



Impact Study on the Cashew Master Training Program

Final Report

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KEY TO ABBREVIATIONS

ACA	African Cashew Alliance
ANADER	Agence Nationale d'Appui au Développement Rural (Côte d'Ivoire)
ANATRANS SA	Société Anonyme de Transformation de l'Anacarde
BMZ	German Federal Ministry for Economic Cooperation and Development
CVC	Cashew Value Chain
CBF	Conseil Burkinabè des Filières de l'Anacarde
CCA	Conseil du Coton, de l'Anacarde et Karite
CIAB	Comité Interprofessionnel de l'Anacarde du Burkina
CICC	Consultative International Cashew Council
CNLVC	Conseil National de Lutte contre la Vie Chère (National Council for the Fight against the High Cost of Living)
COCOPRAGEL	
COOP-CA	Société Coopérative pour la Commercialisation des Produits Agricoles et d'Élevage avec Conseil d'Administration
ComCashew	Competitive Cashew Initiative
CRIG	Cocoa Research Institute of Ghana
CRIN	Cocoa Research Institute of Nigeria
ECOWAS	Economic Community of West African States
EU	European Union
FEDOPCA-CI	Federation des Operateurs du Cajou de Cote d'Ivoire
FGD	Focus Group Discussion
GAP	Good Agricultural Practices
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GmbH)
KII	Key Informant Interview
MDF WA	MDF West Africa
M&E	Monitoring and Evaluation
MoFA	Ministry of Food and Agriculture (Ghana)
MAFFS	Ministry of Agriculture, Forestry and Food Security
MoFA-WIAD	Ministry of Food and Agriculture – Women in Agricultural Development
MOVE	Market-Oriented Value Chains for Jobs and Growth
MTP	Master Training Program
NGO	Non-Governmental Organization
NITIDAE	Nouvelle(s) Initiative(s) pour la Transformation de l'Industrie Agricole et le Développement Économique / New Initiative(s) for the Transformation of the Agricultural Industry and Economic Development

OACPS	Organisation of African, Caribbean and Pacific States
OECD	Organisation for Economic Co-operation and Development
OIA-ANACARDE	Organisation Interprofessionnelle Agricole de l'Anacarde
PMB	Produce Marketing Board
R&D	Research and Development
RCN	Raw Cashew Nut
SL&CAD	Sierra Leone Chamber for Agribusiness Development
SLARI	Sierra Leone Agricultural Research Institute
TCDA	Tree Crops Development Authority (Ghana)
ToC	Theory of Change
USD	United States Dollar
UWCO	Unity Women in Cashew Organization
WAEMU	West African Economic and Monetary Union

EXECUTIVE SUMMARY

This Impact Study assesses the long-term results and contributions of the Cashew Master Training Program (MTP) to individual beneficiaries, partner institutions, and the broader cashew sector, with a particular focus on West Africa. The study examines the program's relevance, efficiency, effectiveness, impact, and sustainability, with the objective of generating evidence to inform future strategic decisions on capacity development interventions in the cashew value chain.

The assessment covered 10 years of MTP implementation since the first training edition in 2013. The study adopted a mixed-methods approach, combining an online survey that targeted a total of 1,204 graduates, with in-depth interviews, focus group discussions, and key informant interviews involving public institutions, private sector actors, and implementing partners. Quantitative findings were complemented by qualitative evidence to capture behavioural change, leadership development, institutional influence, and gender-related outcomes. Gender and youth considerations were integrated throughout the evaluation design and analysis.

Overall, the findings show that the MTP is **highly relevant, timely and responsive** to the needs of the cashew sector. The program addresses critical capacity gaps by combining technical training across the cashew value chain with strong emphasis on leadership, communication, facilitation skills, and mindset change. This integrated approach, has enabled graduates to apply learning effectively in production, processing, research, extension, enterprise development, and policy engagement. Continued demand for the program across countries and institutional contexts confirms its strategic relevance.

The MTP demonstrates **high effectiveness** in upgrading participants' knowledge, skills, and attitudes. Graduates report improved technical competence, stronger leadership and facilitation capacity, and increased confidence to influence peers, institutions, and communities. A major strength of the program is its multiplier effect, with a substantial proportion of graduates cascading knowledge to farmers, processors, traders, trainers, women, and youth, significantly extending the program's reach beyond direct participants.

The **efficiency level of the program is moderate to high**. The MTP delivers multiple outcomes from a single training investment. Its comprehensive curriculum and participatory learning methods maximize returns within a relatively short training period, while institutions employing MTP graduates benefit from enhanced staff performance without additional training costs. However, efficiency is constrained by limited access to finance and equipment, weak institutional coordination, limited employment opportunities in the sector for some MTP graduates, and insufficient post-training follow-up from the program.

The **impact of the MTP is moderate to high**. The program has contributed to strengthening the cashew value chain through improved production practices and productivity, enhanced quality management, increased value addition, business creation, research and innovation, and greater engagement in policy development and public-private collaboration. The program has also produced significant **gender-transformative outcomes**, with female graduates experiencing increased confidence,

leadership, and economic participation, and male graduates promoting more gender-equitable practices within institutions and communities.

The **sustainability of MTP outcomes is rated high**, particularly relating to behavioural change, leadership development, and institutional embedding. Nevertheless, **sustainability remains moderate** at the larger institutional and sectoral level if the challenges of weak support systems, limited structured alumni engagement and resource constraints persist. Also, sustainability can only be assured if the skills, practices, structures, and value-chain improvements are consistently upgraded to align with the changing nature of climate and technological advancement, and the required institutional systems is put in place.

Key recommendations emerging from the study include: (i) strengthening systematic post-training follow-up, monitoring and alumni networking to support knowledge application and peer learning; (ii) introducing targeted support mechanisms, including refresher training, mentorship schemes and linkages to finance and equipment, to enhance graduates' ability to scale impact; (iii) explore the reduction of number of sessions with extended days as well as re-alignment of logistics to reduce per capita training cost and enhance affordability; iv) selection criteria should prioritize candidates who have direct connection to the cashew industry and/or whose career plans include contributing to the industry; and (v) further strengthening gender- and youth-responsive measures within the program to sustain inclusive outcomes.

In conclusion, the Cashew Master Training Program represents a high-value investment in human capital for the cashew sector. Addressing the identified constraints will be critical to consolidating gains and scaling long-term, inclusive impact.

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I. INTRODUCTION AND PROGRAM BACKGROUND

This report, submitted to the Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ), details out the results of the impact study on the Cashew Master Training Program (MTP) conducted by MDF West Africa between August to November 2025. The Impact Study covered 1,204 graduates of the annual MTP since its launch in 2013 up to 2024 or from Editions 1 to 18. The graduates came from 20 West and East African countries but the Study has special focus on West Africa where 97% of participants originate.

1.1 Overview of the Cashew Sector in Selected West African Countries

The cashew sector has become a major focus for agricultural diversification, rural livelihoods, and agro-industrial development across West Africa. The six (6) major cashew producing countries in the Region differ significantly in scale, maturity, productivity, and levels of value addition. Below is a brief on each of the countries listed from highest to lowest annual cashew production.

Côte d'Ivoire

Côte d'Ivoire is the global leader in raw cashew nut (RCN) production, accounting for about 40% of world supply, with production rising from 380,000 tons in 2010 to about 1.2–1.3 million tons by 2023–2025¹. Cashew is the country's second-largest export commodity after cocoa. A major structural shift is underway: domestic processing capacity expanded from about 68,500 tons in 2015 to roughly 350,000 tons in 2024, supported by agro-industrial zones, fiscal incentives, and donor-backed value-chain reforms. Despite progress, over half of production is still exported raw, and challenges remain around plantation productivity, access to finance, and post-harvest quality management.

Nigeria

Nigeria is one of Africa's largest cashew producers and a major source of rural employment, with production approaching 1 million tons in recent years, though estimates vary by source. The country produces high-quality cashews, but less than 20% is processed locally, resulting in significant lost value addition. Constraints include skills gaps, inconsistent quality, inadequate processing technology, and limited access to finance. Recent investments in vocational training and value-addition initiatives demonstrate strong economic viability for processed cashew products, particularly kernels, suggesting substantial untapped potential for agro-industrial growth.²

Benin

Cashew is Benin's second most important export crop after cotton, contributing about 1.7% of GDP and nearly 5% of export earnings.³ Production has grown steadily, reaching about 140,000 tons by 2018 and projected to exceed 200,000 tons by 2025. Despite this growth, yields remain low (250–400 kg/ha), mainly due to limited adoption of good agricultural practices, unimproved planting material,

¹ World Bank Group (2025). In a Nutshell: Agri-processing adds value in Côte d'Ivoire's cashew industry.

² European Union VET ToolBox Project. Cashew production and processing in Nigeria: lessons learned. 2022

³ Hinnou et al. (2022). Socio-economic determinants of adoption of good cashew production practices in Benin.

and weak pest and fire management. Most cashews are exported raw, with domestic processing still underdeveloped.

Ghana

Ghana's cashew sector has expanded rapidly over the past two decades, particularly in the Northern Savannah Zone, where cashew is promoted as a climate-resilient agroforestry crop. National production increased from about 10,000 tons in 2005 to over 130,000 tons by 2020, but productivity remains relatively low (≈ 500 kg/ha) compared with regional leaders.⁴ While Ghana produces high-quality nuts, local processing is weak, constrained by raw material shortages, high utility costs, and trade competitiveness issues. These constraints have recently led major processors to consider relocating operations to Côte d'Ivoire, highlighting structural challenges in sustaining industrial-scale processing in Ghana.⁵

Burkina Faso

Burkina Faso's cashew sector is small but growing, concentrated mainly in the southern and south-western agro-ecological zones. Production is dominated by smallholders, with cashew increasingly integrated into agroforestry and mixed farming systems. Research highlights low yields, aging orchards, pest pressure, limited access to improved planting material, and weak extension services as major constraints.⁶ Local processing remains minimal, and most nuts are exported raw to neighbouring countries. Nonetheless, cashew plays an important role in income diversification and land-use sustainability.

Sierra Leone

Sierra Leone's cashew industry is emerging and still at an early stage of commercialization. About 28,000 hectares of cashew have been planted, 85% since 2017, largely through donor and government support to smallholders. Current production volumes are very low, but output is expected to rise significantly as young orchards mature. The sector faces acute challenges: extremely low productivity (around 148 kg/ha), weak market organization, limited processing capacity, and lack of finance.⁷ However, Sierra Leonean cashews are recognized for good nut quality, offering future export potential if productivity and aggregation improve.

1.2 Background of the Program

The GIZ Competitive Cashew Initiative (ComCashew) was launched in 2009 to build the capacity of actors in the cashew value chain in Africa. It has been transformed in 2022 to MOVE or the Market-Oriented Value Chains for Jobs and Growth in the ECOWAS region, with ECOWAS as its main political partner. The project is mainly funded by the German Federal Ministry for Economic Cooperation and Development (BMZ), with co-funding from the European Union, the Organisation of African, Caribbean and Pacific States (OACPS) and the Bill & Melinda Gates Foundation and implemented jointly with

⁴ World Bank (2023). Analysis of Agroforestry-Based Value Chains and Food Systems in Northern Ghana.

⁵ Citi Newsroom (2025). Ghana's Largest Cashew Processor set to relocate to Ivory Coast.

⁶ Somda et al. (2023). Comparison of cashew nut production characteristics in Burkina Faso.

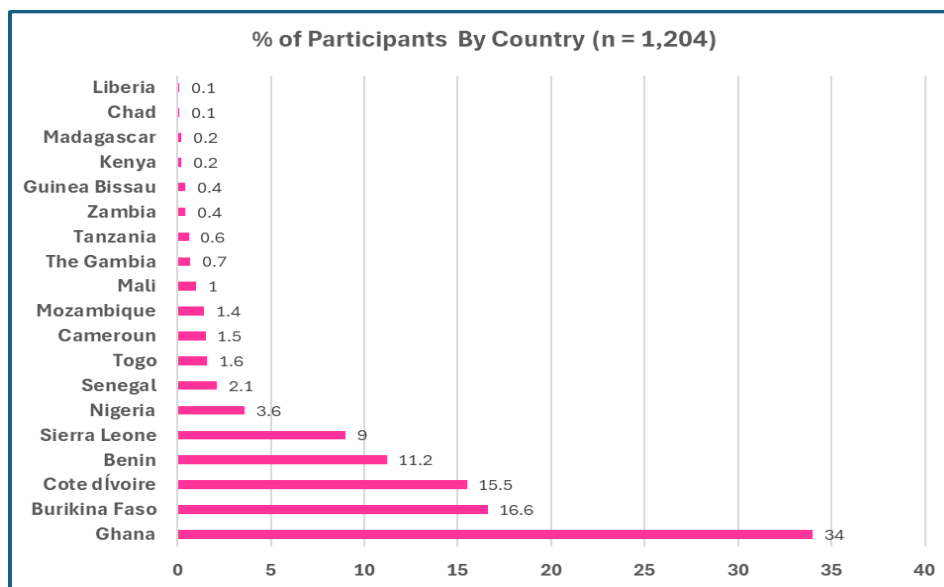
⁷ Invest Salone (2021). Cashew in Sierra Leone: Industry Snapshot.

numerous private and public partners. MOVE is implemented in Nigeria, Ghana, Burkina Faso, Sierra Leone, Côte d'Ivoire and Senegal.

Under ComCashew, the Cashew MTP was launched in 2013 with the primary objective of upgrading and reinforcing the capacity of local actors within the cashew value chain while transferring essential knowledge to partners and target groups. The programme has focused on improving the skills, knowledge and attitudes of MTP graduates to foster positive changes within the cashew sector by training stakeholders such as farmers, processors, extension workers, trainers, exporters in one single sitting. GIZ was implementing the Cashew MTP until the role was fully transferred in 2023 to a private sector partner, the African Cashew Alliance (ACA), in close collaboration with the Cocoa Research Institute of Ghana (CRIG), Ministry of Food and Agriculture of Ghana (MoFA), the Consultative International Cashew Council (CICC) and the Cote d'Ivoire-based Conseil du Coton et de l' Anacarde (CCA). The Cashew MTP is funded by the European Union (EU), the Organization of African, Caribbean and Pacific States (OACPS), the BMZ and other sponsors.

The Cashew MTP has delivered 18 Editions of training up to 2024 graduating a total of 1,344 individuals, 140 of whom were under the category of Learners mainly from implementing partners. The rest of the graduates were 1,204 participants from 19 countries in West and East Africa, that was the target of the Impact Study. Figure 1 shows the countries of origin of the 1,204 graduates with the highest numbers coming from Ghana, Burikina Faso, Cote d'Ivoire, Benin, Sierra Leone and Nigeria. At the time of the Impact Study, the program was running its 19th Edition. The training is mainly conducted in Ghana and Cote d'Ivoire, however a first East African Edition was started in 2025.

Figure 1: Distribution of Participants By Country of Origin



The Cashew MTP Curriculum

The MTP covers three (3) one-week classroom sessions and participants are obligated to attend all three sessions to be considered a graduate (see Box 1). In-between each session, participants are expected to return to their host institutions or private undertakings, share their knowledge with colleagues or communities/groups applying the practical lessons obtained in the training sessions. Linking theoretical knowledge to practice, the MTP technical modules and activities are aligned with the production, processing and marketing of cashew.

Box 1: Cashew MTP Curriculum

Session 1: Organization of the cashew market and implementing instruments for a Master Trainer

- Value chain development and cashew market
- Training materials development
- Trainer's attitudes

Session 2: Planting material development and good agricultural practices

- Improved planting material development
- Good agricultural practices (GAP) and
- Harvest & post-harvest

Session 3: Cashew processing, sector organization and cross-cutting issues

- Cashew nuts and by-product processing
- Organization of the cashew sector
- Cross-cutting issues

1.3 Purpose of the Impact Study

The overall goal of the assignment was to evaluate the long-term impact of the Cashew Master Training Program (MTP) on the target groups and partners, assess its contributions to the cashew sector's development and identify areas for improvement to inform future initiatives. Specifically, the main objectives of the study were:

- To evaluate the extent to which the MTP has upgraded and reinforced the capacities (knowledge, skills and attitudes) of local actors (MTP graduates) in the African cashew value chain/Cashew sector, with particular attention to gender inclusion;
- To assess the effectiveness of the knowledge transfer to partner institutions and other target groups and its influence on gender responsive practices, leadership opportunities for women, and overall performance;
- To identify the overall impact of the training programme in the cashew sector (West Africa); and
- To provide recommendations to enhance the design and implementation of the Cashew Master Training Program and similar capacity building programmes of large-scale intervention, ensuring that they are more gender transformative and inclusive.

1.4 Structure of the Report

This report presents the findings of the Impact Study and is structured into five chapters. Chapter One introduces the study by outlining its purpose and scope, providing an overview of the West African cashew sector, the Cashew Master Training Program (MTP), and the structure of the report.

Chapter Two describes the methodology adopted for the assessment, including the evaluation approach, guiding principles, data collection methods, and analytical processes applied.

Chapter Three presents the key findings of the study, drawing on evidence from the online survey, in-depth interviews, focus group discussions, and stakeholder consultations.

Chapter Four sets out the recommendations derived from the findings, highlighting priority actions for GIZ and the Implementing Partner, ACA.

Chapter Five concludes the report by summarizing the main results of the Impact Study and reflecting on the overall contribution and future orientation of the MTP.

2. METHODOLOGY

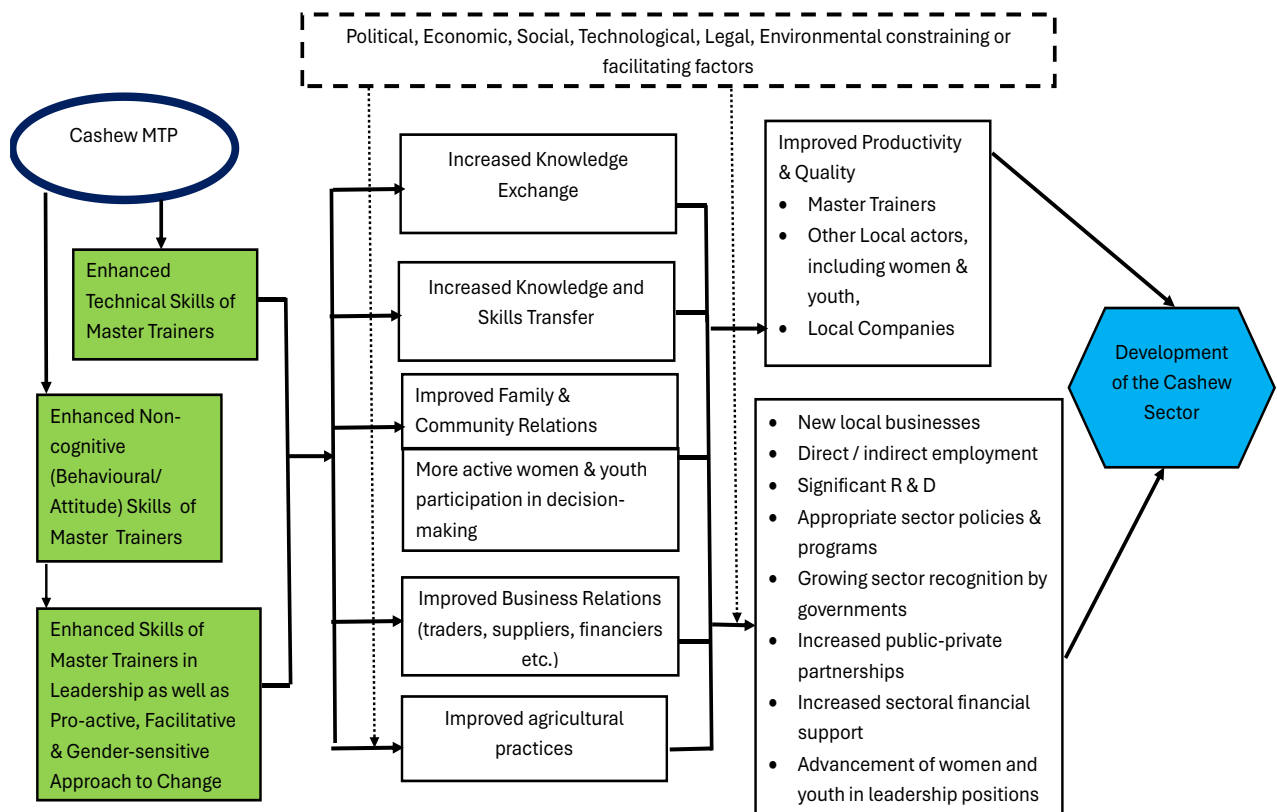
MDF evaluation approach was organized around the following principles: i) recognition of the value of combining quantitative and qualitative approaches; ii) focus on processes, including inter-organizational relations, as they affect results; iii) consideration of unplanned and unexpected results, external and project-related influences; iv) independence and objectivity of research team; v) integration of gender and cultural diversity; vi) inclusive and participatory processes; vii) self-assessment and reflection by project actors; viii) backward accountability and mutual experiential learning from the evaluation processes.

The study adopted cross-sectional mixed-methods that enabled the Evaluation Team to compare the situation of graduates before and after participating in the MTP. The use of cross-sectional study allowed for the collection of data on the impact of the trade skills and business management training.

2.1 The Theory of Change

The Theory of Change (ToC) illustrates how and why a desired change is expected to occur in a particular context. The TOC below (Figure 2) was structured out of the information gathered from the program documents and preliminary interviews regarding program vision and intentions. It is not the official ToC for the Cashew MTP, however, it also extracted ideas from the MOVE ToC, serving to guide the evaluation questions, consequent probing and investigation.

Figure 2: Re-structured Theory of Change for Cashew MTP



2.2 The Evaluation Framework

The ToC served as an overall framework for tracing MTP impact, influencing the formulation of the Evaluation Framework that consists the major questions intended to be investigated, and the specific methodologies that would generate the data and information required by the questions. Table 1 below presents the Evaluation Framework following the OECD evaluation criteria of relevance, efficiency, effectiveness, impact, and sustainability. An initial desk review of program documents as well as preliminary interviews⁸ conducted with seven (7) members of the GIZ MOVE and Cashew MTP management helped in framing the evaluation framework. Questions that explored the treatment of gender inclusion in the training program and the resulting outcome on the leadership role and economic welfare of women and youth have been integral at each criterion level.

The framework guided the formulation of research tools listing specific questions with deliberate intent to generate reflections on how the program was able to address and influence positive changes towards gender equality, women and youth empowerment concerns. The principles of the Most Significant Change and Contribution Analysis methods were applied in designing the research tools in order to obtain direct information regarding effectiveness and impact. The guides for the online survey and interviews/ FGDs are presented in Annex 1.

2.3 Data Collection and Analysis Methods

Desk Review

Reference was made to program documents shared by the GIZ / ACA Cashew MTP Team including Participants Database, MTP Concepts and Fact Sheets, MOVE Results Model, Samples of Session Reports, 2018 Tracer Study Report, 2020 Tracer Study Report, MTP Inter-session Reports by Participants and MTP Selection Criteria. The documents provided a deeper understanding of the program, its interventions, targets and indicators. The review also informed the development of the data collection tools and the identification of target stakeholders. After the inception phase the same documents were used to obtain some of the answers to the evaluation questions and triangulated with the primary data collected. The MTP Team complemented this program information with online research relevant to the cashew sector in the countries/districts covered by the Study.

Online Survey

An online survey targeted all the 1,204 graduates from Editions 1 (2013) to 18 (2024). The online survey was distributed in English and French, and completed by the graduates using Survey Monkey. A total of 622 graduates responded to the survey, representing 52.4% of the target 1,204. Almost 40% (233) of these respondents are females, also representing half (50.1%) of the female MTP graduates (465). The overall survey results have been compiled in a separated report for submission to GIZ.

⁸ Interviewed were Mr. Ernest Mintah (Managing Director, ACA), Mr. Jerry Jacob Anim (Deputy Director, MoFa Ghana), Dr. Godfred Awudzi (Research Scientist, CRIG), Mr. Andre Tandjiekpon (Executive Secretary, CCIC), Ms. Beate Weiskopf (Team Leader, MOVE), Ms. Cynthia Al-Da Benon (MOVE Head of Human Capacity Development Component), Ms. Mary Adzanyo (Country Coordinator, MOVE Cote d'Ivoire).

Table 1: Cashew MTP Impact Study: Evaluation Framework

Criteria	Evaluation Questions	Methodology
Relevance	<ul style="list-style-type: none"> To what extent was the Master Training Program in line with the needs of the graduates as well as other cashew stakeholders? To what extent have the objectives and delivery strategy of the program been consistent with the needs of women producers, processors and traders? What evidence exists to suggest that the observed changes are of relevance? To what extent have program design, monitoring and evaluation considered the gender differences/imbalance in the domains of production, resource access, income distribution and expenditures, leadership capabilities and time usage? 	<ul style="list-style-type: none"> Literature review Online Survey of 1,204 graduates In-Depth Interview of 45 Graduates FGD of selected graduates KII of national and regional stakeholders, company management MTP Resource Persons/Facilitators GIZ/ACA Cashew MTP officials
Efficiency	<ul style="list-style-type: none"> How was the trainee selection process able to bring in local actors that have high potential to influence change in the sector? How can the process be improved? How was the cost structure and financing mechanism able to ensure participation and inclusion? To what extent has the Master Training Program been able to maximize synergies, collaborations with national and local institutions for added value and to enhance the effectiveness and efficiency of its interventions? 	<ul style="list-style-type: none"> Literature review In-Depth Interview of 45 Graduates KII of national and regional stakeholders, company management MTP Resource Persons/Facilitators GIZ/ACA Cashew MTP officials
Effectiveness	<ul style="list-style-type: none"> To what extent have the objectives of the training been achieved as planned? What observable changes can be identified in the capacity of individual graduates, their production/organizational unit? What are the observed changes with other cashew stakeholders? To what extent has capacity development support and/or collaboration with the Cashew MTP contributed to these changes? What internal and external environmental factors affected the outcomes of the MTP, both positively and negatively? To what extent did the program consider gender inclusion and what had been the difference realized for female stakeholders in the cashew industry? To what extent have women and youth benefitted from the training in terms of enhanced knowledge, skills, and attitudes? 	<ul style="list-style-type: none"> Literature review Online Survey of 1,204 graduates In-Depth Interview of 45 Graduates FGD of selected graduates KII of national and regional stakeholders, company management
Impact	<ul style="list-style-type: none"> How were the enhanced capacities affected productivity and income of producers, processors and traders? How did the benefits from training influence knowledge transfer and institutional changes with partner institutions in the cashew sector, at national and West Africa levels? 	<ul style="list-style-type: none"> Online Survey of 1,204 graduates In-Depth Interview of 45 Graduates FGD of selected graduates

	<ul style="list-style-type: none"> ○ How did the knowledge transfer process influence gender responsive practices, leadership opportunities for women and access to opportunities for women and youth in production, processing and trade? 	<ul style="list-style-type: none"> ○ KII of national and regional stakeholders, company management
Sustainability	<ul style="list-style-type: none"> ○ What evidence exists to suggest that the changes established will be sustained? ○ To what extent do the changes in the capacity of graduates signify sustainable changes at the farm/organization and sector levels? ○ How can the MTP course structure be improved to ensure sustainability of demand, patronage and inclusion? 	<ul style="list-style-type: none"> ○ In-Depth Interview of 45 Graduates ○ KII of national and regional stakeholders, company management ○ MTP Resource Persons/Facilitators ○ GIZ/ACA Cashew MTP officials

In-depth Interviews with Selected Survey Respondents, Key Informant Interviews and Focus Group Discussions

Most significant stories of change were probed with selected graduates who responded to the online survey. An in-depth interview was a way to validate and obtain more details on how MTP had influenced changes in the professional and personal lives of graduates, the potential impact on the cashew sector in their respective countries and beyond and how they assess the sustainability of the training program. The total number of interviews was 47 (7.5% of the survey returns), with 22 females, and 12 countries represented. The lines of business represented include cashew processing (21.3%), cashew production (12.8%), cashew-related trading (12.8%), programs/projects (12.8%), R&D (12.8%) and government (10.6%). The following were the criteria used in the selection, in order of importance:

- 1) Number of training / knowledge-sharing events initiated within and outside their own organization/company;
- 2) Representation across the different segments of the value chain;
- 3) Balance representation from male and female graduates;
- 4) Number and depth of leadership / influencing roles within the industry, both as technical and pedagogical leaders; and
- 5) Examples of instances in which the participant was able to affect program and policy within the institution, and beyond.

Interviews were also conducted with key MTP partners as identified by GIZ MOVE and ACA, as well as using the MTP participants database. They consisted of the following: i) Cashew MTP Team and Resource Persons; ii) Program Partners (national, West Africa region); iii) Companies (Processors / Traders); and, iv) Government collaborators. The interview format used was a blend of online and in-person interviews. In-person interviews were conducted in sample countries that included Ghana, Sierra Leone, Cote d'Ivoire and Burkina Faso. Country sampling was thought necessary given the time allocated for the study and the depth of evaluation parameters required. Aside from the fact that these four countries comprise the top five areas of origin of MTP graduates, they were also chosen for proximity and time efficiency. Evaluation Experts were based in Ghana and Burkina Faso, respectively, and the 2 other countries have proximity to these home bases.

Focus group discussions (FGD) were held with MTP graduates who come from similar companies/organizations. The management of the same companies/organizations were also engaged in the discussion of their perspectives on investing in a Master Program like the MTP, what had been the benefits of the training to their businesses and the known impact on the cashew sector. Table 2 lists the number of stakeholders interviewed per country and per type, while Annex 2 presents the names and organizations.

Table 2: Number of Stakeholders Interviewed By Category and by Country

	Ghana	Sierra Leone	Burkina Faso	Cote d'Ivoire	Nigeria	Benin	Tanzania	Mozambique	Mali	Chad	Cameroon	Togo	Total
MTP Graduates: FGD	6	5	4	2									17
MTP Graduates: In-depth Interviews	11	5	4	8	4	7	2	1	1	1	1	2	47
Company CEO	4	3	1	2									10
Key Partners	3	2	-	3									8
GIZ/ACA/Resource Persons													8
Total per Country	24	15	9	15	4	7	2	1	1	1	1	2	
Total Interviewed													90

Data Analysis, Coordination and Sense-making Workshop

Data analysis focused on improved performance of stakeholders (farmers/producers, processors, companies/traders, etc.). While quantitative survey data was processed using Microsoft Excel, thematic analysis was done on the qualitative data. To the extent relevant, data was disaggregated by sex, age, line of business and/or impact areas. Throughout the data collection phase, progress monitoring and update meetings were held with the GIZ MTP Team ensuring that challenges were discussed and addressed, including real-time refinement of research protocols/strategies and field logistics.

Initial Findings were presented in a sense-making workshop involving GIZ/ACA MTP management and the program stakeholders. The half-day workshop validated the findings, issues and lessons were discussed, conclusions and recommendations were enriched, providing valuable guidance to the impact study report writing.

2.4 Limitations

Practical and methodological constraints were encountered during the data collection process. To some extent these constraints affected the timing of data collection and analysis, as well as the inability to reach targeted graduates, therefore their valuable insights. Nevertheless, this did not undermine the validity and quality of the findings as presented in this report.

- a) Contact details of the MTP graduates were not updated resulting to email messages remaining undelivered for a significant number of graduates. Maximum efforts were applied by both MDFWA and the GIZ MTP Team to obtain alternative email addresses by using available telephone numbers, personal networks and intermediaries. Even as email addresses were available, some graduates did not respond on time, some responded later via Whatsapp. The situation resulted in delays to the next phases, that is, dissemination of the survey monkey link, the country in-person interviews and the online in-depth interviews.
- b) Some difficulty was met in scheduling interviews. Many interviewees occupy demanding professional roles, as a result scheduling interviews required flexibility, repeated follow-ups and, in some cases, last-minute adjustments.
- c) Internet connectivity challenges affected several interviews. In some cases, unstable connections led to interruptions, reduced audio quality or the need to switch communication platforms. These challenges were particularly evident in rural areas and in countries with weaker digital infrastructure.

3. FINDINGS

This section describes the major findings of the Impact Study presented according to the OECD criteria of relevance, efficiency, effectiveness, impact and sustainability. Included in this section is an elaboration of the challenges experienced by the MTP graduates as well as that of the MTP itself. Evidence offered are coming from the online survey, partner and graduate interviews

3.1 RELEVANCE

The idea of a Cashew Master Training Program (MTP) in 2013 was to respond to the gaps in the system that would allow the cashew-growing countries in West Africa to meet the growing global demand for cashew. According to the experts involved in designing MTP these gaps were:

- a) Cashew farmers were not using approved or improved planting materials, proper planting distances, intercropping prospects, farm sanitation practises;
- b) Available research knowledge on cashew production was not made available to farmers and other stakeholders at a satisfactory rate; the extension service officers-to-farmer ratio was low;
- c) Small proportion of the cashew fruit was being processed, while the apple part has high potential as an alternative livelihood;
- d) Low level of expertise in the cashew industry which was highly segmented within each country and across the Region. The result was scarcity of information, inability to exploit cross-border linkages and benefit from global experiences;
- e) Active networking was absent with limited organisation among producers, no research exchange, no regulatory bodies and industry representation from the public and private sector; and
- f) Highly inward-looking behaviour among the crop of experts and practitioners with low regard for the role of organisational and relational dynamics in moving the sector forward.

The MTP addressed these issues by designing a structured learning pathway that covers the entire value chain (from farm to export), grounded in practical exposure at research stations and processing facilities. The interviews confirmed that this approach was highly aligned with sector needs and filled a critical capacity gap at public and private organizations.

The delivery of the Cashew MTP was **highly relevant to the needs of the MTP graduates** who underwent the 3-session, 5-day per session curriculum. It had proven **timely and responsive to the gaps being experienced** by participants who had varying professional backgrounds and responsive to the prevailing economic needs of their respective countries.

3.1.1 Employment and Gainful Livelihood in the Cashew Industry

MTP has equipped individuals with the knowledge and skills to secure employment and establish businesses in the cashew sector, and for those already operating their own processing companies, the program provided business solutions to their operational gaps.

Case 1: After attending MTP in 2020, she immediately established a cashew farm and a cashew processing business that generated additional income, as well as employment for members of her family and the community. She shared her improved knowledge with women farmers that were targeted by her office at the Ministry of Agriculture-Women in Agricultural Development (MoFA-WIAD) (Ghana, Female in Public Sector, MTP 2020)

Case 2: He was working as a volunteer agricultural advisor for 4 years with the National Association of Cashew Producers. The MTP provided him with technical skills that convinced him to start his own nursery enterprise that supply grafted cashew seedlings and various forest species to farmers and development projects. (Benin, Male in the Private Sector, MTP 2017)

3.1.2 More Effective Facilitation, Communication and Leadership Skills

The MTP is perceived as relevant because it reshapes professional posture, decision-making capacity and confidence. Participants received much-needed boost to their training and facilitation skills giving them more self-confidence in performing their capacity-building and leadership roles in their respective institutions. This dimension is particularly important in contexts where social norms, hierarchical organisational cultures or gender dynamics limit individual initiative.

Case 1: As the newly-designated Acting Head of Marketing Unit, the lessons of self-awareness and leadership from MTP gave her confidence. Her leadership style inspired her colleagues to work as a team resulting in successful outcomes such as influencing policy changes on cashew procurement by local processors, campaigns promoting local cashew products and establishing cashew kernels selling centres that had been replicated by others in the private sector. (Tanzania, Female from the Public Sector, MTP 2017)

Case 2: Perception management lessons from MTP changed his way of thinking during work and at home. Before MTP he was already an experienced Field Manager in one of Ghana's leading supplier of cashew nuts, but the sessions related to Trainer's Attitude shaped his decision making and improved his judgement in complicated situations. (Ghana, Male from the Private Sector, MTP 2016)

3.1.3 Comprehensive Understanding of the Cashew Value Chain for More Strategic and Cohesive Intervention

At a technical level, the MTP responded to long-standing gaps in knowledge related to cashew production practices, quality management, processing techniques and value chain organisation. In many national contexts, such specialised expertise is scarce, particularly within public extension systems and emerging private enterprises. The programme therefore filled a critical void by producing professionals who combine technical competence with a holistic understanding of the sector.

Case 1: Before MTP his only focused was research on tree crops covered by the Cocoa Research Institute of Ghana (CRIN). After MTP he became interested and started learning more about how segments of the cashew value chain connect to each other and the actors within each segment. He used this knowledge in his interaction with farmer-recipients of dissemination exercises. MTP guidelines on how to look for information and identify solutions also helped him contribute more to product development and finding technology solutions (Nigeria, Male from Public Sector, MTP 2016)

Case 2: He was already embedded in the Ghana cashew value chain as a Local Buying Agent for Red River Foods, but his role was transactional. The MTP gave him a more comprehensive understanding of the cashew value chain, from production practices to quality control, tools for communication, advisory support and gender-sensitive facilitation. These tools were very valuable in the context of under-utilised cashew potential in Northern Ghana. (Ghana, Male from Private Sector, MTP 2016)

3.1.4 Gender Inclusion and Empowerment

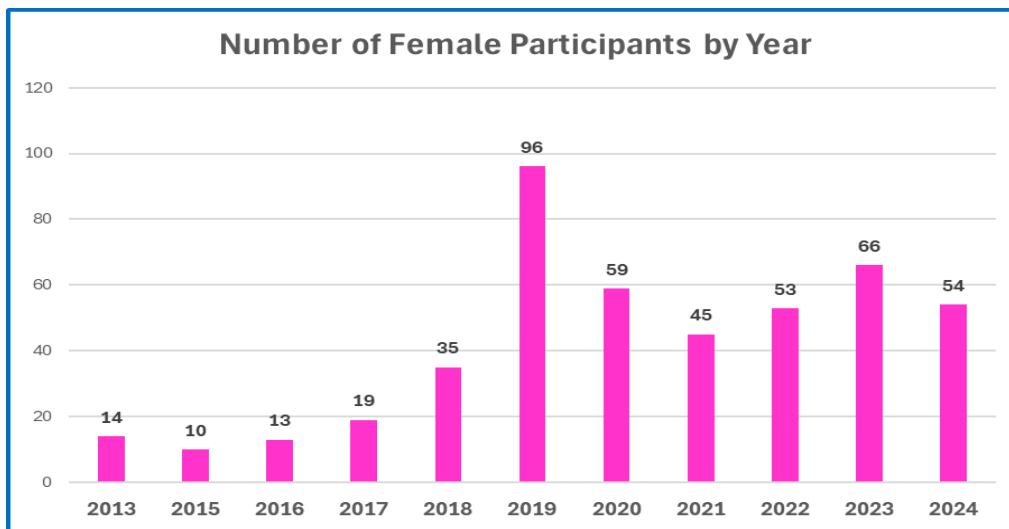
It is a fact across the cashew-growing countries of Africa that women constitute 80-90 percent of the workforce in the cashew sector. However, they remain in segments of the value chain that has low returns and rarely are they seen in leadership roles. The MTP gender modules sought to foster gender-

equitable attitudes among men and strengthened women’s leadership. MTP graduates recognize the gaps and they have brought their gender awareness into their activities, while female graduates have applied their lessons to emerge as community trainers, entrepreneurs, and effective leaders.

Case: As Head of Post-harvest Management Research unit she had transformed her communication to be more professional and effective. MTP has reduced her shyness and fear of speaking in front of people. She learned to put her ideas and opinions in more precise and clear statements. It used to be the case that she was silent in meetings and her ideas just stayed inside her head and never expressed to co-workers. (Tanzania, Female from Public Sector, MTP 2024)

Another measure of the responsiveness of the MTP to women’s needs was the policy to support the nurturing responsibilities of female participants. The measure was introduced in 2016, providing additional resources for women to bring their babies as well as a nanny to the training. Later in 2019, the guideline was announced that GIZ sponsorship for participants would only be approved if applying organizations send candidates 50% of whom are females. These policies saw an increasing number of female participation since 2016 and hiked by several folds by 2019 as shown in Figure 3.

Figure 3: Number of Female Participants by Year of MTP



3.1.5 Cashew Governance Structure with Competent Human Resource

The program was relevant to emerging institutional demands. As governments began recognizing cashew as a priority crop, the need for technically competent staff in ministries, cashew boards, and cooperatives grew. MTP effectively supplied this workforce. MTP graduates proved valuable to countries that have needs to establish a National Cashew Industry Development Plan to either revitalize the cashew industry (Mozambique) or consolidate a national strategy (Burkina Faso and Benin). Graduates also played lead roles in developing a National Cashew Research Strategy for Tanzania, Nigeria and Burkina Faso. In Ghana, an MTP graduate had a lead part in developing a Cashew Policy.

Case 1: He was hired in 2023 as the very first Cashew Value Chain Specialist of The Ghana Tree Crops Development Authority (TCDA), established in 2019, and he attributed his appointment to his qualification as a Master Trainer. Consequently, with the knowledge and skill he obtained from MTP, he was able to contribute to

the integration of the cashew value chain in TCDA 's operational systems and provide clarity to the sector governance structure. (Ghana, Male from Public Sector, MTP 2020)

Case 2: She attended MTP at the time that the Trees and Industrial Crops Unit of the Ministry of Food and Agriculture was starting to implement its mandate to promote cashew. Human resources were not enough to address the mandate so she fit in well with her first hand knowledge of the cashew value chain. She is currently the Acting Head of her Unit. (Ghana, Female from the Public Sector, MTP 2017)

3.2 EFFICIENCY

The MTP is assessed to have **moderate–high efficiency**, achieving strong outputs and skill transformation relative to its resource use. However, the efficiency level is reduced by external environmental constraints such as limited institutional funding, insufficient equipment, limited employment opportunities in the cashew sector, and absence of systematic follow-up systems to ensure knowledge application and transfer. These conditions restrict the full translation of training into broader sector impact.

3.2.1 Efficiency in Program Design & Delivery

High-quality facilitation

MTP graduates consistently described facilitators and resource persons as experts, approachable and engaging, using interactive and participatory methods (see Figures 4 and 5). As a MTP 2019 participant from Burkina Faso stated: *“Throughout the training, the emphasis was on oral communication. During the breaks between sessions, we developed our communication skills among ourselves. The way the modules were organized and facilitated demonstrated that communication was central and transferable to our professional practices.”* This results in high knowledge absorption and retention of lessons beyond the training. Also, clear was that the training Team deliver content applicable both professionally and personally.

MTP Training Quotes Still Applied by MT:

Its important not to make assumptions".

“Turn each situation into an opportunity”

“Moving out of your comfort zone”

“Language is not a barrier”

“Keep your information sweet and short”

“Precise, concise, clear”

“Learn to unlearn”

“Equity is more important than equality”

Comprehensive curriculum with strong cross-functional value

Singular training delivers skills across agronomy, processing, management, communication, gender, and leadership—maximizing returns on training investment.

Strong peer-learning and networking effects

MTP is designed to generate a multiplier effect through the graduates’ activities of transferring knowledge to farmers, women and youth, and also able to contribute to positive changes among colleagues, institutions, and communities. When realized such an impact exceeds the cost of delivering a single training.

Figure 4: Positive Qualities of the Training According to MTP Graduates

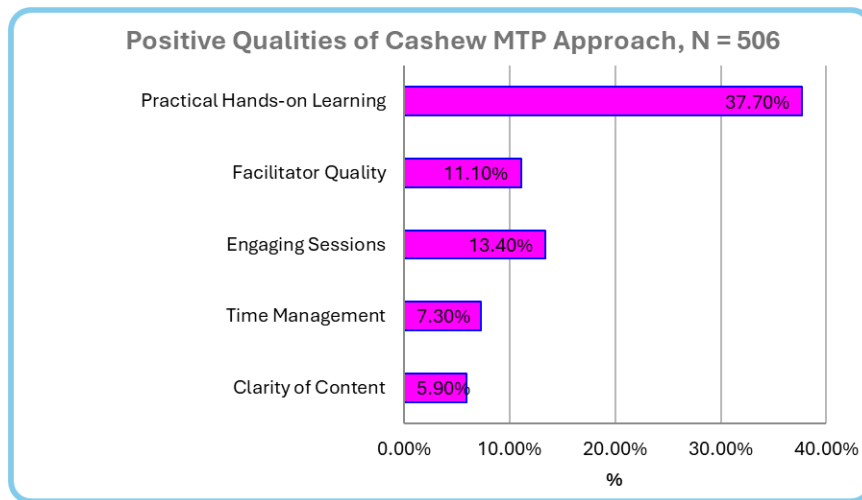


Figure 5: Positive Qualities of the Training According to MTP Graduates



3.2.2 Efficiency of Resource Use

The program generates multiple outcomes (i.e. leadership, technical skills, research capacity, enterprise creation, etc.) from one training. Some MTP alumni ended up being contracted resource persons in other donor and government programs, maximizing the value of initial investment. Based on data collected, 55 or 10% surveyed graduates have either acquired consultancies/contracts or acknowledged as expert in the sector that they got invitations to be Resource Persons in fora.

Case 1: She has been invited as Trainer/Resource Person by GIZ and MoFA. She's been hired as Consultant Trainer by Mastercard Foundation to train women in cashew milk production. (Ghana, 2018)

Case 2: Gets invited as Resource Person/Speaker in local discussions and as Mali representative to international forum. It started with the Cotton and Cashew Council; training, support, and advice. (Mali, MTP 2013)

3.2.3 Time Efficiency

Training duration is just appropriate for adult learners, who have other responsibilities. The content sequencing and mainstreaming of cross-cutting issues like gender and behavioural lessons is efficient for retention.

3.2.4 Efficiency of Knowledge Transfer & Application

MTP graduates with institutional engagements and those with resources to create their own enterprises or improve existing ones are able to immediately implement their skills (often within weeks or months). At most 333 (53.5%) surveyed MTP graduates also trained hundreds of farmers, processors, and community members. Improved decision-making, communication, and teamwork increased organizational performance.

Case 1: At the Regional Directorate of Agriculture, my position was "in charge of producer organization." On the ground, we lacked the necessary resources to plan and act effectively. Upon my return from training, I established professional organizations in the cashew sector and restructured those in the Poni and Nounbiel provinces. (Burkina Faso, MTP 2020)

Case 2: After the training, I became a knowledge relay within the institution: sharing new cashew practices with colleagues; strengthening the technical capacity of the cashew program; contributing to new product formulations using cashew nut and apple; introducing a cashew-apple juice extractor to farmers; and, stimulating interest among young scientists. (Nigeria, MTP 2023)

3.2.5 Institutional Efficiency

Institutions (TCDA, MoFA, WIAD, CRIN, companies) gained skilled staff at no extra training cost. Graduates reported improved organization coordination, supervision, extension quality, product development and R&D output. This is high organizational return on investment.

Case 1: The MTP was a true springboard for my professional career. It allowed me not only to acquire technical skills in the cashew nut sector, but also to distinguish myself in the professional world. Following the program, I had the opportunity to take on my first position with an NGO, still within the cashew nut sector. This initial role paved the way for much more significant positions, leading me today to the leadership of the prestigious Burkina Faso Council for the Agro-Pastoral and Fisheries Sectors, whose mission is to coordinate and support the sustainable development of the agricultural sectors, drawing on the experience of the cashew nut industry. (Burkina Faso, MTP 2016)

Case 2: My company is now a leading player in the cashew sector in Mali and is sought after for training and advice on product quality. (Mali, 2013)

3.2.6 Sector-Level Efficiency

Regional collaboration allows efficient dissemination of innovations. The MTP provides a multi-country talent pipeline supporting research, policy, and private-sector development. Currently, however, this asset needs to be made deliberate by facilitating structures and programs that allow for these talents to be utilized systematically, without exacting personal sacrifices from the graduates.

Case 1: She has recommended the participation of the Mozambique research team to MTP. This team was able to establish collaboration with a research team in Ghana. Last year the Mozambique research team signed a memorandum of understanding with the Tanzania research station to study . pests and disease on cashew trees. (Mozambique, 2017)

Case 2: CRIN is a collaborator under the USDA Pro Cashew Health Map project that maintains a compendium of insect pests and diseases that affect cashew across West African states that also include Ghana, Benin, Burkina Faso, Togo and Cote d'Ivoire. Data is collected per country and Mr. Dele is coordinating for CRIN. The USDA Pro Cashew study on Cashew Mother Tree Selection also covered Nigeria with Mr. Dele coordinating the field work. A Tanzanian international consultant led the multi-country study. (Nigeria, MTP 2016)

3.3 Effectiveness

The Cashew MTP aimed at generating a pool of experts with a comprehensive knowledge of the cashew value chain and the skill to transfer their knowledge to other value chain actors. This pool of experts will bring with them the technical as well as behavioural skills that would transform their professional and personal lives, and impact others the same way. Consequently, this transformation at the individual levels is expected to create positive changes to the cashew industry nationally and regionally.

The MTP demonstrates a **high level of effectiveness** in strengthening technical knowledge, promoting improved farming practices, and enabling MTP graduates to cascade training to others. Similarly, the MTP inputs on gender inclusion that focuses on women and youth, were translated by MTP graduates in their training delivery and influence on improved gender relations both in the workplace and home environment. There were improved confidence and participation of women in processing and agribusiness. Sector-wide impacts were realized across the board these will be treated in the next section.

As Table 3 shows MTP graduates who responded to the online survey highly rated their MTP experience, with a significant majority (56.8%) indicating it as Highly Satisfactory and almost half rating it as Satisfactory (40.6%)

Table 3: Assessment of Overall MTP Experience, N= 502

Rate	Number	%
Highly Satisfactory	285	56.8
Satisfactory	204	40.6
Neutral	11	2.2
Highly Unsatisfactory	1	0.2
Unsatisfactory	1	0.2
Sub-Total	502	100
No Answer	120	
Total Respondents	622	

Reasons for less than “Highly Satisfactory” rating were elaborated during in-depth interviews, and they included:

- a) Lack of follow-up to see what was happening with MTP graduates, without this and if there is nothing happening then one forgets the lessons learned. (MTP 2017)
- b) Most of the 2016 MTP participants were degree or master holders. In the cashew industry, a large number of key players are only SHS graduates. Opportunity should also be given to other SHS graduates but have extensive field experience. (MTP 2017)
- c) Regular refresher sessions should have followed up the MTP, allowing MTP graduates to update their skills, refresh their teaching approaches, and integrate new knowledge as the sector evolves. (MTP 2017)

- d) The program was very comprehensive, but the time was insufficient, and participants couldn't delve deeply enough in some important topics, nor exchange ideas as much as we would have liked (MTP 2016, 2018)

3.3.1 Strengthening Technical Knowledge and Skills Across the Value Chain

The MTP consistently enhanced participants':

- Knowledge of **good agricultural practices (GAP)** for cashew production.
- Skills in **planting, pest & disease control, timely weeding and pruning, grafting, spacing, and orchard management.**
- Understanding of **post-harvest techniques such as early harvesting and better drying protocols**, nut quality improvement, and marketing requirements.

Many valued their exposure to and greater understanding of the full value chain— production, processing, quality control, market access, economics, grafting, plant propagation. With improved technical competence participants often report observable improvements such as higher yields, healthier trees, or better-quality nuts. They also gained more confidence to support other farmers. Survey responses also showed that for a third (30.3%) of the MTP graduates the most significant change they experienced after attending MTP was “Improved knowledge and skills in cashew value chain/ production/ processing/ trading, as well as value addition”.

Case 1: Cashew MTP strengthened his skills in strategic management of the cashew sector. Through the practical modules and exchanges with industry experts, he was able to gain a more holistic view of the value chain from production to marketing. This has allowed him to better structure his activities in his consultancy firm, optimize internal processes and strengthen the quality of his partnerships. In addition, the program has given him a better understanding of international market requirements and quality standards. Finally, networking with other MTP participants paved the way for new collaborations and professional opportunities. (Benin, MTP 2018)

Case 3: She was proud of the fact that she practiced grafting during MTP and received positive feedback from the Resource Persons on the success of her grafts. This new technical mastery became a major lever in her work. She subsequently trained hundreds of farmers across Kwara, Oyo, and Enugu States. According to her, many farmers were unaware of grafting and were using low-performing planting materials. MTP allowed her to fill this gap. She also learned new methods in varietal development and molecular approaches for creating new cultivar knowledge that later fuelled several research initiatives in her institution. (Nigeria, 2023)

3.3.2 Capacity to Train, Disseminate Knowledge and Influence Other Actors

Core to the aims of the MTP is to create multipliers, a pool of experts who will transfer the knowledge and skill certain to boost the cashew development nationally and regionally. MTP implementers stated 80 percent of MTP graduates are expected to deliver training.

Most MTP graduates (in various capacities including extension agents, farmers, processors, lecturers, researchers etc) reported conducting community trainings, farm demonstrations, or farmer visits, supporting producer groups, women's groups, and youth, also serving as reference points for extension agents, NGOs, or processors. MTP graduates function as intermediaries between farmers and institutional actors (MoFA, NGOs, aggregators). According to an MTP Resource Person and MoFA Assistant Director of the Directorate of Crop Services / Cashew Desk In-charge, Mr. Jerry Anim Jacob, “Great progress in extension–farmer ratio was achieved due to MTP graduates supporting local dissemination.” Mr. Jacob is an MTP 2017 graduate.

MTP also motivated some 116 (18%) MTP graduates (see Table 4) to conduct more research exploring modern agronomic practices, diseases and pest control, value addition to cashew nut and apple,

preservation, equipment fabrication, compost from cashew, and other evolving topics that are also due to climatic changes and technological developments. Owing to their recognition as experts in the cashew value chain, a significant number (36.2%) of MTP graduates have been engaged as Resource Persons to provide lectures and present papers in local and international seminars and conferences. Some of these engagements also generated income enhancing their economic situation.

Table 4: Other Forms of Knowledge Sharing by MTP graduates, N=400

	Number	%
Lecture/Seminar	226	36.2
Research/Publication	116	18
Others	40	10
Podcast	18	2.8
Total	400	100

The ability to transfer knowledge and coordinate between actors was accompanied by enhanced confidence especially in managing groups, increased leadership and communication skills including public speaking, that were gained from the MTP Trainer Attitude theoretical inputs and practices.

The survey generated information on the MTP tools that MTP graduates applied in their workplace, and it is clear that what they immediately relate to were the tools that served to guide behaviour. Table 5 below shows the greatest value was placed on the Gestalt Principles and Techniques, Training Design and Implementation, Good Communication and Participatory Approaches. These are all topics that addressed personal development, which for most of the MTP graduates were the triggers that led to the transformation not only in their work relationships and performance but with the family/home environment as well.

Based on survey responses 333 (53.5% of 622) MTP graduates trained farmer producers, 177 (28.5%) trained processors, 161 (25.9%) trained traders and 207 (33.3%) trained trainers. Table 6 below showed that more male MTP graduates conducted the training. However, the distribution actually just reflects the proportion of male to female respondents. For training of farmers, a third (31.8%) was conducted by MTP graduates from Ghana, followed by Burkina Faso (18.9%), Benin (13.2%), Cote d'Ivoire (12.6%), then Sierra Leone (9.0%). MTP graduates from the rest of the 9 countries also trained farmers.

Table 5: MTP Tools Applied by Graduates in their Workplaces

Applied MTP Tools	Number	% (N = 499)
Gestalt Principles and Techniques	106	21.2%
Training, Design and Implementation	94	18.8%
Good Communication	93	18.6%
Participatory Approaches & Group Dynamics	84	16.8%
Production & Farm Management (Others)	49	9.8%
Project Planning and Management	44	8.8%
Business & Financial Planning	32	6.4%
Grafting	32	6.4%
Good Facilitation	31	6.2%
KOR Calculation	31	6.2%
Time management	27	5.4%
Cashew Processing (Others)	24	4.8%
Quality Management	22	4.4%
Practice, Inter-session and Field Visits	21	4.2%
Cashew Value Chain Analysis	20	4.0%
Presentation and Visualisation	19	3.8%
Research, Monitoring and Evaluation	17	3.4%
Gender Mainstreaming/ Inclusion	10	2.0%
Negotiation Technique and Conflict Resolution	10	2.0%
None	10	2.0%
Knowledge Sharing and Networking	9	1.8%
Others	9	1.8%
Disease Control & Management	8	1.6%
Curriculum Vitae Writing	5	1.0%
Cannot recall	4	0.8%
Proposal and Report -Writing	4	0.8%

Table 6: Number of MTP graduates Who Trained Cashew Actors Over 10 Years, By Sex

Participants	Number of MTP graduates Who Conducted Training %			Total Numbers Trained
	Males	Females	Total (100%)	
Producers/ Farmers	231 (69.3)	102 (30.6)	333	195,071
Processors	113 (63.8)	64 (36.1)	177	22,963
Traders	112 (69.5)	49 (30)	161	25,062
Trainers	153 (73.9)	54 (26)	207	17,809

Case 1: Since MTP she has trained 1,000 farmers; 50 processors; 200 traders; 300 trainers in Tanzania. Training of the farmers and processors were done in collaboration with the Cashew Nut Board of Tanzania. Her employer Tanzania Agricultural Research Institute trained the traders directly. Training of Trainers were done in collaboration with the Ministry of Agriculture who sent their extension workers to be trained in good agricultural practices in cashew production, post-harvest handling and pest management. The trainers are expected to disseminate the techniques to the Ward level so that farmers can assist in scaling up cashew production to 100,000 tonnes in 2030. (Tanzania, 2024)

Case 2: His company, a key player in the agri-food industry in West Africa processing and trading white kernels, roasted cashew and cashew paste, has 7 MTP graduates including himself. Since MTP he has done technical replication- grafting techniques and establishing large nurseries for agroforestry projects. He has also done internal knowledge sharing, debriefing 16 agronomists and a team of 10 women processors. He has trained a neutral team trained in improved KOR evaluation practices; supported from 800 to 5,592 certified producers to secure raw quality materials that brought higher processing yields. The 5 other co-worker/subordinates who underwent MTP also trained at least 300 producers on orchard maintenance, grafting, nurseries, and quality. Many producers successfully revived unproductive orchards and more than 60 out of 80 producers adopted improved grafting and nursery techniques. (Burkina Faso, MTP 2018)

Case 3: She leads several national and regional research activities such as identification and cloning of elite trees, multi-location evaluation of new cashew germplasm, development of improved varieties, hybridisation plans. She published and presented multiple research papers including: “Selection of Cashew Mother Trees” during an ACA Annual Conference, held in Benin (2024); “Current Status of Cashew Production and Breeding in Nigeria”, in Accra (2024); “Review of Cashew Research in Nigeria”, in the Scientific Research & Essays. (Nigeria, MTP 2023)

3.3.3 Gender-Transformative Learning Changes Attitudes And Practices

MTP emphasizes gender balance and equal opportunities promoting equal participation to speak and inclusion of women and youth in training activities. Gender modules empower women and sensitize men to gender equity. MTP graduates across all engaged countries had generally applied these principles as they implement their respective roles in the cashew value chain.

- Enhancing women’s technical capabilities and leadership skills, training them in cashew agronomy, processing, quality control, entrepreneurship; facilitation and communication
- Enabling women in agribusiness helping them gain confidence, engage in processing and start enterprises
- Engagement of rural youth in good agricultural practices and value addition

There is strong evidence that gender inclusion as instilled during MTP has been promoted at the institutional level. MTP graduates got to influence the adoption/strengthening of gender messages into their training modules. More gender-responsive policies were also introduced, as well as extension delivery where agriculture officers use MTP skills to improve gender-sensitive farmer engagement.

Gender analysis shows that both men and women graduates achieved strong individual effectiveness in translating their lessons to action. However there seemed to be a more pronounced shift in visibility and influence for women because, as they themselves expressed, they were coming from a starting point of a relatively lower self-confidence and self-esteem that MTP inputs succeeded in transforming.

Case 1: She started as a Secretary who later got promoted to an Operations Manager position in a cashew trading company. She already felt men working under her did not give her proper respect. After MTP, she observed that the disrespect towards her reduced and she attributed it to the way she responded with calm and communicated with clarity, “Calm can make people listen”, an MTP lesson. She learned grafting from MTP and had become an expert on it that an established coffee company hired her to train them. She also trained farmers under block farming arrangement with her company employer and this has improved their productivity. (Sierra Leone, Female from the Private Sector, MTP 2018)

Case 2: After attending MTP an Agricultural Advisor for the National Federation Of Cashew Producers Was able to do the following:: i) trained six women in grafting within his nursery and recommended them to an ENABEL project seeking female grafters; ii) trained 50 women enabling them to become direct contributors to cashew production and orchard establishment; iii) involved his wife in nursery activities and nut processing; and iv) promoted women’s economic empowerment within his community.(Benin, Male from the Private Sector, MTP 2017)

Case 3: She has applied gender inclusion in her training making sure that there's equal representation between males and females, also that women and young people have all the opportunity to participate fully. In the local context whenever there is a big age gap, the young people tend to be quiet when the older ones are talking, also because when the young ones talk, they were challenged by their elders. Therefore, she motivated the youth to lose their fear and also speak up and they were encouraged. She also urges the older ones to listen and accept different views. People have come to accept this kind of discussion. (Tanzania, Female from the Public Sector, MTP 2024)

Case 4: After MTP he organized youth cashew farmers and workers in Port Loko into the Teinkatopa Youth Development Association. There are 20 groups of at least 35 members per group. He trained the groups in agronomic practices, surveillance, and pruning. Most of them accepted the new knowledge and committed to plant more, now realizing the benefits. At the end of each year the group engaged in community events such as gala, football, talk show and agricultural fair. His employer, a cashew trading company also support youth farmers with loans for maintenance of average 50 acres plantation, payable after harvest. (Sierra Leone, Male from the Private Sector, MTP 2023)

3.3.4 Enhanced Business Opportunities, Business Relations and Continuing Product Development

MTP graduates valued their training for the technical knowledge and skills for both production and processing. The exposure to established processors such as the field visit to Yamoussoukro cashew processing company and the presentations of alumni processors have “opened their eyes” to the potentials of the cashew nut and apple, inspiring many of them to enter into their own business. Based on a manual count, 73 (11.7%) of the survey respondents opened their cashew business after MTP attendance, at varying periods of commencement. Majority of these new businesses were from Ghana (37.0%), Cote d’Ivoire (17.8%) and Burkina Faso (11.0%). Other countries with recorded new businesses post-MTP include Benin, Sierra Leone, Togo, Nigeria, Senegal, Zambia, Mali and Cameroon. Almost half (43.8%) of these new businesses are operated by female graduates. More than half (57%) of the new business operators are mid-career professionals (36 – 55 years), but there is still almost a third (26%) that are within the youthful age of 26 – 35 years. New businesses were started by more youthful male graduates compared to more females starting theirs at mid-career. Those already

operating companies on production and/or primary processing gained fresh ideas which they immediately applied for growth.

Business operations also benefitted from the network established with other alumni, Resource Persons, and support from GIZ MOVE. Built relationships included business mentorship between graduates within the same country (e.g. Ghana) and across countries (e.g. Ghana and Sierra Leone). Graduates also took advantage of their relationship with MTP Resources Persons to consult on production constraints including new pest occurrences, cashew processing ideas, business procedures especially international regulations.

The MTP has significantly contributed to greater understanding of the requirements of both the local and international markets, improving market access. A respondent stated: *"Before the training, I didn't know what the market needed. With the MTP, I understood how prices work, the quality sought and buyers' expectations."* This increased knowledge has resulted in companies being better able to diversify their sources of supply, optimize their commercial relationships and reduce their dependence on a limited number of suppliers. In addition, the skills acquired in leadership, professional communication and technical argumentation have strengthened the negotiating position of the trained executives. Several now claim to be *"discussing on equal terms"* with international intermediaries, exporters and processors. Professional organizations such as inter-professional associations also benefit from these skills: they are now better equipped to defend the interests of their members and to engage in dialogue with regulators on pricing, regulation or tax incentives.

MTP graduates from the private, public and NGO sectors reported new cashew businesses as outcomes of their cascade training, research dissemination or policy/program concepts that were implemented. The Study was not able to quantify the number of new businesses but they included male and female start-ups across all engaged countries, some of them within the targeted youth category. MTP lessons on the potentials of the cashew fruit as source of livelihood inspired the MTP graduates, some of whom continued to conduct experiments on alternative products from the fruit, and have been training other individuals, especially community women who started earning from their new ventures. The concept of recycling from cashew waste has been instilled among the MTP graduates and the communities they have reached out to, and there is evidence that the idea is no longer viewed as a sanitation concern but rather a potential for alternative, complementary or even major livelihood source.

Case 1: A cashew producer and a former employee of a failed cashew company established her own business enterprise in 2020, 2 years after MTP. She processes different products from cashew fruits (juice for drinking, as ingredient for ice cream, spice powder, toffee, jam), kernels (bottled milk for drinking) and pruned cashew branches (activated charcoal for anti-dote for snake bites and chemical spray inhalation). She has shared her skill in cashew milk processing to 80 females under a Mastercard Foundation program in 2025, 20 of whom received starter kits and are operating their businesses. (Ghana, Female from Private Sector, MTP 2018)

Case 2: She supported value addition, especially juice extraction and processing, promoted the fabricated cashew apple juice extraction machine developed by her employer-Institute. Her institute's value-addition department developed new product formulations from kernels and cashew apple (e.g., juice, flour, snacks), and she contributed by transferring these technologies to communities. By training farmers to produce high-quality grafts, she enabled them to start small graft-production businesses. Through the juice-processing training, women started informal micro-businesses selling cashew apple juice. Her research team is developing improved varieties that will later support nursery businesses." (Nigeria, 2023)

Case 3: ANADER has invested in action research on the development of cashew products. We brought in a Senegalese woman during the MTP to teach us how to make processed products from by-products. We then trained women in the production of plant-based meat, flatbreads (Gnomi, aloco, klakolo), and juice, offering them new income-generating opportunities. (Cote d'Ivoire, MTP 2013)

Case 4: He promoted processing the cashew apple into juice. His team designed an operational model for local processing, tailored to village-level realities. They developed a model for juice processing directly in the villages, together with the machines and the bottles. To address logistical and marketing constraints, they set up an aggregator in Parakou that provided the bottles and caps and handled the marketing. The aggregator takes his share of the revenues and pays the women processors. This documented model was presented to ProCashew and with Côte d'Ivoire in 2024. (Benin, Male from Private Sector, MTP 2015)

3.4 CHALLENGES

Despite its achievements, interviews revealed recurring challenges encountered by MTP graduates and the MTP in general. The survey also collected the opinions of graduates on challenges they met and Table 7 below shows which factors are most felt.

Table 7: Challenges Encountered as a MTP Graduates, (N=499)

Challenges	No.	%
Other technical difficulties (that may imply need for strengthening of Master Trainer skills)	109	21.8
Financial and logistical challenges to transferring knowledge including direct training and conduct of research	100	20.0
None	70	14.0
Inadequate opportunities to apply knowledge including time limitations due to work	64	12.8
Limited access to financial resources to start or diversify cashew projects	55	11.0
Limited networking structures & opportunities (e.g. alumni network, access to resource persons)	50	10.0
Lack of institutional support or enabling environment (e.g. policy, budget, infrastructure, data systems, competent human resources, etc)	47	9.4
Difficulties in implementing principles of mindset change by others (e.g. workplace etc)	34	6.8
Difficulties in implementing training principles (e.g. time management)	32	6.4
Farmer resistance to change resulting to slow uptake of modern approach to cashew farming	25	5.0
Inadequate follow-up and support from MTP	25	5.0
Other	22	4.4
Limited technical knowledge on cashew processing & preservation	5	1.0
Limited information and low domestic awareness of cashew and its benefits	4	0.8
Inadequate regulatory and legal framework, as well as lack of enforcement	4	0.8
Natural environmental constraints (e.g. climate change, etc)	3	0.6
Difficult security conditions	2	0.4

3.4.1 Resource and Financial Constraints

Graduates repeatedly reported inadequate funds for transportation and logistics to train farmers, venue rentals, purchasing demonstration materials, paying for processing inputs. Many graduates attested to demand of target farm and community-level participants for “payment” to attend the training. Some attributes this to poverty situation for many farmers and expectations that every meeting means compensation for them. To some graduates this is justified as these farmers would be taken away from their livelihood to attend the training, would need food and will also incur travel expenses. Covering training cost is most difficult for MTP graduates who do not have institutional affiliations or at least a well-resourced one. Even highly trained graduates could not scale up training or outreach activities owing to limited resources.

3.4.2 Equipment and Infrastructure Barriers

This includes lack of processing tools and machinery. Graduates could not train others practically, demonstrate processing techniques, start small enterprises, expand value-addition initiatives. Missing tools either from MTP graduates or the entrepreneurs included cracking machines, dryers, peelers, sorting equipment, fruit preservation equipment and laboratory or R&D resources, among others. Those dealing with producers experience poor or limited access to improved planting materials affecting adoption of agronomy lessons. Poor internet connectivity undermines blended learning. Bush-burning is a constant problem for cashew plantations. Smuggling and cases of exploitation at police barriers also have negative effects on operations.

Case: She needs start-up kits so that they can transfer knowledge to others. In her case, she's doing everything manually and not with equipment which she cannot afford. MTP also does no follow-up with MTP graduates to assess their needs which may not necessarily be funds but also refresher training for example of processing.

3.4.3 Institutional and Systemic Sector-Level Constraints

The MTP graduates encounter bureaucratic and slow institutional procedures. Government and research institutions often have administrative bottlenecks, slowing down processes that delay training or project execution. There is also weak coordination among cashew sector institutions. The lack of harmonized actions affect messaging, standards and training frameworks. This reduces efficiency of post-MTP engagement. In some country context like (i.e. Sierra Leone, Burkina Faso and Chad), there is limited government support for cashew. Graduates from these countries noted that cashew is not prioritized compared to cocoa, rice or other crops, has weak recognition and insufficient budget allocations.

Case: “Product certification procedures were complex and costly for entrepreneurs, preventing timely application.” (Ghana, Female from Private Sector, MTP 2018)

Case: “Government policies do not offer protection for local cashew industry, allowing more resourced foreigners to take advantage of high RCN costs and unaffordable loan interests.” (Ghana, Male from Private Sector, MTP 2018)

Case: “Coursing MTP initiatives through the government structure tends to leave out private sector participation, either due to politicization or weak structures.” (Sierra Leone, Male from Private Sector, MTP 2016)

3.4.4 Farmer- and Community-Level Constraints

Low farmer adoption rates due to traditional practices, limited literacy, lack of exposure to new technologies, risk aversion. Socio-cultural barriers in some communities also restrict women's participation, view agricultural enterprises as high risk, make people resistant to new processing techniques. Lack of community-level equipment and facilities prevents shared demonstrations, value addition, or product trials..

Case: "Many farmers do not adopt good practices, making it difficult to translate training into outcomes.

3.4.5 Regional and Market Constraints

Limited regional engagement and collaboration among MTP graduates hinder cross-country diffusion of MTP skills. Market volatility and weak value chains results to unstable nut prices increasing the cost for primary and secondary processors, limited market access, weak entrepreneurial ecosystems and low support for small processors. Financial institutions have high-risk perception of women and youth who could not take advantage of loan facilities.

Case: He got low response rate from MTP graduates in other countries that greatly affect regional networking and collaboration. (Ghana, Male from Private Sector, MTP 2016)

Case: "Agriculture-related businesses are seen as high risk, limiting access to finance for the small operators and women." (Mozambique, Female from Public Sector, MTP 2017)

3.4.6 Gender-related Constraints

Women are dominant in cashew processing and they are most of the times who lack cracking machines, start-up kits, and capital to operationalize skills. Institutional and bureaucratic procedures affect women as most of them do not have the literacy to engage in official transactions. There is limited gender-targeted funding and lack of follow-up support normally leave them unable to proceed. Some communities restrict women's engagement in processing or business activities.

Cashew sector leadership is still male-dominated, limiting upward mobility. This is possibly the reason why MTP participation of women could not reach the targeted 50% as the persona accepted in the program tend to be from middle to top-level management positions.

Few youth-focused modules or opportunities despite recognition of need. Limited regional collaboration reduces cross-learning opportunities for women and young MTP graduates.

3.4.7 Attrition and Limited Retention

Some participants leave the cashew sector after training, reducing returns on investment. 62 (10%) out of the 622 surveyed MTP graduates are not engaged in the cashew sector, for any of the following reasons:

- They're working and applying their skills on another sector, in some instances, have no time for other tasks; (33)
- Low employment opportunities in the cashew sector leads to non-utilization of knowledge and skills gained (14)
- In Full-time studies (11)
- Retired (4)

There is high probability that the rate of attrition is higher than what the survey generated. For one, at least 100 email messages sent were technically undelivered (a consequence of the absence of structured alumni database management). A graduate from Benin stated, *“I know three colleagues from Benin in my cohort who are currently at home doing nothing.”* Two MTP graduates who participated under a cashew company platform, are now practising nurses. The main challenge is the limited availability of concrete post-training opportunities to apply the Master Training skills, even as the certification builds strong leadership and facilitation capacities. These opportunities are also dissipated by the inability of cashew companies to maintain consistent gainful operations due to market volatility, therefore relieving employees.

MTP graduates working in academia have the peculiar constraint in applying their knowledge in the cashew value chain, specifically those whose fields of practice involve other themes. Two lecturers from the University of San Pedro in Cote d’Ivoire were interviewed and both do not deal with the cashew industry. One works in the field of governance and the other in horticulture. They reported that even as they know the University had sent other staff for the MTP under GIZ subsidy (the MTP database lists 5 participants), they are not aware of whether the other graduates deal with cashew. This pronouncement itself indicates that there is no coordination happening among these graduates in matters of the cashew sector. The lecturers also cited workload, priorities, and career progression requirements as barriers to focusing on cashew.

3.4.8 Limited Post-Training Support and MTP Follow-up

Many graduates often operate without tools, logistical support, financial resources, transportation and formal institutional recognition. This restricts the scale of knowledge-sharing activities and limit long-term efficiency. Many MTP graduates were disappointed that there was no/limited/non-systematic follow-up of their status. They believe it would have given more encouragement to graduates to have the MTP Management/Resource Persons to reached out to them to: i) find out how the knowledge and skills are being implemented; ii) what the needs are of the MTP graduates either for resources to transfer knowledge and/or for refresher courses; iii) support them with opportunities to share knowledge.

Case: MTP graduates need start-up kits so that they can transfer knowledge to others. In her case, she's doing everything manually and not with equipment which she cannot afford. MTP also does not follow-up with MTP graduates to assess their needs which may not necessarily be funds but also refresher training for example of processing. (Ghana, Female from Private Sector, MTP 2018)

3.4.9 Lack of data capture on MTP Impact and On-ground Progress

Related to the reported lack of follow-up is the lack of formal system of progress tracking of MTP graduates in terms of their contribution to improvements in agronomic practices such as improved planting materials, irrigation, and development of cashew by-products. Such information needs to be accumulated at strategic points like the Cocoa Research Institutes in various countries and other crop research institutes in order to consolidate findings and package them for widespread dissemination.

Case: I think MTP participants have been able to identify superior climate-smart planting material which would not only boost productivity but improve RCN quality. Also, MTP participants have been able to identify cashew flower sex types and drip irrigation using bottles, all beneficial practical discoveries. However, he receives these information through phone calls and Whatsapp messages that are informal channels that would be insufficient for further verification. (Dr. Paul Adu-Gyamfi, MTP Resource Person)

3.5 IMPACT

The MTP produced **moderate to high level of impact** in terms of contribution to value chain strengthening, gender empowerment & shifts in social norms, impact on policy development, institutional and regional collaboration, public-private sector engagement and sector investments. The extent of MTP impact varied between the countries involved as they vary in terms of level of sophistication of the cashew value chain and institutional frameworks including the political support system.

Social and personal impacts showed highest significance, and they were oft-cited, cutting across all profiles. Interviewees reported improved leadership culture within organisations, stronger teamwork, enhanced trust between actors and more constructive conflict management. The same held true for household-level impact. Many participants described realized emotional control and balance, improved financial and time management, as well as shared family decision-making that produced a more pleasant home environment. They gave credit to the personal development lessons imbibed from the MTP. These effects had been experienced by both men and women, with the latter finding a refreshing, more fulfilling role within the household that is assured of resilience and long-term well-being. These social changes are critical enablers of economic performance, particularly in cooperative and community-based contexts.

3.5.1 Contribution to Cashew Value Chain Strengthening

The dissemination of GAP or good agricultural practices has contributed significantly to increased RCN yields as reported by MTP graduates across all engaged countries. Table 8 Below shows sample average yield increases provided by few graduates as being realized on their farms and those that they have mentored.

Table 8: Examples of Increases in Average Cashew Harvest Due to GAP

	Average Harvest in kilogram per hectare	
	Before MTP	After Applying GAP
Cote d'Ivoire	500	600 -800
Benin	400	800
Burkina Faso	400	800
Ghana	3 bags	10 bags

Interviews showed that MTP graduates contributed to higher-quality raw cashew nuts (RCN) attested to by repeat local buyers and converted consumers, and evidenced by expanding export market share of West African producers. Improved products imply strengthened competitiveness of the West African cashew industry. There were also improved farmer–buyer relationships through better understanding of quality standards; strengthened local capacity for aggregation, primary processing, and quality control; more efficient operations by producers and processors. Consequently, such improvements contributed to the generation of both permanent and seasonal employment, often for women and youth. Incomes have also increased for producers and processors increasing their ability to investment more into their enterprises.

Based on the need for more efficient operations of old and new primary and secondary processors, opportunities for local equipment fabrication have also arisen signalling potential jobs for young engineers and technicians. The founder of Nimdee Hyeren Cashew Processing Limited in Ghana, an MTP graduate, obtained his new set of equipment from a local fabricator of cashew dryer and installer of smoker / broiler, a young mechanical and electrical engineer. This segment of the value chain will definitely need support to improve information, human resource and financial investment infrastructure that will benefit both processors and youth fabricators.

System-Level impact can be seen in improved supply consistency from producers to primary processors, and from primary to secondary processors. MTP graduates and those benefitting from their cascade training also represent enhanced local expertise that remains in the community and movement toward a more professionalized cashew sector.

Case 1: An MTP 2013 graduate stated that MTP helped Cote d'Ivoire recognize the value of the cashew sector and have become one of the world's top producer. More actors have been engaged because of job opportunities offered. Cashew processing grew with increased number of professionals from the private, public and NGO sectors. Before 2013, less than 5% of RCN was processed locally; today processing exceeds 30%. The ecosystem is stronger — cashew is no longer just an agronomy matter: researchers, universities, sociologists, ecologists and policy actors are involved.

Case 2: An MTP graduate who is a cashew producer and processor from Ghana attested that before he applied the technical knowledge he received from MTP 2018, his white kernels were not up to standard. After MTP he taught his 75 producers-strong Kabile Cashew Farmers and Processing Cooperative how to do proper spacing, pruning and grafting. The resulting harvest from these new methods were quality nuts that were praised by buyers, some of whom used to buy from Benin.

3.5.2 Gender Empowerment, Youth Inclusion & Shifts in Social Norms

The MTP has a significant role contributing to the emerging core of women leaders in the cashew sector, especially observed in Cote d'Ivoire, Ghana, Nigeria, Benin and Sierra Leone. Close to 20 percent of female survey respondents hold Chief Executive and Director/Manager positions in cashew-related companies, inter-professional organisations and consultancies. Some of the women in this leadership core have influenced regional cashew networks. Importantly, survey and in-depth interview responses showed that capacity-building efforts of MTP graduates resulted to hundreds of women initiating and/or leading cashew processing units.

As for changing gender attitudes and stereotypes, participants reported shifts in personal behaviour, enhanced respect, open communication at work, home and the community-at-large. As women's leadership and entrepreneurship increased, men's attitude also transformed into one of listening, acceptance and cooperation. The study survey showed that a significant majority observed improved gender relationships both at the MTP graduate's workplace and at their homes, and this is due to MTP. See Table 9.

Table 9: Extent of MTP Influence on Gender Relationships, (% , N=622)

Rate	At Workplace	At Home
Great extent	43.7	43.5
Some extent	35.0	33.7
Very little	8.1	8.8
No answer	7.0	7.0
None at all	5.9	6.7

Characteristically, female MTP graduates who are in Executive positions have implemented policies and strategies to promote women's skills, and also promote them to technical and management positions. In Togo the Executive Director of a cashew processing and trading company reported that women lead in their production and marketing units at the same time that women are operating machines and performing technical tasks, responsibilities that are still male-dominated in other similar companies. She said recruitment is based on capacity, not sex. Also through the company's capacity-building efforts, their supply chain consists of around 100 cooperatives, a quarter of which are women-led. In Burkina Faso, the female Managing Director of a cashew trading and processing company testified as follows: *"My role has been above all to trust women and open the door to the program for them. I sent many women to training. This year, it was the women who did the KOR (nut quality test at purchase), and we have never had such good quality nuts! I personally supervised the procurement, and the results speak for themselves."*

Milestones achievements by MTP graduates included breaking barriers to resource access of women in the cashew sector. Aside from facilitating the formation of village or group savings and loans schemes⁹ across most of the engaged countries, graduates also ensured that women obtained land for their self-managed cashew plantations. In Ghana, a male MTP 2019 graduate worked through his local NGO Z-Treebiz to advocate with his network of traditional leadership in Langbinsi (Norther Region) to give land access to women. His advocacy led to 420 women farmers receiving land from their husbands to plant cashew trees, access that cannot be taken away from them even in the event of divorce or widowhood. In Benin, a female who completed MTP also in 2019 led her self-established NGO called Centre for Synergy of Farmer Actions (CSAP) in empowering women within the cashew producers sub-sector. Gender champions were identified within the community and trained on gender-sensitive and gender transformative approaches to advocate for change within households and communities. As a result, fourteen (14) men allocated land to their wives for cashew production. These are micro-successes that need replication as the West African context is still pre-dominantly biased against women's economic roles. As an MTP 2019 graduate from Benin attested: *"When it comes to land and trees, it is still very difficult. Women have almost no rights."*

Case 1: Aside from applying GAP on her 10 acre cashew plantation and strengthening her primary processing business, an MTP graduate led the formation of Unity Women Agri Business Cooperative. The Cooperative has 30 women as members to whom she transferred her MTP knowledge. Focus group discussions with these women revealed that they manage 2-5 acres of cashew farm from which they are earning income either selling RCN and/or doing secondary processing with the cashew apple. The MTP graduate's continuing gender inclusion sessions have made them aware of their rights to land, livelihood and credit, gave them access to capital through the Village Savings and Loan Association, exercise their right to speak their minds, and be part of decision-making, something that their spouses apparently have grown to accept. (Sierra Leone, Female from the Private Sector, MTP 2023)

Case 2: After MTP, through her work with the NGO Africa Relief and Assistance (ASA), she was able to put together a women's cooperative with more than 100 members, having capital of 200,000 CFA (around USD340). Subsequently, the association received funding of 1,500,000 CFA (around USD2,500) for the production of cashew honey and it was a total success. This change was the most significant for her because MTP helped her regain self-confidence and she was able to give confidence to other women. Most of these women now have their own cashew nut plantation. (Cote d'Ivoire, Female from NGO Sector, MTP 2017)

⁹ VSLA – Village Savings and Loan Associations in Ghana and Sierra Leone
CECI - Village Savings and Credit Groups in Cote d'Ivoire
ROSCA - Rotating Savings and Credit Associations in Mali

Case 3: A Sustainability Manager for a processing company Cashew SA promoted gender-sensitive policies both within his firm and the cooperatives they work with. He managed to influence company management not to only add female staff but also provide them with the best working conditions. Within the cooperatives, he led the establishment of gender committees and support women to change their perspective on their skills and contributions. Due to these efforts a woman was elected as President of the Benin Cashew Producers' Federation. (Benin, Male from Private Sector, MTP 2016)

Youth Inclusion

Youth inclusion emerges as an indirect but increasingly significant dimension of the MTP's impact. Across all countries, young people benefit primarily through secondary pathways rather than through direct program targeting.

In economic terms, youth benefit from employment opportunities created by processing units, buying operations and service provision activities initiated or expanded by MTP graduates. These opportunities are most visible in contexts where processing and value addition are growing, such as Côte d'Ivoire, Nigeria and Ghana. In less mature sectors, youth benefits are more limited and often informal. Beyond employment, youth are exposed to entrepreneurial and leadership role models. Several MTP graduates describe how their own professional transformation has influenced younger family members, students or community members, shaping aspirations towards agribusiness, technical careers and entrepreneurship. This inspirational effect is particularly strong among female graduates, who often serve as powerful role models for young women.

However, from a comparative perspective, youth inclusion remains largely unstructured and uneven. It depends on individual initiative rather than program design. The absence of explicit youth-focused components—such as mentorship schemes, incubation support or youth-specific training pathways—limits both the scale and sustainability of youth impact. As a result, youth inclusion represents a major opportunity for strategic strengthening rather than a fully realized outcome of the MTP.

3.5.3 Impact on Policy Development

The MTP has moderate but growing impact on policy, mostly at institutional level and they were rather applied, consultative, and practice-oriented in nature (e.g. extension practices, cooperative rules, buyer quality requirements, trade regulations, price referencing etc). A few MTP graduates played key roles in designing district/national cashew plans and standards. The online survey showed a significant number of survey respondents who believe that the MTP has contributed to their ability to influence cashew policy to a "Great Extent" (38.9%) and to "Some Extent" (44.7%). With graduates who are strategically positioned in government institutions with mandate to promote the cashew industry, their role on policy is direct and productive. The non-government actors among the graduates are influencing policy through their consistent participation in inter-profession groups and cashew-related fora. There's a balanced number of male and female graduates that contributed to policy influencing in the cashew sector, all of them holding high management positions in their institutions. A description of the various levels of policy engagements by MTP graduates is presented below with noteworthy cases as examples.

(1) Technical Input into Policy Formulation

- Providing evidence-based recommendations on cashew production, processing, quality standards, and sustainability.
- Supporting the drafting or revision of sector strategies, guidelines, and action plans related to cashew and tree crops.
- Translating field-level realities into practical policy options for ministries, regulatory bodies, and development partners.

Case1: As District Director of Agriculture, a graduate used his MTP-acquired understanding of the cashew value chain to support the District Assembly to reorganise cashew revenue collection. He ensured that revenues from cashew transported through the district are captured locally. This has increased the district's internally generated funds. (Ghana, Male in Public Sector, MTP 2016)

Case2: A graduate was part of conceptualizing policies linked to the needs on the ground: i) From the levy charged on cashew exports, 20% is reinvested as guarantee fund with selected banks tasked to provide loans to cashew processor. She also helped developed the 10-year National Cashew Industry Development Program. (Mozambique, Female in Public Sector, MTP 2017)

(2) Stakeholder Consultation and Facilitation

- Facilitators of consultations with farmers, processors, exporters, and cooperatives.
- Intermediaries who ensure producer and private-sector voices are reflected in policy discussions.
- Contributors to validation workshops and policy review meetings.

Case 1: A graduate learned during a forum that the government received a US\$16million funding for cashew seedling production and distribution. He raised the issue that Ghana's cashew industry does not need more farm expansion but yield improvement, therefore, investments should rather be directed to existing cashew farm rejuvenation, by training farmers how to make their current tree crops productive. (Ghana, Male in Private Sector, MTP 2016)

Case 2: As a market analyst consultant a graduate works with institutions and programs connected to public policy and regulation. Her analyses and recommendations contribute to informing policy-oriented discussions and implementation strategies related to cashew productivity and market regulation. (Cote d'Ivoire, Female in NGO Sector, MTP 2013)

(3) Policy Implementation Support

- Developing implementation guidelines and training materials aligned with new or existing policies.
- Supporting pilot initiatives that test policy instruments (e.g., quality standards, traceability systems).
- Advising institutions on institutional arrangements and coordination mechanisms.

Case 1: It used to be that cashew processors could not purchase cashew directly from farmers. Purchases are done through competitive auction. In 2021, her Marketing unit advocated with management of the Cashew Nut Board to reform the policy and was successful. The capacities of processing companies increased from 3% to 20%. There are 50 such companies but only 25 have adequate capacity and funds. (Tanzania, Female in Public Sector, MTP 2017)

Case 2: As the Cashew Value Chain Specialist in Tree Crops Development Authority (TCDA), a graduate has always been part of stakeholder policy discussions that included, among others: i) Use of branding materials ;ii) Introduction of Passbooks for cashew farmers and traders; iii) Conveyance Certification; iv) Establishment of TCDA Checkpoints to monitor Cashew Trade. He plays a leadership role in the drafting of a Cashew Policy for TCDA. (Ghana, Male in Public Sector, MTP 2022)

(4) Advocacy and Policy Influence

- Advocating for reforms related to pricing, market access, incentives for local processing, and farmer support.
- Using program credibility to influence policy priorities and resource allocation.
- Informally shaping policy agendas through sustained engagement with decision-makers.

Case 1: An MTP graduate played a key role in supporting the Interprofessional Cashew Organization to negotiate an agreement with the State on the management of export levies: “We worked a lot on an agreement with the State so that levies could benefit the sector. It was finally signed in 2025.” (Benin, Male in NGO Sector, MTP 2015)

Case 2: She has contributed indirectly to policy discussions by sharing MTP lessons and sector challenges with the National Cashew Council and participating in a high-level meeting with the Vice President and other leaders on cashew policy and support for new planting materials. (Nigeria, Female in Private Sector, MTP 2023)

3.5.4 Impact on Institutional Collaboration

Institutional collaboration is significantly high, with MTP graduates acting as connectors. Although there are examples of collaboration based on formal contractual agreements, most of the collaboration were practice-driven. It is a core mechanism through which MTP graduates target impact—especially via government, research institutes, NGOs, private sector companies and donors. Cross-border or regional cooperation is currently at moderate level. This level of collaboration can still be made more deliberate and coordinated, although the beginnings of knowledge diffusion, technology transfer, and market linkages are already set into motion.

Institutional collaboration includes support to capacity building, technology transfer, trials, laboratory work, extension, mentorship, policy development, quality standards, or curriculum development. Below are some examples of collaboration within the sector spearheaded by MTP graduates.

a) Research institutions partnering with NGOs, projects, producer organisations and donors

Benin: An MTP graduate working as Program Officer for the Atacora-Donga Regional Union of Cashew Producers led the establishment of eleven (11) cashew wood parks using quality planting materials during the period 2019-2020. This was done with the technical support from INRAB (National Institute of Agricultural Research of Benin) and benefitted local producers including 8 young people, 1 woman.

Ghana: The Cocoa Research Institute of Ghana (CRIG) that has MTP graduates in its top management, produces research materials relevant to cashew that have been shared to producers and processors through the Ministry of Agriculture and field units, such as the Wenchi Agricultural Station, headed by an MTP graduate. Companies also approach the Ministry to link them to farmer producers.

b) Inter-professional bodies collaborating with cooperatives and regulatory bodies

Cote d’Ivoire: An MTP 2015 graduate working as Operational Assistant for the Inter-professional Organization for the Cashew Nut Sector had been engaged by the Council for Cotton and Cashew to supervise surveys, conduct trainings, and provide technical support.

Benin: An MTP graduate explained to the Ministry how the sector is organized in other countries. All of this led to the establishment of the interprofessional body and certain regulatory measures.

c) NGOs partnering with universities, state authorities and interprofessional bodies

Togo: AgroEspoir, an NGO supporting cashew value addition is headed by a female MTP 2022 graduate. One of the by-products being pursued is chicken feed for which the organization worked with the University of Kara to optimize nutritional content.

Benin: The Chief Executive Officer of the Centre for Synergy of Farmer Actions (CSAP), an MTP 2019 graduate, actively contributed to strengthening collaboration between public institutions, civil society and private sector actors in the cashew value chain. She worked closely with the Territorial Agency for Agricultural Development (ATDA), as well as with local NGOs whose capacities were strengthened, including three national organizations such as FENAPAB.

d) Public sector partnering with universities and donor partners

Cameroon: An Agricultural Technician of the Ministry of Agriculture, an MTP 2018 graduate, regularly receives university students for internships and thesis work in his cashew farm and processing unit, thereby contributing to the training of a new generation of professionals.

Nigeria: CRIN, that has MTP graduates in top management, in collaboration with Food Pro and Summit University received from GIZ MOVE Matching Grant. The ultimate objective is to build the capacity of women and young adult cashew farmers in two States, to use digital tools that have been developed for production and pest management.

e) Regional Collaboration

Mali: The Director of the Society for the Study and Assistance of Sustainable Development (SEADD), an MTP 2013 graduate, was designated Ambassador for the African Cashew Agency, FOCAS (Sahel Cashew Forum), organized every two years by Burkina Faso. He organized the same forum in Mali in 2019.

West Africa: Many interviewed graduates indicated that they have maintained contact with several MTP peers from across the borders and continue to consult them when they need information and/or advice. The dominant platform for this exchange is the WhatsApp software that consists of various groups, mostly inter-MTP Edition graduates per group. The relationships established continue to generate opportunities for collaboration and can be considered an existing regional cashew network, albeit informal

3.5.5 Impact on Public-Private Engagements

There is no specific quantitative indicator of increased public-private engagement as a result of implementing Cashew MTP in the past 10 years. Nevertheless, a highly significant number of survey respondents believe that the MTP has contributed to their ability to influence public-private engagement to a “Great Extent” (39%) and to “Some Extent” (45%). Sixteen (16) of the in-depth interview respondents provided a description of these engagements, half of whom are women holding Executive positions in their respective organizations, a mix of public and private. Essentially, graduates engaged in hybrid public-private roles that link government institutions, private agribusinesses,

producer/processor organizations, and development partners. These roles that are largely facilitative, technical, and coordination-oriented, fall under the following activity categories:

(1) Capacity Building and Extension Services

- Training of farmers, processors, and cooperatives on good agricultural practices (GAP), post-harvest handling, quality control, and processing standards endorsed by government;
- Joint extension activities implemented through public agricultural agencies but often financed or co-designed by private companies, NGOs, or donor projects;
- Collaboration between public regulatory bodies and private processors/exporters to improve inspection, certification, and quality monitoring systems.

Case: “The Togo Youth Training and Integration Center works extensively with the Ministries responsible for Agriculture and Trade. They train agents on good harvesting, packaging practices, Ministry standards and requirements for the sale of cashew products.” (Togo, Male from NGO Sector, MTP 2015)

(2) Policy Implementation and Feedback Cycle

- Cascading national cashew policies, standards, and strategies into operational guidelines at local and value-chain levels;
- Providing private-sector feedback (from farmers, processors, exporters) to public institutions on policy gaps, feasibility of techniques/approaches, and market constraints.

Case: “The Togolese Ministry of Commerce is represented in all regions; we are very far from the city, but the Regional Director travels to us AgroEspoir Afrique Ltd, to implement the cashew program. We are indispensable. We work with the municipalities on their local plans. We are working to develop training booklets and learning guides on cashew processing.” (Togo, Private Sector, Female, MTP 2022)

(3) Market Linkages and Value Chain Coordination

- Facilitating buyer–seller linkages between producers, processors, exporters, and input suppliers;
- Supporting contract farming arrangements, aggregation models, and traceability systems that involve private firms operating within public regulatory frameworks.

Case: “In the field of cooperatives, we had a partnership with the State and with processing factories. The usual practice has been selling RCN to exporters. The new paradigm was to strengthen this partnership to develop the processing segment of the value chain. We are currently bridging the gap between production and processing, ensuring that producers are well trained and generate quality products.” (Benin, Private Sector, Male, MTP 2016)

(4) Project Implementation and Public–Private Partnerships (PPPs)

- Donor-funded or government-led projects that explicitly promote public–private partnerships in the cashew sector.
- Multi-stakeholder platforms involving ministries, research institutions, private firms, and farmer organizations.

Case: The Cocoa Research Institute of Nigeria (CRIN) won a collaborative project under the GIZ MOVE Matching Grant. The ultimate objective is to build the capacity of women and young adult cashew farmers in two States, to use digital tool specifically a mobile app that ascertains soil nutrient composition, determine yield, detect

pests/diseases and provide solutions. CRIN provides the technical support, Food Pro trains on primary processing and Summit University provides the digital solutions. (Nigeria, Public Sector, Male, MTP 2016)

(5) Facilitation of Knowledge and Innovation Dissemination

- Link research institutions, public extension systems, and private enterprises with new knowledge on cashew;
- Promote innovations (new varieties, processing technologies, digital tools) piloted by private actors but scaled also through public systems.

Case: “The Tree Crops Development Authority-Crops Research Institute (TCDA-CRI) Research Agenda Platform will bring together public and private entities to deliberate on priority research concerns. Private sector participation in the cashew industry in Ghana is growing. Two new big cashew companies are being planned, one of them is Sampa Nuts which TCDA is helping to acquire equipment from Vietnam.” (Ghana, Public Sector, Male, MTP 2022)

3.5.6 Enhanced investment in the Sector

The Study was not able to quantify the evidence for increased investment in the cashew sector attributed to the Cashew MTP. Nevertheless, the survey and interview results suggested meaningful investment flows across the engaged countries. These came from MTP graduate-led enterprise creation and those put up by the recipients of their cascade training and knowledge transfer, expansion of current operations also by the graduates, mobilization of institutional and donor resources for the capacity-building and other technical initiatives. It can be surmised, therefore, that the Cashew MTP acted as catalyst for financial and non-financial investments to benefit the cashew value chain.

Previous section already described the 73 new enterprises established by MTP graduates that consisted of cashew production and orchard development, processing, trading, aggregation and marketing. Those with existing enterprises either expanded their cashew plantations and/or applied modern agronomic practices, upgraded their processing methods and equipment or diversified their cashew products

Other types of investments went into training and capacity-building activities, consultancy and advisory services. They were paid services that had come from either the government and/or donor resources. MTP graduates also designed and successfully brought in new projects for cashew sector development. For instance, the Project Director of the NGO DEDRAS and MTP 2015 graduate, reported that he led the mobilization and implementation of project partnership with the DAAD (German Academic Exchange Service) and Agribusiness Development World (2014–2016), as well as the Civic Engagement Alliance (2016–2020) under the Cordaid-ICCO (Interchurch Organization for Development Cooperation) initiative that benefitted the cashew sector in Benin. The latter was their advocacy partner that led to the State signing an agreement with the Interprofessional Cashew Organization for appropriate levies would benefit the sector.

3.6 SUSTAINABILITY

The sustainability of MTP outcomes is rated **moderate to high** depending on whether the skills, practices, structures, and value-chain improvements are consistently upgraded to align with the changing nature of climate and technological advancement, and institutional systems requirements are addressed.

3.6.1 Sustainability of Technical Knowledge and Skills

The MTP uses participatory, hands-on training methods (pruning, grafting, pest control, orchard layout) that create lasting practical skills. Many MTP graduates integrate these skills into their own farms, making continuous practice more likely. They also have packaged a training design (theoretical and practical, but especially practical) to share the knowledge and skill to others, therefore it becomes embedded in one's regular practice. So long as MTP graduates practice what they know and keep abreast with new methods and approaches. However, this is where the lack of systematic follow-up with graduates and refresher training becomes a big gap to the sustainability of technical benefits, especially as the cashew industry is characterized by volatile market movements and fast-changing environmental and technological context. As Dr. Paul Adu-Gyamfi of the Cocoa Research Institute of Ghana and MTP Resource Person pronounced:

“Even as we have achieved 60% dissemination of cashew knowledge built through research, science is running faster than the speed of light. There are more discoveries and more tools that are currently being used to improve cashew productivity. We need to roll out these new tools to the value chain actors to update their existing approaches and improve cashew production. For instance, in the early days of MTP we were using time-consuming physical or morphological tools to develop cashew varieties. Today, we are using molecular tools (DNA) yet to be learned by most actors.”

The sustained application of technical knowledge and skills also depend on the existence and strength of institutional frameworks. Experiences of MTP graduates differ in this regard. In countries with relatively stronger institutional frameworks—such as Ghana, Côte d’Ivoire, Nigeria, and to some extent Benin, system-level sustainability is reinforced by formal roles, clearer mandates, full or partial integration of MTP graduates into extension services, cooperatives or organisational structures. In these contexts, individual competencies are more likely to be leveraged repeatedly and at scale. By contrast, in countries where institutional frameworks are weaker or fragmented—such as Sierra Leone, Cameroon, Togo and Chad, system-level sustainability depends heavily on individual motivation and personal sacrifices. In these environments, MTP graduates often operate without formal recognition, stable funding or structured opportunities to apply their skills. As a result, while individual sustainability remains high, the continuity of broader sectoral impact is fragile and vulnerable to burnout, career shifts or resource constraints.

3.6.2 Sustainability of the Multiplier Effect (Cascade Training)

MTP graduates have gained recognition and credibility in their community, respective organizations, with relevant government units, national and regional cashew stakeholders. As long as they continue making themselves available, either voluntarily or under contract, they will be seen as valuable in transferring knowledge to other actors in the value chain. The barriers to their continuing knowledge transfer, as earlier discussed, will be transport cost, time, and lack of incentives if it means taking away time from their own livelihood or family time. Also, without refresher training or recognition, there may be diminishing incentives to follow through.

To ensure sustained dissemination of knowledge and capacities, some MTP graduates working within formal organizations had adopted strategies of institutionalizing capacity building measures. In Benin, a female MTP 2019 graduate was part of the integration of the Pro-Leaders Training of Trainers (ToT) into the national framework for developing skills and supporting actors across the cashew sector. The Pro-Leader approach that started as a project NGO initiative, involves mobilizing local change agents, both men and women, trained in GAP, post-harvest handling and cashew marketing. In Mozambique, what was a GIZ-funded project in 2018-2020 was transformed into a regular public-private program by the Institute of Nuts, led by a female MTP 2017 graduate. The School for Cashew Processing a centre established in Nampula Province for product development and technology transfer has already supported 500 male and female farmers/entrepreneurs to add value to the cashew apple/nut such as butter, hamburgers among others, and also taught business management.

3.6.3 Sustainability of Social and Leadership Outcomes, Particularly Women and Youth Leadership

The behavioural change affecting personal development had been transformational for most MTP graduates, seeing themselves in a more positive light and also experiencing the improved relations that it had brought them both at home and the workplace. Skills in facilitation, communication, leadership persist beyond cashew promotion. Once they have assumed leadership roles and have proven their worth to others, they will be motivated to become long-term community leaders. These positive changes also apply to the men and women that have been trained, oriented and mentored by the graduates. Gender-inclusive practices emerged as an important sustainability enhancer. Where women are empowered and actively involved in leadership and decision-making, ownership of change is broadened, and practices are more likely to persist beyond individual actors. Personal transformation as an outcome of the MTP will most likely be sustained and harnessed not only for progress in the cashew sector but for other priority development sectors at individual, community or institutional levels.

3.6.4 Sustainability of Value Chain Improvements

Cashew producers that benefitted from knowledge on GAP (e.g. orchard management, drying, sorting etc) will continue supplying better-quality nuts. Buyers often maintain improved procurement standards once introduced. Market volatility may affect farmers' motivation to adhere to quality protocols. Sustainability is stronger when quality is rewarded with acceptable prices. Cashew processors have discovered the versatility of the kernel and cashew fruits as a livelihood source. The movement of the cashew value chain towards recycling waste for nutritional gains, medical treatment, bio-fertilizer, engineering and mechanical purposes, will ensure interest of investors in the sector. The sustainability of interest and investments, however, rests on consistent access to efficient and affordable equipment, adequate infrastructure such as utilities and transport, existence of regulatory framework that safeguards operational resources and profits, institutional support to capacity-building, research and product development, and complementary financial capital. Based on the optimism of some MTP graduates regarding the cashew industry, the availability of these conducive factors is relatively better in countries with the highest level of cashew production and processing in the West Africa Region. This includes Cote d'Ivoire, Nigeria, Benin and Ghana, listed in order of

performance ranking¹⁰. In contrast, MTP graduates from Burkina Faso, Togo, Sierra Leone expressed serious concerns due to the limitations in these technical, policy/regulatory and institutional support to the sector.

Normal economic expectations would state that private enterprises and cooperatives tend to exhibit higher sustainability because incentives are embedded in business models. However, the context of the private sector in the cashew sector is marked by market volatility largely caused by unstable RCN supply and pricing. Those with limited financial resources find consistent operations at full capacity very difficult. Many MTP graduates-processors find themselves halting operations at some point in the year, resulting to low income and low labour absorption. To sustain their companies and permanent staff, a few cashew processing and trading entrepreneurs resort to operating complementary businesses such as alternative commodity trading (Balmed Trading in Sierra Leone) and diversified crop and livestock farming (Nimdee Hyeren Cashew Processing Ltd and Kabile Cashew Farmers and Processing Cooperative in Ghana).

Similar to the condition to sustain the benefits of technical knowledge and skills, the sector needs to be up to date new methods and approaches in order to maintain efficiency and high productivity and high quality.

3.6.5 Cashew Master Training Program Sustainability

The MTP Program itself is reflecting on a way to sustain the delivery of a high quality training without too much cost burden, especially as the ACA will not be able to provide the level of subsidies provided by GIZ that is exiting this role. The tuition per person rate of \$3,000 per participant is too high for most cashew actors. This limits accessibility for rural farmers, women, private sector actors with low capital and countries with weak institutional budgets. The demand for a Cashew MTP training was obviously high gauging from the highly positive feedback from those engaged in the study. Survey results also rated the MTP experience as Highly Satisfactory and when asked if they will recommend MTP to others even for a fee, 98% answered in the positive. When engaged, there was unanimity among MTP graduates that it will be difficult for MTP to leave the burden of full fee payment to prospective participants. This includes company CEOs interviewed with one exception. Three (3) company CEOs volunteered USD1,000 as their limit if ever they have to support a staff to an MTP. Government workers also said their institutions have limited budget especially for international training with such high cost. For CEOs, fully financing a staff to attend MTP is a business decision. They have to determine the return on their investments and there is a need for guarantee that the trained staff will stay in the job. This requires a determination from both the company and MTP Selection Committee regarding career plans of every candidate.

¹⁰ The African Exponent. Top 10 Cashew Producers in Africa 2025, 16 July 2025

4. RECOMMENDATIONS

The survey gathered the opinions of MTP graduates regarding overall recommendations to improve the program. The responses in Table 10 below highlight an emphasis on follow-up and refresher training, continuity of MTP, and support resources.

All MTP graduates engaged in interviews and the survey had lauded the MTP for the quality of training and the transformative effect on their professional and personal lives. There was a prevailing opinion to continue the program because “*stopping it will be a waste of money*” according to one graduate. This means the need for such capacity building initiative is still high especially for countries where the industry does not have coordinated and institutionalized support.

Table 10: Recommendations by MTP Graduates to Improve the Cashew MTP, (% , N=499)

	Recommendation	Nos.		%
		Sub-theme	Theme	
1	Follow-up, Evaluation, Refresher Courses, Coaching, Mentorship, Internships for MTP graduates		111	22.2
2	Training Delivery Improvement		94	18.8
2.1	Adoption of Blended Learning	6		
2.2	More Time for the Practical and Field Application Sessions	34		
2.3	Longer Duration of Training to Cover More Sessions and Practicals	32		
2.4	More Participatory, Interactive and Adult-Learning Approaches	2		
2.5	Others	20		
3	Program Expansion and Continuity		73	14.6
4	Financial Support to MTP graduates and Linkages to Employment Opportunities		70	14.0
5	None		59	11.8
6	Post-MTP Support to Networking and Coordination of MTP graduates		57	11.4
7	Curriculum and Content Improvement		25	5.0
7.1	Deeper Treatment of Topics	8		
7.2	Adoption of Digital Solutions	2		
7.3	Additional Topics for Inclusion	6		
7.4	Tailored Sessions Based on Participants’ Level of Experience, Training Needs and Country Context	4		
7.5	Enhance Gender Consideration	2		
7.6	Others	3		
8	Logistics and Administrative Improvement		26	5.2
9	Creation of Partnerships and Collaboration		23	4.6
10	Training Venue Diversity		15	3.0
11	Others		13	2.6
12	More Sponsorship for MTP Participation		12	2.4
13	Improvement of Communication, Marketing and Visibility		10	2.0
14	Improvement in Selection Process		6	1.2
15	Engagement of MTP graduates in Cashew MTP		9	1.8
16	Provide Adequate and Appropriate Materials for Cascade Training		7	1.4

The Cashew MTP has proven that it can deliver quality training that produce professionals that are competent in moving the cashew industry forward. The challenge is how to convert the individual excellence into sustained, system-level impact. Improving the efficiency of the MTP therefore requires a strategic shift: from a predominantly training-centred model to a human capital development model that enables graduates to consistently navigate sectoral barriers as well as take advantage of opportunities. The following are recommendations for consideration and action by the Cashew MTP Team, led by GIZ and ACA.

4.1 Develop diversified and sustainable financing models

Full fee-paying option seems unaffordable to majority of the MTP graduates, including those speaking on behalf of their public institutions and company management. The following options should be studied:

- a. Explore funding partnership with multiple donors
- b. Explore partnerships with agriculture-oriented tertiary institutions preferably with regional/international scope, as co-implementing organization to take advantage of conference facilities, administrative and logistics capacity as well as technical training competence.
- c. Cost sharing with companies / public and private organizations / inter-professions wishing to send their personnel/members for training. Awareness-raising and consultations can be pursued with these entities.
- d. Explore partnership with the CICC to also ensure that financing policies include capacity building initiatives such as the MTP
- e. Selection process should be reviewed designing the criteria to prioritize participation of candidates who have direct connection to the cashew industry and/or whose career plans include contributing to the cashew industry.

4.2 Cost-efficiency measures

- a. A fully decentralized MTP will miss the opportunity for regional exchange that had been part of the original program concept aiming to effectively transfer knowledge. Therefore, country-level training can focus on post-MTP Technical Trainings that are highly relevant to the needs of local cashew industry actors. The trainings can be organized in collaboration with alumni networks and can tap highly competent MTP graduates as Resource Persons. One advantage of in-country training would be the potential funding support that can be mobilized from national cashew organizations existing in the respective countries.
- b. Enhance the effort for other countries to host MTP along the lines of the East Africa training.
- c. A blended learning format has drawbacks that include reduced participants' interaction in an online environment as well as the lack of assurance of internet stability. As a priority option, the program should explore reducing the number of sessions while extending the number of days in order to cover the most essential topics and practical activities. The option to use online delivery can be explored for the remaining topics most especially soft skills and conceptual themes, complemented with access to online reading materials and exchange/discussion fora.

4.3 Selection process

- a. MTP should ensure that information regarding application timing and process reaches the most relevant candidates. Adding the cashew local and national inter-professions vthe relevant candidates. This is mostly important for those in remote rural areas with no internet access, including female producers and processors who only have the Associations as their network.
- b. Identify potentials among the senior secondary school graduates but with extensive experience in the cashew sector. This needs to be emphasised especially for female workers in the industry.
- c. Invite more research institutions and universities to participate especially in countries where cashew industry is at infancy stage.
- d. Feedback should be given to applicants who were not accepted in order to exhibit transparency and maintain goodwill.

4.4 Support to Graduate Deployment and Network Strengthening

- a. Introduce a structured mentorship program that pairs trainees with experienced cashew farmers and processors to ensure continuous learning and practical guidance beyond the training. MTP graduates can also have mentor-mentee partnership that can be mutually agreed in a platform such as WhatsApp. The main challenge will be the time of each graduate, busy in their own fields/work, thus, commitment to assignments need to be secured and monitored.
- b. Integrate explicit youth pathways, including mentorship schemes, youth-focused training cascades, and support for service-based entrepreneurship in areas such as processing, mechanisation and quality control. Linking graduates with youth employment and entrepreneurship programmes would significantly increase the multiplier effect of training investments.
- c. Facilitate the mobilization of start-up support for MTP graduates in need of resources to apply knowledge transfer. This can include a Start-up Fund where MTP graduates can apply for modest amount for training.
- d. Facilitate formal integration of graduates into public extension systems or interprofessional organisations. In others, anchoring graduates within cooperatives, private processors or sector platforms may be more effective.
- e. A core group of in-country MTP graduates can be incentivize to take the lead in following-up with graduates periodically to: i) determine how they are applying their mandate of transferring knowledge; ii) identifying the challenges and discussing measures to address them; iii) collate success stories including discoveries about planting materials, diseases and pest control, training delivery approaches, among others; iv) lead a discussion on the status of the cashew industry in the country and determine how MTP graduates can address them including potential projects for which they can present as a proposal to funding and/or technical partners; v) share documented feedback with ACA/MTP for possible updating of MTP curriculum/materials, and/or onward dissemination to other MTP graduates.

- f. Support regional and national alumni networks. Online conferences should be made regular.¹¹
- g. Facilitate regional collaboration mechanisms—such as thematic working groups, cross-country exchanges or joint assignments, allowing MTP to leverage its multi-country footprint more strategically. This is particularly important for addressing shared challenges such as market standards, certification and climate-related risks.
- h. An online platform (Whatsapp, Telegraph etc) that connects all graduates are sought for by those engaged in the study. They believe they will benefit more from learning experiences from different country contexts.
- i. Other digital solutions should be explored in order to connect MTP graduates to each other without barriers and for each of them to have access to information materials.

4.5 MTP Graduate Tracking and Strengthening of Monitoring, Evaluation and Learning (MEL) System

- a. Strengthen database system for graduates’ tracking, networking and information dissemination. There is a sense in some of the graduates that they have been dropped off the MTP network, and may not be benefitting from post-MTP programs.
- b. To ensure immediate and practical application of training lessons, include the preparation of a “break-in plan” on the last session, where participants will answer the listed questions below. The plan can serve as basis for periodic follow-up of graduates especially those who will be highly in need of support:
 - i. How do you plan to apply your Cashew MTP lessons after the course?
 - ii. What assistance do you need to be able to implement your plan?
 - iii. Who should assist you in your plan implementation? How do you plan to mobilize this assistance?
- c. Improving efficiency requires strengthening the MTP’s monitoring, evaluation and learning framework. Current evidence focuses strongly on individual outcomes, but less systematically on system-level change. A more robust MEL approach should capture not only who is trained, but how training translates into organisational change, sector coordination, gender and youth outcomes over time. Such data would enable adaptive management, inform differentiated strategies across contexts, and demonstrate value for money to funders.

4.6 Strengthening of Curriculum and Training Delivery

- a. Advocacy skills should be considered as additional topic for MTP graduates to have the tools to determine appropriate actions they can take to address policy and institutional barriers like price regulations or lack of it, foreign competition, police extortion, smuggling among others.
- b. Include in gender inclusion sessions, the integration of gender-responsive efficiency measures, such as targeted support for women-led outreach, recognition of unpaid contributions, and facilitation of access to resources and leadership roles. Ensuring that women’s increased responsibilities are matched with institutional support will enhance both

¹¹ After the sense-making workshop for the Impact Study, ACA has identified the following actions: 1) each network to have its leadership with one coordinated from the ACA Secretariat; 2) Networks to be supported to organize periodic meetings (online), refresher courses, trainings and programs to reinforce their MTP learnings and transfer knowledge to the industry; 3) make use of local resources; 4) MTP Alumni Series (online webinar); 5) free periodic online webinars focusing on MTP topics and new industry topical issues.

- equity and efficiency. These measures are particularly relevant in processing and cooperative contexts, where women's participation is high but structural support remains uneven.
- c. The role of traditional authorities in the value chain should be highlighted. Traditional authorities have a significant role to play particularly in changing social norms and practices to achieve gender equity and inclusion. They can influence land access and traditions that limit the participation of women and the youth.
 - d. Other essential topics that can help strengthen MTP graduates:
 - 1) Alternative livelihood for off-season period
 - 2) Digital tools for innovation
 - 3) Simple business planning for audience with low literacy
 - 4) Designing cashew industry policy
 - 5) Strengthening regional collaboration and synergies
 - e. More interactive training materials for use after the training such as audio-visuals
 - f. Case studies should reflect the country context of every participant
 - g. Introduce periodic refresher courses, adapting modules to the specific needs/interests of different groups of MTP graduates.
 - h. Post-MTP Cashew Technical Trainings should be made more accessible to graduates that needed follow-through and specialized training. Aside from GIZ MOVE that had been providing such training, MTP should establish a database of institutions, programs and projects across the continent and beyond that have similar offers. Possible collaboration can be explored to influence the design and timing of the relevant technical training with the needs and demands of the MTP graduates¹². Information regarding Technical Training should be made available by MTP to all alumni.

¹² Training can also include Master Classes on Cashew Processing Equipment Fabrications, possibly in partnerships with technical universities.

5. CONCLUSION

This Impact Study assessed the long-term contributions of the Cashew Master Training Program (MTP) to individual capacities, institutional performance, and the development of the cashew sector in West Africa. Using a mixed-methods approach—combining an online survey, in-depth interviews, focus group discussions, and stakeholder consultations—the study finds strong and consistent evidence that the MTP has generated meaningful, multi-dimensional, and largely sustained impacts since its inception.

The MTP has demonstrated high relevance in addressing critical capacity gaps across the cashew value chain. By integrating technical knowledge with leadership, communication, and mindset-change competencies, the program responds effectively to the complex realities faced by public- and private-sector actors. Graduates are better positioned to operate strategically within production, processing, research, policy, and enterprise contexts. Continued demand for the program and wide application of MTP learning underscore its alignment with sector needs.

In terms of effectiveness, the MTP has successfully upgraded graduates' knowledge, skills, and attitudes. Participants report improved technical competence, stronger facilitation and leadership capabilities, and greater confidence to train others and influence institutional practices. The program's multiplier effect is particularly significant, with many graduates cascading knowledge to farmers, processors, traders, and trainers, often reaching large numbers of beneficiaries. These outcomes confirm that the MTP extends beyond individual capacity development to foster broader sectoral learning and change.

The program also demonstrates moderate to high efficiency, delivering multiple outcomes from a single training investment. Its comprehensive curriculum, participatory delivery, and peer-learning environment maximize returns within a relatively short training period. Institutions employing MTP graduates benefit from enhanced performance without incurring additional training costs. However, efficiency is constrained by external factors, including limited access to finance and equipment, weak institutional coordination, and insufficient post-training follow-up, which reduce the full realization of potential benefits.

At the impact level, the MTP has contributed to strengthening the cashew value chain through improved production practices, enhanced quality management, increased value addition, new business creation, expanded research and innovation, and greater engagement in policy development and public-private collaboration. The program has also generated notable gender-transformative outcomes. Female graduates report increased confidence, visibility, and leadership roles, while male graduates demonstrate improved gender awareness and promotion of inclusive practices. These changes extend beyond the workplace, influencing community engagement and household decision-making.

Regarding sustainability, many MTP outcomes—particularly those related to behavioural change, leadership, and institutional embedding—show strong prospects for continuation. Graduates continue to apply and transfer knowledge years after participation. Nonetheless, sustainability remains uneven due to limited post-training support, lack of structured alumni engagement, resource constraints, and weak systems for tracking graduate outcomes and sector-level impact.



In conclusion, the Cashew Master Training Program represents a high-value investment in human capital for the cashew sector in West Africa. Its holistic design and transformative learning approach have generated impacts well beyond direct beneficiaries. Strengthening post-training follow-up, alumni networking, resource linkages, and impact monitoring will be essential to consolidating and scaling these gains while preserving the program's core strengths.