



**MINISTRY OF FOREIGN AFFAIRS
OF DENMARK**
Danida

MARCH 2019

EVALUATION OF THE PRIVATE AGRICULTURAL SECTOR SUPPORT (PASS), TANZANIA





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CARNEGIE CONSULT



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The following annexes to the Evaluation Report can be downloaded as separate PDF files from evaluation.um.dk.

Annex A: Terms of Reference

Annex B: List of interviewees

Annex C: List of documents and data sets

Annex D: Evaluation matrix

Annex E: Survey results report

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LIST OF ABBREVIATIONS

ACB	Akiba Commercial Bank
AIC	Agribusiness Innovation Centre
AMDT	Agriculture Market Development Trust
ASPS	Agriculture Sector Programme Support
BancABC	Banc African Banking Corporation
BoA	Bank of Africa
BoT	Bank of Tanzania
BSPS	Business Sector Programme Support
CRDB	Cooperative Rural Development Bank
DEP	Development Engagement Partner (under BSPS)
FSDT	Financial Sector Deepening Trust
KCBL	Kilimanjaro Cooperative Bank Limited
KIT	Royal Tropical Institute (Koninklijk Instituut voor de Tropen)
MCB	Mkombozi Commercial Bank
MFI	Microfinance institution
MT	Metric ton
M&E	Monitoring and evaluation
NMB	National Microfinance Bank
PASS	Private Agricultural Sector Support
Sida	Swedish International Development Cooperation Agency
SME	Small and Medium Sized Enterprises
TADB	Tanzania Agricultural Development Bank
TIB	Tanzanian Investment Bank
ToC	Theory of Change
TZS	Tanzanian Shilling
USD	United States Dollar

EXECUTIVE SUMMARY

Introduction

In 2000 the Private Agriculture Sector Support (PASS) was established by the Government of Tanzania and Government of Denmark as a pilot project facility under the Agriculture Sector Programme Support (ASPS I) funded by Danida. PASS became operational in 2001 and in 2003 continued as a facility under Agriculture Sector Programme Support II (ASPS II). In 2007, PASS was registered as an autonomous legal Trust and became a component of the Business Sector Programme Support III (BSPS III) and since 2013 the Business Sector Programme Support IV (BSPS IV).

The vision of PASS is to reduce poverty levels for agribusiness entrepreneurs in Tanzania. The PASS Theory of Change is based on the logic that agribusiness entrepreneurs who access, and use, financial and business development services, will increase the level of productive investments. With an increased level of productive investment, the agribusiness entrepreneurs will become more productive and scale up activities. They will increase income and create employment (full time, seasonal, part time and casual labour) in the agricultural sector and ultimately contribute to reduced poverty levels. More specifically, PASS facilitates the provision of financial services and business development services to small and medium size commercial farmers, groups and agribusinesses. PASS offers a range of business development services to its clients, including feasibility studies, business plan development, capacity building and organizing marketing and market linkages. PASS's main focus is on the development of business plans that enable clients to get a loan. The financial services offered by PASS include the appraisal of loan write-ups in line with collaborating financial institutions' terms and conditions and providing partial credit guarantees to cover for inadequate collateral. In addition, PASS has set up the Agricultural Innovation Centre (AIC), that provides business support to SMEs to expand its client businesses through innovation, market access support, financial management and operational advice.

PASS is a non-profit organisation but operates on commercial terms charging commercial rates for its services. PASS is operationally sustainable and is reinvesting any surplus to further increase PASS outreach.

Findings

Since its incorporation, PASS has been and remains both relevant and additional. PASS operations contribute to the goals of the Tanzania Government in economic development as well as those of the Danish Government. Overall, the evaluation finds the organisation as being efficient, effective, and achieving impact. At the same time, the evaluation proposes attention being given to a number of issues, that would improve efficiency for future growth, increasing effectiveness, and reducing risk.

At present, PASS is relevant to about 166,000 end-clients (farmers). PASS is supporting most of these end-clients directly by providing a guarantee to their bank. Other end-clients are supported more indirectly when guarantees are being provided to SMEs who sell to or buy from farmers, or to MFIs who in their turn support their clients. Considering the average household size of between five and six members, about 940,000 household members are benefitting directly or indirectly.

The banks as commercial financial institutions have not yet taken up the role that PASS plays. They slowly need to step up and take a larger share of the risk for PASS to fulfil its ultimate development goal: to no longer be needed as a service provider. Until that time, PASS' goals include a continuous support of end-clients in need of guaranteed loans providing these clients with the means to invest and grow their business, while at the same time stimulating end-clients who have succeeded to up-scale their business to graduate and become 'corporate clients' with commercial banks.

For the near future, further growth is expected and necessary in view of demand in the market and is possible at limited additional staff time through expansion of portfolio guarantees and institutional guarantees. Growth in individual and group loan guarantees implies a growing burden on presently available staff.

In the meantime, further growth can be fuelled by attracting additional capital, increasing agreed leverage with partner banks and lowering the guarantee percentage for recurring PASS clients (to maximum 30%). The leverage ratio is the result of negotiation and is based on trust: financial institutions can base their guarantee not only on the capital base of PASS but recently also on that of Swedish International Development Cooperation Agency. This marks as a significant achievement of PASS in developing its potential guarantee reach and has resulted in a leverage ratio (ratio of loans provided to guaranteed amount) evolving from 0.9x to 2.2x over time.

PASS has likewise provided valuable services to banks and clients by assisting clients to develop business plans on the basis of which loans and guarantees can be provided. This should be continued as it improves viability of the businesses and reduces risks to both parties.

With further growth of the PASS organisation, further digitization is needed to improve effectiveness, as with this strong growth, the effectiveness of the internal organisational processes runs the risk of lagging behind. Risks loom in process bottlenecks and the consequences of centralized decision making processes. Digitization can increase operational efficiency and leverage going forward.

At the same time, the dual goals of financial as well as development impact suggest that M&E of financial and social impact as well as data analysis for day to day operations and strategic policy making (including green growth and gender) can only be successful in the future if further digitization of operations takes place.

Operational efficiency of PASS has come far but can benefit from further improvements. Expansion of the organisation to improve coverage of the presently most important agricultural production areas and value chains through existing branch offices is wise. Further intensifying the network of branch offices is not necessary. FinTech solutions would increase efficiency at the client-PASS interface, in data entry and management in the PASS system, in communications with the banks, and in monitoring and evaluation of progress and social impact.

The level of financial sustainability of the organisation is relatively high compared to most other guarantee schemes, though should continue to be a concern given its commercial business take. Monitoring of financial risks (non-performing loans, exchange rate risks, concentration risks at the level of banks and clients) is key to the success of the organisation with respect to financial sustainability. In particular, the sharp increases in the overall volume of non-performing loans and defaults are a cause for concern and it is recommended that monitoring on doubtful loans should be scrutinised by PASS.

Recently established and newly proposed activities of PASS such as the AIC and lease business are diverse in nature and it should be considered whether these should be part of the PASS organisation itself. An alternative governance model of a holding is suggested, with all three organisations featuring under one holding company.

PASS has had a clear social impact with participating farmers and businesses, as it was intended to do. In terms of changes in productivity and production, our data suggest that improvements of around 25-35% have been achieved in key crops such as rice (with average yields of almost two MT/acre, compared to around 1.5 MT for non-PASS farmers), and this is the level of improvement at or above the level of achievement generally found in similar micro-finance and loan guarantee programmes. Similar growth figures in income related to the studied crops were noted. Again, this is at or above expectation and compares with other similar programmes.

In terms of employment, the results show that investments made possible by the guaranteed loans, especially in SMEs, generally lead to higher labour productivity and does not always lead to higher labour input per unit product within the SME. In this process within SMEs, manual labourers are generally replaced by fewer, but more qualified personnel. However, the increase in volume of production and the related increase in procurement from farmers by agricultural processors and traders indirectly has a positive employment effect at the level of the farm due to expansion of production, assuming expansion is still an option in view of the land area available in Tanzania. The employment effect also includes indirect employment creation of a higher level of quality in the economy at large, such as in services related to maintenance, transport, construction, operation of machinery, administration, and catering and hospitality, though this could not be studied quantitatively.

The impact of PASS could also be found at the level of input cost for financial services. Loans obtained by PASS-related farmers are generally double the amount obtained by other farmers from local (informal) loan providers, against a significantly lower interest rate (by 5%). The process from business plan development to guarantee certification to loan provision should be shorter according to clients, and more timely in view of the agricultural season starting dates. PASS could contribute to this, next to the banks/MFIs.

Recommendations

RECOMMENDATION 1

The evaluation proposes that crop-related specific financial and non-financial services are taken into consideration, taking the particularities of the various value chains, their dynamics and resultant demand for PASS resources. Rice and cashew for instance have very different characteristics and requirements, and possible product innovations in the value chains to be developed with financial partner institutions should take this into account. PASS can learn from Agricultural Markets Development Trust (AMDT) and Financial Sector Deepening Trust (FSDT) in this respect.

RECOMMENDATION 2

The evaluation recommends that a coherent and comprehensive strategy on gender and green growth transformative approaches be formulated.

RECOMMENDATION 3

The evaluation recommends that further agronomical technological development is pursued, and more agronomic knowledge provided to farmers in tandem with financial services either directly or preferably through financial institutions or third party extension services providers.

RECOMMENDATION 4

The evaluation recommends that PASS takes into account the limited employment effects, related to crops and type of mechanisation at the farm level, and the possible positive effect on employment in SME investment and in stages higher up the value chain. Specific labour enhancing policies may be considered, such as a focus on value chains where increased employment (hired external labour) is an important effect of investment. A view on off-farm, indirect effects, and a policy focus on stimulating investments in off-farm employment, could be considered.

RECOMMENDATION 5

The evaluation recommends that input systems and marketing systems around the various value chains are studied and taken as a point of departure to further develop these value chains and allowing farmers to further improve sales and income. Information on prices could be provided through various mobile applications, as is being contemplated by PASS. In this, PASS could cooperate with other DEPs in the BSPS IV programme that focus on these issues, such as AMDT and FSDT.

RECOMMENDATION 6

The evaluation recommends increasing ownership within financial institutions through providing additional training, reduce the credit guarantee percentage on loans to decrease financial reliance on PASS and further promote the portfolio guarantee instrument.

RECOMMENDATION 7

Asked specifically to advice on this, the evaluation recommends implementing a holding model for the various initiatives currently under PASS, including AIC and the lease business, under which all three organisations would fall.

RECOMMENDATION 8

The evaluation recommends PASS to prepare a human resource strategy, consider increased discretionary power of branches and improve digitization of various processes within its operations.

RECOMMENDATION 9

The evaluation recommends improving the M&E system of PASS through expanding the data input and analytical use of the Navision system.

RECOMMENDATION 10

The evaluation recommends PASS to impose increased quality controls on financial institutions' processes for loan assessment, processing and monitoring, further scrutinising processes for following-up on non-performing loans, periodically re-assess the contribution margin of the various branch offices and offset and setting a policy for managing foreign exchange fluctuations.

1 INTRODUCTION

In July 2018, the consortium formed by Carnegie Consult and Royal Tropical Institute (KIT) was commissioned by the Danish Ministry of Foreign Affairs to conduct an evaluation of the Private Agricultural Sector Support (PASS) in Tanzania.

PASS is an independent trust established in Tanzania which aims to promote and facilitate investment in the primary agricultural sector and agribusinesses. PASS provides access to financial and business development services to the agricultural sector, both smallholder farmers and agribusiness, through the provision of credit guarantees to partner financial institutions and through assisting potential borrowers in developing business plans.

This evaluation report is the result of the evaluation conducted between August and November 2018.

1.1 Purpose and scope

The Terms of Reference for the evaluation of PASS Tanzania (Annex A) specify the objectives of the evaluation, which are mainly backward looking with a focus on impact and sustainability, which will be used for consideration on future support for PASS. In addition, the evaluation provides PASS management and the Board of Trustees with lessons learned and insights going forward.

The main evaluation questions raised in the Terms of Reference of the evaluation are:

1. *How has the PASS strategy developed since the start of PASS in 2000, and to which extent has the PASS instruments been relevant for the overall transformational development of the agricultural sector in Tanzania?*
2. *What are the effects and impacts of PASS?*
3. *To which extent has the PASS organisation ensured an accountable, transparent and efficient management of PASS over the evaluation period?*

4. *How has the aspect of institutional and financial sustainability of PASS been addressed and what are the prospects for the future?*

The evaluation covers the period between the establishment of PASS as a facility in 2000¹ and 2018, with a focus on the period from 2008 onwards when PASS became a Trust².

1.2 Structure evaluation report

This evaluation report is structured as follows: Chapter 2 outlines the evaluation approach including activities and limitations. This is followed by Chapter 3 which describes PASS, its history, activities, the Theory of Change (ToC) and portfolio. The evaluation findings are presented in Chapter 4 in accordance with the OECD/DAC criteria, relevance, effectiveness, efficiency, impact and sustainability. Finally, the conclusions and recommendations including lessons learned, are discussed in Chapter 5.

1 PASS was established as a pilot project under the Agriculture Sector Programme Support (ASPS I) and became operational in 2001.

2 PASS was registered as an autonomous body corporate under the trustee laws of Tanzania in 2007.

2 EVALUATION METHODOLOGY

2.1 Approach

The evaluation was conducted on three levels:

1. the overall strategic and institutional level of PASS;
2. the level of the financial institutions;
3. the level of the end-clients (smallholder farmers and Small and Medium Sized Enterprises (SMEs)).

This three-layered approach allowed the evaluation to differentiate the analysis between the institutional set-up of PASS, the effect experienced at the level of the partner financial institutions and the development effects on the level of end-clients.

The first level focused on PASS itself, its governance, the relationship with the Danish embassy in Dar es Salaam, the relationship with the Swedish International Development Cooperation Agency (Sida), its strategy and its result measurement and result measurement tools. The analysis at this level is retrospective. The second level focused on the various financial institutions PASS collaborates with. This second level fed the analysis at the first level. The third level focused on a sample of individual end-clients. This level is vital to provide insights in the effects and impacts PASS has had on small scale producers/farmers, the agribusinesses and their economic environment. The data collected at end-client level allows the evaluation to generalise to higher levels, draw conclusions at the level of the partner financial institution, and the overall PASS level.

The evaluation matrix presented in Annex D includes the evaluation criteria, questions, level of analysis, indicators, methods and data sources. In line with the evaluation matrix, multiple external and internal data sources have been used to facilitate triangulation and cross-validation of the information and data collected. The data collection method used during this evaluation are elaborated in Section 2.2.

2.2 Data collection methods

DESK RESEARCH

The evaluation has reviewed the documentation provided by the Evaluation Department of the Danish Ministry of Foreign Affairs, the Danish embassy in Dar es Salaam and PASS. In addition, the evaluation has reviewed relevant background documentation to further deepen the understanding of the contextual factors; the political environment, and the agricultural and financial sectors in Tanzania. Annex C presents the list of documents.

PORTFOLIO ANALYSIS

The evaluation performed both portfolio and financial analyses. Basis of the portfolio analysis are the annual reports since 2013 and the Navision data (the financial database of PASS) provided by PASS, the latter which has been registering production since 2009. The Navision data contains information on the end-clients of PASS and financial information. These datasets were processed, cleaned and integrated in a master file before analysis. The evaluation has attempted to verify the information using the data from annual reports and the data in the Navision database. However, with respect to the available information, significant limitations persist, which will be elaborated in Section 2.3. Using the Navision database, in-depth cross-section analyses will be provided in Section 3.5.

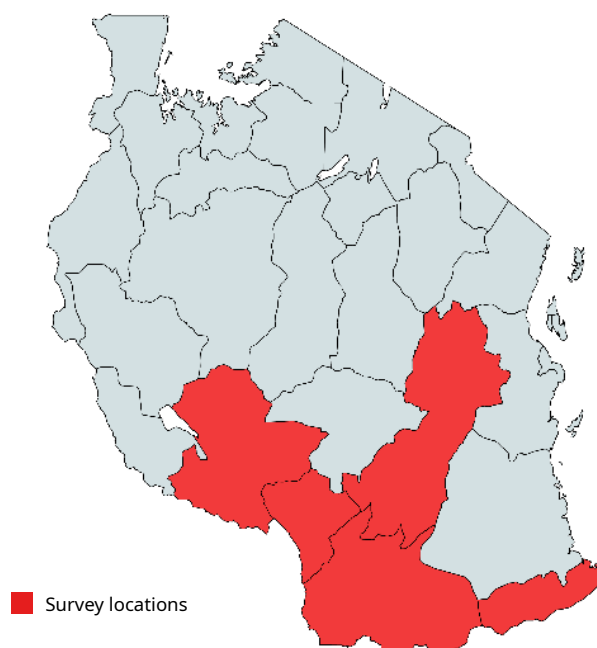
The list of data files provided by PASS can also be found in Annex C.

SURVEY

The survey featured as a prominent source of information on one of the key questions of the evaluation, pertaining to the results and impact of the work of PASS. Ideally, a baseline dataset would have been available on the state of agriculture of PASS farmers prior to the involvement with PASS, and similarly for farmers who are not involved (non-PASS farmers, to compare with the present situation of farmers involved with PASS). For such a design (a Double Difference analysis), the baseline dataset does not exist.

Therefore, two survey designs were developed, one comparing PASS with non-PASS rice farmers to estimate the impact of PASS involvement. The second design compares farmers producing four different crops for which they obtained a loan through PASS (rice, maize, coffee and cashew farmers), to compare impacts of PASS between crops, and extrapolate the findings of the rice farmer analysis. Further details can be found in the Survey Results Report (Annex E).

The following map (Figure 1, below) shows the locations visited during the field survey (the regions of Morogoro, Mbeya, Njombe, Ruvuma and Mtwara).

FIGURE 1: SURVEY LOCATIONS**INTERVIEWS WITH SELECTED SMES**

The evaluation conducted semi-structured interviews with five selected larger farmers and SMEs active in coffee, sugarcane and rice in the Morogoro region (Dakawa, Morogoro and Kilombero districts) to gain insight on the impacts of the programme on these enterprises, particularly in terms of employment creation, productivity increase, income generation and innovation. Though these findings are anecdotal by nature, they served to confirm the findings in the survey and other analyses and triggered specific survey questions.

INTERVIEWS WITH KEY INFORMANTS

Various key informants within PASS and stakeholders in the value chain of PASS (both partner financial institutions and partner organisations) were identified and representatives have been interviewed in Dar es Salaam and Morogoro.

The evaluation conducted interviews with three partner financial institutions in Dar es Salaam namely; Cooperative Rural Development Bank (CRDB), National Microfinance Bank (NMB) and Tanzanian Agriculture Development Bank (TADB) and with two financial institutions' branch offices in the Kilombero district, namely CRDB and NMB. On PASS level, interviews were conducted with management, headquarter and branch-office staff, Agribusiness Innovation Centre staff and the Board of Trustees. The list of persons interviewed can be found in Annex B.

In addition, a kick-off meeting was held with the Evaluation Department of the Danish Ministry of Foreign Affairs, and the Danish embassy in Dar es Salaam. An Evaluation Reference Group meeting took place in

October 2018 to present the findings of the field mission to the Evaluation Department of the Danish Ministry of Foreign Affairs, the Danish embassy in Dar es Salaam, the Swedish embassy in Dar es Salaam, representative of the United Nations Capital Development Fund and chairman of PASS's Board of Trustees.

2.3 Limitations

The evaluation experienced several challenges during the evaluation.

EVALUATION PERIOD

The period covered in this evaluation is quite long. Therefore, the lack of institutional memory due to turnover of key staff at both the Danish embassy and PASS would seem logical. During the evaluation this risk was mitigated, as it appeared that the turnover of key staff at PASS has been low and the tenure of key persons within PASS covers a longer period. Furthermore, the evaluation had the opportunity to interview previous employees of the Danish embassy and other stakeholders that have been working with PASS for a long time.

Notwithstanding, not all data or information is captured in one system for the entire evaluation period due to the transformation of PASS's set-up before and after 2007. Therefore, differences in availability and level of detail of the data and information is inherent. The data series on basic indicators in Navision do not cover the full evaluation period and though the evaluation had received a number of annual reports from the period before 2009, the data covered in these reports is rather limited. Consequently, in line with the focus period mentioned in the Terms of Reference, a more detailed picture is only available for the last decade.

SELECTION BIAS

The key person interviews with SMEs were organised through the PASS head office and were thus pre-selected cases from the available database³. Also, the number of SMEs interviewed was limited. This means that the evidence is anecdotal though it did give insight into important processes, such as mechanisation in agriculture and the effects of capital investments on employment.

SURVEY

The lack of a baseline dataset made the development of the preferred methodology impossible, and the number of accepted but unutilised loans in 2018 was insufficient to have a control group of large enough

3 PASS staff never participated in these discussions, thereby ensuring non-biased responses. The interviewees in the survey were selected by the survey team on the basis of the PASS database and were implemented without involvement of PASS.

size. This posed significant limitations on the methodology in terms of sample framework. It was therefore decided to change part of the method and focus on a wider number of crops, also to have a broader perspective on the value chains that PASS is engaged in.

Survey fatigue and the absence of interviewees slowed down the start of the rice survey in Morogoro. This was addressed later in the survey period by interviewing more farmers in this value chain than anticipated in Mbeya.

DATA QUALITY AND AVAILABILITY

With respect to data quality, and specifically the available portfolio and financial data, many discrepancies and non-systematic data extractions were encountered. Due to these inconsistencies, analyses took more time than anticipated and the data at hand cannot in all cases be matched to overall numbers in annual reports.

General observations are that data capturing is inconsistent and the management information system is not used to its full potential. Inconsistencies are common, including incomplete data, non-systematic use of abbreviations, incorrect and non-existing dates, different spelling of client names, and non-conditional usage of subsectors, regions and locations. PASS is making progress to capture all relevant data more systemically and accurately within Navision. Since 2018 the entire operational process within PASS must be entered in Navision, while prior to 2018 not all data was entered in the system and branch offices relied on Excel files.

Currently, however, not all client-detail data fields are mandatory to complete in Navision and as a result, key financial and non-financial information is still not collected and captured in the system.

With respect to the available financial information, significant limitations persist. Within Navision data, reported totals cannot be reconciled to data in annual reports, ageing reports and business plan overviews. Simultaneously, links to bank data are not automated in the system, especially with respect to information found in the aging reports. Due to inconsistencies in use of templates by financial institutions and PASS, a common identifier to cross reference data is lacking. As a result, fundamental statistics cannot be derived from Navision output received, such as the overall loan volume guaranteed at year-end or further information on status of the underlying loan including redemption schemes, defaults or details on any restructured loans. The provision of this fundamental statistics for instance would allow for development of cohort reporting on repaid, outstanding and claimed loans. In the opinion of the evaluation such alterations could and should be done within the current management information system, without much

effort This would allow PASS to monitor their performance more closely and more efficiently.

Despite these gaps, the evaluation has incorporated the Navision data in order to conduct cross-sectional analyses, under the assumption that the missing or incomplete information would not distort the overall picture. In the remainder of this evaluation report the evaluation will clearly mark the sources of data for each individual analysis.

3 PASS

3.1 History

The Government of Denmark has provided project and programme support to business and private sector development in Tanzania since the early 1990s. In 2000 PASS was established by the Government of Tanzania and Government of Denmark as a pilot project facility under the Agriculture Sector Programme Support (ASPS I) funded by the Government of Denmark. PASS became operational in 2001 and started as a programme to increase the growth of private commercial farming and agribusiness. In 2003, PASS continued as a facility under Agriculture Sector Programme Support (ASPS II). PASS was registered as an autonomous legal Trust in 2007. In 2008 PASS became a component of the Business Sector Programme Support III (BSPS III) and since 2014 the Business Sector Programme Support IV (BSPS IV).

The current programme BSPS IV, started in January 2014 and will be completed in December 2019. It is designed to resolve some of the major factors that impede private sector growth and employment creation and consists of several components.

The first component, Agricultural Markets Development, is implemented through the establishment of the Agricultural Markets Development Trust, mainly focussing on market access from a value chain perspective.

The second component, Improved Business Climate, is implemented through the BEST-Dialogue engagement (mainly focusing on advocacy and policy change), the Local Investment Climate engagement (mainly focussing on assisting cooperation with local governments) and the Confederation of Danish Industry (DI) twinning engagement (mainly focussing on improving collaboration between Danish and local businesses).

The third component, Access to Finance, is implemented by the Financial Sector Deepening Trust (FSDT), mainly focussing on improving access to financial services. This includes support for PASS, mainly focussing on improving agricultural sector business development and access to finance through the provision of guarantees for loans to end-clients via partner financial institutions. PASS also included within its ranks the Agribusiness Innovation Centre (AIC), mainly focussing on building successful and resilient businesses in selected value chains on a no-cure-no-pay basis.

3.2 Strategy and activities

The vision of PASS is to reduce poverty levels for agribusiness entrepreneurs in Tanzania. PASS's ToC is based on the logic that agribusiness entrepreneurs, who access and use financial and business development services, will increase the level of productive investments. With an increased level of productive investment, the agribusiness entrepreneurs will become more productive and scale-up activities. They will increase income and create employment (full-time, seasonal, part-time and casual labour) in the agricultural sector, and ultimately contribute to reduced poverty levels.

PASS's work is based on a five-year business plan, the latest started in January 2018 and will end in December 2022. The organisation facilitates the provision of business development services and financial services to small and medium size commercial farmers, farmer groups and agribusinesses (SMEs). Larger-scale businesses are facilitated on selective basis but only if they have significant impact in the agricultural sector.

A range of business development services are offered to its clients, including:

- feasibility studies,
- development of business plans,
- capacity building – e.g. in specific technical areas,
- organising marketing and market linkages,
- organisation of farmers into groups, which can be used as focal points for contract farming, input supply credit, produce-price negotiations and provision of advisory service.

In practice, the focus of the business services offered are geared towards developing business plans that support clientele in securing loans. All services are offered to its end-clients on a cost-sharing and/or commercial basis.

The financial services offered by PASS assist eligible individuals and companies to access loan facilities for their viable investments via appraisal of loan write-ups in line with partner financial institutions' terms and conditions. In conjunction, PASS provides a partial credit guarantee cover that is given to the partner financial institutions to top up inadequate collateral, thereby enabling PASS end-clients to gain access to financing.

The partial credit guarantees are provided in various forms:

PASS'S VISION

To become a leading organisation in the provision of financial and business development services in the agricultural sector.

PASS'S MISSION

PASS Trust is committed to the provision of business development and financial services to small and medium agribusiness entrepreneurs through linkages to financial institutions.

PASS'S GOAL

PASS's goal is to stimulate investments and promote growth of commercial agriculture and agribusinesses in Tanzania.

- From its onset, PASS offered its end-clients traditional guarantees, under which PASS provides its partner financial institutions with a 50-80% guarantee of the loan amount of its end-clients, being individuals (SMEs or farmers) or farmer groups.
- Since 2012, PASS offers a portfolio guarantee to partner financial institutions under which the financial institutions identify agribusiness entrepreneurs and PASS provides a portfolio guarantee based on an application submitted by the financial institution. In contrast to the traditional guarantees, assessments of the individual farmers are done by the financial institution.
- In some cases, smaller community banks/MFIs are constrained by undercapitalisation. In such cases, PASS can guarantee a loan from a large commercial bank to a smaller financial institution which on-lends to agribusiness entrepreneurs. In parallel, PASS can provide traditional guarantees to the smaller financial institution to agribusiness entrepreneurs and provide business development services.

PASS's partner financial institutions include, CRDB, NMB, TADB, Bank of Africa (BoA), Akiba Commercial Bank (ACB), Exim, Equity Bank, Amana Bank, Kilimanjaro Cooperative Bank Limited (KCBL), Banc African Banking Corporation (BancABC), Mkombozi Commercial Bank (MCB) and several MFIs and smaller community banks.

Next to the business development and financial services, PASS has established the AIC that provides business support to SMEs to expand its client businesses through innovation, market access support, financial management and operational advice. In general, AIC focuses on three key activities, namely incubation of agro-processing enterprises, in-house incubation and a seed funding facility.

The incubation of agro-processing enterprises targets agro-processing business with a potential for growth. AIC provides business development services to these selected agro-processing enterprises for a period up to three years. These business development services include strategic management, operations, finance, human resources, markets, technology, product development, access to finance, business networking and facilitation for business regulatory requirements.

The in-house incubation centre started in 2018 and targets youth and women. The centres will aim to incubate participants for a period of 12 to 18 months in different agricultural subsectors to assist them to set-up their own agribusinesses on their own land upon completion of the incubation programme. During the in-house period the participant will have access to land and the necessary agriculture infrastructure

(e.g. greenhouses) and knowledge and skills on modern agriculture and agro-processing will be transferred.

The seed funding facility will provide mezzanine financing to the participants in the incubation activities of AIC to bridge the gap towards getting access to commercial loans for these starting agribusiness entrepreneurs.

PASS is legally registered as a Trust and is a non-profit organisation operating on commercial terms charging commercial rates for its services and is reinvesting any surplus to further increase PASS outreach. PASS charges different type of fees for its services. In Table 1 below the different fees for end-clients and financial institutions are explained.

TABLE 1: FEE STRUCTURE PAYABLE BY PASS END-CLIENTS AND FINANCIAL INSTITUTIONS⁴

	Who, reason and when payable	Specifying loan amount	Fee percentage
Application fee	Payable by end-client upfront and non-refundable to seek commitment from end-clients but doesn't guarantee or imply approval of a credit guarantee nor loan.	Loan amount up to/less than TZS 1,000,000,000	0.625% of loan amount (minimum fee TZS 65,000)
		Loan amount up to/less than USD 1,000,000	0.625% of loan amount (minimum fee USD 65)
	After payment PASS will screen for eligibility criteria and proceed with contract signing for business plan development or linkage to partner financial institution.	Loan amount above TZS 1,000,000,000	0.625% of PASS guarantee amount (minimum fee TZS 6,250,000)
		Loan amount above USD 1,000,000	0.625% of PASS guarantee amount (minimum fee USD 6,250)
Business plan fee	Payable by end-client if contract is signed with end-client for the development of business plans.	-	1.3% of loan amount requested
Linkage fee	Payable by end-client after financial institution approves loan application with or without guarantee and loan agreement is signed between financial institution and end-client and before PASS credit guarantee certificate issuing.	Loan amount up to/less than TZS 1,000,000,000 or USD 1,000,000	1.3% of loan amount approved by partner financial institution
		PASS guarantee amount above TZS 1,000,000,000 or USD 1,000,000	1.3% of PASS guarantee amount approved by financial institution
Corporate fee	Same as linkage fee.	Loans above TZS 1,000,000,000 or USD 1,000,000	0.65% per quarter (i.e. 2.6% per annum) of PASS guarantee amount
Risk-sharing fee concessional loans	Payable by end-client for concessional loan but financial institutions are the collecting agents.		2% per annum
Restructuring fee	Payable by existing end-client with PASS guarantee upon approval of restructuring for the extension of the repayment period to the financial institution.	-	0.5% of restructured loan amount

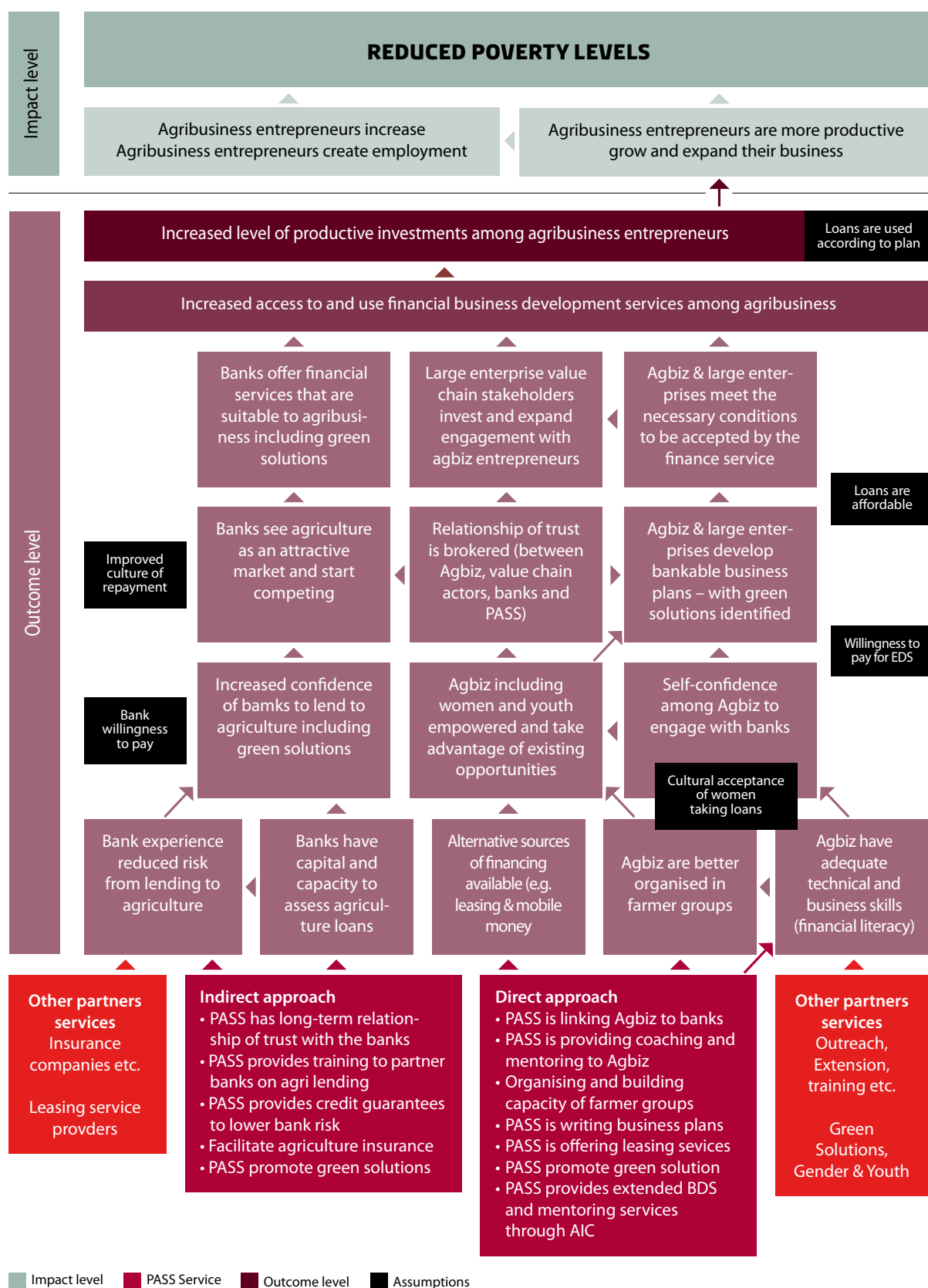
4 Source: PASS Business Development Manual 2016 and Revised fees for PASS products (05/09/2017 internal letter).

	Who, reason and when payable	Specifying loan amount	Fee percentage
Resubmission fee	Payable upon signing of resubmission fee structure letter by the end-client with existing business plan submitted to financial institution by PASS but suspended for 12 months and needs to be updated/resubmitted.	-	0.25% of loan amount upfront and 1% of the loan amount as linkage fee
Risk-sharing fee traditional guarantee	Payable by financial institution for the traditional guarantee product	-	4% per annum on outstanding loan amount
Risk-sharing fee portfolio guarantee	Payable by financial institution for the portfolio guarantee product	-	3% per annum on portfolio guarantee product

3.3 Theory of Change

The first concrete documentation of a Theory of Change (ToC) of PASS, as presented below in Figure 2, was in its Five-Year Strategy 2018-2022. However, PASS has undergone various changes during the evaluation period.

The evaluation has further verified a recently developed ToC for the full evaluation based on document review and interviews. Over time, the services provided by PASS at the input level have diversified. After an initial period of focussing on business plans guarantee provision and thus goals that pertain to the output level, the ToC now includes goals that are at the impact level. Also, a wider range of partners and stakeholders is now included in the ToC as actors, for a variety of reasons related to risk reduction, effectiveness and ambition to influence the institutional environment. Lastly, PASS set up the AIC as one of its direct services inputs for business development in the agricultural sector in Tanzania, with the aim to expand client businesses through innovation, market access support, financial management and operational advice.

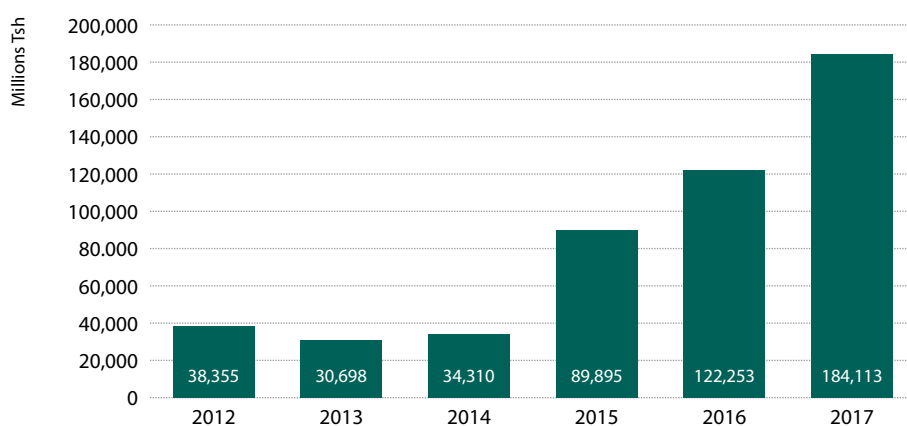
FIGURE 2: PASS THEORY OF CHANGE⁵

5 Source: PASS Five-Year Strategy 2018-2022.

3.4 Portfolio

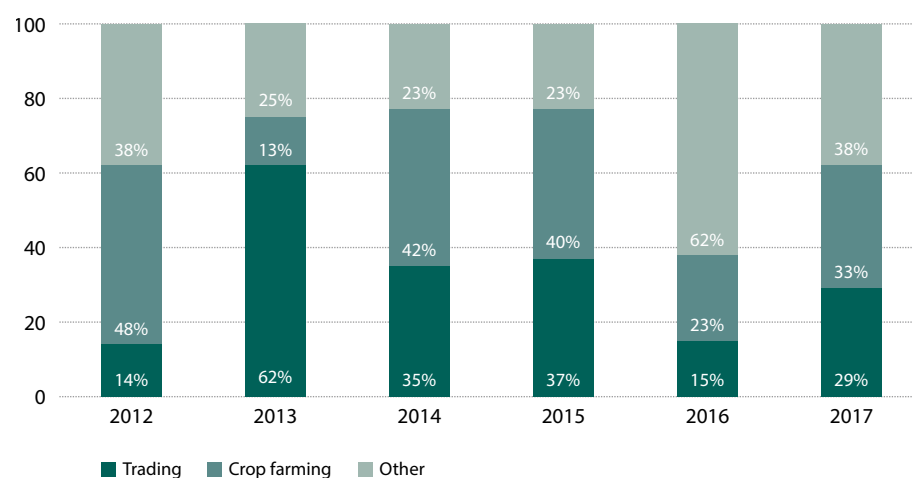
An overall cumulative annual growth rate (“CAGR”) of 37% of the volume of loans guaranteed by PASS was attained in the period from 2012 to 2017 inclusive (Figure 3). However, significant differences can be witnessed throughout the years. Growth was stagnant in the period from 2012 to 2014 inclusive, and a steep increase in volume has been realised since then. This strong growth has been credited to financial institutions’ increased appetite to lend in agricultural value chain projects (and in particular NMB), amongst others in the light of tightened regulatory requirements, in combination with PASS management’s desire to reduce the dependency on CRDB by growing the portfolio with other financial institutions.

FIGURE 3: VOLUME OF OUTSTANDING LOANS UNDER PASS GUARANTEE⁶

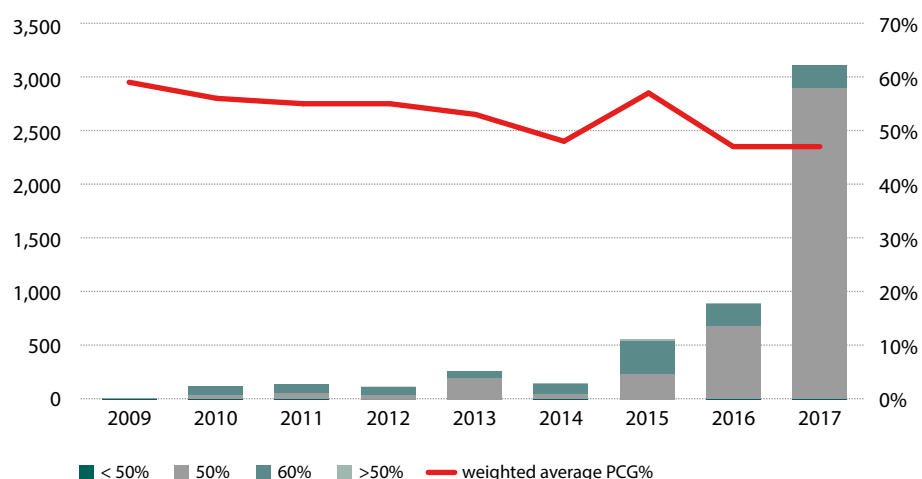


In terms of sectoral distribution, crop farming and trading continue to be the most relevant subsectors, combining to represent over half of business plan value in most years (Figure 4).

⁶ Source: PASS annual reports. Before 2012, received PASS reporting has focussed on numbers and volumes of submitted business plans. Consequently, earlier data on outstanding portfolio size is unavailable.

FIGURE 4: APPROVED BUSINESS PLANS BY SUBSECTOR IN VALUE TERMS⁷

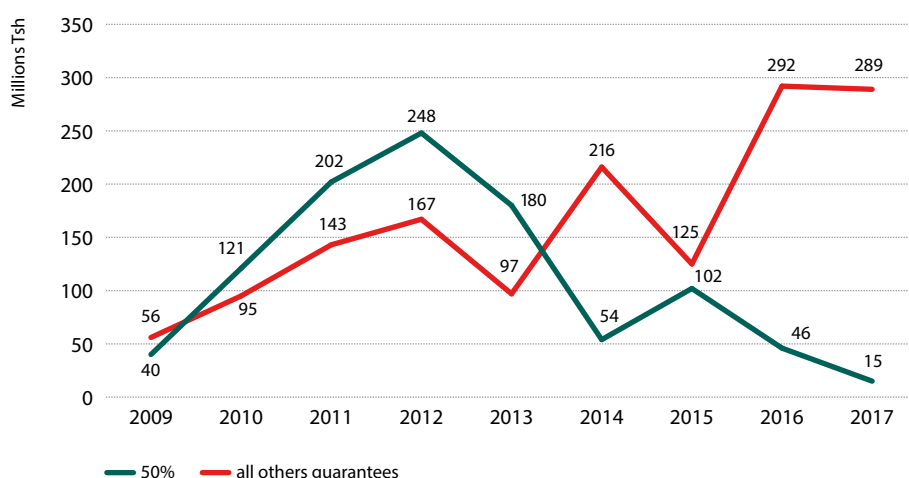
Since recording the data in Navision, 74% of the guarantees provided by PASS have covered 50% of the outstanding loan amounts (Figure 5). However, these guarantees simultaneously represent only 36% in terms of volume of loans guaranteed. This lopsided relationship is largely explained by the characteristics of the very large guarantees that have been extended (such as institutional guarantees), which typically are guaranteed at different percentages (Figure 6).

FIGURE 5: TOTAL NUMBER OF LOANS ISSUED PER PARTIAL CREDIT GUARANTEE PERCENTAGE PROVIDED (LEFT) AND WEIGHTED AVERAGE PERCENTAGE (RIGHT)⁸

7 Source: PASS annual reports. The category 'Other' includes processing and transport.

8 Source: Analysis of Navision data. The term Partial Credit Guarantee is used to denote the percentage of an outstanding loan amount that is guaranteed by PASS.

FIGURE 6: AVERAGE LOAN SIZE BY PARTIAL CREDIT GUARANTEE PERCENTAGE PROVIDED⁹



3.5 Governance

Governance within PASS is organised in a logical and structured fashion. This governance structure enables its management to track and trace developments in the wider financial and development field. The Founders Committee is placed at arm's length to the organisation but are engaged and at the same time shields the organisation from political forces that could have influenced its operations. Their role is primarily safeguarding in nature. This committee is to pass "no-objection" declarations on major decisions made by the Board of Trustees. In addition, the Founders Committee is responsible for the appointment and removal of Trustees.

PASS started with a Steering Committee that consisted of members of the Government of Tanzania, the Government of Denmark, CRDB, the PASS manager and deputy manager. The Steering Committee was renamed to Board of Directors in 2001 and governed PASS in the next years. A new configuration of the Board of Trustees with private sector members was installed in 2007 when PASS became a trust and is ultimately responsible for guiding PASS in accordance with the trust deed.

The Board of Trustees now consists of a select group of highly knowledgeable individuals, who are at the top of their fields. They are empowered to pass decisions on matters such as formulation and review of the policy of PASS, setting targets for annual performance, and appraising performance of management. In practice, they provide the management of PASS with innovative thoughts and a sounding board for the decisions to be made. The recently introduced set of innovative products seems to have originated from the discussion between management and

⁹ Source: Analysis of Navision data.

the Board of Trustees. Such a supportive role is valuable and allows PASS's management to increase the relevance of PASS in the financial landscape.

Members of the Board of Trustees are appointed and step down according to a schedule to ensure continuity of the Board of Trustees, except for the Chair who has been on the Board of Trustees since 2007. Selection of committee members, as well as appointing PASS's Managing Director, is done by the Board of Trustees. The Board of Trustees meets four times a year while the committees independently also meet three to five times a year depending on the need.

There are three different committees within the Board of Trustees, namely the Business Committee, Audit Committee and Human Resources Committee. The Business Committee ensures the investment policy and guidelines are in line with PASS's vision and mission, evaluates credit guarantee fund performance on a regular basis to ensure policy guidelines are followed, quarterly report to the Board of Trustees on the performance of the credit guarantee fund and guaranteed loan portfolio and reviews and reviews and provides guidance to the applied management judgments in impaired non-arrears cases. The Audit Committee ensures compliance with legislation and regulatory requirements and reviews and follows-up on issues raised by auditors. The Human Resources Committee oversees recruitment of senior staff, ensures compliance with policies, evaluates executive officers' performance and reviews compensation and management succession plans and sets the compensation for executive officers.

Different authority levels are set within PASS for the approval of payments, procurement and credit guarantee applications and have been stipulated in policies and reviewed regularly.

4 FINDINGS

4.1 Relevance

PASS STRATEGY AND PORTFOLIO DEVELOPMENT VS. DANISH POLICY GUIDELINES

The PASS's strategy is generally in line with the Danish policy guidelines for private sector support in Tanzania, as described in Chapter 3. PASS support is compliant with the general principles formulated for Danish Government engagement with the private sector. BSPS IV aims to improve employment and income opportunities for farmers and SMEs through green inclusive growth. The 2016 Technical Review stated that: 'Inclusive green growth could be incentivized by financial rewards to its partner financial institutions (i.e. higher guarantee percentages as with its gender goals, or lower guarantee fees)'. At the same time, a number of SMEs operating in the agricultural sector are supported mainly focusing on solid waste management and reuse, but generally there is a need for integration of broader environmental concerns and requirements in loan-use and guarantee policy, possibly in cooperation with the financial institutions, as far as technically and financially feasible. For instance, climate change mitigation may require adaptation to agricultural practice to make this important and potentially vulnerable sector more resilient, and this could specifically be supported. The broader perspective on environmental concerns is recognised by PASS and its donors, and it is anticipated that Sida will assist PASS on this matter by providing the organisation with the technical assistance to develop this green development policy.

Neither is there at this point a detailed gender policy above the provision of increased guarantee levels to loans for women (of up to 80% of the loan), nor data collection about the percentage of end-clients that are female¹⁰. A deeper insight in the possibilities and options for a more transformational gender approach in the field of inclusive finance has not been developed, including a view of what that translates into and how this may be monitored. With the experience to date and the knowledge gained however, PASS is well placed to focus on ways to

10 Though such data is provided for in 2017 and 2018, there is a need for such data collection to be automated as part of the improvements to the Navision system and how it is used.

further integrate gender goals while staying within its mandate, and in cooperation with its partners.

FINANCIAL SECTOR AND AGRIBUSINESS' NEEDS IN TANZANIA

In 2017, agriculture contributed to 30.1%¹¹ of the Tanzanian gross domestic product. However, despite its relevance to the country's economy, the general agricultural sector has traditionally been underserved by financial institutions. Financial institutions consider the sector to be high-risk and under influence of exogenous factors such as drought and diseases. Small-scale agricultural entrepreneurs face larger challenges, often being cited as lacking sufficient financial literacy or adequate capacities to develop and submit solid business plans. Due to this disinterest, there is a general lack of knowledge within financial institutions on agronomics in the country in general, which further increases financial institutions' hesitance towards financing the sector¹².

A complicating factor is that collateral requirements set by the Bank of Tanzania (BoT) are high (125%). Formal title deeds for land and property are rare and the collateral value of capital goods are moderate at best. Consequently, many loan applicants are rejected due to lack of collateral.

Even if clients do have formal ownership rights, it is proven difficult for financial institutions to recover the value of collateral as land is still abundant and cultural disposition discourages the population from purchasing land or property. In fact, the average recovery rate in Tanzania is 21.2%¹³, which would leave financial institutions significantly exposed in case of defaults.

Despite the above-standing, overall domestic lending to agriculture by financial institutions has gradually increased in recent years (Figure 7), though this growth has lagged the development of the overall corporate lending market. Both the supply and demand side of the market for agricultural finance stand to benefit from further unlocking the untapped potential within the sector, as PASS endeavours to do.

PASS'S RELEVANCE TO FINANCING OF THE AGRICULTURAL MARKET

PASS is committed to the provision of business development and financial services to small and medium agribusiness entrepreneurs through linkages to financial institutions. Since its establishment, the products and services that PASS offers have evolved by acting on identified market needs.

11 Source: World Bank Development Indicators 2017.

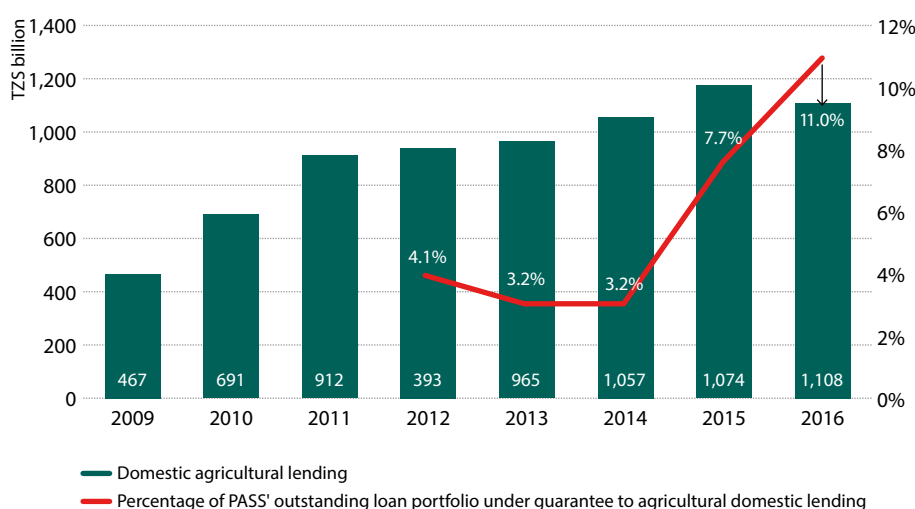
12 Notable exception is NMB which has a dedicated centre of expertise.

13 Source: World Bank Doing Business Rankings 2018.

4 FINDINGS

At the heart of its activities lies development of business plans and provision of credit guarantees, which in practice are strongly intertwined. Based on data in PASS annual reports and BoT annual reports, the evaluation can conclude that the proportion of loans guaranteed by PASS relative to the overall agriculture financing market has increased over time (Figure 7). This supports the suggestion that guarantees of PASS are relevant and supportive of achieving growth in the commercial loan markets.

FIGURE 7: AGRICULTURAL MARKET LENDING IN TANZANIA¹⁴



Over time, one would ideally witness a continued growth of the agricultural loan market combined with gradual decrease of PASS's share therein. This would signal financial institutions' continued increased willingness to finance the sector, with less reliance on credit guarantees of PASS and ultimately with PASS succeeding in its demonstration effect that, despite commonly-cited risks, the agricultural sector is bankable. As the relative portion of the PASS shows an increase (Figure 7, above), the conclusion can be drawn that financial institutions still significantly rely on PASS's loan guarantees to support the agricultural loan market.

MOTIVATIONS FOR PARTICIPATING IN PASS'S PROGRAMME

By developing business plans that are geared to loan applications, PASS supports the agricultural sector in addressing access-to-finance topics. Financial institutions have expressed their appreciation for this business development support from PASS for multiple reasons.

1. Firstly, PASS effectively continuously develops a pipeline of new client leads for the financial institutions.

¹⁴ Sources: PASS annual reports 2012-2016; BoT Annual Report 2016-17, page 212; BoT Annual Report 2015-16, page 218.

2. Secondly, PASS is able to instil confidence with the financial institutions through its long-standing relationships and high-quality performance. PASS acts as a due diligence funnel for client selection, as PASS will only work with potential loan applicants that they see likely to secure loans. In essence, PASS screens applicants thereby compensating or complementing the skills gap and lack of financial institutions' capacity to assess the agricultural sector.
3. Finally, the actual business plan support naturally provides both the end-clients and financial institutions with the planned activities that lead to a sensible financial business case and would enable servicing of any subsequently requested loan.

Although the financial institutions subsequently assess and approve loan applications on stand-alone basis (formally, granting of loans are not conditional on the provision of a guarantee by PASS), in practice the guarantees offered by PASS are crucial to establish the funding relationship between the financial institution and end-clients. From the financial institutions' perspective, several needs are fulfilled herewith:

1. The credit guarantee de-risks the entrepreneur's capacity to service its loan, as in case of default the financial institutions will be compensated.
2. The credit guarantee furthermore supports financial institutions in resolving regulatory collateral obstacles that agribusinesses encounter.
3. The credit guarantee can enable an increase of maximum limits with respect to single obligors or the agricultural sector.
4. In addition, cash deposits offered by PASS in conjunction with the credit guarantee scheme increase the liquidity position of financial institutions.

Despite these inherent and proven benefits, several remarks should be made.

- The demand for PASS's guarantees continues to grow, not only for new clients in new subsectors, but also in recurring clients that demand higher amounts in subsequent loans. Although no hard evidence can be provided, there seems little evidence for financial institutions to finance clients directly without a PASS guarantee¹⁵.

¹⁵ Though a few cases are known of end-clients having been provided with a loan without a PASS guarantee, this is not captured in the Navision system.

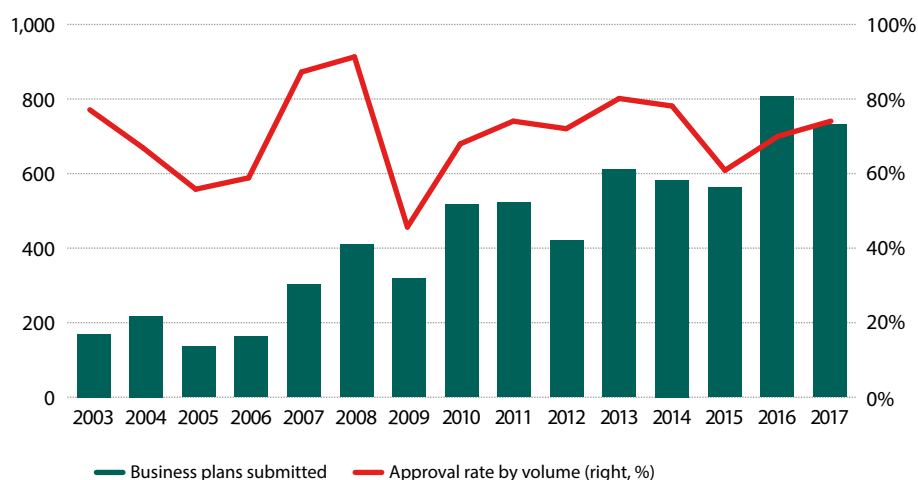
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- The benefit of having PASS act as agricultural finance knowledge centre for the financial institutions may result in financial institutions not being inclined to develop significant in-house capacity. Therefore, limited agricultural finance knowledge will remain institutionalised within a financial institution, should PASS decide to terminate its cooperation agreement. In this respect, the introduction of a portfolio guarantee instrument works as mitigator, as the financial institution is required to conduct its own business plan analysis and hence requires some degree of knowledge of the agricultural sector.

PASS'S FINANCIAL AND NON-FINANCIAL INSTRUMENTS

The product and service portfolio of PASS as described in Chapter 3 has predominantly been geared to developing business plans for purpose of securing loans (which are guaranteed by PASS)¹⁶. PASS has proven to be successful in this regard, and the success rate of business plans (i.e. the conversion rate of business plans to approved loan applications) is high. Hence, it can be stated that PASS's services are considered very relevant to the needs of the agricultural sector (Figure 8).

FIGURE 8: NUMBER OF SUBMITTED BUSINESS PLANS PASS AND APPROVAL RATE OVER TIME¹⁷



In due course, PASS has developed new instruments that have instigated a – slowly – increasing risk appetite among financial institutions towards the agricultural sector, while expanding the volume of its portfolio. Several significant examples of evolution within PASS are:

- the gradual increase of PASS branches and financial institutions to establish greater outreach amongst potential clients;

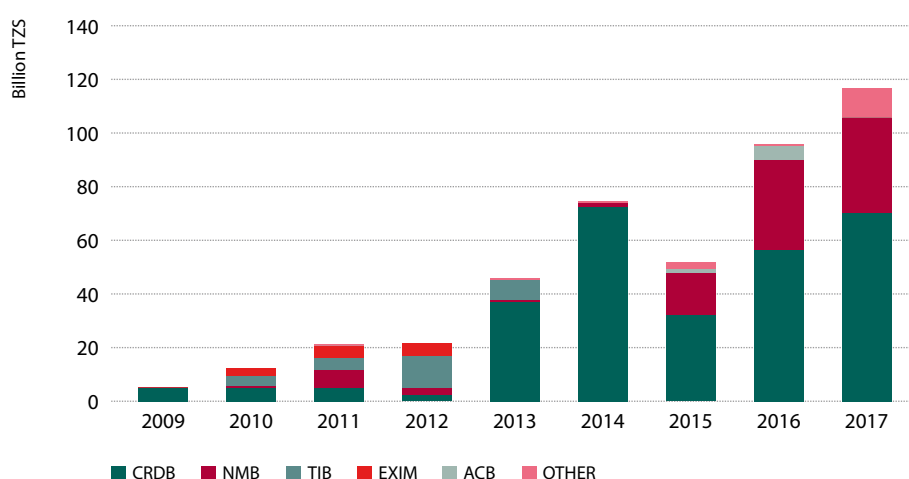
¹⁶ Several products described in PASS's ToC have not (yet) seen significant traction include leasing services, agricultural insurance and green solutions.

¹⁷ Source: PASS annual reports.

- the introduction of institutional loan guarantees to support loans from financial institutions to MFIs that themselves are active in financing of small agricultural enterprises who lack sufficient liquidity;
- the introduction of a portfolio guarantee to selected financial institutions, thereby shifting the assessment of loan applications from PASS to the financial institutions;
- the extension of guarantees to larger value chain actors with foreseen spill-over effects downwards in the value chain.

This evolution mentioned is captured in Figure 9 to 13, below.

FIGURE 9: DEVELOPMENT VOLUME OF PASS-BACKED LOANS BY BRANCH ISSUED 2009-2017¹⁸



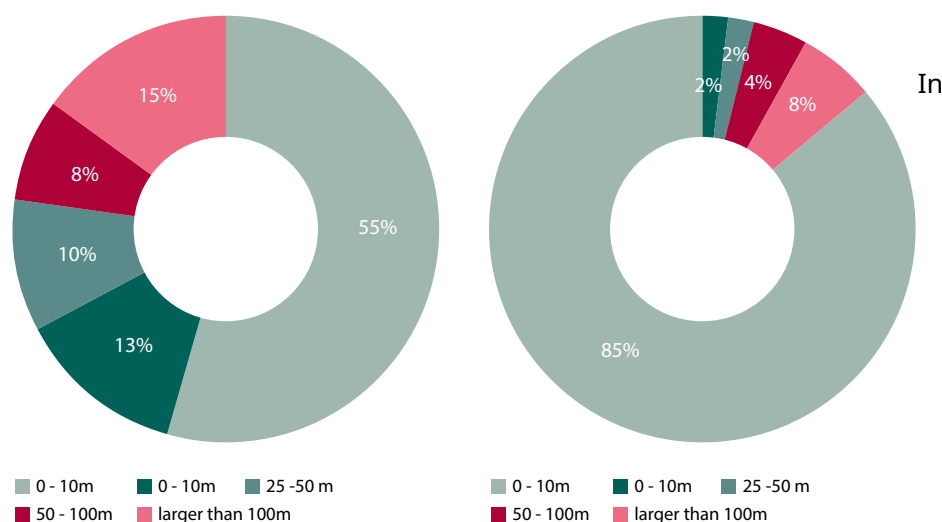
The average size of loans guaranteed by PASS between 2009 and 2017 has been TZS 78.5 million. This however varies significantly. As depicted in Figures 10 and 11 below, the majority of guarantees were provided for loans less than TZS 10 million, though the TZS 10 million threshold is even disproportionally high when observing the average loan size secured by smallholder farmers surveyed. In terms of value, however, 85% of the guarantees provided were for loans exceeding TZS 100 million, whilst this represented only 15% of the number of guarantees¹⁹. For instance, several guarantees were issued supporting loans to Pride Tanzania of over TZS 28 billion. Such distribution of the guarantee value may lead to a concentration risk.

¹⁸ Source: Navision database, Carnegie analysis.

¹⁹ This data set includes all guarantees issued by PASS, including linkage/institutional guarantees which cannot all be identified. However, even if we make a correction for the assumed amount of linkage/institutional guarantees, only a marginal shift in percentages result.

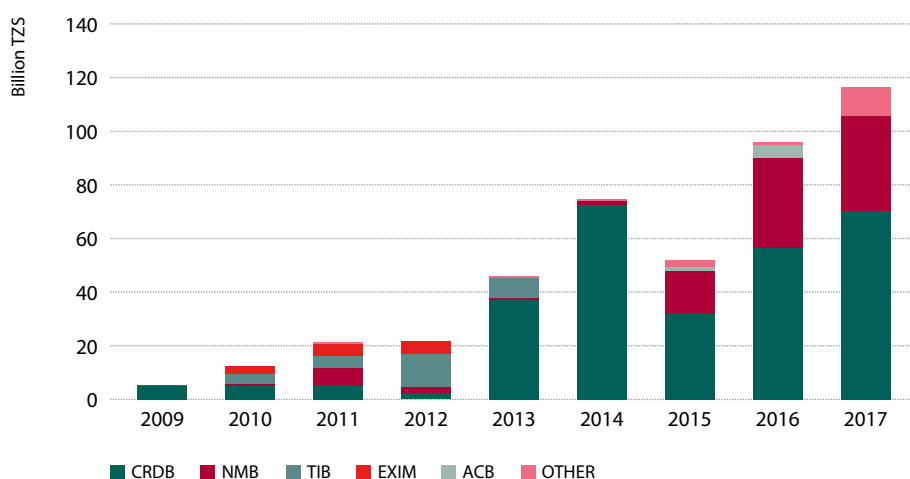
4 FINDINGS

FIGURES 10 AND 11: PASS-BACKED LOANS CATEGORISED BY SIZE IN TERMS OF MONETARY VOLUME (LEFT) AND ABSOLUTE NUMBERS (RIGHT)²⁰



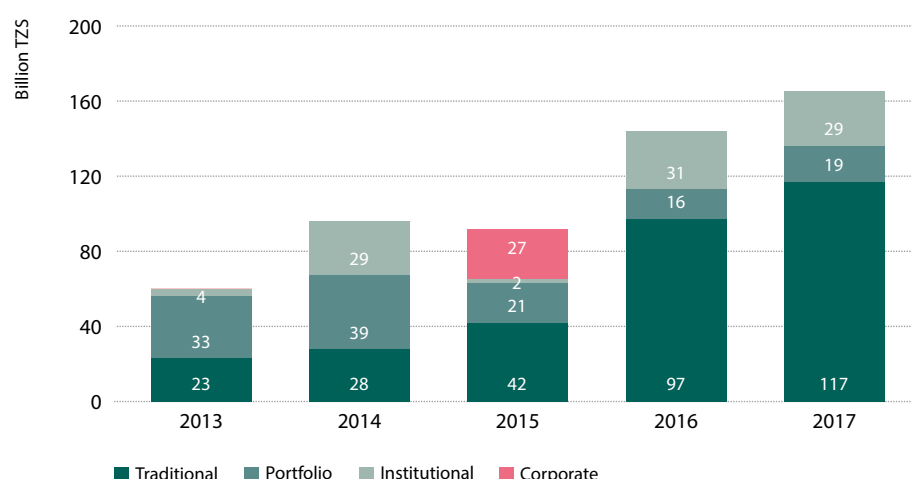
terms of counterparties, the majority of exposures in terms of both volume and value lies with CRDB and NMB, which incidentally are also Tanzania's two largest commercial banks. In addition, these banks traditionally have serviced the agricultural sector more than other banks, which makes them logical counterparties to PASS. In recent years, PASS has made an attempt to expand the number of partner financial institutions. This in order to decrease the dependency on CRDB and NMB whilst simultaneously increasing the outreach to clientele. However, as other partner financial institutions are smaller in both size and reach nor typically focussed on commercial lending to agricultural companies, displayed growth has been very gradual.

FIGURE 12: VOLUME OF PASS-BACKED LOANS BY FINANCIAL INSTITUTION²¹



²⁰ Source: Navision database aggregate 2009-2017, Carnegie analysis. Please note that the number of loans disbursed in 2017 has jumped significantly to over 3,000. This likely denotes the fact that for a number of group loans, the participants are included individually. As a result, the number of small-volume loans is relatively high.

²¹ Source: Navision data base, Carnegie analyses.

FIGURE 13: VOLUME OF SUBMITTED BUSINESS PLANS PASS BY TYPE²²

The use of a credit guarantee instrument rather than offering loans directly has enabled PASS to have financial institutions gradually become less uncomfortable with the agribusiness sector. In addition, by operating through partner financial institutions, PASS increases its reach to the agricultural sector by leveraging its own capital with that of financial institutions. This aspect has been amplified in recent years, as PASS has developed a portfolio guarantee scheme, thereby being able to expand its reach further whilst limiting expenses.

The relevance of PASS to its clientele has indirectly been confirmed through the displayed growth in the agribusiness portfolio and the increase in the number of financial institutions that are participating in the credit guarantee scheme. The growing number of applicants for PASS's business plans and the fact that both small-scale and larger clients are willing to pay relevant fees for its services support this notion.

PASS'S POSITION IN RELATION TO OTHER TANZANIAN CREDIT GUARANTEE PROVIDERS

There are multiple credit guarantee schemes in Tanzania, but there is no real competition in the market as demand is largely unmet and PASS's reputation unmatched.

For partner financial institutions, PASS is the preferred credit guarantee scheme in Tanzania for (agriculture) finance compared to other credit guarantee schemes in the market despite the higher costs. PASS has displayed a long-term commitment through its continued presence since 2001, which by far exceeds the presence of most other schemes. In addition, PASS is seen as a reputable and reliable partner with an extensive network in the field, capabilities to form client groups, cooperation with financial institutions and engagement in the entire process from the start, in monitoring the clients and even recovery. Key informants

²² Source: PASS annual reports.

mentioned that other credit guarantee schemes in the market are less reliable in payment of called-up guarantees (amongst others a guarantee scheme run by BoT) and are rather seen as a provider and not a partner especially in the processes of restructuring loans. Thus, there is a strong relationship between PASS and the financial institutions. This operational model has proven its worthiness, as the level of assistance provided to its clients reaches further than typical credit guarantee schemes.

4.2 Effectiveness

GEOGRAPHICAL AND SECTOR DISTRIBUTION OF PASS'S GUARANTEE PORTFOLIO

PASS's growth strategy has been implemented successfully, with the portfolio growing rapidly since 2016. Several crops within PASS's portfolio experienced rapid growth in the past years. Cashew experienced extensive growth, particularly due to the changing regulatory environment in the cashew sector. Loans in the cashew, coffee and rice sector are mainly used for the purchase of agricultural inputs, in some cases labour, for operational costs of traders and to acquire or rent additional land. In terms of both numbers and volume, the majority of PASS's portfolio is for the purchase of agricultural input, followed by loans for farming, production, processing and trading activities.

Mechanisation is picking up slowly, but the data does not allow the provision of detailed information on the sectors in which mechanisation is occurring and on the type of mechanisation. However, this increase in mechanised farmers is currently taking place in a limited number of subsectors and appears to be based on lease-purchase arrangements with financial institutions and on borrowing between neighbours: only a very small percentage of farmers is in ownership of a tractor. The evaluation found some arrangements around tractor leases that would be interesting to study for further development of the lease model at PASS. To this, experiences in neighbouring countries such as Kenya could also be studied.

In terms of geographical distribution of the location of the end-clients, there is a relation between the regions and crops which is reflected in PASS's portfolio. The coastal region (Mtwara and Lindi region) experienced growth in recent years as this is the cashew growing area. The Iringa, Njombe and Morogoro region are mainly focused on the rice sector and coffee in Mbeya and Ruvuma. As specific crops have specific timings of input requirement, expansion of guarantees in certain crops will have consequences for the timing of work load for branch staff. Generally, some areas where PASS branches are located can be characterised as relatively isolated, and certainly many end-clients are living in

remote areas. The recent establishment of the branch office in Kigoma results in a quite remote area now being included in the network.

PASS has an increasing number of recurring clients that receive a loan with PASS guarantee each year. In addition, clients are graduating from SMEs to corporate, but still need a guarantee. In this the link of these clients to a large number of smallholders is crucial for PASS. According to key informants, the loan amounts of these graduating clients increases though there is a limit set to what PASS can lend toward bigger or recurring clients. PASS's ability to adapt to rapid growth in demand in the market both in numbers and volumes (new subsectors, new clients, recurring clients that demand higher volumes and developments such as mechanisation etc.) puts pressure on the fund capital of PASS, which was expected to become relevant in 2019 according to interviewees at PASS.

In discussions with partner financial institutions, it appeared that financial institutions consider it prudent to consider whether PASS will be able to grow in tandem with the potentially rapid growth in loan requirements of certain crops. This is only natural as capacity problems at PASS would influence their service delivery to partner institutions as well.

ADDITIONALITY OF PASS'S ACTIVITIES

Financial additionality occurs when a financial institution offers or enables the offer of financial services only where the market cannot or does not do the same, or otherwise does not provide financing on an adequate scale or on reasonable terms. Both elements of the definition are applicable to PASS, since many farmers do not have access to finance (as evidenced by the replies of farmers on this question in the survey), or do not have access to finance at reasonable scale or terms. From the survey it appears that non-PASS farmers either access finance less, but when they have access to finance, borrow smaller amounts against less favourable interest rates compared to PASS farmers. These alternatives are village money lenders, friends and family, savings and credit cooperative societies and village and saving loans associations, and the loans provided to non-PASS farmers generally are half the amount provided by financial institutions with PASS support, against interest rates that are some five percentage points above the rates of the financial institutions.

Development additionality in an operational sense occurs when the financial institutions offers specialised advice and or bridges skills gaps that may exist between the recipient of the financing and the private investors. This has certainly occurred as the various services – in particular the business plan development support – bridge an existing knowledge and skills gap, especially at the level of small-scale farmers. It is less clear whether that gap still exists when dealing with SMEs or larger corporations. Development additionality, in an institutional sense, may occur when the financing may require improved standards of

environmental, social and corporate governance. In addition, this may require standards to be improved or developed around sustainability, legal regulation, and better public/private risk allocation. Overall, this seems less the case.

Substantial institutional changes seem not to have taken place, and the risk appetite seems to have changed only marginally, in consideration of the fact that the main partner financial institutions are important agricultural finance institutions already. Despite PASS's push to expand to additional (smaller) banks, none have yet significantly increased their portfolio to represent a considerable proportion of PASS's business. A strong reliance of partner financial institutions remains on the operations and agronomic knowledge of PASS.

Although the role of PASS is appreciated, the fees charged by PASS are considered high by financial institutions and end-clients, also compared to other credit guarantee schemes. The business plan fees and linkage fees are considered high up-front cost with no guaranteed loan. The fees are also perceived as scattered because fees are charged at two different points in time. However, PASS's fees work as a cost incentive for recipients to graduate as guarantee beneficiary and hence no longer be subject to the perceived high level of fees. In this sense, the fees lead to additionality.

INFORMATION COLLECTION ON EFFECTIVENESS

With regards to information capturing to assess effectiveness, features have been implemented in the 2018 Navision data structure to capture yearly financial information on end-clients, including gross income, profit before tax, total assets, and information on ownership, gender and number of jobs created. This can further be improved, as information on productivity increases and business expansion are not yet captured in Navision, and information on the crop is no longer collected. Additional information collected at financial institutions and within PASS, e.g. collected during monitoring visits, is not captured in Navision but is available in hard- and/or soft-copies.

Though the above improvements are important, there seems to be no coherent framework for data collection in place. There is an annual monitoring report, but the data collected systematically is on a limited set of farmers (around 100 from different branches and geographical areas, crops, gender). Therefore, the findings are not significant in a statistical sense and may be affected by outliers. The case studies, though real and informative, are based on successful cases and do not always represent the overall trends. In general, financial institutions are focussed on financial data and the collection of non-financial data is not common, therefore to date has not been an information source for PASS.

PASS branches currently follow their clients closely. PASS staff has regular contact by phone with the more important clients, and conducts regular client visits, sometimes with financial institutions staff and/or when visits with new and existing clients in proximity can be combined. PASS closely monitors clients with non-performing loans.

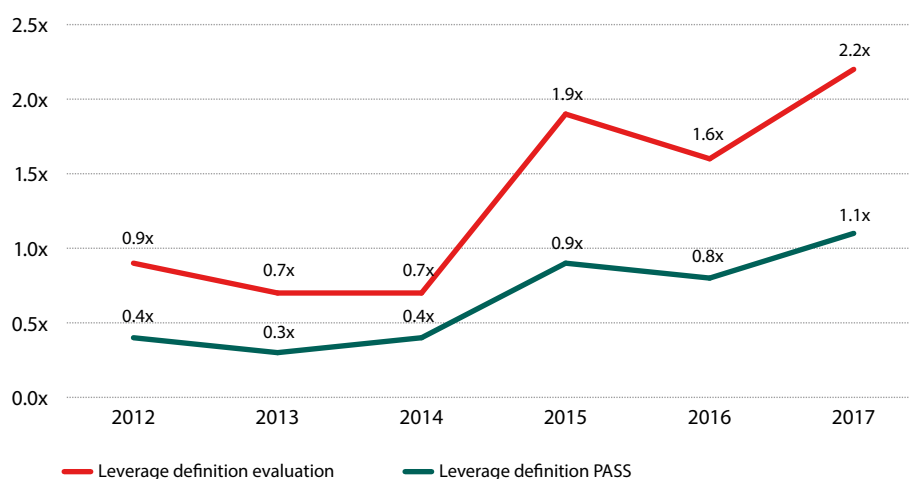
LEVERAGE

Given its model, the capital base of PASS has been put to work to provide guarantees for agriculture-related loans. By providing only partial guarantees, PASS has leveraged capital from partner financial institutions' own balance sheets. Until recently, PASS has provided cash-based guarantees. Effectively, PASS deposits the cash amount of the provided guarantee with the financial institution. Though this may have the benefit of improving the liquidity position of a financial institution, it simultaneously limited the amount of leverage it could create, as there was an absolute limit on the amount of cash that could be placed in deposit.²³

At the end of 2017, Sida entered into a USD 20 million guarantee agreement with PASS, under which Sida will guarantee 60% of additional loans issued by financial institutions. This implies that through the PASS mechanism, up to USD 33 million in additional loans can be issued (20/60%). On an overall level, PASS since undersigning of this contract has been enabled to attain higher leverage ratios with its financial institutions. Moving forward, rather than depositing cash deposits with the financial institutions, the guarantee is provided by PASS on a partially unfunded (or cashless) basis. Consequently, the leverage ratio is the result of negotiation and is based on trust: financial institutions can base their guarantee not only on the capital base of PASS but also on that of Sida (which incidentally has a high credit rating). This marks as a significant achievement of PASS in developing its potential guarantee reach and has resulted in a leverage ratio (ratio of loans provided to guaranteed loan amounts) evolving from 0.9x to 2.2x over time, as can be deduced from Figure 14 below.

23 For example, assuming a guarantee percentage of 50%, for every TZS 100 million PASS deposits with a financial institution, the financial institution is able to provide up to TZS 200 million in loans to agribusinesses. A leverage of 2:1 would be generated (the definition being the ratio of loans provided to guaranteed amounts). Higher leverage rates are not possible, unless guarantee percentages decrease or a higher leverage ratio is accepted by the financial institutions (as has been done with CRDB and NMB since undersigning of the Sida guarantee agreement). This implies that the financial institutions would be exposed to a counterparty risk on PASS as not all guaranteed amounts are funded directly on-balance.

FIGURE 14: DEVELOPMENT OF LEVERAGE RATIO 2012-2017²⁴

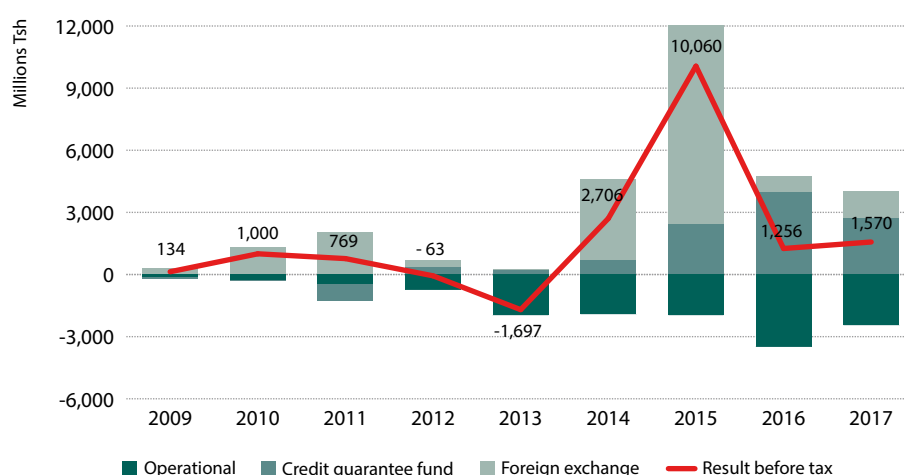


4.3 Efficiency and financial sustainability

FINANCIAL SUSTAINABILITY PASS

PASS has been profitable over the past years. The achieved financial result can be broken down into three main components: operational result, credit guarantee fund result and foreign exchange result (Figure 15). The operational result provides a reflection on the efficiency of operations. The credit guarantee result shows the degree to which the fund's guarantee capital is able to revolve. Finally, the exchange rate result is the result of investment policy. A breakdown of the overall results reveals that PASS's operational losses have been masked by positive results on its credit guarantee fund and the foreign exchange.

²⁴ Source of data series are PASS annual reports, to the extent available. Please note the difference in calculation: PASS defines leverage as the ratio of Credit Guarantee Funds utilized over Credit Guarantee Funds deposited/required. The evaluation has defined leverage, in line with market practice, as the ratio of outstanding balance of loans under PASS guarantees over Credit Guarantee Funds deposited/required. The evaluation considers this methodology to provide a better reflection of how to measure the effectiveness of PASS's capital.

FIGURE 15: BREAKDOWN OF ANNUAL RESULT 2009-2017²⁵**Operational result**

Operational revenues of PASS are generated through fees charged to clients (for business plans, loan applications and restructuring/resubmission) and financial institutions (for risk sharing fees), supplemented by grants from the Danish Ministry of Foreign Affairs and the Tanzanian Government. The charged fees rank in the higher end of comparable credit guarantee schemes. Despite this, given the increasing demand for the credit guarantees over time, the fee level does not seem to discourage financial institutions and end-clients from using the guarantees. This indicates that the market considers PASS's activities as additional to the market.

On the other side, operational costs are comprised of staff and organisational costs required to operate the PASS business. Despite the growing volume of loans guaranteed by PASS that generate revenues, the overall balance remains negative. In this sense, PASS is not unique, as most credit guarantee schemes operate as a loss. In particular, the operational expenses depicted in Figure 16 above, have increased significantly in 2016 and 2017. As of 2016, salaries adjustments were implemented as well as branch offices expanded causing a sharp increase in expenses²⁶.

Credit guarantee fund result

The result of the credit guarantee fund can be measured by netting the deposit income (or put differently, the investment income) of the PASS's funds placed with the financial institutions with the actual called up guarantees and provisions for losses. Since 2012, the result on the credit guarantee fund has been positive, even in 2017 when an indemnity fund

²⁵ Source: PASS Navision database and audited financial statements.

²⁶ Please note that 2016 numbers include a significant expense to InfoDev World Bank for consultancy work to further develop AIC. This amount of TZS 1.5 billion has been categorised as operational expense.

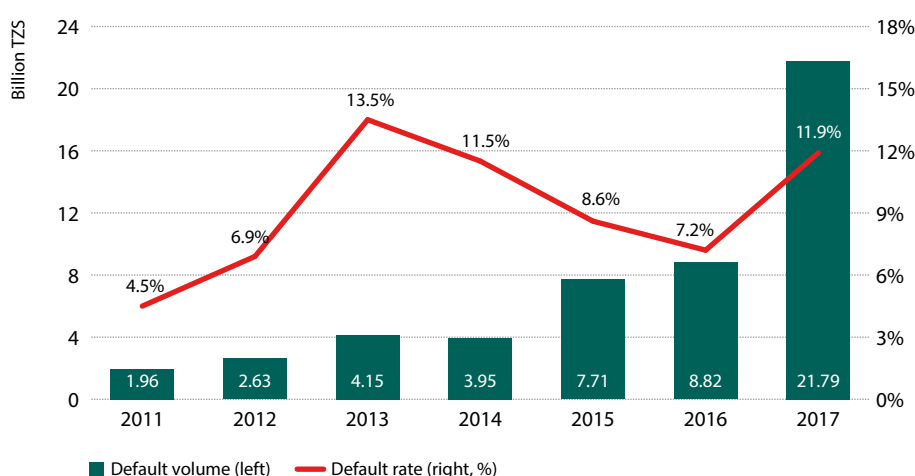
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loss was incurred by the loss of the deposit on one of the accounts due to closure of FBME Bank by the Government of Tanzania.

A note of caution should be made, as the actual losses incurred alone do not reflect the quality of the overall underlying portfolio. The default rate of PASS guaranteed loans, which is measured as the volume of defaults relative to the outstanding balance, has increased dramatically from 4.5% in 2011 to 13.5% in 2013, the explanation offered being that one financial institution failed to conduct proper monitoring of loan-takers. Afterwards, defaults gradually decreased to 7.2% in 2016. However, the default rate again has spiked in 2017 to 11.9%, due to several very large loans having defaulted. Though no credit guarantee programme is perfectly comparable, the evaluation sees a 5% default rate as an ambitious but realistic target based on experience in credit guarantee programmes on the African continent. Given its development goals, PASS should typically be inclined to accept higher default rates than commercial banks. Though this is a trade-off with financial sustainability²⁷, the reported high default rates are likely to hit bottom-line results in the long-run and hence could compromise PASS's capital base.

In addition, please note that the rate of non-performing loans has increased as well, rising to 9.3% and 14.5% in 2016 and 2017, respectively²⁸, despite a healthy growing Tanzanian economy²⁹ (Figure 16). This is exacerbated by the fact that in absolute terms, the outstanding balance of loans guaranteed has grown rapidly and defaults in general increase during the term of a loan and (rather than in the first year after disbursement).

FIGURE 16: DEFAULT VOLUME AND RATE PER ANNUM³⁰



27 Strong swings in default rates are typical in developing markets. As comparison, most major banks in Tanzania reported default rates below 10% in 2017.

28 Non-performing loans are classified as those loans that are in excess of 30 days past due.

29 World Bank reports annual GDP growth percentages of 7% or higher since 2013.

30 Source: PASS annual reports.

The actual called-up capital accounted for in annual reports is far less to date than the amounts in Figure 16 above, due to restructuring of loans and recovery of collateral, making loss given default rates substantially lower. Nevertheless, the sharp increases in the overall volume of non-performing loans and defaults are a cause for concern and it is recommended that monitoring on doubtful loans should be scrutinised.

Foreign exchange result

The income of PASS in recent years has primarily been based on foreign exchange results. As the fund is primarily funded in USD with the functional reporting currency being TZS, a sliding TZS vis-à-vis the USD creates a benefit for PASS. However, the TZS-USD rate has been subject to strong fluctuations over time both upwards and downwards, as depicted in Figure 17 below. A sudden shock in exchange rates could lead to a reversal of exchange rate income into exchange rate losses. Given the historic dependency on the exchange rate component in the overall result of PASS, a stabilization or appreciation of the exchange rate can pose a severe risk on the financial sustainability of PASS.

FIGURE 17: DEVELOPMENT OF THE TZS-USD RATE FROM 2008 TO 2018³¹



BRANCH NETWORK

Since 2011, local presence of PASS branch offices has grown with expansion first into Mwanza (2011), followed by additional branches in Moshi/ Arusha (2012), Mtwara (2013) and Kigoma (2015). In 2010, the head office of PASS was relocated from Morogoro to Dar es Salaam. It was chosen for the head office to be vested in the financial centre of the country, which is Dar es Salaam, close to PASS's partner financial institutions located there.

The expansion to new branches has fuelled growth of both the number of loan applicants as well as number of partner financial institutions. On

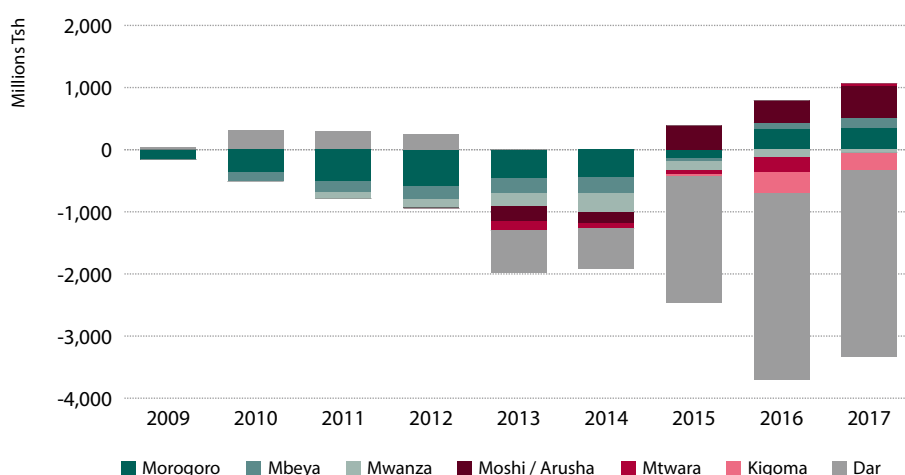
31 Source: OANDA.

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several occasions during interviews, financial institutions have mentioned they highly value the local branches of PASS spread through the country. For several financial institutions, it was even one of the prime motivations to partner with PASS. Efficiency of reaching and monitoring end-clients, is mentioned as the principal reason for this. Furthermore, the branches work in close cooperation, thereby for instance sharing information on value chains and specialisms. Key informants have signalled that the geographical spread has presently matured, and additional branch offices shall not provide additional added-value to PASS's activities.

In aggregate, the expansion in the number of branches has resulted in higher overhead costs and hence a lower operational result, even though certain branches have reached a break-even point operationally (Figure 18, below). Please note that the office in Dar es Salaam is disproportionately burdened with all headquarter-associated costs, with no cost allocation key applied to the other branches. Two of the six branches, in Mwanza and Kigoma, furthermore are incurring operational losses. Given this cost structure, PASS will need to further scale-up its operations driven from current branches in order to reach an overall operational break-even level, as the overall 2017 operational loss exceeded TZS 2 billion (excluding AIC which presently makes a loss). Expectations within PASS are that the Kigoma branch will be able to break-even or become profitable in 2020.

FIGURE 18: OPERATIONAL RESULT BY BRANCH 2009-2017³²



32 Sources: Navision data, the trial balances, audited financial statements and annual reports. Please note that the received branch data does not match consolidated amounts. As PASS branches are operated in a systematic fashion, the evaluation assesses the financial sustainability of PASS's branches purely from an operational point of view. As branches have no decision-making authority on credit guarantee or exchange rate policies, results from guarantees (i.e. losses, provisions and related interest income to the credit guarantee fund) and foreign exchange are not assessed to measure performance from an operational point of view.

OUTREACH

The number of end-clients that are benefitting from PASS guarantees has climbed over the years. For the past year (2017), the number of end-clients linked in some way to PASS has been calculated at 166,447³³. These end-clients are related either directly (with only the bank as intermediate institution) or indirectly (with a bank and either a group, SME or MFI as intermediary) to PASS. Most clients are individuals, either through a traditional (individual or group loan) or portfolio guarantee arrangement. Groups generally have between 30-40 and up to a few 100 members. Some loans are provided to SMEs, which add large groups to the list as they may involve a few 100 to up to 22,000 farmers from which they source or to which they supply. The single largest group added indirectly to the total number of farmers linked to PASS in some way involves the institutional guarantee to PRIDE, an MFI with 63,719 clients in 2017. With an average size of 5.65 members per household³⁴, one arrives at a total number of at least 940,000 household members benefitting from the relationship with PASS, either directly or indirectly.

ORGANISATIONAL SET-UP AND TIMELINES

The number of partner financial institutions has grown over the years and currently 15 partner financial institutions are mentioned by PASS. CRDB and NMB by far have the biggest share in PASS's guarantee portfolio, which is logical given their importance in the Tanzanian agricultural market. Several financial institutions have not disbursed new loans with PASS guarantee in recent years. For example, Exim provided its last PASS-guaranteed loan in 2012, Tanzanian Investment Bank (TIB) in 2013 and Kilimanjaro Cooperative Bank Limited (KCBL) in 2014. This has been the result of a combination of factors: several financial institutions have developed a limited proposition to serve the agricultural sector, and some face liquidity challenges. PASS monitors financial institutions on a regular basis and if needed partnerships are terminated.

PASS plays a significant role in the relationship between financial institutions and end-clients. In many cases, PASS's staff is the driving force in supporting farmers developing business plans and going through the full application process with financial institutions. After loan disbursement, PASS typically has regular contact with end-clients and play vital roles in restructuring loans with end-clients, should non-performance loom. Though PASS aims to not delay the start of the farming season in its processes, comments from partner financial institutions have been made on recent time lags of issuing the guarantee certificates. Financial institutions need to comply with their own set customer service regula-

33 An earlier figure presented by PASS of 170,974 end-clients contained double counting of three SMEs who received two loans/overdrafts in this year, and whose clients were mentioned twice in the database and added to the total.

34 Source: PASS Survey.

tions which stipulates that disbursement will be within a week after signing the offer letter.

In addition, PASS's operations are still largely paper-based. Applications by end-clients for PASS services are paper-based in the field and must be entered in Navision manually when returning to the PASS office. In addition, each guarantee certificate is printed, signed and scanned individually which is a time-consuming process. Each individual guarantee certificate needs to be signed by the Managing Director, which has been an increasingly time-consuming requirement in the last few years³⁵. In the past years key informants addressed the visibility of increased pressure on staff within PASS, both in terms of man-power and skillset (knowledge). Doubts have been expressed by staff members of associated banks whether PASS is able to accommodate the current and future growth. Furthermore, there is a high dependency on key persons which might affect the sustainability of PASS in the long-term.

PASS has an internet banking platform with CRDB to manage payments. Payments within PASS are centralised and managed at the headquarters, branch offices only have limited cash supplies. However, the internet banking system is not integrated with the management information system, including the financial management system. Manual checks are performed on the accounts and to see whether the end-client has paid the fees before proceeding to the next phase (preparation business plan and issuing guarantee certificate).

FinTech, or IT solutions in the financial world, was brought up by key informants as a topic that could be important for PASS in the near future. In the case of PASS, it is important to consider two elements: using digital technology to improve PASS's own operations on the one hand, and the influence it may have on the operations of the partner financial institutions and end-clients of PASS on the other.

PRODUCT DIVERSIFICATION

PASS is clearly innovative in developing and introducing new financial products and services in the Tanzanian market. This innovation is the result of PASS having frequent interaction with the market, combined with fruitful stakeholder discussions and informed sessions with the Founders Committee and Board of Trustees. Several of the more prominent innovations are described below.

The most important diversification initiative has been the expansion of the guarantee product range from only traditional guarantees to

35 Though this is an improvement from the pre-2007 period when the Trustees had to sign, the evaluation finds that with the volumes now reached and expected in the future, a solution going forward will either involve devolution to branch level, or a digital process, or both.

portfolio guarantees. This has enabled PASS to increase its outreach with a limited increase in resources. Currently only three of the 15 partner financial institutions, namely CRDB, NMB and VisionFund Microfinance Bank, are partners for the portfolio guarantee product.

The formation of end-client groups is appreciated by key informants and enables PASS to reach more small-holder farmers through the group guarantees. However, financial institutions have different internal processes, for some financial institutions PASS needs to issue a guarantee certificate for each individual member in the group. This puts pressure on PASS's resources.

Apart from AIC, that is set-up as a separate unit but organisationally being part of PASS, PASS has been exploring the possibility to start a leasing business, offering tractors and other large agricultural equipment to farmers. A business plan has been written, though no concrete steps have been taken to start implementation.

The evaluation finds that it appears that a leasing service is already in place in the market. The leasing service is not organised separately as a lease company with lease finance product, but involves a maintenance service component to a loan, and transfer of ownership of the product is stipulated in the loan agreement by the financial institutions for the purchase of e.g. a tractor.

The extent to which these and additional new market offerings will be profitable in the long-run can only be evaluated in half a dozen years from now. However, the fact that PASS keeps innovating and introducing new products increases the likelihood of PASS remaining relevant and additional.

DEVELOPMENT RESULTS, INFORMATION COLLECTION AND REPORTING

An assessment of the M&E and impact assessment system is related to the ultimate impact PASS aims for (Figure 2, p. 27). The system is geared towards resources employed in PASS, and the impact in terms of output generated (business plans and guaranteed loans). Annual M&E reports over the years show that the organisation is concerned with both the performance of the organisation and its clients and partner financial institutions, both in terms of financial and non-financial impact.

However, the method used for measuring impact has not really improved in the past few years. The M&E system still seems to be in development and is presently not able to answer these questions. The overall BPS IV set out the development of a M&E system, and a consultant was hired to provide services to PASS as part of that assignment some years ago. However, the evaluation finds that these have been slow to bear fruit. As far as monitoring of impact is concerned, as stated above, information (Client Satisfaction Survey) is collected from an annu-

ally changing set of clients representing the various locations, products, subsectors and gender categories. The total size of the sample is limited and insufficient for a statistically significant analysis. The sample size calculation seems to be based on the size of the matrix resulting from the various dimensions mentioned above, in which each cell is filled with one case. To achieve statistical significance, a higher number of cases are needed in the Client Satisfaction Survey employed.

For more in-depth study of the impact of PASS, a more formal impact assessment process can be set up. Baseline data can be collected using a digital survey and standardised statistical processing files. This is a cost effective and rapid procedure which can be done annually or bi-annually to allow a thorough insight in actual impact achieved. It could also serve to inform evaluation studies such as the present.

COMMUNICATION

Currently, reporting has an internal focus towards the Founders Committee and Board of Trustees. Towards internal stakeholders, communication and reporting about PASS's performance appears to be fit for purpose, however the level of detail, quality and way of presentation could be improved.

Communication towards the public on future direction and strategy is limited. Key informants at the level of the banks indicated to be uncertain whether PASS's fund capital is enough to anticipate and accommodate growth in the size of the portfolio and to follow market developments. This information is not generally shared with the banks to avoid misinterpretation, and PASS is monitoring capital deployment without sharing this information. Key informants also signalled that end-clients do not always understand or are not always aware of the process of obtaining a loan with a PASS guarantee and some have drifted away after preparation of the business plan due to their, as key informants indicated, unawareness of the linkage fees for linking to the financial institutions.

AGRIBUSINESS INCUBATION CENTRE

Business Development Services were the original focus of AIC. A number of end-clients has been assisted (four are still active, three are no longer active, two are about to start and ten are in the pipeline). These results are limited in scope and the sustainability of the no-cure-no-pay model is considered doubtful by the evaluation.

The in-house incubation centres are recently added as an activity. These are still in a start-up phase. At this stage it is too early to provide solid evidence about proof of concept, but the principle is attractive. Partnerships with research partner institutions have been sought and Memorandum of Understandings have been signed with Sokoine University of Agriculture and Sokoine University Graduate Enterprises Cooperative

Society to set-up the first in-house incubation centre for the horticulture subsector. There is potential for upscaling the in-house incubation centres concept to link to other subsectors and additional research partner institutions and AIC is eager to involve industry research development organisations and business partners.

The construction of facilities for an in-house incubation centre at Sokoine University has started and the first greenhouses are expected to be finished in November 2018. The pre-selected and two-week selection training of participants (two groups of 50 participants) were completed during the field mission. The mindset and full long-term commitment on the side of the participants is important and should be a priority. Participants in the training indicated this is a career opportunity as no alternative is available at this time. It was mentioned that participants' expectations about the AIC differed from the current set-up of the AIC, and PASS AIC could use these remarks as early learnings. The information received when the participants applied might have been limited. In the current set-up, the participant is not autonomous in the crop decision. Key informants indicated it might be good to let the participants be more autonomous (entrepreneurial) in the decision on the crop, i.e. tomatoes might not be right choice though easier to sell in the local market; it is a highly competitive market and there are high price fluctuations. Therefore, it might be better to go for a more exclusive crop such as herbs and Indian vegetables, potentially with certification, which might be difficult to get to the market but will be more profitable. On the other hand, the current decision for this model and crop is made to allow for easy replication. All in all, the in-house incubation centre should be able to demonstrate commercial viability of agriculture in the eyes of participants and the public and flexibility is needed to allow for alterations in the set-up moving forward. Overall, the evaluation considered the in-house incubation centre an innovation worth testing.

The replenishment of the seed funding facility depends on success of the participants in the incubation activities which is a liability but could potentially be a successful model. The Founders committee has advised that an evaluation of the AIC takes place in 2019.

4.4 Impact and sustainability

EMPLOYMENT EFFECTS ON END-CLIENTS

Employment effects can be expected at various levels, farm level, at the level of SMEs, and in the economy as a whole through indirect effects. At the farm level, comparing PASS with non-PASS farmers (shorthand for farmers with and without a loan guaranteed by PASS) in rice production both categories employ similar levels of household labour, but PASS farmers employ larger numbers of external hired labour (Figure 19,

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below). Specifically, PASS farmers use more hired labour on weeding and land preparation than non-PASS farmers.

FIGURE 19: HOUSEHOLD AND HIRED LABOUR INPUT IN DAYS IN RICE FARMING, PASS AND NON-PASS FARMERS, FARM LEVEL, 2018³⁶



These are totals at farm level. However, PASS farmers use larger farms for production of the studied crop. When controlled for land under the main crop, PASS farmers still use less household labour per acre than non-PASS farmers, but continue to hire more hired labour, though the difference is slightly reduced (Figure 20, below). Employment effects are therefore estimated to be small in this crop per acre, but they are positive and statistically significant.

FIGURE 20: HOUSEHOLD AND HIRED LABOUR INPUT IN DAYS IN RICE FARMING, PASS AND NON-PASS FARMERS, PER ACRE, 2018³⁷



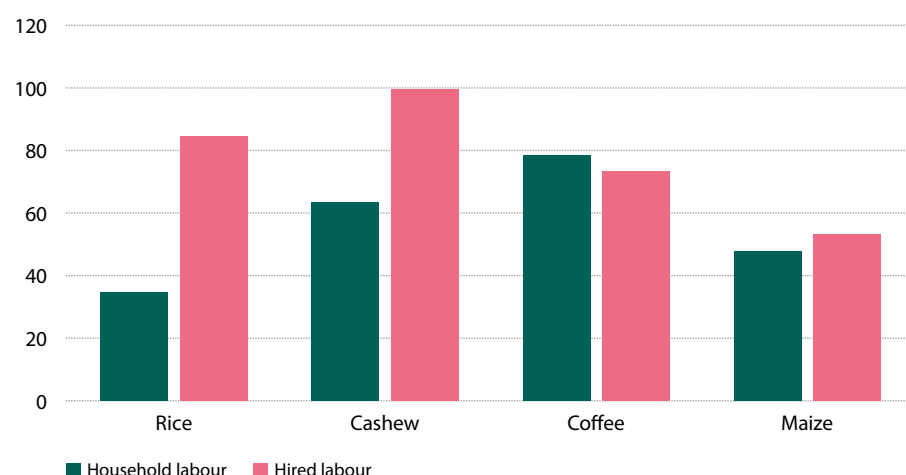
Rice as a crop is specific as it uses more hired labour than other crops relative to household labour, though on average, taking all labour input

36 Source: Survey results report.

37 Source: Survey results report.

together, has a low hired labour per acre ration, much like maize. Pure cash crops (coffee, cashew) have higher labour input per acre, so for employment effects, crop choice does make a difference. Figure 21 below, shows the data for the four crops studied.

FIGURE 21: HOUSEHOLD LABOUR AND HIRED LABOUR INPUT IN FOUR CROPS, PASS FARMERS, TOTAL AT FARM LEVEL, IN DAYS, 2018³⁸



Especially in rice and cashew, hired labour constitutes a considerable amount of the total labour employed. Average amount of labour in cash crops (cashew and coffee) is also higher than in food crops, even for rice. In terms of employment creation, the recent upturn in cashew production is a very positive development.

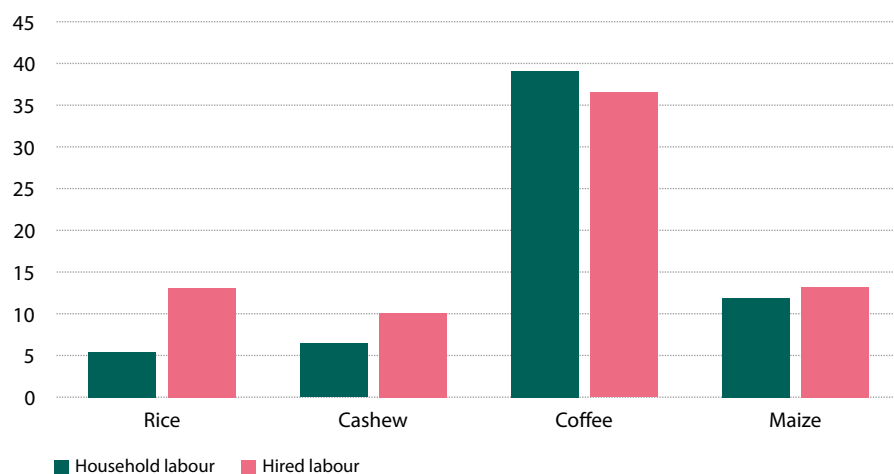
Labour per acre varies considerably between crops, with coffee being the most labour intensive. Coffee farmers have very few other crops: maize, beans and some cassava. The other cash crops, cashew and rice³⁹, are also attracting a lot of hired labour. The employment effects of financial services availability in the three crops other than rice are hard to establish with the data at hand but may be limited. On the other hand, hired labour in the areas studied may have been lower than in other more remote areas, as mechanisation has been introduced in these areas some time ago, which has taken over manual labour (Figure 22 and 23, below).

³⁸ Source: Survey results report.

³⁹ Though strictly speaking a food crop, as farmers also consume small amounts in-house, rice in this area is mostly seen as a cash crop.

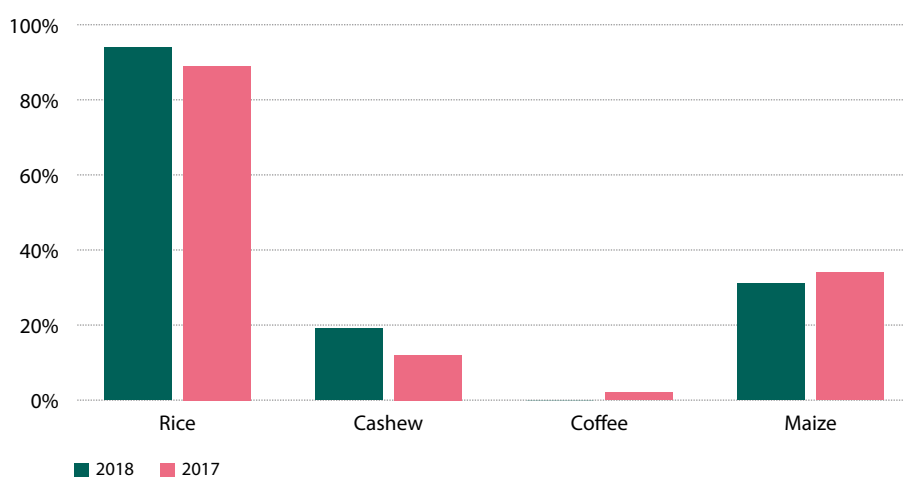
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FIGURE 22: HOUSEHOLD LABOUR AND HIRED LABOUR INPUT IN FOUR CROPS, PASS FARMERS, PER ACRE, IN DAYS, 2018⁴⁰



Mechanised farming reduces the total amount of farm labour used and reduced specifically the amount of hired labour. Though levels of tractor ownership are generally low in most crops, borrowing and hiring tractors is a common occurrence. Figure 23 below, shows that there is quite some variation in tractor use among the crops, related to the type of crop (tree crop or field-based) and whether it is a commercial crop (rice) or a food crop (maize). Again, loans for the purchase of tractors will have a different impact among these crops on farm employment.

FIGURE 23: TRACTOR USE IN FOUR CROPS, PASS FARMERS, IN % OF FARMERS⁴¹



Employment effects at the level of SMEs and larger farmers were assumed to be high by the various actors around PASS, but are probably less than expected, due to capital investments leading to higher labour productivity. For instance, a large coffee trader obtained a series of

40 Source: Survey results report.

41 Source: Survey results report.

loans, each one larger than the previous one, and expanded his business to accommodate larger shipments to clients abroad. This implied large-scale grading and sorting had to take place, to fill a few containers of coffee at a time. This again implied that, rather than 100 women sorting the beans, a sorting machine was installed and only four better trained and paid employees and 30 women sorters for the beans were employed, while expanding the supply from one container a month to one container a day. There is also a gender component in this process, as the better trained employees were all men, and the people laid off were all women.

Mechanisation (e.g. tractor and tools) similarly leads to less employment on-farm (for land preparation and weeding, harvesting) as explained above, but newly created employment consists of better skilled personnel. Non-farm agricultural and services employment generation (services agricultural sector, catering, transport, administrative services, maintenance, etc) may be considerably larger than expected but is outside of the view of PASS and this evaluation.

INDIRECT EMPLOYMENT AND INCOME EFFECTS ON WIDER ECONOMY

As discussed above, indirect employment effects could be considerable but are difficult to find for PASS. It is generated outside of the agricultural sector and takes place in the service sector. Though investments will increase labour productivity leading to lower employment per unit product, the expanded overall supply implies a tendency to more employment: more transport needs for example, and administrative and catering services, and thus a shift in employment away from the primary agricultural process and towards supporting services, all better paid jobs. The net effect could not be studied in the framework of this evaluation but could be positive and considerable in terms of higher qualifications and employment of better trained people. In addition, successful farmers, processors etc. often diversify into other activities, investing their proceeds from agriculture in other sectors, generating employment and income, as some of our discussion partners intended to do. Since the economic environment is conducive to these activities (guest houses were mentioned for instance, depending on ever improving roads networks) this calls for a study of multiplier effects in the regional economy in relation to an improving economy in general.

PRODUCTION EFFECTS ON END-CLIENTS

The ability to cultivate more land and improve agricultural methods and thus yields are among the obvious effects on production. PASS and non-PASS farmers were compared on rice production and productivity, input-use and income. As so much in respect to production depends on weather conditions, in the survey, the data for the past two years was asked to verify potential fluctuating conditions. Both years (seasons 2016-2017 and 2017-2018) were around or slightly below average in

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terms of production and productivity (Figure 24 and 25). The findings are therefore representative of the crop and the area.

FIGURE 24: RICE PRODUCTION IN TWO LAST SEASONS IN KG, PASS AND NON-PASS FARMERS, FARM LEVEL, 2017 AND 2018⁴²

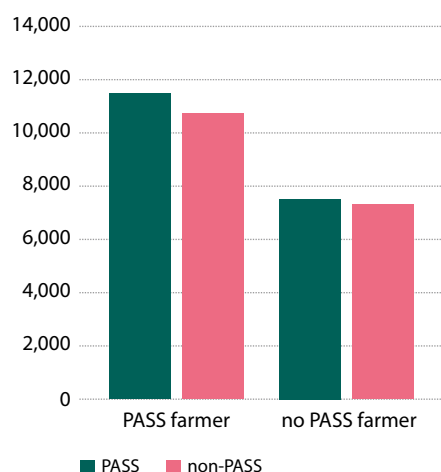
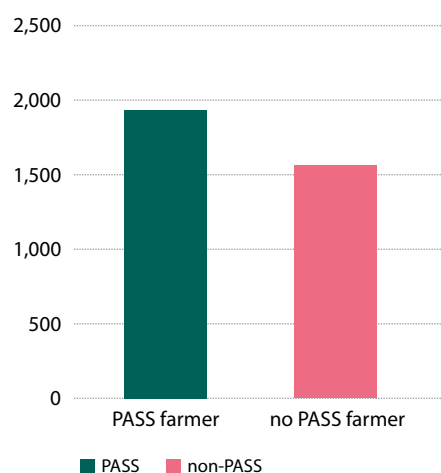


FIGURE 25: RICE PRODUCTIVITY IN LAST SEASON, IN KG PER ACRE, PASS AND NON-PASS FARMERS, 2018⁴³



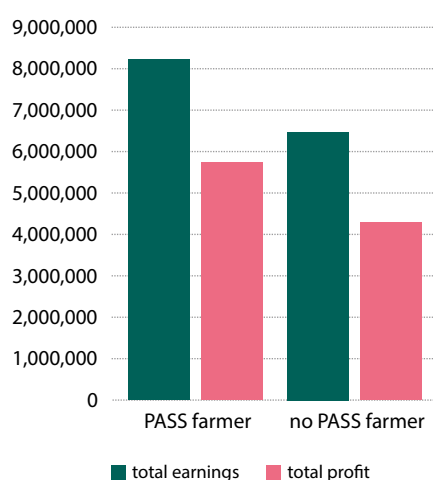
The higher levels of production and productivity are related to higher levels of inputs used by farmers. The set of inputs used has meant that PASS farmers have considerably more production, and less but still significantly better productivity (Figure 25, above). Though the difference between PASS and non-PASS farmers in terms of hired labour inputs was not very large, productivity is higher. This might be related to tractor use, and the generally higher level of input use.

42 Source: Survey results report.

43 Source: Survey results report.

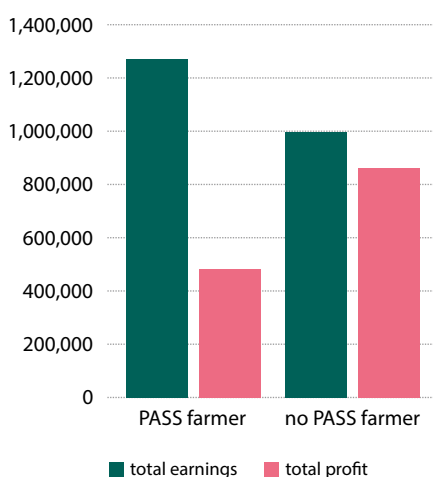
At the same time, they allow higher levels of sales and income (Figure 26, below).

FIGURE 26: EARNINGS AND PROFIT FOR PASS AND NON-PASS FARMERS, FARM LEVEL, IN TZS, 2018⁴⁴



In Figure 26 above (farm level) and Figure 27 (below, per acre), profit is arrived at by deducting input costs from total earnings from this crop. In terms of earnings and profit per acre, the difference between PASS and non-PASS farmers is less pronounced due to the difference in land holding sizes used for the rice crop, but still significant.

FIGURE 27: EARNINGS AND PROFIT FOR PASS AND NON-PASS FARMERS, PER ACRE, IN TZS, 2018⁴⁵



The findings at farm level are confirmed at the level of turnover and profit per acre between PASS and non-PASS farmers. PASS farmers do better on a per-acre basis as well, with a difference is between 25 and

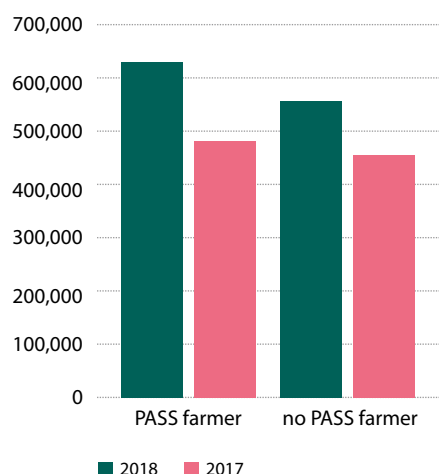
⁴⁴ Source: Survey results report.

⁴⁵ Source: Survey results report.

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35%. PASS farmers have higher turnover in rice sales, though their profits are relatively smaller due to higher expenditures on inputs (about 50% more input use than non-PASS farmers) (Figure 28, below). The image is similar for input use per acre.

FIGURE 28: COST OF INPUTS USED BY PASS AND NON-PASS FARMERS, FARM LEVEL, IN TZS, 2017 AND 2018⁴⁶



Both categories of farmers sell most of their produce to local traders and on the local (spot) market. Prices on those markets are not very high and information at the farm gate about prices on the market is lacking, resulting in weak bargaining positions. There are very few channels of information on prices in the market. No evidence was found of warehouse receipt systems in operation, a method of increasing prices to farmers that uses their stock as collateral for a loan. Such a loan provides the farmers with immediate cash, while the stock appreciates in value until a few weeks after the harvest when prices go up.

Apart from income effects, longer term effects may be an increase in asset ownership. Though we did see a slight difference in this aspect, with PASS farmers having higher levels of asset ownership (slightly more land, power tillers, hand tools, etc), it is unclear whether this is caused by successful loan application, or whether more wealthy farmers are more inclined to obtain loans. Both effects may have occurred, and due to a lack of baseline data we are not in a position to establish the direction of the relationship.

Large-scale farming

The above refers to small-scale farming in rice. Farmers operating at a larger scale were met during interviews. Interviewees confirmed positive production effects in large scale farming. Mechanisation led to larger tracts of land being cultivated, in cases where farmers had surplus lands that they did not use before. In addition, land was better managed

46 Source: Survey results report.

(more rounds of ploughing, providing a better seed bed for the crop, more weeding), as well as better timed, which may be the most crucial stage in the whole operation. Data was unavailable, but farmers who had obtained a tractor for their farm with the help of a PASS supported loan confirmed that yields had improved, and with larger areas cultivated, production in general had increased considerably.

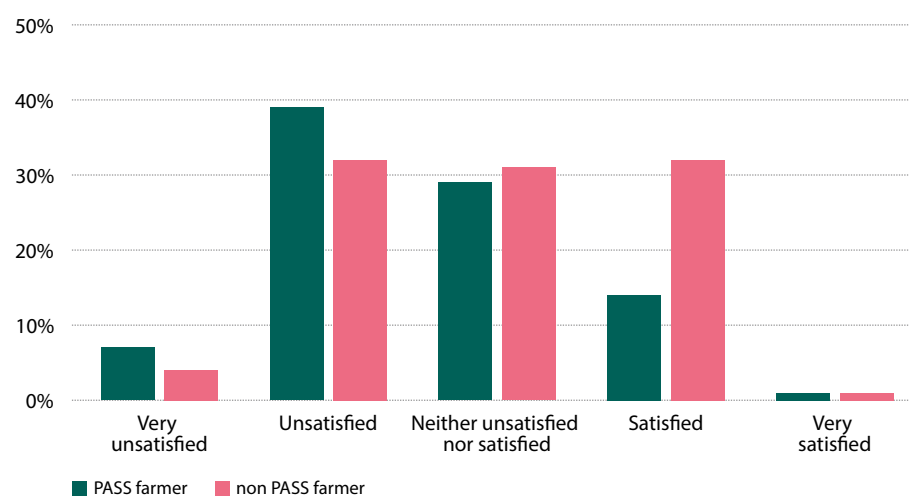
Indirectly, tractor availability among some large scale farmers also provides the opportunity for farmers who do not have a tractor themselves to improve operations. Renting has become easier and operations are better timed when more tractors are present in the area.

Increasing land-use (number of acres cultivated) with the help of mechanisation seems to be the dominant reaction whenever farmers had sufficient land, previously renting out the land that they were unable to cultivate themselves. An unexpected effect therefore was the expulsion of small-scale landless farmers who borrowed this land from the farmer. As land was still available, they could shift to other areas, but with increasing use by the owners themselves, this may become a problem in the future.

WELL-BEING EFFECTS ON END-CLIENTS

Higher income levels for PASS farmers are not necessarily related to higher levels of well-being or food security (Figure 29 and 30). Many more elements in life are of influence on these impact variables not necessarily related to agriculture or agriculture-based incomes. Though they are not included in the ToC, contextual variables are certainly of influence, and limit the influence PASS has on well-being and food security. Two variables have been selected to present (Annex E, for more details).

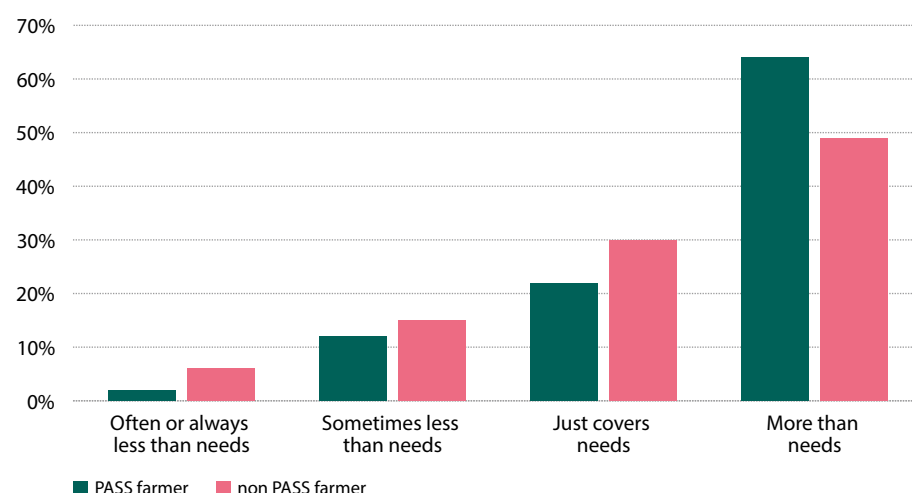
FIGURE 29: LEVELS OF WELL-BEING, % OF PASS AND NON-PASS RICE FARMERS, 2018⁴⁷



47 Source: Survey results report.

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FIGURE 30: LEVELS OF FOOD SECURITY, % OF PASS AND NON-PASS RICE FARMERS, 2018⁴⁸



The evaluation concludes from the above that no clear impact on wellbeing seems to be present, but the food security situation of PASS farmers is better than non-PASS farmers. The difference is small but statistically significant. Since rice, though mostly a cash crop, is also used at home, and rice productivity and production were significantly higher for PASS farmers, this result can be expected. As well-being implies additional dimensions apart from food security and thus is a complex issue, a less clear-cut link between PASS support and well-being is observed.

LOAN DETAILS

The availability of loans against favourable conditions is an effect in itself of the link with PASS. Non-PASS farmers are not completely excluded from financial services, but they source these services from money lenders in the village, Saving and Credit Cooperatives, Village Savings and Loan Association, friends and family. They pay higher interests for these services, and the amounts are smaller (Table 2, below). Only a small percentage had actually borrowed money for their main rice crop, 32% compared to 68% for PASS farmers. This restricts their input use and the scope of their operations.

TABLE 2: LOAN DETAILS FOR PASS AND NON-PASS FARMERS, IN TZS AND %, 2018⁴⁹

	PASS farmers	Non-PASS farmers
Loan size	3,251,262	1,267,143
Loan interest rate	21.7%	26.5%

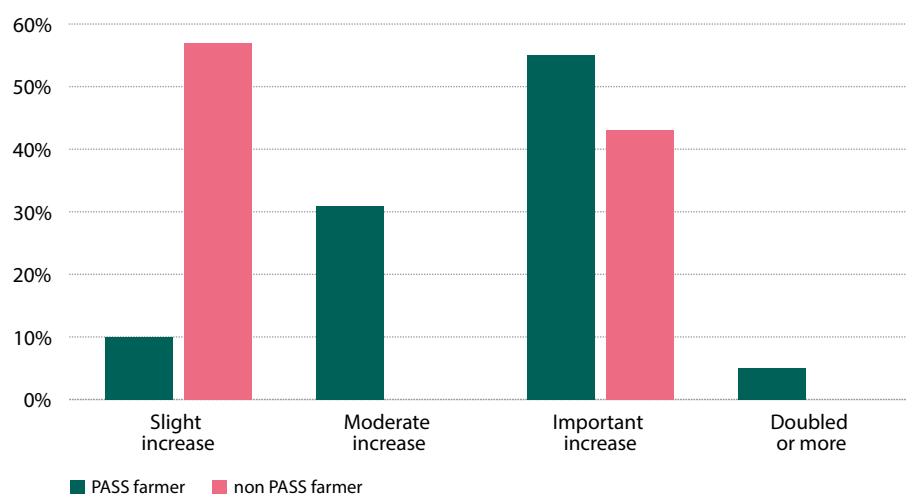
48 Source: Survey results report.

49 Source: Survey results report.

PASS farmers borrow double the amount that non-PASS farmers borrow, and the interest rate is significantly lower by 5%. This allows higher investments in inputs (other than labour) for PASS farmers, at relatively lower costs.

Farmers stated that much of the positive effects described here could be attributed to their involvement in PASS supported loans (Figure 31), when this support was known to them, and to the effect of having a business plan. The effect of the loan was considered important.

FIGURE 31: EFFECT OF HAVING A LOAN ON PRODUCTION. PASS AND NON-PASS FARMERS, 2018⁵⁰



In this respect, PASS farmers acknowledged the positive effect of the loan. On the other hand, around 65% of the PASS farmers were generally not very happy with the *process*, which in their view took a long time to finalise or was against high costs. However, this also applied to non-PASS farmers, who mainly took aim at the high costs and interests of the loan, which they obtained through informal channels.

50 Source: Survey results report.

5 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusions

Since its incorporation, PASS has been and remains both relevant and additional. PASS operations contribute to the goals of the Government of Tanzania in economic development as well as those of the Government of Denmark. Commercial financial institutions have not yet taken PASS's place and slowly need to step up if PASS intends to fulfil its ultimate development goal. These include a continuous support of end-clients in need of guaranteed loans providing these clients with the means to invest and grow their business, while at the same time stimulating end-clients who have succeeded to up-scale their business to graduate and become independent clients of commercial financial institutions. The mission of PASS should be to ultimately no longer be necessary as a financial guarantee service provider.

At the same time, demand for PASS' services is far from met. Specially in more remote areas, penetration of financial services is scant, and present levels of financial services are limited in volumes and unfavourable in costs, levels that noticeably improved through the availability of PASS financial and non-financial products.

For the near future, further growth is necessary and is possible with limited additional staff time through expansion of portfolio guarantees and institutional guarantees. Growth in individual and group loan guarantees implies a growing burden on staff presently available. In the meantime, further growth can be fuelled by attracting additional capital, increasing agreed leverage with partner financial institutions and lowering the guarantee percentage for recurring PASS clients (to maximum 30%). Lower guarantee percentages for these clients would also promote graduation of clients to commercial bank loans, and ascertain that additionality is maintained.

PASS has likewise provided valuable services to financial institutions and clients by assisting clients to develop business plans on the basis of which loans and guarantees can be provided. This should be continued as it improves viability of the businesses and reduces risks to both parties. At the same time, PASS should also incentivise financial institutions

to develop their own in-house agronomic knowledge capabilities for business plan development.

Two trends are observable, namely increased portfolio volume and larger numbers of clients. With further growth of the organisation, further digitization is needed as with this strong growth, the effectiveness of the internal organisation is lagging. Risks loom in process bottlenecks and the consequences of centralisation. Digitization can increase operational efficiency and leverage going forward.

At the same time, the dual goals of financial as well as development impact suggest that M&E of financial and social impact as well as data analysis for day-to-day operations and strategic policy-making (including green growth and gender) can only be met in future if digitization of operations takes place. The present hybrid paper and digital system has reached the end of its capacity in that respect and needs to be modernised. Operational efficiency of PASS has come far but can benefit from further improvements. Expansion of the organisation to improve coverage of the presently most important agricultural production areas and value chains through existing branch offices is wise. Further intensifying the network of branch offices is not necessary. The focus should now lie on financial efficiency, and again this is made easier with appropriate digital systems in place. FinTech solutions would increase efficiency at the client-PASS interface, in data entry and management in the PASS system, in communications with the financial institutions and in monitoring and evaluation of progress and social impact.

The level of financial sustainability of the organisation is relatively high within the realm of credit guarantee schemes, though should continue to be a concern given its commercial business take. With a growth of PASS portfolio, a focus on portfolio guarantees and institutional guarantees, maintenance of the fee structure (with possibly higher fees for recurring clients) and digitization, operational efficiency could be maintained and even grow, allowing the organisation full recovery of operational costs.

Monitoring of financial risks (non-performing loans, exchange rate risks, concentration risks at the level of banks and clients) is key to the success of the organisation with respect to financial sustainability. These risks have not decreased substantially in the last few years, and further growth of the organisation's portfolio and clients' size could further make this a point of attention.

New activities of PASS are diverse in nature and it should be reconsidered whether these should be part of the PASS organisation itself.

The AIC has been operational for some years, and recently a promising addition to the set of activities and services, the in-house incubation

centre, has been added. At the same time, the original services for SMEs have not resulted in operational benefits, while the in-house incubation centre skills development activities need to prove itself yet. Furthermore, there certainly is a market for lease products related to agricultural mechanisation, the question is whether this should be a part of PASS organisation itself. An alternative governance model of a holding is suggested, with PASS, AIC and the lease company all being part of the same holding company.

PASS has had a clear social impact with participating farmers and businesses, as it was intended to do. In terms of changes in productivity and production, data suggests that improvements of around 25-35% have been achieved in key crops, and this is at or above the level of achievement generally found in similar microfinance and credit guarantee programmes. productivity could improve further when agronomic advice and innovation is available to clients. Though PASS is not in a position to facilitate the provision of agronomic knowledge directly, it could support this indirectly through the development of connections of financial institutions with the appropriate extension organisations of private sector input providers.

With improved productivity and production, similar percentages in income increases related to the studied crops were noted. Again, this is above expectation and compares favourably with other similar programmes. The Theory of Change designed by PASS states that impact at the level of poverty reduction can be expected and is achieved other factors being equal, though many more variables have an influence when determining poverty alleviation.

In terms of employment, the results have been limited in the sense that investments made possible by the guaranteed loans, especially in SMEs, generally lead to higher productivity and a relative reduction of labour input per unit product. However, this is partly compensated by the increase in volume of production and the related increase in agricultural product procurement from farmers of agricultural processors and traders. The employment effect also includes indirect employment creation of a higher level of quality, such as in services related to maintenance, transport, construction, operation of machinery, administration, and catering and hospitality. Though the present evaluation could not study these indirect effects, they remain valid and should be studied for future reference to overall employment effects.

The impact of PASS could also be found at the level of input cost for financial services. Loans obtained by PASS farmers are generally double the amount obtained by non-PASS farmers from local (informal) loan providers, against a significantly lower interest cost (by 5%). Appreciation of the loan is expressed by PASS farmers and would improve further if the process from business development to guarantee certification

to loan provision would be shorter in time, and timelier in view of the agricultural season starting dates.

5.2 Recommendations

1. How has PASS's strategy developed since the start of PASS in 2000, and to which extent has PASS's instruments been relevant for the overall transformational development of the agricultural sector in Tanzania?

... on types of agribusiness and farmers

PASS has proven relevant to an increasing number of agricultural end-clients through provision of business services and credit guarantees. This has allowed end-clients to access financing. The products and services offered by PASS have evolved over time, thereby catering to shifts in market demand. A clear example is the value chain approach, where large loans are extended to key actors in the value chain, thereby having spill-over effects on the sustainability of smallholders. Also, loans are provided to input providers, farmers as well as off-takes and agro-processors in certain value chains, which supports all actors in the value chain. A large number of different value chains appear in the portfolio. Each crop has its unique dynamic, and requirements in time, as well as in space (in the various branch intervention areas specific crops dominate). This will influence portfolio growth and demand on resources and point at possible innovations in certain value chains for the future, such as the warehouse receipt system in cereals.

RECOMMENDATION 1

The evaluation proposes that crop-related specific financial and non-financial services are taken into consideration, taking the particularities of the various value chains, their dynamics and resultant demand for PASS resources. Rice and cashew for instance have very different characteristics and requirements, and possible product innovations in the value chains to be developed with financial partner institutions should take this into account. PASS can learn from AMDT and FSDT in this respect.

... on aspects related to gender and green growth.

With respect to gender, an increase in the number of female farmers engaged by PASS is commented on in annual reports, though there is no Navision data to support this statement⁵¹. Documents preparing the

⁵¹ Separate excel documents are available but these are not integrated in the Navision automated system.

ground for a gender policy were never released to the evaluation. A green growth policy or strategy, though discussed in a Green Growth concept paper, has not yet taken off in significant forms. A deeper insight in the possibilities and options for a more transformational green development and gender policy in the field of inclusive finance is not developed, including a view on how it translates to at the level of the financial institutions, and how this may be monitored.

Both issues have been identified several years ago and have been around for some years now. Next to PASS's intention to emphasize on green growth (which will be supported by Sida in 2019).

RECOMMENDATION 2

The evaluation recommends that a coherent and comprehensive strategy on gender and green growth transformative approaches be formulated.

2. What are the effects and impacts of PASS?

... on crop productivity and production

PASS farmers produce considerably more rice than non-PASS farmers, mostly at the farm level as the farms of PASS farmers are larger, but also at the level of the field (per acre). Rice productivity levels of PASS farmers are around two metric tons per acre, well below the world average prior to the Green Revolution and should allow for further growth to at least two to four times the present yields. For other crops, similar conclusions can be drawn. For non-PASS farmers, present levels are even lower. Smallholder farmers are not exclusively focused on one cash crop, most farmers depend on both cash and food crops. This is reflected in the cropping pattern. The dynamics in terms of productivity, weather dependency, input levels and productivity differ widely per crop. Policies of PASS for the support of smallholder farmers will partly depend on these specificities. Various innovations are already being adopted such as replanting of rice, row planting and mechanical weeding, and this has increased yields. Various other innovations seem to be lacking or are not accessible to farmers readily, such as improved seeds and higher levels of organic fertiliser.

RECOMMENDATION 3

The evaluation recommends that further agronomical technological development is pursued and more agronomic knowledge provided to farmers in tandem with financial services either directly or preferably through financial institutions or third-party extension services providers.

... on direct and indirect employment, income effects

Employment effects were noticed at various levels. PASS has been effective in supporting the growth of labour opportunities at farm level, though not at field level. More labour is employed as larger areas are cultivated. However, labour per acre does not always increase with the use of hired labour and thus employment generation depends on the crop, e.g. it is high in tree crops, especially coffee. Tractor use, generally replacing hired manual labour, is not very prevalent in these crops. Maize is not labour intensive nor mechanised.

Further growth in farm employment in the future may be limited by mechanisation processes taking place in farming. However, indirect effects related to mechanisation processes are generally not taken into account but could be considerable. Employment related to mechanisation itself (drivers, mechanics, suppliers, etc.) is growing, and is better paid by a factor of 10 on average. Additional non-agricultural activities are pursued by successful farmers to diversify their income, and this could also increase employment opportunities in the non-agricultural sector. The growth of production of key crops will also generate additional jobs in trade, processing, wholesale and retail. These indirect effects are hard to quantify and would need special consideration. Future studies should be able to identify these potentially beneficial effects.

It appears that employment creation is limited in the SME sector, as investments are mostly increasing productivity, replacing manual labour with highly skilled operators of mechanised processing and production. Again, this creates the need for higher levels of schooled labour. The expected quantitative employment effects of the provision of guaranteed loans to SMEs may therefore be limited and probably negative, though there may be beneficial indirect effects at the farm level, where increased demand and capacity in the processing industry could drive farmers to expand and hire more farm labour.

RECOMMENDATION 4

The evaluation recommends that PASS takes into account the limited employment effects, related to crops and type of mechanisation at the farm level, and the possible positive effect on employment in SME investment and in stages higher up the value chain. Specific labour enhancing policies may be considered, such as a focus on value chains where increased employment (hired external labour) is an important effect of investment. A view on off-farm, indirect effects, and a policy focus on stimulating investments in off-farm employment, could be considered.

... on livelihood and sustainability

Income levels of PASS farmers are well above those of non-PASS farmers in absolute and per capita sense. In terms of profits and income, the dif-

ference is less pronounced due to the higher costs of production related to input use. Marketing is still predominant through spot markets in the villages and through traders, and information on market prices is scarce. For asset ownership, an indicator in the results framework of PASS, we establish that PASS farmers have higher levels of ownership of farm and household assets. Due to a lack of baseline data, we cannot establish whether this is caused by the loan, or whether wealthier farmers are more likely to obtain loans. It has been difficult to find an impact at the level of poverty reduction, translated as well-being. The differences between the two categories of farmers are negligible in this respect. Food security however is better for PASS farmers, especially when the crop is a food crop. The cause for this lies in the fact that many other variables are drivers of poverty reduction, and thus in the ToC PASS may want to include an assumption on this to make it explicit.

RECOMMENDATION 5

The evaluation recommends that input systems and marketing systems around the various value chains are studied and taken as a point of departure to further develop these value chains and allowing farmers to further improve sales and income. Information on prices could be provided through various mobile applications, as is being contemplated by PASS. In this, PASS could cooperate with other DEPs in the BSPS IV programme that focus on these issues, such as AMDT and FSDT.

... on financial institutions

Financial institutions traditionally have been averse to financing the agricultural sector. Through PASS, the financial institutions are offered a cost-effective way to enter the agricultural financing market. In essence, they are offered a constant stream of screened loan applicants who hold a sustainable business plan and they can finance whilst taking on only a portion of the credit risk (often less than half). The main drawback is that financial institutions rely strongly on PASS and, with the exception of NMB, make only limited effort to develop a strong agricultural knowledge base. This dependency on PASS is undesirable over time and applies not only to the business plan and loan application process, but also to monitoring, loan restructuring and recovery of value in case of default.

The ownership within financial institutions could be increased through a combination of the following actions:

- Provide additional training on agronomic knowledge, discussion groups, and (social media) platforms amongst relevant loan officers and risk managers of financial institutions to institutionalise knowledge with in-house champions and train-the-trainer

programmes. Financial institutions have reiterated their desire to learn in this field and it is an integral part of the ToC.

- Consider to gradually reduce the credit guarantee percentage offered on loans, in order to decrease the (financial) reliance on PASS. This should most be the case for recurring end-clients (i.e. renewed, increased, extended, etc.), as the end-client has demonstrated its capacity to service the loan and has thereby established its financial track record. Though PASS states that lower percentages than 50% are being offered, in 2017 this applied to only five clients or client groups. Higher guarantee percentages for female clients are of course not part of this discussion.
- Further promote the portfolio guarantee instrument, as business plan development and credit risk assessment is not necessarily to be performed with direct support from PASS.

RECOMMENDATION 6

The evaluation recommends increasing ownership within financial institutions through providing additional training, reduce the credit guarantee percentage on loans to decrease financial reliance on PASS and further promote the portfolio guarantee instrument.

3. To which extent has the PASS organisation ensured an accountable, transparent and efficient management of PASS over the evaluation period?

... on governance and strategic management

PASS is best-in-class when it comes to governance with a clear segregation of responsibilities between the Founders Committee, the Board of Trustees and PASS management. The governance has been cited as example for other organisations, including the Danish Ministry of Foreign Affairs funded aBi Trust & Finance in Uganda.

With respect to the expansion into new activities, the evaluation proposes PASS to consider implementing a holding model. Both AIC and the leasing business are very different from PASS's core business. Both in terms of management experience and market focus there are questions about the logic of having these businesses as part of PASS. Though their activity would tie in with PASS (young entrepreneurs would come to PASS for guaranteed loans, and farmers would need a guaranteed loan to lease-purchase the tractor), these activities require a different mind-set, business experience and market orientation. It has been suggested by key informants that the co-mingling of these activities could even start influencing PASS client policy by shifting attention to these more limited financial product markets.

RECOMMENDATION 7

Asked specifically to advise on this, the evaluation recommends implementing a holding model for the various initiatives currently under PASS, including AIC and the lease business, under which all three organisations would fall.

...on operational efficiency

In recent years, PASS has been able to realise significant growth. Although such growth is and should be applauded, it also places an increasing amount of pressure on staff. The expansion in number of branches has enabled further local reach, yet the increased reach does not always seem to be cost or labour conscious. Pressure to increase efficiency in business plan development may lead to more standardization and hence less value added for end-clients and financial institutions alike. This in turn could lead to higher rejection rates with financial institutions, or worse, higher defaults.

Capacity of staff in terms of man-power and skill-sets and dependency on key staff is a crucial topic to address in the near future. Succession plans, a human resource plan, training and a recruitment strategy should have a priority within PASS to be future ready to address these issues.

In addition, the burden on headquarters could be reduced by increasing discretionary power of branches over deals below a certain threshold, though this needs to be considered carefully as it could compromise transparency and quality control within PASS. Digitization can help in this regard. It can be used to streamline and expedite processes whilst maintaining sufficient financial controls. Bottlenecks caused by paper-based processes can be reduced, while in the case of digital data entry would enable templates for formats that could check on errors and consistency as well as support the loan officer in providing agronomic knowledge⁵².

Further digitization will also allow for improvement in the capturing, structuring and clarity of data, reporting, communicating and institutionalising of knowledge. The evaluation has seen such systems in use in other African countries such as Kenya for some time with great appreciation by financial institutions. Lessons can be drawn from these experiences elsewhere, as there are also some disadvantages that should be avoided, such as a certain inflexibility.

52 For instance, standard requirements for certain crops can be pre-programmed so that optimal combinations can be offered to farmers at various levels of input level, and more precise calculation of crop requirements and thus budget can be calculated.

RECOMMENDATION 8

The evaluation recommends PASS to prepare a human resource strategy, consider increased discretionary power of branches and improve digitization of various processes within its operations.

... on capturing and reporting of M&E and financial information

The present system of data collection on client satisfaction does not constitute a rigorous method of M&E. Surveys are small and do not give significant results, and case studies are not randomly sampled. The richness of data analysis from the Navision database could also be significantly improved by linking to such M&E data. Business plans are not captured yet in Navision, a feature is present to link the business plan prepared as an attachment to the client card in Navision but has not been used. This leaves behind the opportunity to create feedback loops in the system, through which the financial performance and the products and services of PASS can be further improved.

Several improvements and changes that have been implemented in Navision in 2018 lead to some differences in the way the data is reported as well as the level of details on how the data is captured. For example, a variety of subsector names was used in the past in which the crop and the activity was specified in the same field or only one of the two was reported. However, since 2018 the subsector field is narrowed down to a few principle activities which leads to losing important client information such as the crop and specifying the activity i.e. type of mechanisation.

Possible financial parameters and or automated links should be incorporated within the Navision system in order to enable consistent creation of dashboard overviews of key parameters (loan status, counterparties, crops, regions, loan size, tenors, etc.) and thereby increase real-time insight in capital at risk and cross-sectional analyses.

RECOMMENDATION 9

The evaluation recommends improving the M&E system of PASS through expanding the data input and analytical use of the Navision system.

... on external communication

For PASS to be able to manage expectations in the market, communicating to a broader public (e.g. partner financial institutions and possible funders) on performance and future directions might help to maintain or build a solid relationship and possibilities to obtain additional funds.

Transparency, clarity and consistency in the distribution of information, such as annual reports and applications, to the public will enhance and is a way to manage expectations. As discussed previously, digitization

may assist PASS to increase the detail level in their current analysis and reporting.

Furthermore, yearly discussions with financial institutions on a more forward-looking strategic nature and alignment of expectations will potentially promote financial institutions in their own strategy development towards agricultural lending.

4. How has the aspect of institutional and financial sustainability of PASS been addressed and what are the prospects for the future?

PASS is deemed a relevant organisation supporting growth in agricultural finance in Tanzania. The dedication and reputation of PASS is renown and appreciated. Its proven innovative nature confirms its ability to act and evolve with market needs, thereby increasing the likelihood to remain additional in the future.

In recent years, the portfolio of loans guaranteed has jumped. Although this signals a strong pickup in the market with a diversification of operations with partnering financial institutions, several elements are at risk of materialising:

- Strain on available capital. Recent growth has depleted the capital position of PASS with respect to cash collateral. PASS seeks to continue growth by negotiating higher leverage levels with partner financial institutions (thus on a partially unfunded basis). The guarantee agreement with Sida provides additional room in this regard, though PASS management still expects an additional TZS 30 billion in capital will be required to meet growth ambitions. Possible synergies could be sought and some are currently considered, such as collaboration with other credit guarantee schemes. These synergies could be in the form of being the implementing partner for other credit guarantee schemes, or co-guaranteeing loans together up to a certain threshold of the loan amount, so the financial institution still has the incentive for recovery etc.
- Strain on staff capacity. An increase of its business can only be leveraged to a certain degree with respect to staff. Should PASS seek significant further growth, it remains questionable whether existing procedures can be maintained for both front as well as back office activities. The development of intelligent ICT solutions can support productivity combined with granting certain authorization levels to branch managers. We realise that delegation of authority to branches to approve guarantees is a major decision that can only be taken after proper controls are in place in branches. Digitization would also assist in this process. Further leveraging the portfolio guarantee form possibly reduces pressure on staff.

- Increase in non-performing loans. Strong expansion without implementation of the right monitoring and risk management tools may lead to further increase of the non-performing loan and default rate of PASS, which is high compared to other similar organisations. Though losses have been held to acceptable levels to date, the underlying trend may leave PASS exposed to larger losses in the future.
- Increase in concentration risk with respect to individual loans. PASS has extended several very large loans, both to individual value chain corporates and to linkage (MFI) financial institutions. Even though PASS has a Credit Guarantee Policy that has put a limit of guarantee per single borrower (currently USD 4,166,000, of which currently 60% (USD 2,500,000) is covered by Sida) as a result, a disproportionate amount of PASS's guarantee capital is tied up in a select number of guaranteed loans. Though the statistical odds of a large corporate or MFI defaulting may be low compared to the default odds of a smallholder farmer, the potential financial impact on PASS could be devastating.

Purely from operational standpoint, PASS is loss-making and the organisation's bottom line has been held positive due to results on the credit guarantee fund and on exchange rate translations. In order to enhance the operational result, the evaluation recommends to periodically re-assess the contribution margin of the various branch offices and offset this against sought development aspects. Furthermore, overhead costs should be allocated to the various branch financial overviews in order to increase transparency on true contribution. Fees charged to end-clients and financial institutions are considered firm in the market, but nonetheless have not acted as a deterrent to participate in the credit guarantee scheme. As most credit guarantee schemes display loss-making operations, the current rate of operational return of PASS is not worrying. The evaluation, however, does recommend to keep careful watch of these developments.

The results on the credit guarantee portfolio have been positive, as income from the deposits placed with partner financial institutions have exceeded losses incurred from capital called and loan provisions. Given the rising trend in non-performing loans, the risk of these losses amassing is realistic. At minimum, the result of the credit guarantee portfolio should be nil over time.

The foreign exchange result has been the largest contributor to the result of PASS over the evaluation period. The evaluation, however, has described that the result from such an open position can and will fluctuate over time. Although many organisations willingly accept such a risk, the evaluation recommends setting a policy that would trigger a

hedging transaction if the TZS-USD rate drops (i.e. the TZS appreciates) by more than a certain percentage over a defined time period.

RECOMMENDATION 10

The evaluation recommends to impose increased quality controls on financial institutions' processes for loan assessment, processing and monitoring, further scrutinising processes for following-up on non-performing loans, periodically re-assess the contribution margin of the various branch offices and offset and setting a policy for managing foreign exchange fluctuations.

EVALUATION OF THE PRIVATE AGRICULTURAL SECTOR SUPPORT (PASS), TANZANIA

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