**TECHNICAL REPORT ON**

**CSIR COMMERCIALIZATION WORKSHOP**

**DATE: 19TH & 20TH MARCH, 2025**

**VENUE: MAIN CONFERENCE ROOM, HEAD OFFICE**

**ACCRA**

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# OVERVIEW OF DAY ONE

## BACKGROUND

The Commercialization Directorate was reinstated in 2025, with Mrs. Naomi Owusu Appiah assuming office as the newly appointed Director. To streamline commercialization and public relations efforts across all institutes of the Council for Scientific and Industrial Research (CSIR), the inaugural Commercialization Workshop was held on 19th and 20th March, 2025 at the CSIR Head Office, Accra .

The event brought together Commercialization and Public Relations officers from all 13 institutes of the CSIR, Heads of Corporate Affairs, Commercialization and Resource mobilization Divisions at the Head Office; as well as representatives from two of the Council’s affiliates - CSR Plus and the CSIR Technology Development and Training Centre (TDTC). Also in attendance were delegates from Kuafo Marketplace and the Intellectual Property Office (IP Office).

This report summarizes the two-day event and presentations delivered by officers, with a focus on the following:

* Existing products, services, and technologies
* Strategic income generation initiatives
* Marketable products and technologies for PPP (Public-Private Partnership) collaboration
* Public relations activities
* Challenges and recommendations

## OPENING PRAYER

The workshop started at 9:30 am with an opening prayer said by Mr. Kwaku Asumadu.

## INTRODUCTION OF PARTICIPANTS

Participants, guided by the Director of Commercialization introduced themselves, institutes, and respective roles / duties.

## WELCOME ADDRESS



**Fig 1.0: Director of Commercialization delivering her welcome address**

Mrs. Naomi Appiah, Director of Commercialization, warmly welcomed and acknowledged the presence of attendees to the workshop, which convened a diverse group comprising Chartered and Professional Marketers / business experts, Public Relation Officers, Heads of Commercialization Divisions, Assistant Heads, Public Relations Officers, as well as the leadership of CSIR Plus, CSIR-TDTC, Kuafo Market Place and the Intellectual Property Section. In her welcome address, she expressed the workshop’s primary objectives, stressing that it was organized to among others afford the DoC the opportunity to present her vision for the Directorate and solicit inputs from all, in the form of strategy formulation and implementation to achieve set mandate. She encouraged all participants to actively engage, collaborate, and share insights to strengthen commercial activities and realize collective goals within the CSIR framework. Her call to action emphasized the critical need for unity and shared commitment, underscoring the directorate’s vital role in advancing the council’s commercial agenda.

## OPENING REMARKS



**Fig. 2.0: Director of Administration, CSIR given her opening remarks**

In her opening statement, Mrs. Genevieve Yankey, Director of Administration, emphasized the importance of regular conferences as a vital platform for fostering networking and collaboration among CSIR professionals. She highlighted that such engagements are essential to drive effective commercialization of CSIR initiatives and to sustain relevance through proactive participation and coordinated efforts.



**Fig 3.0: Director of Finance, CSIR delivering a speech**

In his address, the Director of Finance urged all to uphold the highest standards of professionalism, emphasizing that this should be evident in their conduct and work ethics. He underscored the deliberate decision to reinstate the Commercialization Directorate, noting that its revival was not without purpose. Consequently, he called for enhanced collaboration among the team to position the Council for Scientific and Industrial Research (CSIR) as an exemplary workplace. The Director expressed his commitment to fostering teamwork, assuring participants of his readiness to support collective efforts. He revealed that he had already initiated third-party discussions with Mrs. Appiah to this end. "We are prepared to provide you with the maximum support," he affirmed, reinforcing the pledge of Management to resource the team adequately. Further, he encouraged all present to cultivate a sense of ownership, likening their roles to running a personal enterprise. "Consider this your own business," he advised, "one that you manage with the vision that your children’s children will inherit it." He concluded on an optimistic note, suggesting that through unified efforts, the team could collectively take pride in future achievements.

## KEY NOTE ADDRESS

**The Director General, CSIR, giving his key note address**

The Director-General (D-G) of the Council for Scientific and Industrial Research (CSIR), Prof. Paul Pinnock Bosu, delivered the keynote address at the workshop which featured on “Building a Robust CSIR Commercialization Directorate for Increased Productivity”. He started by warmly welcoming corporate directors, participants, and stakeholders, emphasizing the critical role of the commercialization workshop in advancing CSIR’s mission. Reflecting on a similar event five years ago, he highlighted the establishment of the Commercialization Directorate as a significant milestone. The D-G also noted the inclusion of Public Relations (PR) units/sections from all institutes and the Head Office, emphasizing a comprehensive approach to commercialization and marketing, and stressed the interdependence of PR and marketing in promoting CSIR’s products and services.

## Areas of Emphasis by the Director-General: Vision and Direction for Commercialisation

The D-G expressed unwavering confidence in the Director of Commercialization (DoC), praising the clarity of her vision. He emphasized that the DoC’s presentation would serve as a cornerstone for CSIR’s commercialization strategy, aligning with participants’ expectations and providing a clear, actionable roadmap for the future.



### Interest in CSIR Products and Services

Prof. Bosu highlighted a surge of interest from potential business partners and private sector entities from 2023 onwards, but voiced concern over the failure of many MOUs and agreements to materialize. He stressed the need for CSIR to adopt a resolute stance, ensure agreements are grounded in solid terms and prevent external parties from exploiting or undervaluing CSIR’s contributions.

### Legal and Conflict of Interest Issues

The D-G drew attention to ongoing legal disputes tied to MOUs and agreements, citing personal involvement in court cases as evidence of these challenges. He identified conflict of interest as a significant internal issue, exemplified by staff exploiting CSIR systems for personal gain, such as printing personal receipts or obstructing business engagements. He urged employees to respect professional boundaries and refrain from misusing CSIR’s name or resources.

### Indiscipline and Timeliness

Addressing internal discipline, the D-G flagged lateness and disrespectful behaviour as persistent issues. He emphasized that timeliness is vital to maintaining a positive business reputation, sharing a classmate’s commendation of CSIR’s punctuality during a training program as a model to emulate. He called for a renewed commitment to discipline and punctuality to bolster CSIR’s image.

### Reward System and Retooling

The D-G acknowledged shortcomings in the reward system for diligent employees, noting its inclusion in CSIR Commercialization Guidelines but inconsistent application across institutes. He highlighted varying performance, with some institutes excelling while others faltering. He expressed optimism about a proposed retooling initiative, which, pending government approval, could inject funds into commercialization efforts and enhance operational capacity.

## Final Remarks and Anticipation

In concluding, Prof. Bosu expressed keen anticipation for the upcoming presentations, eager to assess the current state of commercial activities across CSIR’s institutes.

## PRESENTATION BY DIRECTOR OF COMMERCIALIZATION

Mrs. Naomi O. Appiah, Director of Commercialization, presented an overview of the commercialization policy within the Council for Scientific and Industrial Research (CSIR). Her presentation addressed the policy structure, achievements, SWOT analysis, and vision for the Directorate. She highlighted that the CSIR Act of 1996 introduced market-driven principles to promote the commercialization of technologies and research outputs, but stressed the need for updated policy guidelines to improve implementation.



## Current Structure and Achievements

The commercialization framework spans divisions in 12 CSIR institutes, Commercialization and Resource Mobilization, as well as Corporate Affairs Divisions at the Head Office; which are all coordinated by the Director of Commercialization. She mentioned two limited liability companies, CSIR Plus and CSIR TDTC, tasked to engage the private sector in the transfer of marketable technologies to industry players. Key selected achievements within CSIR commercialization space were briefly touched on, as well as the analysis of our strengths, weaknesses, opportunities and threats (SWOT). Some of our strengths include a portfolio of marketable technologies, an Intellectual Property (IP) Office, and specialized expertise, while a key weakness is the limited adoption of CSIR technologies by the private sector.

## Vision for Commercialization

The Director reiterated the commercialization mandate of generating 30% of CSIR’s recurring expenditure through commercial operations, underpinned by four strategic thrusts of her vision. Each thrust includes targeted interventions to drive progress, as detailed below:

* Policy / Operational Reforms: Establishing a semi-autonomous business unit with separate accounts to enhance transparency and operational efficiency. The rationale of this operational reform is to ensure CSIR, though a public sector entity operates like the private sector in its business activities.
* Innovative Business / Marketing Strategies: the use of a four-stage approach namely Product Development; Business Incubation; Business Development and Private Sector Partnerships to foster market-relevant solutions. The application of internal marketing principles via employee engagement, transparent communication and campaigns; as well as close collaboration with public relations and other existing structures within CSIR would be deployed to boost visibility and market share. This includes aligning efforts with industry best practices, aggressively creating a platform for networking with governmental agencies as well as creating a one-stop shop for CSIR products and services, among others.
* Strategic Funding Options and Use of Capital: Exploring sustainable internal and external funding mechanisms, including a dedicated bank account for commercialization activities, would be leveraged to ensure financial resilience. Strategic efforts would focus on pursuing income streams such as business pitching, franchising, licensing, CSIR Provident, Superannuation and Endowment Funds; and other legal methods, while critically evaluating private sector proposals to secure beneficial partnerships.
* Building a Strong Team: Assembling a skilled, motivated team across CSIR institutes, supported by continuous capacity development and a clear motivation system for efficient and profitable operations would be at the forefront of affairs.

# SUMMARY OF COMMERCIALIZATION AND PUBLIC RELATION

## ACTIVITIES

## CSIR-SRI



### Existing Products, Services and Technologies

CSIR-SRI focuses on soil, land, and water management research to support sustainable agriculture. Key innovations include:

* Soil Fertility Mapping – Helping farmers optimize soil management.
* Climate-Smart Agriculture – Techniques to improve resilience to climate change.
* Land Restoration Techniques – Solutions to combat soil degradation and promote sustainable land use.

### Strategic Income Generation Interventions

CSIR-SRI supports commercialization and income generation through:

* Promotional Materials – Brochures, press releases, and corporate materials to market income-generating projects.
* Strategic Partnerships – Collaborations with the media, business associations (e.g., Association of Ghana Industries, Ghana Chamber of Commerce), and influencers to expand reach.
* Policy Advocacy – Engagement with government agencies and policymakers to create a favorable environment for technology adoption.

### Marketable Products and Technologies for PPP Collaboration

To attract public-private partnerships (PPPs), CSIR-SRI promotes:

* Market-ready research innovations – Technologies for soil fertility, climate adaptation and land restoration.
* Tailored solutions for industries – Research outputs packaged in user-friendly formats for businesses and policymakers.
* Success stories and case studies – Demonstrating the impact of CSIR-SRI’s work to potential investors and partners.

### Public Relations Activities

To enhance commercialization, PR efforts focus on:

* Strengthening Public and Private Sector Engagement – Promoting research outputs via media campaigns, stakeholder engagements, and events like exhibitions and briefings.
* Leveraging Media Channels – Using a mix of digital (social media, websites) and traditional (radio, TV, print) platforms for outreach programmes.
* Internal Communication and Capacity Building – Coordinating PR efforts across CSIR, sharing best practices, and training researchers in effective communication.

### Challenges:

The following are challenges that hinder smooth implementation of PR activities:

* Limited Resources – Insufficient funding for PR campaigns and outreach.
* Low Public Awareness – Lack of knowledge about CSIR-SRI’s research and its applications.
* Fragmented Communication – Inconsistent messaging across CSIR institutions.

### Recommendations:

To curtail identified challenges, it is important to:

* Develop a Comprehensive PR Strategy – A unified plan for promoting CSIR-SRI’s innovations.
* Establish a Centralized PR Unit – To ensure branding consistency across institutions.
* Increase Budget for PR Activities – Advocating for more funding for communication and commercialization.
* Strengthen Stakeholder Collaboration – Engaging businesses, media, and policymakers to support technology adoption.

### Conclusion & Call to Action

Public Relations is key to a successful commercialization by attracting investment, building public trust, and driving technology adoption. CSIR-SRI needs to prioritize PR efforts, enhance collaboration, and invest in training and resources to maximize impact.

## CSIR-CRI



### Existing Products, Services, and Technologies

CSIR-Crops Research Institute (CRI) offers various agricultural innovations, including:

* Hydroponics Generated Seed Yam – Higher yield and disease-free yam seed production.
* Rapid Cassava Cuttings Multiplication – Boosts cassava seedling production by 300%.
* Improved Taro Varieties – High-yielding and suitable for multiple food products.
* Lima Bean-Maize Cropping System – Enhances soil fertility and minimizes Fall Army Worm spread.
* Cocoyam Low Input Rapid Multiplication Technique – Requires minimal expertise while doubling planting materials.
* Soybean Good Agronomic Practices – Ensures optimized harvesting within 85-100 days.
* CRIFERT Rapid Organic Fertilizer – Made from agricultural waste, improves soil health.
* Root & Tuber and Legume Intercropping – Pigeon pea-yam intercropping increases yield and reduces fertilizer use.
* Bio fortified Yellow-Fleshed Cassava – High in carotenoids, resistant to ACMV, and suitable for industrial use.

### Strategic Income Generation Interventions

Revenue Target: GH¢5,155,434.39 (10% increase from 2024).

Sources of Income: Services, goods, and administrative support.

### Key Strategies:

* Strengthening Research-commercial partnerships to boost revenue.
* Marketable Products and Technologies for PPP Collaboration
* Hydroponics Seed Yam – Assures quality seed production.
* Improved Cassava, Taro, and Cocoyam Varieties – High-yield and disease-resistant.
* CRIFERT Organic Fertilizer – Environmentally friendly alternative.
* Lima Bean-Maize Cropping System – Sustainable soil fertility management.

### Target Partners:

Seed companies, commercial farms, agrochemical firms, food processors, and mining companies.

### Public Relations Activities

* Exhibitions & Fairs – Showcasing technologies to stakeholders.
* Educational Visits – Engagements with students (Primary, JHS, SHS, and Tertiary).
* Media Engagement – Newspaper articles, radio/TV programs, YouTube, and online news reports.

### Challenges:

* Inadequate government funding and high energy costs.
* Weak research-industry linkages and ineffective Intellectual Property Rights (IPR) implementation.
* Competition from international organizations and climate change impacts.

Recommendations**:**

* Strengthen partnerships with key institutions (Tree Crop Development Authority, COCOBOD, etc.).
* Leverage digital platforms for better marketing and visibility.
* Collaborate with other research institutes for consultancy projects.
* Implement robust Intellectual Property (IP) management systems.

## CSIR-OPRI



### Existing Products, Services, and Technologies

CSIR-OPRI offers a range of products and services related to the oil palm and coconut industries, such as:

Products: Oil palm seedlings, coconut seedlings, and oil palm fresh fruit bunches (FFB).

Services: Training and technology transfer, laboratory services, consultancy and contract research.

Other Facilities: A guest house and a basic school.

### Strategic Income Generation Interventions

To maximize revenue, CSIR-OPRI is implementing several strategies not limited to:

* Developing competitive pricing for products and services.
* Expanding the oil palm nursery to increase seedling production and sales.
* Promoting the institute via radio and TV talk shows.
* Participating in trade exhibitions.
* Organizing city training programs.
* Commercializing the guest house.

### Marketable Products and Technologies for PPP Collaboration

Opportunities for Public-Private Partnership (PPP) include:

* Oil palm seedlings.
* Coconut seedlings.

### Public Relations Activities

No PR unit.

### Challenges:

* Public relations issues
* Commercialization budget issues
* Insufficient staff, including a shortage of trained personnel, makes it difficult to communicate effectively with the media.

### Recommendations:

* Adopt a coordinated approach to enhance visibility.
* Allocate a budget for commercialization activities.
* Ensure adequate staffing to support commercialization efforts.
* Set up a dedicated PR office.

## CSIR-PGRRI



### Services, and Technologies

Products & Commodities**:** Includes Taro suckers, coconut, Paulownia, pineapple, plantain, banana, and Rambutan.

### Technologies

* Vegetative propagation techniques
* Seed production methods
* Rambutan grafting and rooting
* Tissue culture technology

### Services

* Identification and marketing of research outputs
* Networking and partnership-building
* Training and consultancy
* Production and sale of seedlings and farm produce

### Strategic Income Generation Interventions

The commercialization division identifies and promotes research outputs to the public through:

* Sale of plant commodities such as taro suckers (260,000+ distributed since 2018).
* Public-private partnerships (PPP), such as collaboration with Tiger Farms.
* Training programs and consultancy services for knowledge dissemination.
* Seedling and farm produce sales as a revenue stream.

### Marketable Products and Technologies for PPP Collaboration

* Taro sucker distribution for farming.
* Vegetative propagation and seed production techniques.
* Rambutan grafting and rooting techniques.
* Tissue culture-based production methods for improved plant varieties.
* PPP agreements such as Tiger Farms collaboration.

### Public Relation Activities

* Building networks and partnerships with stakeholders.
* Promoting plant genetic resources (PGR) conservation and commercialization.
* Engaging in training programs and consultancy to share expertise.

### Challenges

* Insufficient funding to support commercialization activities.
* Competition from other nursery producers.
* Lack of a dedicated product development unit.

### Recommendations

* Management should ensure timely financial support for commercialization efforts.
* Establish a product development unit to complement the commercialization division

## CSIR-FORIG



### Existing Products, Services, and Technologies

CSIR-FORIG offers a range of commercial products and services, including:

**Products:** Prekese syrup, wood furniture, honey, seeds and seedlings,

**Services:** Wood and Furniture Testing Centre, furniture production and research

consultancies.

### Strategic Income Generation Interventions

To enhance revenue, the institute has focused on:

* Establishing a dedicated Commercialization Division to coordinate revenue-generating activities.
* Ensuring customer satisfaction and loyalty to maintain a competitive edge.
* Exploring Public-Private Partnerships (PPP) to reduce production costs.

### Marketable Products and Technologies for PPP Collaboration

* Prekese syrup production (requires automation to scale up)
* Wood production and testing services (expanding to meet demand).
* Beekeeping and honey production (investment in expansion of existing apiaries for sustainability and increased productivity).

### Public Relations Activities

* Managing the institute's public image and outreach activities through social media (Facebook, X, LinkedIn, YouTube).
* Publicizing research outputs and institute activities via media collaborations.
* Producing documentaries, reports, and event coverage.
* Coordinating scientific seminars and reports as part of the Scientific Secretariat.

### Challenges

* High production costs for raw materials like Prekese fruits, honey, and wood.
* Competition from other wood manufacturers.
* Lack of automated dispensers for Prekese and honey production.
* Insufficient PR resources, such as professional cameras, recording devices, and editing tools.

### Recommendations

* Regular price reviews to align with market trends.
* Investment in advertising through electronic media.
* Expansion of Prekese plantations and bee colonies to ensure a steady raw material supply.
* Purchase of automated dispensers to improve efficiency in Prekese and honey production.
* Providing adequate tools and funding for the PR unit to enhance the institute’s visibility.

## CSIR-IIR



### Existing Products, Services, and Technologies

The Institute of Industrial Research (IIR) is a leading engineering research institution in Ghana, operating under the Council for Scientific and Industrial Research (CSIR).

* It focuses on providing technological solutions for national development and industrialization.
* Specializes in various fields from agriculture to zeolites, supporting Ghana's industrialization agenda.
* Staff includes highly qualified professionals with expertise in engineering and physical sciences.

### Strategic Income Generation Interventions

* Diversified financial resource mobilization from government (GOG), donor funding, and commercialization of research outputs.
* Training and capacity-building initiatives, including:
* CNC Training Workshop
* Foundry Technology Training Centre
* Skills training in automotive engineering, CNC technology, and mechatronics.
* Partnerships with various stakeholders to enhance commercialization opportunities.

### Marketable Products and Technologies for PPP Collaboration

* Emphasis on solutions beyond just products, addressing industry needs.
* Alignment with Sustainable Development Goals (SDGs) to attract partnerships.
* Collaboration opportunities in industrial training, research commercialization, and technology solutions.

### Public Relations Activities

Media Relations:

* Established a media contact list for consistent engagement.
* Ensures prompt publication of stories on CSIR-IIR events.
* Actively sources speaking opportunities and interviews.
* Maintain a unit for media enquiries, engagement, and monitoring.

Event Planning:

* Develop a structured checklist for organizing institute events.
* Provide professional support, MC services, and photography for events.
* Reputation Management:
* Crisis communication support, PR counseling, and community relations.

Branding:

* Created various marketing communication materials.
* Coordinated the design and launch of a new institute website.

### Challenges:

Insufficient funding and lack of resources for public relations and marketing efforts.

### Recommendations:

* Prioritize cost-effective marketing strategies (e.g., content marketing, partnerships).
* Seek external funding or corporate sponsorships to support PR initiatives.
* Strengthen collaborations with research and educational institutions.

## CSIR-BRRI



### Existing Products, Services, and Technologies

Marketable Products:

* Pozzolana cement and Pozzomix cement
* Bricks and tiles
* Construction cost indices
* Accident data for research and consultancy

Consultancy and Services:

* Laboratory services and geotechnical consulting
* Traffic, road, and transportation consultancy
* Artisan training and facility rentals
* Geomatic engineering (survey, planning, construction management, fumigation)

Technical Divisions as Income Centers:

* Advanced Material Science Division – Conducts chemical analysis, including water pollution checks.
* Built Environment Division – Provides consultancy, rental income, and cost indices.
* Civil and Structural Labs – Conduct tests for construction industry compliance.
* Geotechnical and Geo-informatics Division – Works on flagship projects, including tailing dams for mining waste.

### Strategic Income Generation Interventions

* Youth Employment Agency Project:

- Trained 250 youth in brick-making to establish entrepreneurial ventures.

- Generated approximately GHS 2.8 million in revenue.

- Major Consultancy Projects (2024):

* Bloomberg Project: Traffic accident data collection with National Road Safety.
* Ghana Standards Authority Partnership: Construction of offices and fence walls across the country to prevent land encroachment.
* Tailing Dam Construction for Mining Companies: Helps prevent environmental pollution by containing mineral waste.

### Marketable Products and Technologies for PPP Collaboration

* Tile cement production – Looking for investors to scale up.
* Mosquito-repellent emulsion paint – Potential product in collaboration with the Materials Division.
* Architectural and Structural Draftsmanship Services – New initiative to generate income.
* Graduate School Development – Exploring commercialization opportunities.

### Public Relations Activities

* Engagement with industry partners for consultancy and research collaborations.
* Training programs and workshops to increase public and private sector participation.
* Brand positioning through strategic partnerships with government agencies like Ghana Standards Authority and National Road Safety.

### Challenges:

* Need for investment in tile cement production and other innovative products.
* Ensuring financial sustainability for commercial ventures.
* Scaling up youth training programs for broader impact.

### Recommendations:

* Strengthen public-private partnerships (PPP) to attract investors.
* Expand training programs to create employment opportunities.
* Seek policy support for commercialization and technology transfer initiatives.

## CSIR- INSTI



### Existing Products, Services, and Technologies

CSIR-INSTI focuses on electronic tools and communication systems for national development. It operates five technical divisions:

Communications, Electronics, Fluid Science, Geospatial & Information Science, and Printing & Publishing.

### Products and Services:

* Consultancy and Technology Transfer
* Printing and Publishing Services
* Training and Advisory Services
* Conference Facilities and Office Space Rental
* Library and Study Area Services
* App Development

### Strategic Income Generation Interventions

Article Processing Charges for Publications:

* $100 for foreigners, $50 for Ghanaians, free for CSIR staff.
* Contract Research and Consultancy:
* App development based on demand.
* Research services for industries, government, and international organizations.
* Expert consultancy on AI, cybersecurity, and emerging technologies.
* Revenue from Facility Rentals:
* Renting out conference facilities, office space, and co-working spaces for events and corporate training.
* Publishing High-Impact Research Journals and Technical Reports.

### Marketable Products and Technologies for PPP Collaboration

* Conference and Executive Conference Rooms
* Library and Study Area Services
* Rental Office Spaces
* Printing and Publishing Services

### Public Relations Activities

* Promoting research publications and consultancy services to attract industries and government partnerships.
* Engaging stakeholders in corporate training and technology adoption.
* Enhancing visibility through technology events and training workshops.

### Challenges:

* Conference facilities not meeting competitive standards.
* VAT and IRS clearance requirements delay job bidding.
* Over 50% of printing jobs are outsourced due to lack of equipment.
* Administrative delays in job execution.

### Recommendations:

* Invest in modern printing machines to reduce outsourcing costs.
* Develop a structured commercialization plan for revenue generation.
* Open separate financial accounts for the printing section to avoid bureaucracy.
* Strict payment policies: Enforce 70% upfront payment for services.
* Upgrade conference facilities to attract more corporate clients.

## CSIR-STEPRI



### Existing Products, Services, and Technologies

* Conference Facilities: Major revenue source, though demand fluctuates.
* Consultancy Services: Only 30% of research staff secure projects.
* Publications: Low sales, including Ghana Herbal Pharmacopoeia.
* Miscellaneous Services: Minimal income from vehicle rentals and photocopying.

### Strategic Income Generation Interventions

* Expanding Conference Market: Leveraging technology and social media, enhancing facilities, and partnering with catering services.
* Increasing Consultancy Wins: Proposal writing workshops to improve grant-seeking abilities.
* Hosting Scientific Events: Organizing seminars, workshops, and report generation for organizations.
* Training Programs: Short courses for young researchers in policy brief writing, data analysis, and scientific communication.
* Enhancing Publication Sales: Updating and expanding distribution of the Ghana Herbal Pharmacopoeia.
* Improving Video Services: Investing in high-quality equipment and skilled technicians.

### Marketable Products and Technologies for PPP Collaboration

* Conference and Event Management: Partnering with external organizations.
* Training & Capacity Building: Providing specialized short courses.
* Scientific and Policy Research Support: Offering research-driven consultancy services.
* Video Documentation Services: High-quality event coverage and promotional videos.

### Public Relations Activities

* No Dedicated PR Officer: Public engagement is carried out through projects.
* Employee-Led PR: Staff share CSIR-STEPRI information via personal and professional networks.
* Digital Presence: Website and social media (LinkedIn, Instagram) used for outreach.
* Stakeholder & Community Engagement: Ongoing collaborations with relevant stakeholders.

### Challenges:

* Uneven demand for conference facilities.
* Low engagement in consultancy projects.
* Poor sales of publications and limited income from minor services.

### Recommendations:

* Diversify revenue sources and expand target markets.
* Improve internal capacity for securing consultancy projects.
* Offer more short courses and strengthen publication sales channels.
* Enhance PR and stakeholder engagement efforts.

## Summary of Presentation by Corporate Affairs Division (CAD), Head Office

The Corporate Affairs Division (CAD) of the Council for Scientific and Industrial Research (CSIR) serves as a cornerstone in advancing the organization’s mission through media and public relations, corporate communications management, and event planning. CAD’s efforts center on elevating CSIR’s relevance to national development by enhancing brand visibility, fostering media engagement, and strengthening stakeholder communication. The division has championed several high-profile initiatives, including the launch of the Digital Soil Map platform, the CSIR Intellectual Property (IP) Launch and Seminar, the 34th CORAF Board Meeting, and the U.S.-Ghana Innovation for Food & Economy Workshop. Additionally, CAD has forged impactful media collaborations with outlets such as GTV, UTV, and Joy News, yielding substantial news coverage and educational content that spotlight CSIR’s contributions.

A key pillar of CAD’s strategy is driving financial sustainability through branding and corporate visibility. The division has introduced a monthly media tracker to quantify the monetary value of media coverage and monitor brand engagement, ensuring measurable outcomes. To maintain consistency and bolster commercial appeal, CAD recommends to develop a brand manual that standardizes branding and communication materials across the organization. Furthermore, by deepening partnerships with media outlets, CAD aims to amplify CSIR’s research outputs, making them more appealing to potential investors and funding bodies, thus laying a foundation for strategic income generation.

CAD is also envisioning to position CSIR as a trusted authority in agricultural research and science, technology, and innovation (STI), with an eye toward marketable products and technologies for public-private partnership (PPP) collaboration. To achieve this, the division proposes establishing a centralized communication hub to streamline content creation, analysis, and dissemination, enhancing accessibility for private-sector partners. A Community of Practice (COP) for CSIR communicators recommends being created to share best practices and foster stronger ties with prospective collaborators. Leveraging digital platforms—such as social media, press releases, and corporate communication tools—CAD actively promotes CSIR technologies, drawing interest from PPPs and reinforcing the organization’s market presence.

Public relations remain a vital focus, with CAD orchestrating CSIR Press Corps engagements to sustain media coverage of research and projects. The division also proposes to implement occasional capacity-building programs for media professionals to deepen their understanding of CSIR’s work, alongside participation in global observances like World Food Day and the International Day of Women and Girls in Science to boost visibility. Social media content creation and curation have expanded CSIR’s digital reach, while a new media engagement framework will strengthen collaboration between CSIR institutes and media stakeholders, ensuring a cohesive PR approach.

Despite some achievements, CAD faces notable challenges. Inconsistent branding and communication materials across CSIR institutes undermine a unified identity, while limited collaboration between CAD and institute-level PR teams hampers synergy. Information flow about new technologies, events, and programs remains constrained, and budgetary limitations restrict the scope of PR and communication activities. To address these, CAD recommends developing a comprehensive brand manual to enforce uniformity, establishing a centralized communication hub for efficient content management, and fostering closer collaboration between CAD and PR teams to improve information sharing. Seeking strategic partnerships and funding opportunities is also advised to alleviate financial constraints.

In conclusion, the Corporate Affairs Division aims to diligently enhance CSIR’s brand visibility, refine communication strategies, and strengthen public relations to position the Council as a leader in research and innovation. By shifting from fragmented efforts to a synergistic approach, CAD objects to solidify CSIR’s reputation as a hub for marketable technologies and impactful partnerships, paving the way for sustained growth and recognition.

## DISCUSSIONS



### Highlighted Concerns

The discussion session revealed several critical concerns regarding the operational and commercial dynamics within the Council for Scientific and Industrial Research (CSIR):

* **Exclusion from Projects**: Marketing and public relations (PR) officers expressed frustration over their exclusion from scientific projects despite being part of institutes. This lack of involvement hampers their ability to effectively communicate and promote products, services/technologies; leaving them unprepared when addressing public or stakeholder inquiries.
* **Visibility Challenges**: An officer raised concerns about the poor visibility of CSIR in Kumasi, specifically noting the absence of adequate directional signage and the deterioration of existing signs, particularly for the Soil Research Institute. This was cited as a barrier to public awareness and engagement.

### Questions, Responses, Call to Action and Comments

The session included a series of questions directed to various participants, with responses from the Director-General (D-G) and other contributors, alongside actionable recommendations and observations:

* **Biochar and Land Reclamation**  
  *Question*: To what extent is CSIR Crops and Soil Research Institutes engaging the government to address illegal mining and land reclamation challenges in Ghana?  
  *Response*: The workshop’s focus is on business-oriented outcomes—products, services, and revenue generation—rather than broader topics like soil recovery. Such discussions may be better suited for a separate forum.  
  *Observation*: The need for alignment between CSIR’s commercial goals and its societal impact was implied.
* **Collaboration on Biochar Production**  
  *Question*: How have CSIR-Industrial Research and sister institutes collaborated to scale biochar production and waste-to-energy initiatives to a commercially viable level?  
  *Response*: Emphasis should be placed on biochar within Crop Research and analytical services, with the latter as a priority. Concrete plans for biochar development are needed, alongside strengthened partnerships with Industrial Research.  
  *Call to Action*: Scientists working on biochar must enhance collaboration to drive progress.
* **Tangible Products from Soil Research**  
  *Question*: Does Soil Research lack tangible products, as suggested by their presentation?  
  *Response*: Soil Research clarified that CSIR’s mandate focuses on technology development (e.g., biochar) rather than tangible products. However, equipment breakdowns have halted biochar production, previously conducted on a small scale. A Public-Private Partnership (PPP) was proposed to scale efforts.  
  *Response*: Local fabrication of equipment should be explored to reduce dependency on imports.  
  *Call to Action*: Management should compile cost estimates and actionable steps to operationalize the initiative.
* **Seed Variety Enterprise**  
  *Comment*: The establishment of a seed variety enterprise aims to separate commercial seed production from CSIR’s core mandate, similar to other initiatives like CCST. Its current status remains unclear.  
  *Response*: CSIR’s mandate limits it to producing foundation seeds, not certified seeds for farmers. A private company was created to capture the commercial value of certified seeds, addressing losses incurred from seed growers’ profits.  
  *Observation*: This reflects a strategic shift toward revenue generation within legal boundaries.
* **Decoupling Commercialization**  
  *Question*: Could commercialization be gradually decoupled from CSIR’s main operations for greater efficiency, while remaining under its umbrella?  
  *Response*: Previous efforts, such as CSIR Plus, underperformed. However, a new proposal involves separate commercialization accounts per institute, managed by directors for transparency and accountability.  
  *Observation*: Bureaucratic constraints continue to challenge operational efficiency.
* **FORIG’s Market Expansion**  
  *Question*: Is FORIG prepared to meet existing demand before expanding into new markets?  
  *Response*: Expansion could strain resources unless current capacity is assessed and bolstered.  
  *Observation*: Strategic planning is essential to balance growth and stability, and the urgent need to partner investors cannot be over-emphasized.
* **Training for Presenters**  
  *Question*: When will HoD’s receive training on consistent, visually appealing templates?  
  *Response*: The Director of Commercialization (DoC) will coordinate with relevant teams to establish training timelines, with a follow-up meeting scheduled.  
  *Call to Action*: Finalize training plans promptly.
* **Pozzolana’s Market Performance**  
  *Question*: How is Pozzolana performing commercially?  
  *Response*: A detailed follow-up discussion is requested to provide insights.  
  *Observation*: Market performance data requires further scrutiny.
* **Collaboration Between PR, Marketing, and Scientists**  
  *Concern*: Poor coordination between PR, marketing, and scientific teams leads to inconsistent messaging and subjective decisions.  
  *Proposal*: Media engagements (e.g., interviews, news articles) should be incentivized, potentially as promotion criteria.  
  *Response*: The DoC and PR team should develop a structured publicity timetable based on key research projects.  
  *Call to Action*: Identify target audiences and promotion strategies, as raised by STEPRI regarding herbal publications (e.g., targeting traditional medicine practitioners and students).

**CSIR TV Status**  
*Question*: What is the current status of CSIR TV, given conflicting information at Institutes like the Crop Research Institute?  
*Response*: This requires corporate-level discussion to ensure sustainability.  
*Observation*: Clear communication and planning are needed to resolve operational uncertainties.

### Summary of Discussions

The discussion highlighted the tension between CSIR’s scientific mandate and its commercial aspirations. Key themes included the need for better internal collaboration, improved visibility, and scalable production models (e.g., biochar, seeds). Management of CSIR emphasized a business-oriented focus for the workshop, while actionable steps, such as equipment cost assessments, training timelines, and partnership enhancements were proposed to address identified gaps. Further follow-up is required to clarify initiatives like CSIR TV and Pozzolana’s market performance.

## Closing Remarks

In her closing remarks, the Director of Administration posed several rhetorical questions to highlight operational and strategic challenges faced by CSIR:

* “With reference to CSIR-BRRI’s presentation, for example, are the details of the accident report updated, and how do we address even a percent uncertainty in such documentation?”
* “Given that 70% of funding must be secured before initiating certain projects, how do we proceed when urgent resources are needed but funds are unavailable? Should we always wait, or is there scope for an alternative plan, such as an emergency fund?”
* “While external funding bridges gaps, how do we ensure sustainability? What policies guide this process, and without them, how do we avoid inconsistent approaches?”

These questions underscored a central takeaway: the urgent need for well-defined policies to guide decision-making. The Director of Commercialization emphasized that without clear guidelines on departmental responsibilities, funding mechanisms, and procedural processes, operations risk relying on individual discretion or informal networks, leading to inefficiencies.

She further stressed the importance of publicizing CSIR’s activities, noting that significant work often goes unrecognized due to inadequate visibility. Structured initiatives, such as annual exhibitions, were proposed as a solution, provided they are supported by a clear organizational plan.

The Director concluded by acknowledging the participants’ engagement and critical contributions throughout the day, expressing appreciation for their support. The session ended with a closing prayer by Ibrahim Kwame Asante.

# DAY TWO

Day 2 commenced with an opening prayer by Mr. Thomas Najah, Head of Commercialisation at CSIR-FRI, followed by a recap of the previous day’s proceedings by Miss Gifty Kayla Amoshie, Public Relations Assistant at CSIR-FORIG, one of the workshop’s rapporteurs.

# SUMMARY OF COMMERCIALIZATION AND PUBLIC RELATION ACTIVITIES

## CSIR-SARI



### Existing Products, Services, and Technologies

CSIR-SARI provides farmers in Northern Ghana with agricultural technologies aimed at increasing food and fiber crop production through sustainable methods. Their offerings include:

* Improved crop varieties
* Agricultural research services
* Technology transfer initiatives
* Training programs for farmers and agribusinesses

### Strategic Income Generation Interventions

To sustain its operations, CSIR-SARI generates income through:

* Project overhead charges (10-15% of project costs)
* Commercialized seed sales and other agricultural inputs
* Collaborative projects with development partners
* Consultancy and training services for agricultural stakeholders

### Marketable Products and Technologies for PPP Collaboration

CSIR-SARI fosters public-private partnerships (PPP) by offering:

* High-yielding and drought-resistant seed varieties
* Innovative farming technologies
* Research collaborations for agricultural innovation
* Technology transfer programs under signed Memorandums of Understanding (MoUs)

### Public Relations Activities

CSIR-SARI actively engages in public relations through:

* Media relations: hosting media houses, coordinating press releases, and monitoring public perception
* TV & Radio appearances: Using platforms like UTV Ayekoo and ZaaTV/Radio for public engagement
* Social media presence: Promoting success stories and research findings
* Stakeholder engagement: Organizing events for industry players and policymakers

### Challenges:

* Limited funding for large-scale commercialization
* Inconsistent policy support for agricultural research
* Difficulty in scaling technology adoption among farmers

### Recommendations:

* Strengthen partnerships with private investors for funding
* Advocate for more government support in policy and financial backing
* Enhance outreach programs to ensure widespread adoption of technologies

## CSIR-Food Research Institute



**Fig 4.0: Head of commercialization Division, CSIR-FRI giving his presentation**

He tourched on products, services and technologies.



**Training Programs**: 32 programs covering chocolate processing, fruit processing, cassava flour production, food safety, herbal tea processing, composite flour products and more.

**Analytical Services**: Food microbiology, food chemistry, and toxicology laboratories.

**Technical Services**: Fabrication of food processing equipment, food packaging, feasibility studies, product development, shelf-life estimation, business incubation, and conference facility rentals.

* **Market Presence**: CSIR-FRI operates an online shop (shop.foodresearchgh.org) and sells research products.

### Strategic Income Generation Interventions

* Renting conference facilities.
* Sales of research products.
* Contract production for local and international markets (e.g., USA, Europe).
* Business incubation programs.
* Feasibility studies and consultancy services.

### Marketable Products and Technologies for PPP Collaboration

* Prekese pellets.
* Kokonte (dried cassava meal).
* High-quality cassava flour.
* Value-added cereal and vegetable products.

### Public Relation Activities

* Customer service workshops.
* Corporate communication strategies, including newsletters, annual reports, electronic flyers, and posters.
* Participation in exhibition shows.
* Engagement with international markets (e.g., USAFDA collaboration).

### Challenges

* Limited funding for commercialization activities.
* Breakdown of critical lab equipment (e.g., HPLC).
* Social media saturation and insufficient funds for boosting online presence.

### Recommendations

* All CSIR Institutes should organize fairs based on global awareness days (e.g., CSIR-FRI for World Food Day, FORIG for World Forestry Day, etc.).
* Strengthen marketing and commercialization strategies.

## CSIR -WRI



### Existing Products, Services, and Technologies

The CSIR Water Research Institute (WRI) provides various products and services, including:

* Laboratory Analytical Services: Physio-chemical and microbiological water quality analysis
* Consultancy and Technical Support: Advisory services
* Water Resource Management: Borehole drilling and rainwater harvesting systems
* Aquaculture Services: Fish farm training, tilapia, and catfish distribution
* Facility Rentals: Bus rental, conference room rental, and library services
* Technical Services: Machine shop for fabrication of parts

### Strategic Income Generation Interventions

To enhance revenue, WRI focuses on:

* Expanding fish farm training at both ARDEC and the main office
* Strengthening tilapia and catfish distribution
* Providing water quality training and borehole drilling services
* Developing machine shop services for parts fabrication
* Offering laboratory analytical services

### Marketable Products and Technologies for PPP Collaboration

Potential opportunities for Public-Private Partnership (PPP) include:

* Borehole drilling services
* Fish farm training programs
* Water quality training
* Rainwater harvesting systems
* ARDEC's Fish Farm Tracker Application
* Laboratory analytical services

### Public Relations Activities

To increase visibility and engagement, WRI:

* Participates in and organizes exhibitions
* Publishes articles on research findings
* Conducts seminars and webinars
* Engages with clients through social media and other communication platforms

### Challenges:

* Delays in repairing the marketing vehicle
* Difficulty in collaborating with scientists
* Insufficient funds for marketing activities

### Recommendations:

* Improve vehicle maintenance to support marketing efforts
* Strengthen collaboration between marketing teams and scientists
* Secure more funding for promotional activities

## CSIR-ARI



### Existing Products, Services, and Technologies

CSIR-Animal Research focuses on developing and transferring technologies to enhance livestock and poultry production in Ghana.

### Core Areas of Expertise:

* Livestock and poultry production (pigs, broilers, layers)
* Poultry feed formulation
* Disease control for livestock and poultry
* Dairy and pasture development for sustainable feeding
* Veterinary services and clinics
* Laboratory services, including:
* Feed analysis
* Microbiological, biochemical, and parasitological analysis

### Products and Services:

* Large white pig breeds for commercial production
* Poultry production (broilers, layers, and eggs)
* Animal feed production and nutritional analysis
* Training and consultancy in livestock farming and management

### Strategic Income Generation Interventions

* Veterinary Home Services: Introducing mobile veterinary services to reach customers in their homes.
* Market Expansion for Poultry and Meat Products: Competitive pricing and improved distribution strategies.

### Business Partnerships (PPP):

* CSIR Family and Nick partnerships focusing on poultry and pig production.
* Private sector investments in breeding and feed production.
* Marketing Audit and Strategy Development:
* Conducted a marketing review to assess visibility and sales performance.
* Focus on social media marketing and customer engagement strategies.
* Revenue Growth: 30% increase in sales compared to the previous year.
* Expansion of animal research programs to improve production efficiency.

### Marketable Products and Technologies for PPP Collaboration

* Poultry breeding programs for broilers and layers.
* Pig farming expansion projects.
* Animal feed production and supply.
* Veterinary services for disease prevention and livestock health.
* Training and consultancy programs for farmers.

### Public Relations Activities

* Social Media Engagement: Increased investment in online marketing and visibility.
* Industry Partnerships: Participation in food fairs, exhibitions, and community engagement initiatives.
* Educational Outreach: Collaboration with schools and institutions to educate on livestock farming.
* Radio and Media Appearances: Promoting CSIR-Animal Research innovations and services.

### Challenges:

* Outdated production facilities, limiting the expansion of poultry and livestock farming.
* Funding constraints for commercialization and expansion efforts.
* Weak marketing team, with only one marketing assistant, leading to operational inefficiencies.
* Supply chain challenges, causing delays in delivering products to customers.

### Recommendations:

* Upgrade production facilities to ensure continuous supply and increase output.
* Seek additional funding through PPP agreements for sustainable business growth.
* Expand the marketing team with skilled professionals for better outreach and engagement.
* Improve logistics and supply chain systems to enhance product availability.

## Summary of presentation by Commercialization and Resource Mobilisation Division,

## Head Office

The Ag. Head of the Commercialization and Resource Mobilization (CRM) Division at the Head Office outlined the division’s mandate and highlighted its key activities. The CRM Division is tasked with liaising with CSIR institutes to drive strategic marketing efforts, promote the organization and report on commercialization activities; as well as serve the interests of all stakeholders - both within CSIR and beyond. The division operates under a framework guided by five pillars: The Council, Customers, Colleagues, Community and Compliance.

During his presentation, the Ag. Head, Mr. Adabunu, showcased notable achievements of the division, including its leadership in organizing logistics for the Chairman’s Trophy Award, an initiative focused on recognizing CSIR institutes that excel in Internally Generated Funds (IGF). The division also played a pivotal role in establishing SeedValue Ltd., a registered spin-off company incubated as the CSIR Seed Company. This goal of the company is to enhance food security by improving access to foundation and breeder seeds, leveraging a strategy that engages scientists, technical experts and registered out growers to boost agricultural productivity. Additionally, the division conducted a market audit to evaluate customer engagement processes, marketing integration, and strategic implementation across CSIR institutes. It further supported technology transfer training programs for various institutes, facilitating knowledge dissemination and capacity building.

In addressing marketable technologies, he emphasized efforts to expand seed production and distribution networks through Public-Private Partnerships (PPPs). He also highlighted strategies to broaden access to CSIR innovations, which aim at attracting investment and fostering collaboration. These efforts underscore the division’s commitment to drive commercialization, enhance stakeholder value and advance CSIR’s mission.

## Summary of Presentation on the Kuafo Market Place – Dr. Engr. Michael Wilson

Dr. Engr. Michael Wilson presented the Kuafo Marketplace, a transformative digital platform aimed at bolstering Ghana’s agricultural ecosystem while significantly enhancing CSIR’s commercialization initiatives. This innovative tool connects farmers, agro-input suppliers, food processors, and marketers, streamlining market access and amplifying the visibility of CSIR’s agricultural products, inputs, and services. By serving as a dynamic advertising hub, the platform empowers registered users—including CSIR institutes—to promote both tangible outputs (e.g., honey, banku mix) and intangible services (e.g., research expertise), directly supporting revenue generation and brand recognition.

A standout benefit for CSIR is the platform’s capacity to market its offerings alongside those of other value-chain clients, effectively complementing commercialization efforts. Dr. Wilson emphasized its role in tackling post-harvest losses—estimated at 30%-40% of Ghana’s food wastage—by linking producers to buyers efficiently, thus aligning with CSIR’s mandate to enhance food security and economic efficiency. Additionally, the platform introduces robust e-commerce solutions, enabling CSIR to expand its digital footprint and tap into new revenue streams. The monetization strategy hinges on advertising revenue, with potential supplementation from subscription fees and transaction charges, offering CSIR a sustainable income source to fund its commercialization activities. Dr. Wilson highlighted scalable funding opportunities through agro-tech partnerships and public-private collaborations, positioning Kuafo as a versatile tool for CSIR to attract investment and broaden its impact. The platform’s adaptability also makes it a valuable asset for government agencies, NGOs, and logistics firms, indirectly elevating CSIR’s profile in optimizing food supply chains. To maximize adoption, Dr. Wilson proposed targeted awareness campaigns, stakeholder engagement through community meetings and training, and media promotions—all of which would spotlight CSIR’s products and services to farmers and buyers. However, he acknowledged challenges such as limited digital literacy among rural farmers, unreliable internet connectivity, and uncertainties in long-term revenue sustainability.

Dr. Wilson concluded with practical recommendations to enhance the platform’s benefits for CSIR: digital literacy training to empower farmers as CSIR clients, offline USSD solutions to ensure accessibility despite connectivity issues, and investment from development agencies to scale operations. By integrating these measures, the Kuafo Marketplace promises to amplify CSIR’s commercialization reach, drive revenue, and reinforce its leadership in Ghana’s agricultural innovation landscape.

## Summary of the CSIR Plus – Mr. Benjamin Addotey

CSIR-Plus Limited, a subsidiary of the Council for Scientific and Industrial Research (CSIR), is dedicated to commercializing CSIR-developed technologies. The company is pursuing several key initiatives to achieve this goal, including technology transfer and research collaborations with industries and government, the formation of start-ups to bring innovations to the market, and the development of industry partnerships to facilitate technology adoption. To boost revenue, CSIR-Plus is seeking funding for specific business opportunities, such as the establishment of Sir Cool Production Plant (Kumasi), Palm Oil Processing Plant (Kade), Pozzolana Factory (Gomoa), FRI Ethanol Plant, and a Printing Machine for INSTI. Additional efforts include contract research, licensing technologies, and investing in industrial production facilities for ethanol, palm oil, and pozzolana cement.

The company’s newly inaugurated Board of Directors is committed to enhancing governance and driving these efforts. However, the success story has not been very encouraging as a result of limited dissemination of information about CSIR technologies, difficulty in determining the financial resources for scaling and the slow pace of stakeholder engagements. To address these challenges, CSIR-Plus plans to improve communication strategies for greater visibility, conduct feasibility studies to clarify funding requirements, and implement an efficient stakeholder response system to accelerate collaboration. Through strategic investments, industry partnerships, and enhanced communication, CSIR-Plus is working to bridge the gap between research and successful commercialization.

## Summary Presentation by CSIR-TDTC – Ibrahim Kwame Asante

The CSIR Technology Development and Transfer Centre (CSIR-TDTC), is a subsidiary of the CSIR and tasked with commercializing research innovations and transferring technologies to industries. The Centre supports CSIR institutes such as CSIR-IIR and CSIR-FRI by providing technology assessments and advisory services, while forming institutional partnerships with entities like Dalex Finance, Ghana Export Promotion Authority and the Ghana Skills Development Fund. To promote CSIR innovations, CSIR-TDTC leverages social media, technology fairs, and business meetings, complemented by capacity-building initiatives such as workshops and training programs focused on technology transfer.

CSIR-TDTC actively pursues investment by crafting compelling proposals and responding to funding opportunities from financial institutions (e.g., Fidelity Bank, Exim Bank, ADB) and other organizations. These efforts aim to secure support for assessing CSIR-developed technologies, advancing new technology development and transfer, and providing skills training for CSIR staff to enhance operational capacity. To this effect, CSIR-TDTC has successfully applied for over one million Ghana Cedis from the Ghana Skills Development Fund and is now in the final stages of process, with initiatives like the Windows 3 Application advancing capacity building for technology transfer. This project, led by, CSIR-IIR aims to foster enterprise development and promote sustainable livelihoods.

Notable initiatives include the OpEx Prize Competition, in collaboration with Dalex Finance, which funded technology startups, and international partnerships facilitating researcher placements and training in Egypt, Germany, and the UK. The Centre also drives investment in CSIR-developed products, supports the Ghana Jobs and Skills Project for innovation matchmaking. With the launch of the CSIR Science for Impact Fund (CSIF), CSIR-TDTC believes this is a marketable initiative which will bolster research and commercialization.

Specific projects, such as the Coconut Nursery Gardens initiative, aim at generating business opportunities and training within the coconut industry; as well as workshops, conferences, and the flagship CSIR Technology Transfer Workshop enhance stakeholder engagements.

Despite these strides, challenges persist. Limited operational funding hampers technology assessments and commercialization, while complexities in intellectual property (IP) management and regulatory/market-entry barriers complicate efforts to protect and scale innovations. Misalignment between industry and academic timelines and priorities further slows collaboration. To address these, CSIR-TDTC is working to strengthen industry partnerships, secure sustainable investments, improve internal and external communication through standardized processes, and enhance staff capacity for commercialization.

In summary, CSIR-TDTC is building a robust technology transfer ecosystem by bridging research and industry, securing funding, and promoting innovations. Strategic investments, enhanced partnerships and improved communication are critical to overcoming barriers and achieving sustainable commercialization of CSIR’s research outputs.

## Summary of the Intellectual Property (IP) Presentation – Dr. Hillary Mireku

Dr. Hillary Mireku emphasized the critical role of intellectual property (IP) protection in the commercialization of research to ensure innovators retain ownership and leverage patents, trademarks and copyrights for revenue generation. A lab-to-market approach was highlighted, where licensing agreements can supplement income beyond direct product commercialization.

The discussion underscored the importance of early IP disclosure, as public exposure of technology nullifies patent eligibility; although alternative protections like copyrights and trademarks remain viable. The choice of IP strategy, Dr. Hillary noted, must align with the technology’s nature and market potential.

Regarding Memoranda of Understanding (MOUs), the presentation outlined a collaborative drafting process involving the IP office, legal teams and relevant CSIR institutes. While standard templates exist, they are tailored to private sector needs, such as supplier agreements or partnerships to safeguard CSIR’s interests. Final terms are negotiated in joint meetings before final approval.

Challenges in MOU execution were identified, including lack of standardization, with some institutes bypassing official protocols, leading to inconsistent agreements. To address these gaps, Dr. Hillary recommended institutional directives for MOU formulation, proactive investor engagement, stricter adherence to IP and legal channels, and enhanced oversight by the IP office to streamline commercialization efforts. The presentation concluded by stressing the need for stronger internal coordination and IP management to maximize research impact and industry collaboration.

## Discussions

The discussion session of the CSIR Commercialization Workshop was a dynamic exchange of ideas aimed at enhancing the institute’s commercialization strategies. Participants, including the Director of Commercialization (DoC), Director General (D-G), and representatives from various CSIR institutes, explored topics such as rampant conflict of interest practices, product packaging, publicity strategies, incubation centers, marketing team challenges and platform utilization. Key issues like funding, operational efficiency, and structural concerns were raised, alongside actionable suggestions for improvement. With regard to the issue of conflict of interest, it was recommended that it would be discussed at the Directors Management Committee level to officially address the issue.

* 1. **Key Discussion Points**
* **Leveraging Product Packaging for Advertisement** 
  + Suggestion: Incorporate advertisements for related products and services on packaging, using QR codes to link customers to the full range of CSIR offerings.
  + Benefit: Enhances visibility and provides a seamless customer experience.
* **Organizing Fairs and Publicity Strategies** 
  + Proposal: Organize fairs and promotional events beyond current efforts, supported by proactive publicity such as press releases and media engagement.
  + Example: Utilize upcoming global observances to maximize media coverage and audience reach.
* **Cost-Effectiveness of Press Releases** 
  + Question: Could costs (not content management) be reduced by centralizing press releases under a corporate CSIR package rather than individual institutes managing them?
  + Response: While the Council oversees communication, technical details are institute-specific. Centralization is feasible for some aspects, but institutes must still provide project details.
* **Role of Incubation Centers** 
  + Question: Does Food Research and Institute of Industrial Research benefit adequately from business incubation models?
  + Response: Yes, they do. However, IGF from this service is generally low.
  + **Note**: Moving forward, strategic options geared towards full benefit-sharing should be considered.
* **Marketing Team Concerns from an Institute**
  + Concern: ARI’s marketing team was described as “weak.” A participant asked if internal transfers from other institutes could help.
  + Question: What specific weaknesses exist (e.g., expertise, strategies for growth; gaining competitive advantage, etc)?
  + Response: The marketing officer was absent, so DoC planned to follow up directly.
  + Question: Are training programs profitable? How are funds allocated, and can the process be simplified and uniformed for efficiency, harmonization and transparency?
  + Action: Issue deferred to management level for resolution.
  + Key Issue: Disconnect between commercialization and sales (Accounts department) hinders marketing strategies.
* **Water Research Institute (WRI) Borehole Drilling Project** 
  + Question: Is the borehole drilling project fully operational? If not, what are the challenges and solutions?
  + Response: It is in use, implying operational status, though no details on challenges were provided.
* **Kuafo Platform Discussions** 
  + Q1: Why is the platform named “Kuafo,” suggesting an agricultural focus that may not represent all CSIR institutes (e.g., construction or metal fabrication)?
    - Response: Originated from the Modernizing Agriculture in Ghana (MAG) project, but it can be expanded and rebranded to reflect broader CSIR offerings.
  + Q2: What is the process and cost for listing products on the Kuafo Marketplace?
    - Response: No fees currently; registration and verification (CSIR or accredited Farmer-Based Organizations) are required to prevent fraud. A second version will be launched next month, with training sessions planned. Access via [www.kuaffo.csirgh.com](http://www.kuaffo.csirgh.com).
* **Technology Development and Transfer Centre (TDTC)** 
  + Q1: Can TDTC assist BRRI in securing a strategic investor for its Gomoa plant?
    - Response: Supporting institutes is part of TDTC’s mandate. Past interest from Canadian and U.S. investors did not materialize due to unfavorable terms; management is holding out for better offers.
  + Q2: Is TDTC a Limited Liability Company (LLC) or a Company Limited by Guarantee?
    - Response: A Company Limited by Guarantee.
    - Concern: This non-profit structure may limit investment attraction and impose financial obligations on member institutes (e.g., BRRI) in case of liabilities.
    - Suggestion: Reconsider the legal structure to enable profit-making while retaining the core mandate.

## Closing Remarks – Director of Commercialization

The DoC reflected on the workshop as a valuable learning experience, expressing gratitude for participants’ engagement over two days. Key takeaways included:

* **Collaboration and Motivation**: Emphasis on networking, inclusivity and sustained engagement with stakeholders including government to drive commercialization.
* **Operational Gaps**: Not enthused with some institutes lacking vehicles, stressing the need for presentable, functional and reliable transport.
* **Teamwork**: Assiduously working as a unified team for profitable business operations.
* **Commercialization Guidelines:** Plans are in place to review and refine the commercialization guidelines; hence called on attendees to critically scrutinize the current document since it plays a pivotal role in business processes.
* **Action Points**:
  1. Each institute to submit at least one technology for investment, detailing benefits, requirements (e.g., machinery, raw materials, structural investment, etc) and financial implications.
  2. Develop structured marketing plans, with DoC’s support to ensure innovations are market-ready.
  3. Heads should match-make respective institutes with private-sector companies for more strategic business opportunities; and relay the information to the Directorate.
  4. Refine strategies for the next year, improve templates and platforms, and address unresolved issues at appropriate levels. Reports will be compiled and shared for institutes’ Directors and Management.
* **Appreciation**: Mrs. Appiah finally expressed heartfelt gratitude to all present, for the well-prepared presentations; as well as for contributing to a participatory and fruitful workshop; with a call to maintain momentum in commercialization efforts.

## Closing Remarks - the Director General

The D-G delivered an inspiring and pragmatic address, emphasizing teamwork, professionalism, and strategic focus to drive CSIR forward. Key highlights included:

* **Appreciation and Enthusiasm:** The D-G expressed excitement about the workshop, commending participants for their hard work and the innovative ideas shared. He noted that the discussions planted seeds for future initiatives.
* **Teamwork and Conflict Resolution:** He stressed the importance of collaboration, urging management to step in and resolve conflicts in mandates between teams or organizations through clear communication and coordination.
* **Innovation in Exhibitions:** Observed that research institutes often display repetitive content at exhibitions, the DG called for greater variety and innovation to showcase unique advancements.
* **Marketing and Leadership:** He emphasized that marketing is a collective responsibility, not just the duty of a few. The DG encouraged proactive leadership, effective communication, and the skill of managing both superiors and subordinates.
* **Managing Scientists:** Acknowledging the unique challenges of managing scientists, he advised perseverance and sustained effort to overcome these hurdles.
* **Work in Progress Mindset:** He reminded participants that everyone—from senior to junior staff, is a “work in progress,” with continuous improvement as a shared goal.
* **Professionalism and Reputation:** The DG underscored that employees are constantly evaluated, even informally, and that their reputation and past actions shape future opportunities. Professionalism, he noted, is non-negotiable.
* **Encouragement:** He concluded with a motivational push, appreciating participants’ dedication and urging them to persist despite challenges, while recognizing the need for ongoing support to maintain engagement.

## Vote of Thanks

The Public Relations Officer from CSIR-CRI, delivered the vote of thanks, expressing special gratitude to the Director-General for his full participation during the workshop; and to other corporate Directors for the massive support. She thanked the organizers for an educative and networking-rich program. She finally appreciated all participants for their active involvement.

1. Closing Prayer: The session concluded with a prayer led by the Head of Commercialization Division at BRRI, marking a formal end to the workshop.