.org/aspire/indicator/performance>. Accessed on August 14, 2019.

⁸⁹ Most recent data available from the ASPIRE database. The evaluation team's attempts to identify sources for more updated data were unsuccessful, which, it may be assumed, was also the case for the World Bank itself.

Transitional employment supports, productivity-enhancing measures, and entrepreneurship training

Another channel through which negative impacts of increased trade efficiency might have been mitigated is the establishment of active labour market programmes (retraining, job placement, job search) to assist those who were foreseeably displaced, such as customs clearing agents, loaders, and workers in the service industry outlets that withered because transit time was reduced (hotels, restaurants, etc.). Other measures that could have been proactively taken to encourage additional growth to offset losses in a community include supports for entrepreneurship and productivity enhancement among existing firms, particularly in tradable sectors. Although a wide variety of organisations offer vocational skills training and entrepreneurship in each of the countries, the PGIS team found no evidence of coordination of efforts on any scale, and no respondents identified new or targeted programmes that were initiated in their communities in response to TMEA interventions.

Formalisation, business costs, and labour market structural reforms

Beyond small-scale cross-border trade, exporting and importing goods or services generally requires that businesses be formalised. Procedures and costs of starting up a new (formal) business can be onerous, particularly for poorer households. Table 35 below shows that Rwanda has the simplest and least expensive requirements, while Uganda and Tanzania have particularly complex and expensive systems for establishing new business ventures.⁹⁰ Recent reforms in Kenya have decreased the time and cost to start a business, which should encourage more formalisation. While these reforms may assist some poorer households or individuals, they were not initiated to ensure that the benefits of trade were pro-poor.

Table 35: Key business start-up indicators

| Indicator | Kenya | Rwanda | Tanzania | Uganda | Sub-Saharan Africa Average |
|---|-------|--------|----------|--------|----------------------------|
| Number of procedures to register a new business | 7 | 5 | 10 | 13 | 23.4 |
| Number of days to register a new business | 23 | 4 | 27.5 | 24 | 7.5 |
| Cost to register a new business (% of average per capita GNI) | 24.9 | 14.8 | 58.7 | 33.6 | 44.4 |

Source: World Bank, Doing Business 2019, accessed on March 5, 2019

Once formalised, business taxes (overall burden, structure, and complexity) become a primary concern and potential barrier to realising the benefits of trade liberalisation. Overall, Kenya's tax rate has decreased by 7 percentage points in recent years, and Uganda's has improved slightly as well. Tanzania's tax rate has increased, potentially hindering growth. High social insurance taxes tend to inhibit job growth (which could contribute to poverty reduction), and Tanzania's labour tax rate is above average for the region, as shown in Table 36. These changes, however, were not undertaken as an approach to support pro-poor spending.

Table 36: Key taxation figures

| Indicator | Kenya | Rwanda | Tanzania | Uganda | Sub-Saharan Africa Average |
|--|-------|--------|----------|--------|----------------------------|
| Hours per year to file and pay taxes | 179.5 | 95.5 | 207 | 195 | 280.6 |
| Profit tax (% of commercial profits) | 30.1 | 25.7 | 20.8 | 22.3 | 18.3 |
| Labour tax and contributions (% of commercial profits) | 1.9 | 6.0 | 17.5 | 11.3 | 14.1 |
| Total tax rate (% of commercial profits) | 37.2 | 33.2 | 44.0 | 33.7 | 46.8 |

Source: World Bank, Doing Business 2019, accessed on March 5, 2019

As employment is one of the channels through which trade can affect poverty, changes in labour market policies that remove or reduce barriers to firms' ability to respond to market opportunities may be critical to realise the benefits of trade liberalisation. Ease of hiring and shedding redundant workers is one key concern, but the difficulty in hiring labour is low in all four countries. All countries have

⁹⁰ For more about the requirements for business start-up in Uganda, please see <http://www.doingbusiness.org/data/exploreeconomies/uganda/#starting-a-business>.

minimum wage laws, with Kenya's and Tanzania's being particularly complicated. All countries also have provisions for severing workers for redundancy⁹¹, and they differ in their requirements⁹² with Uganda having the simplest system and Tanzania the most burdensome. Uganda and Kenya have recently updated their minimum wages, but no structural reforms have been undertaken that might ensure the benefits of trade to the poor through increased employment.

Overall, each of the EAC countries included in the PGIS has structural issues in the labour and tax systems that may discourage growth through trade. Kenya, in particular, has recently introduced reforms, some of which reduce barriers to the expansion of business and employment, but the minimum wage increase may dampen some of those effects, particularly in light of the ease of contracting out labour. The minimum wage increase in Uganda does not seem to have had a negative effect, but the cost and difficulty of starting up a business may reduce interest in formalising businesses that could otherwise grow into small to medium-sized export businesses. Tanzania has particularly onerous labour regulations and high business start-up costs, both of which likely contribute to the lacklustre results discussed earlier.

Access to credit and finance

As access to credit and finance improve, traders may have greater liquidity and access to capital to expand their operations. In recent years, the percentage of adults with bank accounts (including savings groups accounts) or mobile money accounts has increased substantially, although significantly fewer poor adults have accounts than their wealthier counterparts, and there is a persistent gender gap with more men having accounts than women.⁹³ Availability of credit remains fairly low, however, and the poorest traders generally have the least access to capital, as they have little to offer as collateral to a formal banking institution, and their network of friends and relatives from whom they might borrow also have limited resources. Women are typically less able to access capital, as family and marital assets are frequently registered in the husband's or another male family member's name. This reduces women's access to collateral for obtaining a loan from a formal banking institution.

Table 37: Gender and poverty gaps in account ownership

| Country | Total Adult Account Ownership (percentage) | Gender Gap in Account Ownership (percentage points) | Poverty Gap* in Account Ownership (percentage points) |
|----------|--|---|---|
| Kenya | 82 | 8 | 18 |
| Rwanda | 50 | 11 | 19 |
| Tanzania | 47 | 9 | 16 |
| Uganda | 59 | 13 | 20 |

Source: World Bank, Global Findex Database, 2017 data

*Poverty gap figures represent the difference in account ownership between the top three and the bottom two income quintiles.

To address this issue, several of the region's governments have established social investment funds to support women entrepreneurs or youth entrepreneurs, but it is not clear to what extent these funds can actually be accessed by the individual beneficiaries of TMEA interventions. Thus, current financial policies and services are not necessarily supporting increased trade and export, particularly among small business owners.

To some extent, SACCOs and semiformal savings groups fill a need for savings and credit services in East Africa. Household businesses may rely heavily on these instruments. In a Ugandan town, however, the local leaders expressed concern that some of the poorer traders were also now heavily indebted, as they were supporting their day-to-day living expenses on credit. It is not sustainable for traders to take on excessive amounts of debt, and this generally has a negative impact on well-being, even if in the short-term, consumption or income does not decrease.

⁹¹ Firing for cause is a separate matter and is not tracked as part of the Doing Business project.

⁹² <http://www.doingbusiness.org/en/data/exploretopics/labor-market-regulation>

⁹³ Demirguc-Kunt, Asli, Klapper, Leora, Singer, Dorothe, Ansar, Saniya & Hess, Jake. 2018. Global Findex Database 2017. Washington, DC: World Bank, p. 23-27.

Conclusions

Many complementary policies could be implemented alongside interventions designed to increase trade, to address some of the challenges described above. And in the form of national development plans, frameworks are in place. It is not clear, however, that pro-poor services have priority for funding when improvements in revenue are realised. Complementary programmatic interventions that could be supported (such as active labour market programmes for displaced workers) were neither designed as part of TMEA nor organised in collaboration with other donors or government agencies.

DEQ4.4 Are measures being taken, and are they successful, in mitigating potential negative impacts on any sub-groups – in particular, poor people in localised areas?

The key groups of people who appear to be negatively impacted by (or to not have benefited from) the changes in trade, to which TMEA contributed, include poorer workers in agriculture (primarily in the form of higher prices but without attendant income growth), poor people in remote areas far from the trade corridors (primarily in the form of higher prices but without attendant income or employment growth), truckers (primarily in the form of reduced demand for services), and displaced businesses and workers at the ports and border posts (in the form of dislocation from economic activity). Based on interviews with TMEA staff, local leaders, and other respondents, no programmes have been put in place specifically to address negative impacts of trade liberalisation on any of the groups noted below.

Economically disadvantaged workers in agriculture

In general, workers in the agriculture sector seem to be left out of the benefits of trade that accrue to the rest of the tradable sector. Given the very high proportions of the labour forces that work in agriculture in East Africa, this is a significant challenge. As the focus groups were not stratified by sector, the qualitative data does not help identify the measures that may be in place to assist them, but they do presumably have access to the social transfer programmes in their respective countries.

Economically disadvantaged people in remote areas

Few of the respondents noted any measures being taken to mitigate negative impacts on those who live far from the trade corridors, as there perhaps did not seem to be any direct impact. The group that was best able to address this issue was the local leaders in these areas. One official in Pallisa, Uganda noted, 'Government funds at the districts targeted at special groups of people. The Senior Citizen Grant helped old people to earn an extra buck from government, i.e. 25,000 shillings per month' (approximately 5 GBP). Another in Pallisa noted three distinct efforts: (1) Action Aid in the rural areas, (2) the Uganda Women's Empowerment Programme (UWEP) at the district level that provides seed funding for women in groups, and (3) SACCOs, local organisations that offer credit to members to boost their start-up capital.

In Chuka, a respondent cited cash transfers to the elderly and people with severe disabilities (2,000 KES/month, or around 16 GBP). Young children and people with disabilities receive free treatment at hospitals, and bursaries are given for secondary school. In Mpwawwa, Tanzania, local leaders cited free education (up to form 4), free health care for the elderly and pregnant women, and cash transfers from TASAF. Similarly, in Ruhengiri, Rwanda, a local leader highlighted several efforts to mitigate negative impacts on poor people, including monthly grants to the poor and elderly through VUP, in kind grant of a cow to families through the Girinka programme, and distribution of improved seeds to boost agricultural production.

In both Pallisa, Uganda and Chuka, Kenya, local leaders cited nepotism and favouritism as problem in gaining employment, however, and the official in Chuka indicated that casual workers were the most affected, as they did not have contracts to protect them. In Rwanda, however, anti-corruption measures have been put in place.

There are government initiatives or measures to mitigate some negative effects such as eradicating corruption. The government has installed a toll-free number to use when you are asked to give a bribe. This will help in clearly letting people compete on

merit to getting jobs since corruption has hindered many to get a job even if one was eligible for the applied job. This will also enhance proper trading at border posts. –
Local leader, Ruhengiri

In Mpwapwa, respondents particularly noted that costs of government services had decreased because prior to 2016, one had to pay official fees and bribes, and the incidence of bribery was reported to have decreased.

Overall, respondents claim that the beneficiaries of these programmes do benefit. They can improve their income, savings, and standard of living, and most do. It is useful to note, however, that none of the measures cited are responding to trade specifically or coordinated with TMEA interventions. These are broader measures put in place as part of the national development plans in each country.

Truckers

None of the truckers at the ports (all men, a mix of poorer and wealthier) interviewed referred to any measures to mitigate the negative impacts of changes on them. They appear to have little negotiating power with the trucking companies for which they work, and as long as demand for truck drivers remains lower than supply, they will have few opportunities to better their working conditions or wages unless they can relocate to other areas. Truckers are presumably able to access the same types of social benefits that others would be if they fall into poverty, but it would be more productive to engage them (and their stranded assets) in other fields before that occurs.

Displaced workers and businesses

As noted in response to DEQ4.3, no respondents were able to cite any active labour market approaches in any of the border communities where there were foreseeable dislocations of workers. TMEA staff interviews indicated that no programming occurred under TMEA's auspices to support displaced workers, nor were programmes coordinated with national or local governments to their knowledge. Local leaders confirmed the lack of national or local government programmed. Local leaders and indirect beneficiary focus group respondents (poorer and wealthier) noted the problem, as did some participants in the direct beneficiary groups.

OSBPs

Respondents in Busia, Taveta, Holili, and Mirama Hills had little to report in terms of what supports were available in the community for displaced workers. While many mentioned hospitals or schools for children, none discussed technical or vocational education for transitioning workers. Poorer men in Taveta cited a food distribution program supported by the village chief, but according to them, the programme suffers from leakage, as those who are not poor apparently also access the food intended for the poor. In Kagitumba, most respondents knew about VUP and Girinka, and some were themselves beneficiaries of the programmes.

Ports

Among the displaced business owners that the PGIS team was able to locate around the ports at Mombasa and Dar es Salaam, all of them noted a significant decrease in their customer base – typically half of what it was prior to the port renovations – and thus in their earnings. All had had multiple employees prior to the expansion as well, and most had laid off all or most of their employees, keeping only one or at most two. Thus, the business owners and their employees were all negatively affected. But more than the port renovations, the SGR may have had the most important impact, as it greatly reduced the amount of cargo being shipped by truck from Mombasa (as the truckers formed the majority of the customer base of the displaced businesses).

When asked about how the relocation was handled, all responded that it was handled poorly, as illustrated by one respondent's answer in Dar es Salaam: 'We were given notice, but they never said the exact date. One morning the bulldozers just arrived and started pulling the structures down. It took me three months to process a loan from DCB Bank, and during that time I consumed all my savings. We got no help at all from the authorities.' It should be noted that the timeline for construction is

typically long in the EAC – the efficiency with which port renovations were executed was atypical of the experiences of the local residents. It did not appear that a final date was advertised as the date that the construction would begin, and many business owners lost not only their business sites, but all their equipment and inventory as well. In Dar es Salaam, the respondents also complained that there was no plan for new space where businesses might go. Many built small shacks across the street from their original locations, but the local council paramilitary pulled these down shortly thereafter. The PGIS team had understood that those who were relocated were compensated, but only two of the business owners with whom the team spoke reported any compensation, one in Dar es Salaam and one in Mombasa, but the one in Mombasa also noted that the payments to businesses varied, and no one understood why some businesses received more money than others.

The poor communication with businesses that were to be displaced meant that the losses were more severe than they needed to be (in terms of equipment and inventory lost), and the lack of a plan for a new designated area for services and businesses left the displaced feeling quite negatively towards the project and the local government agencies involved.

The effects of [the changes in the port] are yet to reach the local man. They should first engage the community and the port; they make the community understand what goes inside the port and what the port ought to do. They have done a lot in Kilifi and Ganze, but not the immediate environment. They should engage the local community. They should understand what to expect from the port as the community and how they can access it. - Local leader in Mombasa

A local leader in Dar es Salaam agreed that transparency was not high in the changes being made at the port, and expressed a desire to have more (and more frequent) information.

Conclusions

Aside from compensation for businesses that were displaced by port construction, little effort has been made to mitigate negative impacts of trade on key sub-groups, even those who were foreseeably impacted by TMEA's contribution to trade (dislocations of workers) by TMEA, local or regional governments, or donor or civil society programmes. They, and other groups who are perhaps not being directly harmed but who are not reaping any benefits from trade, including poorer workers in agriculture and poorer people in remote areas far from the trade corridors (at least in Kenya, Rwanda, and Uganda) can access existing social protection schemes at the national or local level, but as noted above, these were established as part of a broader national development plan, not in response to changes resulting from trade.

DEQ4.6 What factors are critical to ensure the sustainability of positive impacts?

Based on the PGIS team's analysis of the qualitative data, four major factors emerged as being critical to ensure the sustainability of positive impacts. Each of the four is discussed below.

Public information related to trade regulations

The training and information campaigns that TMEA and its partners undertook under Strategy 1 were reported to be largely effective in achieving the knowledge and behaviour change required to facilitate greater small-scale cross-border trading at the border posts and ports, both on the part of the traders and on the part of the government personnel. It was also noted as a weakness in the sustainability of the programme's impacts in some sites, however, because that information was not transmitted from the trained cadre of traders to others. Local leaders in all border communities said that the initial information campaigns held when the OSBPs began their operations were very useful, but there is no mechanism for sustaining that information flow within the communities over time. They noted that an individual's retention of information may be very brief, particularly if that information is not immediately and directly useful, and although help points were available within some OSBPs, it is critical to have information or help points available in the community outside the OSBP (as poorer community members may be reluctant to try to cross the border without understanding the process and the expected financial obligations in advance).

Among individual traders, so long as they continue their businesses, the programme's impact is sustained, but there is no mechanism through which other or new small-scale traders can access the same information and training and reap the same benefits cited by the beneficiaries (increased incomes, etc.). Several local leaders in border communities suggested that ongoing information campaigns would be helpful in sustaining impacts, and given the misunderstandings about restrictions on trade that were cited in the various FGDs, their recommendation has merit.

Institutionalisation of practices through training for OSBP and port personnel

In addition to the gaps in information among the general population, rotation of government personnel was not accompanied with sufficient immersion in the OSBP approach. While trained small-scale traders knew how to advocate for themselves, the lack of a smooth transition among border personnel decreased the efficiency of the border post operation and resulted in increases in time (and therefore cost) to the trained traders.

Ultimately, organisational performance depends on individual knowledge and behaviour, and it does not appear that sufficient structures, training, and/or incentives were built into the system that would institutionalise the inculcation of knowledge and behaviour among all personnel assigned to the OSBPs. Although staff at most OSBPs indicated that they had an orientation, the information was not sufficiently in-depth in many cases.

At the ports, respondents were more positive, indicating that impacts would be sustainable if operational procedures were followed. Port personnel did not seem to have the same challenges with turn-over that OSBP personnel did, or perhaps the training systems have been more effective in inculcating the attitudes and behaviours needed to sustain TMEA impacts.

Participatory processes

TMEA created or catalysed the creation of structures to enable participatory processes in the governance of the borders, allowing women's trade associations a direct role in the design and operation of the posts. Various women's cross-border trade associations are represented on the border committees, and they have been important advocates for women traders and for anti-corruption and accountability measures. These vehicles provide opportunities for sustained engagement and dialogue through the dynamic processes of economic development, policy reforms, and changing international trade patterns to ensure that women's concerns continue to be addressed efficiently. Such participatory processes need not be limited to women's trade associations but may also be useful for people (including traders) living with disabilities or other vulnerable groups who use the OSBPs.

Reliability and confidence in the effectiveness of the system

Several respondents noted that key elements of TMEA's interventions would be sustainable: the effective cargo tracking systems, the clearance procedures, and the ability to report NTBs, in particular, were important factors for many respondents in the sustainability of its programme. The underlying, although unarticulated, factors that are more critical are the continued reliability of the system's various elements and confidence that enforcement will be effective. As one respondent said 'The use of unofficial routes has been reduced to a minimum. Most people are using the official border when crossing. All they must do is show their national identity card and cross. I see this as a long-term measure because each and every day, the number of people, traders, and truckers keeps increasing and that is good for trade in the area.' That confidence in the system is what will enable small-scale women traders to continue to advocate for themselves and to grow their businesses. That confidence in the system is also critical to encouraging firms to become exporters and enter new markets, hopefully increasing employment, and income for workers as they grow.

In addition, continued reliability of the system and public confidence in the effectiveness of the system will require sustained effort and political will that has to be cultivated. This would involve demonstrating the widespread benefits of the system, maintaining, and enhancing civil society advocacy around

these issues, and ensuring that local and national leaders are routinely engaged around these issues to work for their sustainability proactively.

Institutionalisation and monitoring

These results link to the institutionalisation of practices through training of OSBP, port, and personnel at related government agencies. They also rely on performance and data management systems that establish performance targets, monitor performance, identify performance gaps or failure points, and have procedures in place to remedy them. 'This looks like it is going to be a long-lasting change. There is no more 'ukora-ukora' escaping duty.'

Data for such efforts could include satisfaction measures, such as the OSBP user feedback from TMEA's Time and Traffic Studies; similar studies could be brief but more frequent, perhaps in concert with the EAC – whose interests would be served in important ways by the effort. Other standards include those found in the World Bank's Cross-Border Charter, which include particular attention to informal traders. This would strengthen incentives for border officials to continue to improve their treatment of people, including vulnerable groups, and could be used to create an additional channel for inputs from such traders about any changing or otherwise unmet needs.

7 Conclusions and lessons learned

1. Given the evidence presented, the PGIS team concludes that trade increased during the Strategy 1 period, and this increase was roughly correlated with decreases in poverty in the trade corridors in Kenya, Rwanda, and Uganda, primarily through the wage/income channel. **Lesson learned:** Income and wages are particularly critical in gauging the effectiveness of trade interventions (along with other relevant data on consumption, prices, and inflation).
2. Employment in the tradable⁹⁴ sector was beneficial for all households in Kenya, and also in Rwanda and Uganda when agriculture was excluded, but in Uganda, Rwanda, and especially Tanzania, agriculture was a key sector in which the benefits of trade liberalisation did not accrue to households. In those countries, positive results in other tradable sectors (small or large) were negated when agriculture was added to the analysis. **Lesson learned:** Trade interventions do not benefit all sectors equally, and given the agriculture sector's relative size and importance, it should be a focus under Strategy 2.
3. Exposure to trade had highly variable indirect or long-chain results on a sex-disaggregated basis. In Kenya, exposure to trade benefitted female-headed households more than male-headed households, but male-headed households benefitted more than female-headed households in Tanzania. In Rwanda, it benefitted all households, while it yielded no statistically significant differences for households in Uganda. Given the range of outcomes, exposure to trade alone does not appear to be sufficient to mitigate poverty, particularly among female-headed households. Patterns of employment and income (through any number of means) seem to be critical as well. **Lesson learned:** The optimistic assumptions about trade and poverty, particularly for the 'very poor', for women and female-headed households, people living with disabilities, and other vulnerable groups, need to be interrogated as part of TMEA's ongoing planning and targeted research.
4. While prices increased overall, based on the household data analysis, prices increased more slowly in the trade corridor than far away from the corridor in Rwanda, Uganda, and to a lesser extent in Kenya. Tanzania experienced a different pattern, in which the data show prices far from the corridor dropping to come into line with the lower price level existing on the trade corridor. Food prices increased more than other goods and services in all countries, impacting poorer households disproportionately. **Lesson learned:** Price effects from increased trade are neither predictable nor uniform, and require price monitoring and analysis; at the same time, many other factors besides TMEA will affect these. There is room for mitigation strategy planning.
5. Positive changes in income in the trade corridor in Kenya, Rwanda, and Uganda seemed to have mitigated poverty. Which form of income was most critical differed by country and by location – in some cases wages were critical and others non-agricultural sales were critical. It does appear, however, that being located in the trade corridor generally improves opportunities for income generation. **Lesson learned:** Tracking information on source of income is critical to understand how poverty is being reduced – through wages, sales of goods, transfers, or other sources (such as borrowing).
6. In Kenya and Tanzania, unemployment decreased in the trade corridor, compared to areas far from the corridor, as it did in Kigali (but not in other areas of the trade corridor in Rwanda). **Lesson learned:** While important, employment and poverty reduction do not always align (as in the case of Tanzania), and that should be taken into account when assessing programme outcomes related to poverty.

⁹⁴ Trade sectors are defined as follows: **Agriculture:** Agriculture, forestry and fishing; **Tradable:** Mining and Quarrying, Manufacturing, **Mixed:** "Electricity, gas, steam and air conditioning supply, Water supply; sewerage, waste management and remediation activities, Wholesale and retail trade; repair of motor vehicles and motorcycles, Transportation and storage, Accommodation and food service activities, Information and communication, Financial and insurance activities, Professional, scientific and technical activities, Activities of extraterritorial organizations and bodies; **Non-tradable:** Construction, Real estate activities, Education, Human health and social work activities, Arts, entertainment and recreation, Other service activities, Activities of households as employers; undifferentiated goods- and services-producing activities of households.

7. In Uganda, there was a rapid shift from employment in agriculture to service and manufacturing jobs in the trade corridor, whereas it remained constant (mainly in agriculture) far from the corridor, which likely reflects both the impact of trade and the inherent differences in economic potential in and far from the trade corridor. **Lesson learned:** Based on the findings of the PGIS, this shift may also herald other changes in earnings (by sex, given the gendered patterns of employment in services and manufacturing) and household dynamics, as women may be working farther from home than in the past, which may have positive benefits (such as more clout in the household and the community) or detrimental effects (such as increased tension or domestic violence in the home). These trends bear watching in the future.
8. In both Kenya and Uganda, there was a significant increase in self-employment in the trade corridor, which seems to indicate that more individuals are working multiple jobs rather than having steady, formal employment. **Lesson learned:** The financial uncertainty of not having a steady income may have driven households to engage in more work and more diversified forms of work (explaining the importance of agricultural sales to households in the tradable sector in some locations, for example). These trends bear watching, and it would be useful to have more refined data on sources of household income in the future.
9. At the micro level, TMEA interventions were generally effective in directly supporting women cross-border traders who reported increased income, improved ability to save money, greater self-confidence and self-reliance, and the ability to take on new roles in the community as a result. The spread effects of these positive impacts typically included improved access to food, education or higher quality education, and health services for their families and installation of electricity in their homes and/or businesses. **Lesson learned:** As a starting point, the women and trade interventions offer important direct benefits to participants. Where increased vulnerability comes into play – whether because a participant is the female head of household, is among the ‘very poor’, is living with a disability, or is in another way or ways vulnerable to the price and/or income effects discussed in this paper, more nuanced, targeted or ‘bundled’ support will likely be required.
10. At the micro level, the cross-border women traders who said that their costs were decreased as a result of the OSBPs behaved rationally and did not lower their prices in the markets. They stated that the higher profit margins they earned allowed them to improve the standards of living for their families (through improved nutrition, education, housing, medical care, and/or increased savings). **Lesson learned:** Participants of TMEA-sponsored programmes said that competition is the driver of price reductions, and their behaviour indicates that they make rational choices for the benefit of their households.
11. The wealthier beneficiaries of the direct interventions, as well as the wealthier indirect beneficiaries, seemed to benefit more than their poorer peers. **Lesson learned:** As the system is now in place for women and trade interventions, TMEA and its donors will need to make strategic decisions about the additional resources necessary to affect outcomes for the ‘very poor’, women and female-headed households, people living with disabilities, and other vulnerable groups. Working with fewer beneficiaries will likely be necessary if future interventions target more vulnerable groups who need more intensive (and costly) services with no additional budget allocation for that task.
12. Financial limitations were key among aspiring exporters. **Lesson learned:** Assessment and strengthening of supply chains and finance is important groundwork prior to working with organisations on export readiness.
13. The few agricultural producers included among the respondents did not experience increases in income because of their reliance on brokers, who captured economic benefits in the agricultural value chains if there were any to be had. **Lesson learned:** TMEA’s mandate to improve export capability that results in better outcomes for such producers will have to deepen to affect the trade environment that includes intermediaries like these, if both the export increase and the poverty reduction goals are to be met.

14. There were significant dislocations of workers, particularly as clearing agents, truckers, and small-scale vendors. These dislocations have ripple effects throughout their communities, and the greater efficiencies in trade sought through TMEA and EAC reforms were predicated on some of these dislocations – eliminating those service providers and/or the lag time in which those businesses could sell their wares and services – is precisely what makes the system more efficient. **Lesson learned:** It would have been sound planning to work with government, other donors, or local community-based organisations to ensure that some transition plans or mechanisms were in place beyond the outlays to the displaced businesses at the entrance to the ports. While TMEA should not necessarily have implemented active labour market measures itself, it would have been advantageous to have identified partners for that piece of the process.
15. Each country has a national development plan that includes strategies for expanding trade (and other avenues of economic growth) and for decreasing poverty, including expanded use of cash transfers. There is no evidence, however, that Ministries of Finance prioritise pro-poor expenditures or translate the benefits of trade into poverty reduction, nor that TMEA was mandated to work toward that end. **Lesson learned:** A coordinated approach among TMEA donors and across DFID's portfolio to support the prioritization of pro-poor expenditures would have been a useful addition in the Strategy 1 period.
16. A significant lack of understanding remains, even in border communities, about the reciprocal freedom of individuals to conduct cross-border trade. This engendered protectionist attitudes, particularly among poorer respondents. **Lesson learned:** Perceptions are critical from a political economy perspective, and it would have been useful to understand how TMEA interventions, and the trade regime more broadly, were perceived to impact border communities.

8 Recommendations

Key recommendations follow in order of priority based on the judgment of the PGIS team. Given that many of the findings discussed in this report are illustrative of the kinds of impacts that TMEA may contribute to, a number of the recommendations relate to undertaking additional studies or analyses that clarify the actual impacts of TMEA's contribution to improvements in well-being of local communities (directly or indirectly). Additional recommendations focus on the micro level based on the feedback of the women and trade programme participants and sustainability of the benefits of TMEA.

8.1 Recommendations for Long-chain Impacts

1. **Ensure that the concerns of vulnerable women, people with disabilities, and other marginalized groups continue to be heard and addressed by border committees.** Female traders and women in trade association representatives reported important gains from their ability to provide ongoing feedback and be represented within border committees. Traders with disabilities should be represented on border committees. These opportunities should be continued to ensure needs continue to be addressed.
2. **Work with appropriate agencies to put supports in place for workers who are likely to be dislocated when new OSBPs begin operations.** Local and national government agencies or civil society organizations may be able to provide targeted services to those workers who are likely to be dislocated as new OSBPs begin their operations. While it is beyond TMEA's mandate to undertake active labour market measures, efforts to smooth the transition for dislocated workers should yield positive results both in economic and political terms.
3. **Focus on impacts in the agriculture sector (in and far from the trade corridor) and identify strategies for ensuring that benefits of trade liberalisation reach households working in that sector, particularly producers of raw goods.** As benefits from being in the tradable sector disappeared when households in agriculture were included in the analysis in three of the four countries, and as large concentrations of the workforce in each country are employed in agriculture, it is critical that this sector is included in benefits from trade. TMEA should consider partnering with other organisations to further assist agricultural producers to identify value addition opportunities that would improve the producers' likelihood of benefitting from trade.
4. **Consider a range of additional studies or data collection activities that would support further project learning, including:**
 - A concerted effort to diagnose why results in Tanzania were so different from the other countries should also be made, as the PGIS study was not able to develop a comprehensive explanation from the quantitative and qualitative data collected.
 - Further investigation of the distribution of benefits of trade within the agriculture sector., which may include analysis of competition in the value chains of key commodities. For example, households employed in tea, coffee, or horticulture (all large export crops for the region) may have had very different experiences than households working in other areas. It would be useful to disentangle impacts for those working in key exports to areas outside the region from those working in crops that are largely consumed within the region.
 - Examining more frequent and targeted data on targeted households and consumption – possibly through a TMEA-supported household-level study, as has been proposed. Such a study should be designed and analysed externally with requisite attention to the literature about poor and 'very poor' households, women-headed households, informal trade, and the critical intersections between gender and poverty. Such a study should also be guided by a detailed theory of change about how TMEA's projects would directly and indirectly affect poverty and gender, and should include wholesale and retail price and inflation data on the typical market basket. Since TMEA's interventions with women in trade are generally linked to

particular types of employment and entrepreneurship, such a study would also need to include examination of business inputs and costs, to track whether any increases in income have real effects on the businesses and on the households they support. Regarding income and relevant sector(s) of employment/earnings, such research should also look at the range of income sources in households, given that income precariousness often means different types of employment and income could be relevant at different times of year, as well as all the source of consumed goods (home-grown/homemade versus purchased) and use of coping strategies (substitution of foods, borrowing money, reducing consumption, etc.).

- Tracking medium to long-term employment and income impacts on displaced business and workers (i.e., truckers in port cities and clearing agents), as it would be useful to know if the impacts reported in this study were short-term outcomes that may reverse themselves in the long-term or become indicators of long-term unemployment and reduced earning power.
 - Tracking of whether the shifts observed in Kenya and Uganda (from formal employment to self-employment in both and from agriculture to services and manufacturing in the latter) are sustained over time and continue to grow.
 - Where consumption decreased, study whether or not increased access to markets and trade enabled households to sell produce that they would have once consumed. This may have had the paradoxical effect of increasing income, while reducing consumption.
 - Examination of the distributional benefits of trade by sector of employment and level of wealth. As the focus groups were not stratified by sector, it is not possible to identify which sectors might have been more or less affected, but that would be worth exploring in future studies.
5. **Work with donors to advocate for governments to prioritise funding of pro-poor services and programmes when improvements in trade revenues are realized.** Although the PGIS team was unable to access any data on changes in government revenue from trade, given the estimates for increased trade that OPM's Trade and Growth Impact Study⁹⁵, produced, additional revenue may have been generated or may be generated in the future. Frameworks, in the form of national development plans, are in place, but sustained prioritisation of pro-poor government funding requires political commitment. This is beyond TMEA's mandate, and should be an effort coordinated with other donors working in the country (at a minimum through encouragement of regular reporting of progress towards national development plan targets).

8.2 Recommendations for Short-chain Impacts

1. **Expand existing programmes that work with women, and through capacity building or partnerships with other organisations, provide “bundled” services that are more effective for reaching the ‘very poor’.** At OSBP sites (new and existing), as well as in remote areas where TMEA's interventions have yet to reach, there is an opportunity to build capacity of women's producer/trade organisations, and/or to partner with other organisations to provide “bundled” support beyond TMEA's mandate, which research indicates work better with the ‘very poor’.
2. **Consider focusing export capability projects in tradable sectors in which women are heavily concentrated.** As noted in the OPM Performance Evaluation (2019)⁹⁶, in Strategy 2, these investments should perhaps be more narrowly strategically focused, and targeting industries with large concentrations of female workers can help increase TMEA's impact on women.
3. **Consider additional data collection or studies that would support further project learning, including:**
 - Tracking the extent to which support services provided at OSBPs, day care centres, creches, and storage facilities, are used by small-scale traders (female and male). The

⁹⁵ OPM: Paul R Baker, David Vanzetti, Mohammad Razzaque, Neetish Hurry, and Jaime de Melo. Deliverable 5B: Trade and Growth Impact Study. (forthcoming)

⁹⁶ OPM: Keri Culver, Andy Cook, John Spilsbury and Ozlem Akkurt. Independent Evaluation of TradeMark East Africa Deliverable 3B: Performance Evaluation. (forthcoming)

PGIS was not able to capture feedback from a critical mass of respondents who had used these facilities. While those who did not use them reported that they were useful to others, it would be worth verifying whether or not this investment helps improve incomes (as those respondents who did use them claimed).

- Testing the extent to which OSBPs are truly accessible to individuals with disabilities. Given that the PGIS was not able to capture feedback from a critical mass of people with disabilities, it would be useful to undertake targeted testing to verify the accessibility of OSBPs for individuals with a range of physical and sensory impairments and to better understand what additional supports could be provided or changes could be made to better meet their needs. Such research should be culturally sensitive, given that OPM researchers found that local respondents appeared to define disability differently to how donors do.
4. **Consider expanding existing women and trade programming.** As the Strategy 1 programming had positive impacts for a seeming majority of the participants, TMEA may wish to consider expanding its offerings in new OSBP locations, in remote areas to reach those who have not yet benefitted from increased trade, and in existing locations as additional opportunities may emerge. Consider basic organizational capacity building, as sustainability of Strategy 1 efforts was called into question in OPM's OPM Performance Evaluation (2019)⁹⁷ and earlier TMEA gender assessments. It also provides an opportunity to learn from prior programming in addressing the different ways poor and 'very poor' women take up and use new learning, and various support services that may be necessary to reach more marginalized individuals, including access to finance and gender-sensitive extension services for women entrepreneurs and farmers, or 'bundled services' packages that have proven most successful among economic development programming for 'very poor' women in the developing world.⁹⁸
 5. **Work with partners (national and/or local government, donors, and community-based organisations) to provide transition support to displaced workers as new OSBPs begin operations and in port communities.** One direct way in which TMEA can mitigate negative impacts on localised populations is in ensuring that workers who will be displaced through the opening of new OSBPs or expansion of port activities have other opportunities to earn a decent livelihood. These activities may include active labour market programmes, information campaigns about social transfers that may help them in the transition period, or sources of mentoring and financing for entrepreneurs developing new business plans to mitigate the effects of dislocations among more vulnerable workers.
 6. **Consider partnering with other organisations that can provide support to cross-border traders and exporters beyond TMEA's mandate.** A large number of respondents, both direct and indirect beneficiaries, asked for skills training or skills upgrading. They are seeking sustained education and advisory services in formats that are modular and accessible to busy adults. While this may be beyond TMEA's current mandate or what TMEA's donors want the programme to achieve, there are a wide range of organizations in each country that do offer some of those services and might be interested in a partnership opportunity.

8.3 Recommendations for Sustainability

1. **Work with government partners (national and/or local) to put effective strategies in place for ongoing information dissemination about trade and OSBP procedures to enable a wider range of individuals and households to take advantage of cross-border trade opportunities.** Most respondents in border communities could not pinpoint when the information campaign occurred or how long it lasted. Unless they were involved in cross-border trade, they had poor recall on the content of the campaign. In some communities, government, or trade group outreach

⁹⁷ OPM: Keri Culver, Andy Cook, John Spilsbury and Ozlem Akkurt. Independent Evaluation of TradeMark East Africa Deliverable 3B: Performance Evaluation. (forthcoming)

⁹⁸ Buvinic, Mayra and O'Donnell, Megan. 2016. Revisiting what works: Women, Economic Development, and Smart Design. Center for Global Development. Available at: http://www.womeneconroadmap.org/sites/default/files/CGD-Roadmap-Update_v4.pdf

officers have direct and frequent engagement with officials and traders, particularly on market days, which seems to work quite well.

2. **Work with EAC government partners at OSBPs to put strong training systems in place to institutionalise training on standard procedures.** As lack of institutional memory and staff turnover were cited as presenting challenges and delays for small-scale women traders, it appears that training systems could be strengthened to ensure that new personnel are prepared to execute their job functions as intended when they join the staff at the OSBPs. If no orientation is currently included on providing appropriate services to individuals with disabilities, that should also be included in the staff training.
3. **Work with EAC government partners to ensure that data management systems and personnel performance measures support the operationalisation of OSBP and port procedures.** Aligned with the prior recommendation, data management systems should capture performance information and that information should be used by senior administrators to adjust operations as needed to meet performance targets. Similarly, personnel management systems should be aligned with performance standards and targets to ensure that better performance is appropriately incentivized and recognized. For example, performance indicators should set expectations for border staff – new and continuing – to incentivise behaviours for which the new border posts were designed: timeliness, fair treatment of all crossers, and adherence to Simplified Trade Regime (STR) standards.

8.4 PGIS Use and Influence Plan

As noted in the Introduction, one main purpose of the evaluation was to identify lessons learnt relevant for both Strategy 2 and beyond TMEA, i.e. insights on enabling and constraining factors, critical actions and gaps that would be generalisable to future regional trade integration programmes. Given that the chief audiences for the evaluation are DFID London, the Africa Regional Department, DFID Country Offices in East Africa, the trade team, and parallel audiences from among TMEA donors, as well as TMEA, the PGIS team has identified a plan for the use of this evaluation that is targeted at maximizing the application of lessons learnt.

8.4.1 Actors and alliances

Key within this plan are the TMEA regional programme team, country teams, and other donors' relevant teams. In addition to these individuals, adopting recommendations will require cooperation with border committees, border officials, revenue authorities, local governments in OSBP and port sites, WAT grantees, local/regional labour agencies, and other local organizations.

8.4.2 Strategies and actions

Given the limitations of the PGIS, one of the primary uses of this plan is to convene stakeholders and provide entry points for follow-up studies and data collection. As most of the actors listed above are already engaged with TMEA, outreach is minimal. TMEA's team has already reviewed the report and indicated that it was taking up several of the recommendations in Strategy 2 (notably the focus on agriculture, expansion of WAT activities, and some research). As resources are limited, TMEA should determine which of the recommendations it will adopt in consultation with DFID and its Board, and incorporate those activities into its work plan for 2020. For DFID and other donors, distribution of the report and executive summary could be accompanied by a debriefing presentation with opportunities. The ultimate products to be produced from this presentation is a plan for coordinated activities, particularly research activities that various donors working in the trade sector might undertake (i.e. development of a regional learning agenda).

For those extended partners whose cooperation will be required to implement the recommendations, a summary of the relevant findings of the OPM Performance Evaluation (2019)⁹⁹, OPM's Trade and Growth Impact Study¹⁰⁰, and PGIS – excerpts of each executive summary - should be compiled targeted to each partner group (i.e. OSBP government partners, OSBP community stakeholders, grantees, etc.). Infographics can be used to make information accessible to individuals with limited literacy levels.

8.4.3 Communication plan

The learning agenda that is adopted by the donors should be shared with relevant ministries and other organizations (e.g. foundations) working in adjacent sectors in the country, as it might be useful and they may have resources to share around specific issues.

The compiled summaries should be translated into national languages, presented at community meetings, and hard copies made available to at community meetings. Any meetings that are intended to be inclusive of individuals with disabilities should have greeters who can assist people with sight or mobility impairments and sign language interpreters who could assist those with hearing impairments. At the same time, information about additional opportunities to provide information should also be made available.

8.4.4 Resources and timeline

The distribution of reports to TMEA and other donors should occur in January 2020 and should require minimal resources. The sharing of the learning agenda should occur by March 2020. The distribution of information to extended audiences will require more effort, and should be targeted for March or April 2020 after the donors have had the opportunity to review findings and plan/coordinate activities where appropriate.

8.4.5 Monitoring

The TMEA team should monitor progress on its activities related to the recommendations in the normal course of its monitoring activities. DFID should monitor progress on the learning agenda through regular convenings (in person or virtual) of any of the donors who agree to contribute to the learning agenda.

8.4.6 Evaluation

When TMEA confirms its priorities for the Strategy 2 evaluation of S2, it should include a review of the efficacy of the activities recommended as part of the PGIS. It should consider incorporating evaluation of the learning from the wider donor community as well, including the extent to which the learning agenda could be leveraged for TMEA programming.

⁹⁹ OPM: Andy Cook, Keri Culver, John Spilsbury and Ozlem Akkurt. Independent Evaluation of TradeMark East Africa Deliverable 3B: Performance Evaluation. (forthcoming)

¹⁰⁰ OPM: Paul R Baker, David Vanzetti, Mohammad Razzaque, Neetish Hurry, and Jaime de Melo. Deliverable 5B: Trade and Growth Impact Study. (forthcoming)