



Kwame Nkrumah
University of Science
and Technology



B I R D

BUREAU OF INTEGRATED RURAL DEVELOPMENT
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY



BUREAU OF INTEGRATED RURAL DEVELOPMENT

2022-2023 ACADEMIC YEAR REPORT



*Photo: Historic visit of the Minister for Local Government,
Decentralisation and Rural Development to BIRD, KNUST*

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WHO WE ARE

VISION, MISSION, OUR WORK



ABOUT US

The Bureau of Integrated Rural Development (BIRD) is one of the foremost and leading research departments of the College of Agriculture and Natural Resources (CANR) at the Kwame Nkrumah University of Science and Technology (KNUST). The mission of BIRD is to provide an interface between the university and rural communities. BIRD aims at transferring innovations and other services available at the university to promote rural development which will enhance the quality of life in rural areas. Additionally, the vision of BIRD is to be a centre par excellence in Africa for research and socio-economic development through the provision of extension, research and consultancy services to government, donors, NGOs and rural communities in Ghana and the West African sub-region.



WHAT WE DO

BIRD conducts comprehensive inter-disciplinary research, training, consultancy and advisory service in rural development. Our high-quality research projects, seminars and publications encompass almost all areas of rural development, rural enterprises development, natural resource management, project planning and management, and good track record for training, capacity building and rural institutional development. BIRD has working experience in all the sixteen Regions in Ghana and is at the forefront of discussions on many contemporary issues related to rural development. BIRD has a reputable inter-disciplinary team who are well accomplished in their disciplines.



VISION STATEMENT

The vision of BIRD is to be a centre par excellence in Africa for research and socio-economic issues in development through the provision of extension research and consultancy services to government, donors, NGOs and rural communities in Ghana and the West African sub-region.



MISSION STATEMENT

The mission of BIRD is to provide an interface between the University and rural communities. It aims at transferring innovations and other services available at the University needed to promote rural development to enhance quality of life in rural areas.



OUR WORK

BIRD offers services in seven key areas namely: Rural Development and Innovations, Capacity Building and Institutional Development, Gender and Development, Private Sector and Rural Development, Rural Health, Social Protection and Evidence Generation. The specific areas of competence under these broad service areas are as follows:

Rural Development and Innovations

- Policy, planning and implementation
- Local economic development (LED)
- Decentralization and local governance
- Rural access to socio-economic infrastructure
- Agricultural development planning and management
- Natural resources management and governance
- Climate change mitigation and adaptation
- Transfer of innovations

Capacity Building and Institutional Development

- Building and strengthening the capacity of local institutions
- Community-based organisational strengthening and capacity building
- Strengthening the capacity of chieftaincy institutions
- Public institutional reforms and transformation
- Development of tailor-made training programmes
- Institutional strengthening and capacity-building
- Promotion of public/private partnership and management models
- Civil society and civic engagement
- Network support for NGOs



Gender and Development

- Gender-specialized studies
- Mainstreaming gender into development
- Women's organizations and development
- Gender analysis
- Gender-responsive programming

Private Sector and Rural Development

- Small and medium-scale enterprise development
- Training in business management
- Rural finance
- Feasibility studies of rural enterprises
- Enterprise product development
- Enterprise/project appraisal
- Value chains development
- Private sector engagement

Rural Health

- Agricultural health and safety
- Healthy ageing
- Water, sanitation and hygiene (WASH)
- Health impact assessment
- Health programme planning and evaluation
- Evidence-based public health

Social Development and Protection

- Child labour and trafficking
- Cash transfer programming
- Productive inclusion
- Population management and migration for development
- Food and nutrition security
- Youth development
- Disability-inclusive development
- Rural access improvement
- Social protection systems strengthening

10. Inclusive rural development

Evidence Generation (research, evaluation and data analytics)

- Rural development-driven research
- Baseline studies and specialized sector studies
- Monitoring, evaluation and learning (MEL)
- Evidence syntheses (systematic reviews, realist reviews, meta-evaluation, scoping reviews)
- Impact evaluations and policy analyses
- Data analytics and visualisation

A MESSAGE FROM THE PROVOST OF CANR



**PROFESSOR BEN
K.B. BANFUL**

PROVOST



The College of Agriculture and Natural Resources (CANR) is one of the six Colleges of the University mandated to promote agricultural production, rural development and the management of renewable natural resources across Ghana and globally through teaching, research, and outreach.

The CANR comprises two Faculties and three Research Centres. The most prominent and enterprising of the three Centres is the Bureau of Integrated Rural Development (BIRD). The mission of BIRD is to provide an interface between the University and rural communities. It aims at transferring innovations and other services available at the University needed to promote rural development to enhance quality of life in rural areas.

Over the past three decades, BIRD has continued to innovate and expand on her mandate such that she has remained the flagship Research Centre of the



College and one of the most important in the University. BIRD conducts comprehensive inter-disciplinary research, training, consultancy and advisory service in rural development. Her high-quality research projects, seminars and publications encompass almost all areas of rural development, rural enterprises development, natural resource management, project planning and management. BIRD also has a good track record for training, capacity building and rural institutional development. BIRD has working experience in all the sixteen Regions in Ghana and is at the forefront of discussions on many contemporary issues related to rural development. As a result of the quality of the research conducted by the Centre, there has been a very significant growth in the domain of collaborations, both at the local and international level.

In this 2022-2023 annual report of BIRD, activities covering the six key areas of services offered by the Centre are catalogued. These include Research and Development Planning; Capacity Building and Institutional Development; Gender and Development; Entrepreneurial Development of Small and Medium Scale Industries; Rural Health and Social Protection. Several achievements have been made under each of these six areas and the impetus for further improvement and enhancement have been proposed in this report.

It is my fervent hope that the contents of this annual report would be found stimulating and invigorating while serving as a basis for the continued growth of the Centre both within and outside the confines of KNUST.



A MESSAGE FROM THE DIRECTOR OF BIRD



Ebenezer Owusu-Addo, PhD

As another academic year draws to a close, it is with great pride that I reflect on BIRD's accomplishments. 2022/2023 academic year has been a year of great strength for our Centre, marked by the clear connection between our vision and mission and everything we do. As my tenure as Director also draws to a close, I reflect on what a great privilege it has been to lead BIRD for the past 2 years and to shape it as a knowledge hub for rural development in Ghana and beyond.

As Ghana advances in recovery from the COVID-19 pandemic, Russia's large-scale aggression against Ukraine has sent new shock waves around the world, disrupting food market systems and

energy, and jeopardising government's efforts to rebuild the economy. These shocks have had a profound impact on rural areas in Ghana at a time when they face structural transformations brought by the impact of the twin green and digital transitions, ageing, rural-urban migration, and globalisation. These transformative megatrends had a profound impact on how BIRD conducted its business in the academic year under review. As a response

I reflect on what a great privilege it has been to lead BIRD for the past 2 years and to shape it as a knowledge hub for rural development in Ghana and beyond

to these changing trends, and to build sustainable, resilient and thriving rural economy in Ghana, BIRD deepened its engagement with the Ministry of Local Government, Decentralisation and Rural Development (MLGDRD) and the private sector to chart a new course of action in Ghana's rural development journey and agenda.

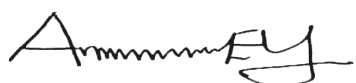
We have seen enhanced research collaborations and constructive partnerships formed enriching BIRD's breadth and depth. We have completed several significant research and translation projects, including the Impact of Post-production Infrastructure on Women's Economic Empowerment and Access to Nutrition Diet Among Female Groundnut Growers and Processors in Northern Ghana to build evidence on the impact of infrastructure on WEE in rural Ghana to inform evidence-based policy making and programming. In terms of education and training, three (3) PhD students who worked on one of our grant projects successfully graduated.

On January 24, 2023, BIRD hosted a team from the Ministry of Local Government, Decentralization and Rural Development (MLGDRD) led by the Sector Minister, Mr. Daniel Botwe, his deputies, and other staff from the Ministry and its sector-wide agencies, to deliberate on rural development issues in Ghana. At the meeting, it was emphasized that to effectively support the rural development agenda of the Government of Ghana, BIRD needs to be repositioned to provide the full breadth of rural development research and education.

In order to keep pace with the changing trends in rural development, in the year under review, we completed the first stage of converting BIRD into a full-fledged Institute within the University. The purpose of the conversion of BIRD to an Institute is to enhance its capacity to widen the scope of rural development research and offer graduate level programmes to meet the growing needs of rural development practitioners and institutions in both the public and private sectors of Ghana and those of other countries within Africa and beyond.

In line with BIRD's vision and that of the College of Agriculture and Natural Resources (CANR), we completed a study on agricultural health and safety in rural Ghana. Findings from this study would inform the development of prevention interventions to promote farmer health and safety. Similarly, we completed a major study on marine plastic pollution in Ghana to help inform advocacy on mitigating the impact of plastic pollution on the environment and human health.

On behalf of all BIRD staff, I would like to thank all our research and project partners for their contributions to our work. In an increasingly challenging funding landscape, BIRD continues to be fortunate in having a committed and hard-working staff and enjoys support of the US Department of Agriculture (USDA) and USAID through their funded projects, including the ASSESS, METSS and TSUE projects.





SIGNIFICANT ACHIEVEMENTS

RESEARCH PROJECTS



BIRD has had a highly productive year conducting research and evaluation studies on agriculture, governance, health, climate change and other rural development issues:

- ▶ 5 grant projects
- ▶ 8 commissioned/contract research/projects
- ▶ Flagship research project on farmer health and safety
- ▶ Flagship research on marine plastic pollution
- ▶ Piloting a match-batch-pay App of Agromovil Inc to enhance the supply chain of sorghum

PUBLICATIONS



Over the past academic year BIRD researchers have produced 27 publications in peer reviewed journal articles, seven (7) book chapters, seven (7) conference papers, six (6) policy briefs and 12 technical reports.

MEDIA



In 2022/2023 academic year, BIRD's media profile increased significantly including a wider coverage on our flagship University-Community Engagement programme. Our researchers were involved in radio interviews. Facebook friends and Twitter followers continue to build with no sponsored advertising.

EDUCATION & TRAINING



- ▶ 14 courses taught in various departments at KNUST.
- ▶ 44 professionals and PhD/MSc students attended our short course in Systematic Reviews
- ▶ Supervision of 5 PhD students; 30 MSc students; 14 undergraduate students
- ▶ 25 local government staff trained in grant proposal writing
- ▶ 150 graduates and interns received hands-on in the field practical training in contract research and consultancy practice

POLICY & ADVOCACY



BIRD has contributed to different discussions about policy and other issues that affect rural areas using its evidence-based research findings as the basis for this work, including:

- ▶ Production of 6 policy briefs
- ▶ Piloting a model on university-community engagement for sustainable and inclusive rural development; and BIRD staff chairs the university committee mandated, among others, to develop an action plan for university-community engagement, a framework which is intended to revamp the university's engagement with its stakeholders

INTERNATIONAL COLLABORATIONS



BIRD increased its international profile through research partnerships and presentations at international conferences. The past year BIRD staff gave conference presentations and seminal presentations in USA, Canada and Cameroon.



OVERVIEW OF PROJECTS: **2022-2023** ACADEMIC YEAR

Tables 1 and 2 provide an overview of projects/grant proposals worked on by staff in 2022/2023 academic year.

Table 1: Research Grants, 2022 – 2023 Academic year

Successful Grants					
	Full Project Title	Funding Body	Date Commissioned	BIRD Contact Staff	Proposed funding
1.	How Citizen Monitoring Can Save Public Money: The case of Northern Ghana	INTEGRITY ACTION/ INTRAC /SEND	Mar., 2022	AAA	\$4000
2.	Meta Evaluation of USAID evaluations	USAID	Aug., 2022	PSM; AAA; EOA	US\$ 255,000.00
3.	Ex-post assessment of legislative strengthening programmes	USAID	Oct., 2022	PSM; AAA; EOA; TY	US\$ 100,000.00
4.	Piloting of Agromovil App among Guinness Supply Chain aggregators and farmers	USAID/METSS	Oct., 2022	PSM; TY; MA	US\$ 460,000.00
5.	Assessing the impact of post-production infrastructure on women's economic empowerment and access to nutritious diet among female legume growers in northern Ghana	ICED	Nov., 2022	EOA; IB; BW; EFA; SEE; TY	US\$ 70,000.00

Notes on staff initials: AAA: Dr. Albert A. Arhin; EOA: Dr. Ebenezer Owusu-Addo; PSM: Prof. Paul Sarfo-Mensah; EFA: Prof. (Mrs.) Ernestina Fredua Antoh; SEE: Prof. Sampson Enyin Edusah; TY: Dr. Thomas Yeboah; MA: Dr. (Mrs.) Monica Addison; IB: Dr. Isaac Bonuedi; BW: Dr. (Mrs.) Bernice Wadei; NMO: Mr. Nathaniel Mensah-Odum.

Table 2: Commissioned Research Activities, 2022 - 2023

Successful Commissioned Research Undertaken					
	Full Project Title	Funding Body	Date Commissioned	BIRD Contact Staff	Proposed funding
1.	Performance Evaluation of the Sustainable Fisheries Management Project	USAID	Mar., 2022	EOA; AAA; PSM	GH 403,979.80
2.	Baseline study for Ghana Market Systems and Resilience Activity (MSR)	USIAD/ACDI/VOCA	Jul., 2022	EOA, PSM, IB, EFA, MA, TY, AAA	GH 663,685.00
3.	End-line Survey for Ghana Agricultural Sector Improvement Programme (GASIP)	IFAD	Oct., 2022	EOA, MA, TY, IB	GH 617,587.50
4.	Baseline Survey for Covid-19 Relief and Resilience Grants-2022	USAID/ PALLADIUM INTERNATIONAL	May., 2023	EOA, TY, MA, IB, PSM, AAA, BW, NMO, ROT	
5.	Consulting Services for Child Labour and Forced Labour Prevention and Remediation Programme for Ivorian and Ghanaian Cocoa Small Producer Organisations	FAIRTRADE INTERNATIONAL	Aug., 2023	AAA, EOA, IB, TY, BW, NMO, ROT	£50,470.00
6.	Consulting Services for the Final Evaluation of the United Nations Joint Programme on Empowering Adolescent Girls Through Improved Access to Reproductive Health Education and Rights-Based Quality Sexual and Reproductive Health Services in Ghana	UNFPA	August 2023	EOA, TY, IB, BW	GH 712,700.00

Successful Commissioned Research Undertaken

	Full Project Title	Funding Body	Date Commissioned	BIRD Contact Staff	Proposed funding
7.	Strengthening Investments in Gender-Responsive Climate Adaptation (SIGRA) in Ghana	CO-WATER	Aug., 2023	AAA, EOA, IB, TY, BW, NMO, ROT	CAD 64,414.00
8.	Consulting Services for follow-Up Studies on Impact Assessment of Local Raw Material Sourcing	GUINNESS GHANA	Sept., 2023	EOA, TY, MA, IB, PSM, AAA, BW, NMO, ROT	GH 707,630.00

Notes on staff initials: AAA: Dr. Albert A. Arhin; EOA: Dr. Ebenezer Owusu-Addo; PSM: Prof. Paul Sarfo-Mensah; EFA: Prof. (Mrs.) Ernestina Fredua Antoh; SEE: Prof. Sampson Enyin Edusah; TY: Dr. Thomas Yeboah; MA: Dr. (Mrs.) Monica Addison; IB: Dr. Isaac Bonuedi; BW: Dr. (Mrs.) Bernice Wadei; NMO: Mr. Nathaniel Mensah-Odum.

THE ENVIRONMENT AND SUSTAINABLE DEVELOPMENT UNIT (ENSUD)



The Environment and Sustainable Development Unit (EnSuD) is a multidisciplinary unit that exists to provide research, training, professional development, consultancy and advisory services, policy analysis and tools to individuals, corporate, governmental, or

CSOs to contribute to good governance, safe, just, sustainable, socially inclusive and environmentally responsive development.

The EnSuD also aims to cultivate, undertake, facilitate, and produce multi-disciplinary, collaborative, and innovative

research focused on sustainable environment, rural development, (peri) urban sustainability, and social resilience. The Unit brings together scholars from multi-disciplinary backgrounds to critically inform research, public debate and seek solutions to pressing challenges posed by environmental and climate changes, urbanization, policy choices, hazards, and transboundary crises (e.g. epidemics). Project highlights for 2022-2023 include:

LANDSCAPE PLANNING AND GOVERNANCE OF GREATER KUMASI

A number of studies on spatial dynamics of land use change have shown declining levels of green spaces and water infrastructure and excessive pressure on these resources threatens sustainability and achieving the 2030 Sustainable Development Goals (SDGs) on food, water, climate and biodiversity. This changing nature of the Kumasi landscape raises important questions. For example, as the world strive to achieve the SDGs, what would the Greater Kumasi Metropolitan Area (GKMA) look like in 2030? Why and how should green and blue infrastructure of the GKMA be conserved? What strategies will work and how should different stakeholders collaborate to conserve green and blue infrastructure? These are important questions that require multi-actor and multi-stakeholder forum to explore the challenges and strategies for inclusive development planning in the Kumasi landscape. This project, which started in

2021, was intended to map out different stakeholders and interests operating in the fields of (peri-) urban planning, agriculture, forestry and conservation in the Kumasi landscape. The goal was to identify strategies and shared stakeholder ambitions for the Kumasi landscape, which will be translated into visualised future development narratives and scenarios, in relation to the Sustainable Development Goals for food, water, climate and biodiversity by the year 2030. The project is being implemented in partnership with PBL Netherlands Environmental Assessment Agency. A key finding of the study was that the GKMA is experiencing massive population growth and the outer rings (peri-urban areas) have seen increased demand for land for various development activities. This has significantly reduced opportunities for local people to sustain their livelihoods resulting in increased despondency, especially among the youth who have little or no skills to compete for jobs outside agriculture. Environmental degradation has become a major challenge in the area; riverine areas, wetlands and the few remaining forest patches have all come under serious threat. The study recommended an inter-sectorial collaboration to develop shared and implementable scenarios that can tackle joblessness, increased crime rate, and environmental degradation in the GKMA

Project Team: Prof. Paul Sarfo-Mensah; Dr. Albert Arhin. Nathaniel Odum, and Johan Meijer and Like Bijlsma of PBL, The Netherlands Environmental Development Agency

EXPLORATORY STUDY OF THE CASHEW VALUE CHAIN IN THE TRANSITIONAL AGRO-ECOLOGICAL ZONE OF GHANA: ONGOING

This exploratory study on cashew in some selected communities in the transitional ecological zone of Ghana focuses on understanding the cashew farming systems, impacts from changing climate on production, generational and gender livelihood opportunities and value chain for socio-economic development. During this year under review, the research team undertook a participatory rapid rural appraisal (PRRP) in the Kintampo North Municipal Area as the first of a series of mixed methods approaches and activities that will drive this research and development activity. The purpose of the PRRA was to affirm preliminary thoughts on the study objectives and research questions which have been derived from an extensive desk study. The pilot phase of the project is being funded by BIRD.

Project Team: Prof. Paul Sarfo-Mensah; Dr. Thomas Yeboah; Prof. (Mrs.) Ernestina Fredua Antoh; Dr. (Mrs.) Bernice Wadei; Dr. Albert A. Arhin; Dr. Isaac Bonuedi

LOCALLY-LED ADAPTATION STRATEGIES, LESSONS AND PATHWAYS: ONGOING

The changing nature of Ghana's climate and their effects on livelihoods, health, food security and economic development have been well documented. This new

study seeks to shed light on different lessons and pathways through which locally-led adaptation can support Ghana's climate actions. A collaborative opportunity is being sought from Africa Policy Research Institute to map climate change policies, strategies and actions in Ghana. It is anticipated that further work will be carried out in 2023/24 academic year.

Project Team: Dr Albert Arhin

PATHWAYS FOR COCOA SUSTAINABILITY: ONGOING

This project started in 2019, is documenting key policy, and operational and practical changes occurring in the cocoa sector. The study also engages cocoa farmers to understand changes in their livelihoods over time, including changes in environmental conditions on production, income and production levels, membership of associations, labour conditions, the extent of benefits from cocoa productivity enhancement programs such as mass spraying, fertiliser subsidy, hand pollination, and participation in sustainability programmes being implemented by cocoa and chocolate companies. In 2022, the study begun to document debates and analysis of the Living Income concept. The empirical part of engaging cocoa farmers to understand income trends, cocoa pricing mechanisms and pathways for strengthening income from cocoa shall be undertaken in the latter part of 2023.

Project Team: Dr Albert Arhin

HOW CITIZEN MONITORING CAN SAVE PUBLIC MONEY: THE CASE OF NORTHERN GHANA

Citizen engagement is promoted as a means of achieving a range of development and governance goals, including improving the performance of services and public infrastructure projects. Ghana has a high rate of uncompleted public projects that often leads to losses to the state. To test the extent to which citizen monitoring contributes to positive development outcomes in Ghana, this research is working with other staff from the Department of Land Economy and Construction Management to explore the extent to which trained community citizen monitors who have been monitoring infrastructure projects for nearly a year in 5 districts in Ghana have made any difference in shaping the quality and fixing of problems related to those infrastructural projects. The study districts are Tamale, West Gonja, Savelugu Yendi, and Tolon Districts. The aim of the research is to gather evidence on the extent to which citizen monitoring of projects—and associated investments—contribute to public savings and better value of money. The fieldwork component of this work is supported by Integrity Action and INTRAC in collaboration with SEND Ghana. Through a review of literature and insights from industry practice, the research study identified a number of promising methods for determining value and public savings. Those selected were: Earned Value

Analysis (utilized when economic data on benefits and savings are accessible), Stories of Change (narrative perceptions of project value and efficiency), Regression Analysis (for estimating the influence of citizen monitoring on improved value and public savings) and Net Present Value (to ascertain the value of investments or projects). The research also identified five (5) ways in which citizen monitoring contributed to achieving better value for money: early detection of problems; identification and prevention of thefts; increased transparency and accountability; better project design and enhanced public participation and support.

Project Team: Dr Kenneth Donkor-Hyiaman, Dr. Michael Nii Addy, Dr Albert Arhin and Catherine Allen (INTRAC, UK).

STRENGTHENING INVESTMENTS IN GENDER- RESPONSIVE CLIMATE ADAPTATION (SIGRA): ONGOING

Ghana, just like many other African countries, is experiencing the impacts of climate change, posing remarkable challenges to the livelihoods and well-being of its population, particularly women, girls, and vulnerable groups. These groups of individuals are disproportionately affected by the climate change impacts. As such, climate change adaptation-related projects aimed at improving the resilience of these individuals are essential for national development. SIGRA project

aims at delivering technical assistance and support to strengthen governance and national systems with key central level Ministries, Departments, and Agencies while providing direct grants to five Districts funding local gender responsive climate adaptation projects. The ultimate goal of the project is to improve resilience of Ghanaian citizens, particularly women, girls, and vulnerable groups, through increased investments in inclusive and gender-responsive climate adaptation initiatives. SIGRA will also support regional government stakeholders in the Accra, Northern and Volta regions and strengthen the ability of targeted Districts to plan, implement, and report on climate adaptation initiatives. The project is implemented by Co-Water International. BIRD has been undertaking baseline studies to support the SIGRA project.

Project Team: Dr. Albert Arhin, Dr. Bernice Wadei, Dr Ebenezer Owusu-Addo, Dr. Isaac Bonuedi, Mr. Nathaniel Mensah Odum, Mr. Richard Tetteh

MARINE PLASTIC POLLUTION IN GHANA

Plastic pollution is a significant threat to the marine environment. Ghana produces about 3,000 metric tons daily and 1.1 million tons of plastic waste per year of which only about 2-5% are collected for re-use and/or recycling – largely performed by the informal sector. Further, an estimated 86% of Ghana's waste plastic load, is improperly disposed of resulting in plastics clogging up stormwater drains,

rivers, and streams and ending up in the oceans. Estimates from the World Bank (2020) indicates that 250,000 metric tons of plastic waste are dumped from Ghana into the Atlantic Ocean. Although scientific interest on the environmental impacts of plastic pollution has grown over the last decade, there has been a relative lag in public and government interest. To understand the scale of the marine plastic pollution and its impact at the local level, BIRD conducted a mixed-method study to inform marine plastic pollution policy and programming in Ghana. The quantitative survey comprised of 1545 households. The qualitative component entailed 30 Key Informant Interviews and 8 focus group discussions with various stakeholders within the plastic value chain. Unstructured observations were also carried out at landfill sites and recycling companies.

The findings indicate that 93% of the respondents believed that plastic waste causes marine plastic pollution. 60.6% of the participants indicated that they would support a single-use plastic policy as they believed that such a policy could help reduce the marine plastic pollution (91.5%). 93% of households think that the government should play a major role in managing plastic waste.

The qualitative interviews and focus groups revealed the deep-seated socio-economic impacts of marine plastic pollution including low fish catch, loss of livelihood and increased poverty. Many fishers along the coast reported catching plastics in their nets rather than fish. The



fishers further complained that plastic pollution damages their vessels, causing financial loss. They further linked plastic pollution in the oceans to the decline in catches and fish stocks. Up to 80% of survey participants think that marine plastic pollution can be reduced through land-based solutions.

"We have experienced low fish yields as some chemicals in plastics are destroying fish stocks" (Fisherman, Elmina, Central Region)

"For some years now whenever we cast our nets, all we catch is plastic" (Chief Fisherman, Moree, Moree, Central Region)

"Now at our beaches, the plastic waste is a great bother to us so when our fishermen go to sea, it is all waste that they get in their nets. This waste is a great bother for us; most of the plastic we have cannot be recycled so the government needs to take action on this to help us" (Fisherman, Elmina, Central Region).

"You can spend all night at sea and all you get is 2 boxes of fish and 3 boxes of rubber. And you now have to come and separate the rubbish from the fishes." (Fisherman, Teshie Lagoon).

Overall, the findings indicate that the marine plastic pollution in Ghana is a hindrance to fishing community's well-being, predominantly in terms of livelihood, food security, natural resource security and public health. The non-inclusion of Indigenous knowledge and values in plastic waste governance systems was found to perpetuate and creates new forms of colonialism.

The findings shed light on citizen and stakeholder input on how plastic pollution is affecting communities locally. Both community members and institutional actors interviewed put emphasis on consumer behaviour and buying patterns of single-use products fueling the plastic crisis. We thus, conclude that plastic waste management policy must go beyond the single-use plastic policy, to a deeper stimulation of public responsibility towards plastic consumption. The main barriers at the consumption found this study side are the awareness and attitude of the general public which are characterized by the lack of awareness of the adverse effects of unsound plastic waste management.

Project Team: Dr Ebenezer Owusu-Addo, Nathaniel Mensah Odum, Prof. Paul Sarfo-Mensah, Dr. Yaw Amo Sarpong

GENDER AND LIVELIHOOD UNIT



Gender and livelihoods are key areas for understanding how gender operates in limiting or expanding men and women's access, options and choices regarding the use of resources and their material conditions, and ultimately their ability to voice concerns and influence their positions in life. Gender and Livelihood Unit under BIRD focuses on the gendered aspects, dimensions and gender impact on rural livelihoods in Ghana and beyond. The unit engages in multidisciplinary contract research, consultancy services and human resource development that aim at promoting inclusive growth and development. The main objective of the unit is to achieve research excellence aiming to provide rigorous, evidence-based advice to inform policy about matters relating to gender and livelihood to address pressing gender and livelihood challenges facing men, women, girls, boys and gender-diverse people in rural and peri-urban areas of Ghana. Project highlights for 2022-2023 include:

THE IMPACT OF POST-PRODUCTION INFRASTRUCTURE ON WOMEN'S ECONOMIC EMPOWERMENT AND ACCESS TO NUTRITIOUS DIETS AMONG FEMALE LEGUME GROWERS AND PROCESSORS IN NORTHERN GHANA

There exists a notable gap in the understanding of how post-production infrastructure affects women's nutritional and empowerment outcomes. This research project sought to address this gap by investigating the impact of processing infrastructure on women's economic empowerment and their access to and consumption of nutritious diets.

The study employed a concurrent mixed-method design, integrating both quantitative and qualitative data collection and analysis. Quantitative data were gathered from a randomly selected sample of 850 women and 801 men residing in the Northern, North East, Upper West, and Savannah regions of Northern Ghana. Women's empowerment was assessed using the Project Level

Women Empowerment in Agriculture Index (Pro-WEAI) tool. Qualitative data were obtained through purposive selection of participants who participated in key informant interviews, focus group discussions, and in-depth interviews. The study employed doubly robust inverse probability weighting regression adjustment for estimating average treatment effects using Stata. Qualitative data were analyzed thematically using NVivo.

The findings revealed that access to improved groundnut processing infrastructure remains limited. The pro-WEAI results indicated that only 48.5% of women were empowered compared to men within their households, with an overall Gender Parity Index (GPI) of 0.92. In households lacking gender parity, the average empowerment gap between women and men was 19%. Qualitative evidence highlights the perceived and experienced impact of processing infrastructure on women's economic empowerment in multiple domains, such as income generation, savings, investment in children's education, asset acquisition, mobility, social recognition, group participation, and improvement in overall economic well-being. The average dietary diversity score for women aged 15-49 was 4.5. That of households, was 5.9. A mere 45.2% of women achieved the minimum dietary diversity necessary for micronutrient adequacy. The treatment effects analysis reveals that women specializing in groundnut processing are more likely to be empowered than primary producers. Groundnut processing

significantly enhances access to and consumption of diverse diets at both individual and household levels. Among the considered processing facilities, access to groundnut shelling and grinding machines stands out as a potential driver of women's economic empowerment. While the quantitative results do not directly demonstrate significant effects of processing infrastructure on dietary outcomes, the qualitative findings indicate both direct and indirect impacts on access to and consumption of nutritious diets.



The study's findings hold significant policy and programmatic implications. They underscore that access to processing infrastructure for women engaged in groundnut processing is a vital factor for household food security and poverty reduction. Consequently, agricultural and rural development policies should

be crafted to support both groundnut production and processing, optimizing women's economic empowerment outcomes. These policies should acknowledge the critical role of groundnut processing and related micro-enterprises in increasing income from processing activities, fostering women's economic

independence, and contributing to the broader goals of sustainable development.

Project Team: Dr. Ebenezer Owusu-Addo, Dr. Bernice Wadei, Dr. Isaac Bonuedi, Dr. Thomas Yeboah, Prof. Mrs. Ernestina Fredua Antoh, Mr. Nathaniel Mensah Odum, Mr. Richard Tetteh

SOCIAL CHANGE AND DEVELOPMENT UNIT (SOCDU)



The Social Change and Development (SCD) unit at BIRD seeks to enhance high-quality research, capacity building, and consultancy services to improve well-being of people and transform communities, both local and global. The unit has a team of skilled researchers and academics with varied expertise and several years of experience in both qualitative and quantitative research methodology. The Unit focuses on conducting high quality research, training services and consultancies in areas such as education, migration, microfinance, health and rural poverty. This year our work has focused on research on various social issues. Project highlights for 2022-2023 include:

ASSESSMENT OF USER SATISFACTION WITH THE AGROMOVIL PLATFORM AMONG SMALLHOLDER FARMERS AND AGGREGATORS IN NORTHERN GHANA: ONGOING

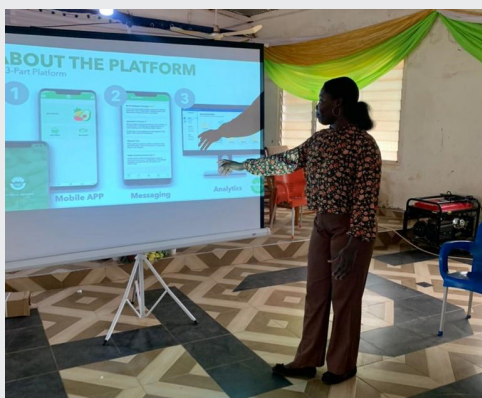
This study provides a detailed assessment of a user-satisfaction survey conducted among smallholder farmers along the sorghum value chain who have had experience using the Agromovil App or platform. The platform, which Agromovil Inc. built, is currently being piloted in Ghana and the goal is to scale up in West Africa. Agromovil Inc., a U.S.-

based technology and e-commerce firm, piloted the platform in Tanzania and Colombia. The purpose of the platform is to help smallholder farmers connect with buyers, sell directly, and optimize transportation to local, regional, and international markets. The platform supports getting farmers' products to market more efficiently, reducing food loss and increasing farmer incomes. In Ghana, KNUST in collaboration with Agromovil is partnering with Guinness Ghana Breweries Public Limited Company (GGBPLC), a Diageo company, to reach 500 smallholder farmers working with four aggregator groups in the sorghum value chain in the Upper East and Upper West regions. The intent of the activity is to increase local market linkages, strengthen local trade associations and increase market data collection from rural areas for analysis by policymakers. The overall purpose of this research was to conduct a user satisfaction assessment to learn more about the extent to which smallholder farmers along the sorghum value chain are satisfied with the Agromovil platform nine months following

the pilot implementation of the Agromovil platform.

The assessment employed the concurrent triangulation mixed method design involving the collection and analysis of quantitative and qualitative data at the same time. The quantitative component of the research gathered data from smallholder farmers who received training and used the Agromovil app for marketing of their sorghum produce in the 2022 farming season. These farmers are linked to four selected aggregator groups namely Faranaya Limited, Akuafo Nketewa Ltd, Agriaccess Limited and AE Farms Limited. Quantifiable data on level of awareness, drivers and barriers to adoption and usage of the Agromovil platform, benefits with usage including changes in production, volume of sales and income, user satisfaction, user promotion and retention were collected. The qualitative component provided opportunity to examine issues including how local contextual factors affect the usage, promotion, retention, and farmers perspective on what it will take for them to use the Agromovil platform





in the next farming season and beyond. Three main data collection instruments, namely a survey questionnaire, focus group discussions and semi-structured interviews were used in gathering the data for the study. The survey questionnaire was administered to a purposively selected sample of 156 smallholder sorghum farmers (122 in Upper East and 34 in Upper West) through a face-to-face interview approach between 4-9th June 2023. The survey questionnaire was entered into the Kobo Collect toolbox deployed on tablets to facilitate quality and efficient data collection. In addition, a total of 9 focus group discussions comprising of 6-12 participants as well as 9 individual interviews were conducted with smallholder farmers. Four (4) key informant interviews were conducted with staff of the four aggregators namely Agriaccess and AE farms in Upper West and Faranaya and Akuafo Nketewa Upper East.

Overall, the findings indicate that the smallholder farmers amongst whom the Agromovil platform was piloted expressed positive satisfaction with the Agromovil app. Their sense of satisfaction is rooted

in the potential of the Agromovil platform to limit the barriers or challenges that farmers face in marketing their produce. The maximum value of sorghum sold through the app in Upper East was 520 of the 50kg bags while that of Upper West region was 117 of 50kg bags. This is even though the app was introduced later when farmers were already marketing their produce. Farmers held the view that the Agromovil platform is fast, convenient, easy to use and efficient. In addition, smallholder farmers are of the view that while the platform has enormous potential to contribute to increasing their productivity, it has within the pilot period significantly helped them to save the transportation cost associated with conveying their produce to and from the market for sale. This has reduced the cost of doing business and thereby improving income. There is increased market visibility for farmers and aggregators, reduction in time spent, and easy to sell sorghum produce. Strikingly most farmers are optimistic that the platform will increase their income in the future despite numerous challenges such as connectivity and poor internet access, lack of smartphones, cost of usage, limited time to learn and use the platform, as well as lack of support and training from Agromovil representatives.

Based on these findings the study recommended the need for Agromovil to expand the number of Agromovil champions working at the community level to support smallholder farmers with use of the app, provide further training to build the capacity of relatively less

well-educated farmers knowledge and skills on how to use the platform, work through the aggregators to ensure and remind farmers to use the app for posting and marketing their produce in the next farming season and simplify the process of accessing passcode for setting up the Agromovil platform by perhaps making it flexible for farmers not to re-enter the passcode periodically.

STREET YOUTH COVID-19 RESEARCH (ONGOING)

Beyond the popular conceptualisation of street youth as vulnerable, research in South Africa highlight how street youth negotiate resilient trajectories strengthened often by personal resources, religiosity and the bond of association with peer groups to cope with multiple livelihoods and other challenges connected with streetism. However, we might expect that the COVID-19 pandemic and its inspired legislations of restrictions on movement and lockdown would have implications on the livelihoods, lives and the futures that street youth imagine for themselves. As social actors whose agency have recognised, it is possible that street youth might develop some tactics and strategies (including drawing on their social networks) to navigate the crisis and advance their lives and futures in advantageous ways. Nevertheless, there are notably a handful studies that have examined issues of how covid-19 is impacting on the lives and livelihoods of street youth and the coping or navigation strategies employed. This present study

aims to fill this gap by bringing new data and insight from qualitative research with street youth in Ghana. The Social Change unit at BIRD embarked on research which sought to understand how COVID-19 has impacted the lives, livelihoods and imagined futures of street youth and their coping strategies in the city of Kumasi. The research involved primary data collection with 70 youth engaged in various economic activities on the principal streets of Kumasi. The preliminary findings show that while COVID-19 has led to destruction of the livelihoods of street youth, the support provided from close friends, family members and other networks have been instrumental in enabling street youth to cope with the challenges brought about by the pandemic. Street youth use their agency to navigate the challenges encountered during covid-19. This project was funded through BIRD.

Project Team: Prof Ernestina Fredua Antoh, Dr. Thomas Yeboah, Nathaniel Mensah-Odum.

AGRICULTURAL HEALTH AND SAFETY IN RURAL GHANA (ONGOING)

Globally, agriculture is identified as one of the most hazardous industries. In spite of this, the missing link in agricultural policies and interventions in Ghana has always been a lack of complementary programme that specifically addresses the health and safety needs of the agricultural workforce in remote and rural areas. As a research centre with a focus on rural

development, BIRD is concerned about the health risks and hazards that farmers and farmworkers are exposed to and is currently conducting research in this space to inform agricultural health and safety policies and interventions in Ghana. In the year under review, a pilot study was conducted on agricultural health and safety in farming populations. The objectives of the study are to:

1. Identify and track health indicators among farming populations to inform occupational health and safety policies within the agricultural sector, and
2. Determine the proportion of farming enterprises from different commodity sectors that have set in place health and safety systems, and examine how these enterprises control high-risk hazards

The findings indicate that farmers have a high exposure to farm chemicals, such as pesticides and fertilizers, as well as toxic gases produced from common farm practices like manure decomposition and silo crop storage. Farmers also have exposure to high levels of dust, which contain mould, bacteria, and animal droppings, among other things. Tractor operators interviewed reported high exposure to loud noises and sounds from tractors, and complained of hearing problems, back pains and injuries associated with tractor rollover. The study found that none of the tractors used by the farmers had a rollover protection.



A tractor with no rollover protection



Farmer applying pesticides with no PPE

Farmers reported physical health problems including hypertension, diabetes, and musculoskeletal injuries. Farmers also reported behavioural and mental health issues such as anxiety, depression, substance use (alcohol and smoking), and death by suicide. This project is being implemented with seed funding from BIRD. In the next steps, a grant proposal will be developed to seek external funding to scale up the study. The findings from the study will be used to develop an integrated, theory-driven and multi-sectoral intervention focusing on farmer health and safety. The overall goal of the Project will be to improve the health, well-being and safety of farm

families for increased productivity, food security and sustainable agriculture in rural Ghana.

Project Team: Dr. Ebenezer Owusu-Addo, Nathaniel Mensah-Odum, Dr. Isaac Bonuedi, Dr. Thomas Yeboah, Dr. Albert Arhin, Dr. Bernice Wadei, Dr. Monica Addison, Prof. Ernestina Fredua Antoh, Prof. Paul Sarfo-Mensah, Prof. S.E. Edusah

MONITORING, EVALUATION AND DEVELOPMENT UNIT (MED)



The MED unit is a multidisciplinary unit that aims to promote development effectiveness and inclusive growth through the production of rigorous, high-quality and independent evaluation and research evidence that meet the highest standards of quantitative and qualitative analysis. The Unit is staffed by a team of experienced evaluators and researchers who bring a broad range of expertise from agriculture, health, education, housing, climate change, labour markets, microfinance, and rural development among others.

This year, our work has focused on conducting baseline surveys, performance evaluations and research on agriculture, farming and other critical issues of

national concern. Our team has also been active in “knowledge translation”, presenting training, and workshops on realist review. Project highlights for 2022-2023 include:

END-LINE EVALUATION OF THE GHANA AGRICULTURE SECTOR IMPROVEMENT PROGRAMME

The “Ghana Agricultural Sector Investment Programme (GASIP)” is a Government of Ghana Programme with joint funding from the International Fund for Agricultural Development (IFAD) and Adaptation for Smallholder Agriculture Programme (ASAP) through the Ministry of Food and Agriculture (MOFA). The Programme focuses on developing smallholder farmers through sustainable Farmer Based Organizations (FBOs). The overall goal and objective of the GASIP is to contribute to sustainable reduction in rural poverty in Ghana by increasing income, profitability and resilience to climate change of Agribusinesses and Smallholder Farmers. The Programme’s

Development Objective (PDO) is: agribusinesses, including smallholders, have enhanced their profitability and climate change resilience. A quasi-experimental approach, specifically, a non-equivalent control group post-test only design was used in this evaluation. The non-equivalent control group post-test design entailed measuring outcomes by following treatment in one group (in this case GASIP and ASAP) and also in a

nonequivalent control group that does not receive the treatment (i.e., non-beneficiaries of GASIP and ASAP). The evaluation employed a participatory mixed methods design based on a representative sample of project beneficiaries and other stakeholders. Both the quantitative and qualitative methods were used to collect adequate data to respond to the evaluation questions.



The end-line evaluation found that the development of GASIP commodity value chains had a moderate impact on the productivity of maize and rice at end-line. The GASIP intervention was found to have played a significant role in improving GAPs among SHFs, adoption of improved technology and climate smart agriculture practices. The GASIP is associated with moderate improvements in food security. GASIP has impacted positively on social capital through the numerous training and capacity building programmes initiated over the lifetime of the programme. GASIP has had a positive effect in terms of enabling households to own, retain and build household and productive assets. The GASIP VSLA model appeared to be enabling GASIP households to save more, both in terms of propensity to

save and the value of savings. The VCD model promoted by GASIP has been satisfactory. The VCD-FBO-SHF model as a cluster approach was a valuable mechanism to address value chain constraints, particularly those requiring the transformation of smallholder farmers' relationships with other value chain actors. GASIP is rated as highly satisfactory in terms of human and social capital development and empowerment. Gender was mainstreamed into GASIP using the Gender Action Learning System (GALS). The GALS contributed to changes in social norms, beliefs, attitudes and behaviours underpinning gender equality. The performance of GASIP in terms of partnership is rated highly satisfactory as GASIP strengthened its positive engagements and partnership with

state agencies, private sector agencies, civil society organizations and non-governmental organisations. Partnerships established with government agencies will contribute to sustainability since they will continue to exist long after GASIP closure. Overall, the evaluation provided substantial evidence to suggest that the implementation of GASIP has to some extent contributed to achieving its goal of reducing rural poverty through increasing the productivity, income and resilience of FBOs and smallholder farmers. GASIPs' unique approach to implementation of agricultural sector intervention (i.e. VCD-FBO-SHF) provided an avenue for smallholder farmers to become well organised to leverage on a wide range of services promoted and or supported by the VCDs with GASIP investment. The findings of the evaluation would inform decisions about future programming, as it will assist IFAD/Ghana, its implementing partners, and other relevant stakeholders with guidance to optimize the effectiveness of future programming in Ghana's agricultural sector.

Evaluation Team: *Dr. Ebenezer Owusu-Addo, Dr. Monica Addison, Dr. Thomas Yeboah, Dr. Bernice Wadei, Dr. Bonuedi, Dr. Albert Arhin, Prof. Paul Sarfo-Mensah P., Mr. Nathaniel Mensah-Odum, Mr. Richard Tetteh, Miss. Boatema Fiscian.*

MFA COVID-19 RELIEF AND RESILIENCE PROGRAM BASELINE EVALUATION

This study documents the impact and resilience analysis of the baseline data

collected for the impact evaluation (IE) of the MFA COVID-19 Relief and Resilience Program. The COVID-19 Relief and Resilience Program is being implemented under the USAID/Ghana Feed the Future Mobilizing Finance in Agriculture (MFA) Activity to facilitate the mitigation of the impacts of the COVID-19 on Ghanaian agribusinesses and smallholder farmers. The intervention is being implemented across 17 districts in the Northern, North East, Upper East and Upper West regions of Ghana. Under the Program, grants were given to 13 grantees to mitigate some of the impacts of COVID-19 on their businesses and build their resilience. The 3-year program is being implemented by Palladium International. The overall objectives of the MFA COVID-19 Relief and Resilience Program impact evaluation are to:

- i. Determine the impact of the pandemic on grantees.
- ii. Determine the impact of the pandemic on the smallholders they support.
- iii. Determine the current level of resilience of the grantees.

The baseline research serves as a reference point for conducting a final evaluation of the COVID-19 Relief and Resilience Program.

The baseline evaluation employed the concurrent mixed-method design involving the collection and analysis of both quantitative and qualitative data at the same time. Quantitative data were gathered from both treated and untreated respondents. The treated respondents

included 13 grantees/agribusinesses and 739 smallholder farmers that are linked to these grantees under the MFA Activity, and operate in the cowpea, groundnut, maize, mango, pineapple and soy value chains. The untreated group was composed of 309 smallholder farmers. The quantitative data were analysed using descriptive (e.g. percentages, frequencies, mean and cross tabulations and inferential statistics (e.g. principal component analysis). The constant comparative analysis was used to identify themes and patterns from the qualitative data. Relevant quotes from participants have been used to support the qualitative analysis.

The quantitative and qualitative data support prior information that the MFA COVID-19 Relief and Resilient Grant program area is highly shock-prone. Both grantees and smallholder farmers were overwhelmed with the COVID-19 shocks. The most commonly experienced impacts of the COVID-19 shocks are reduced productivity, limited access to mechanization services, labour, inputs such as fertilizer and agrochemicals, input price increases.

The use of social capital to manage shocks was found to be critical. The qualitative data reveal the primary importance of the social cohesion and communal support associated with bonding social capital for coping with shocks, of bridging social capital through connections with friends and family, and of linking social capital for receiving public aid and services. Human capital is generally across both grantees and smallholder farmers in the MFA

program areas. According to grantees and smallholder farmers, training on subjects such as business management, the use of IT, strategic planning and finance are highly valued. Disaster preparedness and mitigation is very low in the MFA program area. Availability of other elements of disaster risk reduction (i.e., hazard insurance, crop insurance, and business) is generally low.

The quantitative results show that a good number of farmers in the treatment group (40.4%) and control group (32.1%), experienced a 31-60% decrease in production capacity. Farmers reported high pre-harvest losses (between 25-50%) during COVID-19 (i.e., 2020/21 season). The result shows that 42.8% youth compared to 38.5% adults in the treatment group, experienced pre-harvest losses during the COVID-19 pandemic period. In terms of sex disaggregation, in reference to the treatment group, 40.1% males and 39.5% females reported experiencing pre-harvest losses, during the COVID-19 pandemic. The value chain crops, namely maize, groundnut, soybean and cowpea of the treatment group recorded post-harvest losses of 13.9%, 24.9%, 19.8% and 13.3%, respectively compared to that of the control group (17.26%, 29.60%, 36.7% and 10.03%, respectively). This is in sharp contrast to post-harvest losses during the COVID-19 where maize, groundnut, soybean and cowpea farmers in the treatment group recorded post-harvest losses of 31.15%, 35.75%, 41.10% and 38.66%, respectfully compared to that of the control (30.95%, 68.78%, 69.30% and 95.34%, respectively).

The factor analysis indicates that all three aspects of firm and smallholder resilience capacity, if improved can bolster their resilience in the face of shocks, including COVID-19 shocks. The majority of the smallholder farmers (53.6%) did not have resilience strategies in place for unforeseen events. Within the treatment area, a greater percentage of male farmers (53%) were found to lack contingency plans for unforeseen events compared to female farmers (50.3%). Similarly, the grantees did not have in place, robust pre-crisis strategies such as the establishment of business plans, risk mitigation and business contingency plans, and strategic resourcing through inventory management, proper account management, and savings to deal with the ramifications COVID-19.

Evaluation Team: Ebenezer Owusu-Addo, Minica Addison, Thomas Yeboah, Bernice Wadei, Isaac Bonuedi, Albert Arhin, Paul

Sarfo-Mensah P., Nathaniel Mensah-Odum, Richard Tetteh, Boatema Fiscian.

FEED THE FUTURE MARKET SYSTEMS AND RESILIENCE ACTIVITY BASELINE SURVEY

The Feed the Future Ghana Market Systems and Resilience Activity (MSR), funded by USAID, is implemented by ACDI/VOCA and partners in 17 districts in northern Ghana, covering the Northern, North East, Upper East, and Upper West Regions of the Feed the Future (FtF) northern Ghana Zone of Influence. ACDI/VOCA commissioned BIRD to conduct a baseline survey for the MSR Activity. The purpose of the baseline study was to obtain information to test the MSR Activity's causal pathway as outlined in its Theory of Change, confirm the targets of key indicators and lay the groundwork for impact evaluation of the project.



Emerging technology (Moisture meter) being used by SHFs



Groundnut sheller

The study used mixed method quasi-experimental design involving the collection and analysis of quantitative and qualitative data as well synthesis of both grey and academic literature. Data were collected through a well-structured questionnaire, which was administered to 1763 small-holder farmers (MSR districts, N=1182; non-MSR districts, N=581) engaged in the production of the six targeted crops (maize, soya, cowpea, groundnuts, vegetables, and shea). The findings indicate that vegetables are the most profitable crops cultivated in the ZOI with the highest gross margin of \$522.00 per hectare. It is followed by soya (\$482.00), cowpea (\$ 404.00), groundnut (\$321.00), maize (\$ 262.00), and shea (\$ 52.9). Overall, the study concluded that there is tremendous potential to increase commercialization and profitability of agriculture markets in the ZOI, and that the OBs, their nucleus farmers and the numerous SHFs could serve as key drivers of the process. The reasoning behind this is that they are the market actors that have a comparatively better appreciation of the market systems and the resilience of the six targeted commodities of the MSR activity, and there is the need to capitalize on it by the project. The MSR Activity will significantly benefit from the findings in this baseline study if they are integrated into intervention planning at an early stage.

Evaluation Team: Dr. Ebenezer Owusu-Addo, Prof. Paul Sarfo-Mensah, Dr. Isaac Bonuedi, Dr. Thomas Yeboah, Monica Addison

BASELINE STUDIES FOR THE CHILD LABOUR AND FORCED LABOUR PREVENTION AND REMEDIATION PROGRAMME FOR IVORIAN AND GHANAIAN COCOA SMALL PRODUCER ORGANISATIONS (FAIRTRADE): ONGOING

Over the past decade, various efforts and initiatives targeted at addressing child labour and forced labour in cocoa-growing communities in Côte d'Ivoire and Ghana have been carried out by a number of organizations including Fairtrade. However, the prevalence of child labour and forced labour in cocoa-growing areas in these countries has been a persistent and challenging issue. As part of effort of tackling child labour, this programme, implemented by Fairtrade, seeks to disburse funds to successful Fairtrade certified applicants for initiatives that focus on essential but often underfunded elements of strengthening children's rights and ending harmful practices. The programme is designed to complement existing funding allocated by Small Producer Organizations (SPOs) and other entities for prevention and remediation efforts, rather than replacing them.

BIRD has been contracted to undertake the baseline studies for this programme to achieve the following specific objectives: (i) To provide a better understanding of the implementation context for the programme at the onset of the programme. i.e., gathering data on the prevalence and nature of child labour and forced labour in the programme intervention areas;

(ii) To help validate the assumptions in the programme's Theory of Change (ToC) and targets of the indicators in the programme's Monitoring Evaluation, and Learning (MEL) Framework and (iii) to establish starting points or baselines for all indicators in the MEL framework, suggesting revisions in their formulation if and where necessary.

Evaluation Team: Dr. Albert Arhin, Dr. Thomas Yeboah, Dr. Ebenezer Owusu-Addo, Prof. Paul Sarfo-Mensah, Dr. Isaac Bonuedi and Mr. Nathaniel Mensah-Odum.

SOCIO-ECONOMIC IMPACT OF GUINNESS GHANA BREWERIES PLC'S LOCAL RAW MATERIAL SOURCING: ONGOING

Since 2012, GGB Plc has been increasing the use of locally available raw materials in the production of its premium brands. With a long-term target of 70%, GGB Plc's locally sourced raw materials has increased from a modest 12% in 2012/2013 to 56% in 2023. The year 2023 marks a decade since the GGB Plc introduced different bands to take advantage of the Government of Ghana's concession (favourable tax regimes) for manufactures using local raw materials as substitutes for their imported raw materials, to produce excisable goods. GGB Plc undertook a baseline study in 2014 and follow up studies in 2017 and 2019 to evaluate the social and economic impact of the LRMS scheme. With the initiative entering its 10th year, GGB Plc commissioned

a follow up study in 2023 to assess the incremental social and economic impact of the LRMS initiative since the 2019 impact assessment as well as to measure the total impact of the initiative in the last 10 years against the baseline.

The study employed a concurrent mixed-method approach involving the collection and analysis of quantitative and qualitative data. Data were collected through a structured questionnaire, which was administered to 935 beneficiary smallholder farmers engaged in the production of sorghum and maize in Upper West, Upper East, Northern and Bono East regions of Ghana. In addition, the evaluation team also conducted 13 focus groups and 25 in-depth interviews (IDIs) with smallholder farmers (SHFs) and 15 Key Informant Interviews (KII) with aggregators and other value chain actors in the project zone of influence. Data collection was carried out between August and September 2023. Data were analysed using both quantitative (descriptive statistics) and qualitative (thematic and narrative synthesis) techniques.





The findings show that the implementation of the LRMS initiative has since 2014 contributed to reducing rural poverty through increasing the productivity, income and resilience of smallholder farmers. The findings indicate that LRMS generates both business benefits and developmental effects to the society. Providing private sector companies such as GGB Plc in developing markets like Ghana with the opportunity to increase the local part of their sourcing can have large socio-economic impact on smallholder farmers and agribusinesses and enables local companies to maximise the developmental effects of their investments. Evidence from the study indicates that in addition to benefiting the GGB Plc, local sourcing brings significant developmental effects to the society. These include short-term gains pertaining to local incomes and employment, and long-term gains that can enable structural economic transformations. Further, GGB Plc's LRMS initiative serves as an important mechanism for achieving agricultural sector goals of improved agricultural productivity and rural poverty reduction in Ghana. That

is, GGB Plc's LRMS initiative creates value directly for the local economy and is one of the most important ways in which GGB Plc supports and builds capability in local communities in Ghana. It is recommended that government should consider making business and public policy decisions that could increase that impact, maintain a business environment that encourages continued investment by the private sector. Market actors should also strengthen the linkages between value chain drivers (i.e., agribusinesses and aggregators) and smallholder farmers, improve the enabling environment for local market actors. It is also recommended for GGB Plc to undertake a regular review of the prices of commodities offered to local aggregators and farmers to ensure that they remain competitive, and promote zero farming footprint, promote zero irresponsible drinking.

Evaluation Team: Dr. Ebenezer Owusu-Addo, Dr. Isaac Bonuedi, Dr. Thomas Yeboah, Dr. Bernice Wadei, Dr. Monica Addison, Albert Arhin, Prof. Paul Sarfo-Mensah, Mr. Nathaniel Mensah-Odum, and Mr. Richard Tetteh.

FINAL EVALUATION OF THE UNITED NATIONS JOINT PROGRAMME ON EMPOWERING ADOLESCENT GIRLS THROUGH IMPROVED ACCESS TO REPRODUCTIVE HEALTH EDUCATION AND RIGHTS-BASED QUALITY SEXUAL AND REPRODUCTIVE HEALTH SERVICES IN GHANA (UNFPA): ONGOING

In January 2018, UNFPA and UNICEF launched a programme on strengthening sexual and reproductive health and rights of young people through scaling up of reproductive health education in Ghana supported by Global Affairs Canada. The joint programme entitled “Empowering Adolescent Girls through Improved Access to Reproductive Health Education and Rights-Based Quality Sexual and Reproductive Health Services in Ghana” targets as primary beneficiaries, adolescent girls 10-19 years in and out of school, married and unmarried. The secondary beneficiaries are girls aged 20-24 years. Special attention is given to vulnerable girls such as Kayayei (migrant girls) and those living with disabilities including those in humanitarian situations (refugee camps). UNFPA and UNICEF commissioned BIRD to conduct the final performance evaluation of the programme. The overall objective of the evaluation was to provide evidence of programme performance and achievement of planned results, provide accountability to stakeholders and provide lessons learned to inform the development of future related programmes.

The evaluation found that the adolescent girls programme (AGP) exceeded its target of reaching adolescents with reproductive health education (SRH). The proportion of in-school early adolescents (10-14 years) educated on puberty and SRH increased from 23% to 46% in the treatment communities (against an increase from 33% to 36% in the comparison communities), with an impact of the AGP of 45 percentage points. For late adolescents (15-19 years), their exposure to information on puberty and SRH increased from 20% to 46% in the treatment communities, with an impact of the AGP of 12 percentage points. The evaluation finds that the adolescent girls programme (AGP) has worked to building the confidence of adolescent girls in exercising agency and voice on SRH and gender issues. AGP significantly improved adolescents’ attitude towards SGV. There was a decrease in the proportion of adolescents in the treatment communities who consider it justifiable for a boy to hit a girl, from 67% to 53%. The general agency/empowerment score of early in-school adolescents has improved and increased from 37.7 to 58.9 (against an increase from 50.37 to 50.91 in comparison communities), with an impact of the AGP of 26.5 at a statistically high significant level. The agency scores for late adolescents had improved from 36.8 to 64.3 and overall program impact of 13.4. The agency/empowerment score for in-school young adults also improved from 51.5 to 65.8. One way that the AGP made significant gains in terms of adolescent agency is through the accumulation of knowledge on SHR. Aside from

accumulation of knowledge, other areas that the programme made modest gains include adolescents' confidence to say no to sex, negotiate safe sex and refuse child marriage.



The findings from the evaluation indicate that parents especially mothers are primary source of information to adolescents and young people when it comes to sexual and reproductive health issues. It is recommended that a Parent Education Programme be incorporated into the programme suite of activities to improve parents' skills for educating and communicating with adolescents and young people, especially about sexuality and reproductive health. The proposed parent education programme will be most effective when it operates holistically within the socio-cultural context of changing family patterns and works through existing networks of learning institutions and community-based organizations. The evaluation further recommended that to effectively empower adolescents against transactional and risky sex behaviours, there is the need to consider supporting economic empowerment interventions targeting adolescents. This may be through direct initiatives such as gender-responsive cash plus transfer programmes

or indirect initiatives such as skills for employability and programmes with peer mentors on future planning. There is strong evidence that cash transfer programmes significantly reduce sexual debut, transactional sex, early marriage, and adolescent pregnancy among adolescents.

Evaluation Team: Dr. Ebenezer Owusu-Addo, Dr. Thomas Yeboah, Dr. Isaac Bonuedi, Dr. Bernice Wadei, Mr. Nathaniel Mensah-Odum, Boatemaa Fiscian and Deborah Mensah Bennor.



UNIVERSITY- COMMUNITY ENGAGEMENT

In line with the Vice-Chancellor's vision to position KNUST as a competitive global research-intensive institution for advancement in science and technology for industrial and social uptake towards sustainable national and global development, BIRD has taken up the challenge to reposition itself to achieve the institution-wide vision, viz. to be an institution of excellence for rural development research and education for rural transformation in Ghana and beyond. Innovatively, BIRD instituted a flagship programme dubbed

University-Community Engagement (UCE model) focused on “taking the university to the grassroots” as the rural development propeller. The UCE responds to the Vice-Chancellor’s call of ‘taking the gown to town’. This is being achieved by strengthening the capacity of rural communities and institutions for sustainable and inclusive

rural development. The UCE initiative continues to gain traction both locally and internationally, making it imperative for BIRD to restructure and reposition for this renewed focus. In the year under review, the UCE model took us to the Ayeduse Community. Community engagement was held with the Chief and elders of Ayeduse followed by health screening.



*University-community engagement at Ayeduse community -
Taking the University to the Grassroots*

POLICY AND ADVOCACY

As part of the efforts towards shaping rural development policy and practice in Ghana, on January 24, 2023, BIRD hosted a team from the Ministry of Local Government, Decentralisation and Rural Development (MLGDRD) led by the Sector Minister, Mr. Daniel Botwe, his deputies, and other staff from the Ministry and its sector-wide agencies, to dialogue on rural

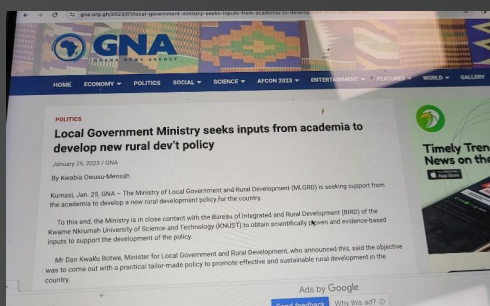
development issues in Ghana. Present at this meeting were other KNUST faculty members from the College of Agriculture and Natural Resources, Department of Planning, and the College of Engineering. At the meeting, it was emphasized that to effectively support the rural development agenda of the Government of Ghana, BIRD needs to be repositioned to provide the full breadth of rural development research and education. The meeting afforded the Ministry to seek support from the academia to develop a new rural development policy for the country.



CONVERSION OF BIRD INTO AN INSTITUTE



Minister for Local Government, Decentralisation and Rural Development Pays a Historic Visit to BIRD



News article on the Minister's visit to BIRD, KNUST

Rural development education and research are key to revitalising rural economies towards the attainment of the Sustainable Development Goals (SDGs). Rural development is complex and dynamic and therefore, institutions established to deal with it need to keep pace with the rapid changes that take place. Presently, the world is experiencing environmental, climatic and economic changes that have profound effects on social and economic lives of people in rural communities. These developmental changes require stronger broad-based institutions to address the challenges. To effectively develop rural areas, there is the need to develop the right mix of professionals with the appropriate set of skills in rural development theory, methods and practice.

The purpose of the conversion of BIRD to an Institute for Rural Development and Innovation Studies is to enhance its capacity to widen the scope of rural development research and offer graduate

level programmes to meet the growing needs of rural development practitioners and institutions in both the public and private sectors of Ghana and those of other countries within Africa and beyond. It is also to respond to international development imperatives as indicated in the Sustainable Development Goals (SDGs), the African Union Agenda 2063, and the African Continental Free Trade Area Agreement, among others. In the year under review, the proposal for the conversion of BIRD to an Institute was

approved by the Planning and Resources Committee of the University. The proposed Institute will be called the INSTITUTE FOR RURAL DEVELOPMENT AND INNOVATION STUDIES (IRDIS), College of Agriculture and Natural Resources, Kwame Nkrumah University of Science and Technology, Kumasi. The conversion of BIRD into an Institute is thus, timely and aligns with KNUST's vision and mandate. It also aligns with the Government of Ghana's rural development agenda.

AERIAL VIEW



Office Complex and Lecture Halls for IRDIS

EDUCATION AND TRAINING



DEVELOPMENT OF AN MSC/MPHIL PROGRAMME IN INCLUSIVE MARKET DEVELOPMENT (IMD)

In August 2022, BIRD commenced work on the development of a new postgraduate programme in Inclusive Market Development (IMD). This programme is a collaborative effort between BIRD and the Wageningen Centre for Development Innovation (WCDI) of Wageningen University and Research (WUR), The Netherlands. Mr Jan Helder, a Sr. Economist and Marketing and Value Chain Development Expert from the WCDI, WUR was on sabbatical with BIRD between August 24 and September 30, 2022 to assist in the programme development. To date, the course content has been developed. Stakeholders' meeting was held on the draft course content in September 28, 2022. The programme will be rolled out in the 2023/2024 academic year.

TEACHING/ SUPERVISION OF STUDENTS PROJECT WORK/ THESIS

Because BIRD is a research department, the academic staff of BIRD continued to dedicate about 30% of their time to teaching and supervision of students' project works in various departments within the University. These include Faculty of Agriculture and Faculty of Renewable Natural Resources of the College of Agriculture and Natural Resources, Department of Geography and Rural Development of the College of Humanities and Social Sciences, Department of Planning, College of Art and Built Environment, and Department of Health Promotion and Education, School of Public Health. The academic staff also continued to serve as External and Internal Examiners for institutions such as the Institute of Development Studies (IDS), University of Cape Coast, University of Energy and Natural Resources

(UENR), University for Development Studies, (UDS), Centre for Sustainable Development (CESDEV) at the University of Ibadan, Nigeria, University of Cape Town, South Africa and graduate students within CANR and other Colleges of the University.

Under the ASSESS project funded by USAID, three (3) PhD students were enrolled into three programmes, one in the Faculty of Agriculture and two in the Department of Industrial Art. BIRD staff are co-supervising the three PhD candidates. In the year under the review, all three PhD candidates successfully completed their PhD programmes.



Group Photo with PhD Candidates



PhD Seminar Presentation to USAID



PhD Candidates graduation ceremony

THE YOUNG CONSULTANT DEVELOPMENT PROGRAMME (YCDP)

In the year under review, BIRD recruited the first cohort of the YCDP graduates who are early professionals, with an interest or qualification in development to research-driven consulting in the rural and international development sectors. The programme aligns with the Vince-Chancellor's mission of entrepreneurship training and is geared towards promoting research-based and consulting entrepreneurship. Recent graduates (MSc., MPhil or PhD) are the persons this programme seeks to target.

The programme offers graduates/early-career professionals the opportunity to develop and refine their technical skills and provide experiences across the key thematic areas of rural/international development within BIRD's portfolios.

THE BUREAU OF INTEGRATED RURAL DEVELOPMENT-KNUST

THE YOUNG CONSULTANT DEVELOPMENT PROGRAMME (YCDP)

The Young Consultant Development Programme (YCDP) at the Bureau of Integrated Rural Development, KNUST, seeks to introduce graduates with a qualification in development studies to research-driven consulting in the rural and international development sectors. YCDP beneficiaries will be engaged for a maximum of one year after which they will graduate from the programme. At the end of the programme, beneficiaries would be assessed and awarded certificates. Beneficiaries will also be given programme support.

The YCDP at BIRD is delighted to announce its recruitment opening for 2022. To apply to the programme, candidates must meet the following criteria:

ELIGIBILITY CRITERIA

- Candidates must be graduates from KNUST
- Candidates must possess MSc, MPhil or PhD degree
- The degree must have been awarded within the last 2 years
- The degree must be in the field of development e.g. Environmental and Natural Resource Management, Development Planning/Management, Economics, Development and Tourism, Geography and Rural Development, Sociology, Gender and Development, Renewable Energy, Development Economics, Development Studies, Monitoring and Evaluation, Project Planning and Management and other Social Science and Development related programmes.

SKILLS AND CAPABILITIES

Applicants must have:

- strong research and analytical skills
- ample knowledge of qualitative and quantitative research methodologies and data analytical tools
- ability to work independently and with a multidisciplinary team
- academic written and oral communication skills in English
- analytical skills for preparation of presentations and articles for publication
- advanced analytical computing skills

HOW TO APPLY

Interested/qualified candidates must submit:
A one-page statement of research interest
Complete CV and cover letter
Academic certificates

All required documents must be sent either directly to the secretariat of the Bureau of Integrated Rural Development (BIRD), KNUST, or send soft copies of your application to bird@knust.edu.gh. You can also contact 0322493501 for further inquiries. Application deadline is 29th June, 2022. All applications received after 5pm on 29th June, 2022 will not be accepted. Only short-listed applicants would be contacted

Recruitment Poster: The Young Consultant Development Programme (YCDP) at BIRD

ANALYTICAL SUPPORT SERVICES AND EVALUATIONS FOR SUSTAINABLE SYSTEMS IN WEST AFRICA (ASSESS-WA) PROJECT

The Bureau continued to lead the University in the implementation of a 9-year USAID Funded partnership Project, the Analytical Support Services and Evaluations for Sustainable Systems in West Africa (ASSESS-WA). The project which commenced in April 2014 and was scheduled to end in March 2019

has been given a No Cost Extension for another two years ending December 2023. ASSESS is responsible for evaluations of programmes in the US Government's West Africa Regional Economic Growth (REG) portfolio in Agriculture, Environment, Trade and Energy. ASSESS-West Africa is managed by the United States Department of Agriculture (USDA), two Land Grant Universities in United States of America (University of Rhode Island, URI, and Delaware State University, DSU) and Kwame Nkrumah University of Science and Technology, (KNUST), Kumasi. Prof. Paul Sarfo-Mensah and Dr. Ebenezer Owusu-Addo are the Principal Investor and Co-PI, respectively of the Project on KNUST Campus with counterparts at URI and DSU. BIRD is also the coordinating department of the METSS Activity financed by the USAID.

ASSESSMENT, ANALYSIS, AND DEVELOPMENT OF TOOLS TO STRENGTHEN THE USE OF EVIDENCE IN POLICIES AND LEGISLATION IN AFRICA (TSUE)

There is growing recognition of the importance of evidence in national decision-making and the crucial role of parliamentarians and their support staff in ensuring that evidence-based approaches are used for strengthening oversight, budgeting resource appropriation, legislation, and policymaking across all sectors. It is important to emphasize that given the nature of parliamentary business, parliamentarians deal with

various subjects/issues while carrying out their legislative functions, the use of evidence cuts across all sectors of their work.

Parliamentarians and their staff need data and evidence to make decisions that effectively, equitably, and justly allocate resources and meet people's social and economic needs. However, they face major technical and political challenges related to the generation and the use of evidence to inform policies. This challenge is acute in Africa given the dearth of information and analysis about the conditions, problems, and solutions of social and economic development. Parliaments in Africa lack the capacity to compile and use evidence in the design, oversight, and evaluation of legislation and policies on the critical economic and social issues facing various countries on the continent. Better use of evidence by Parliamentarians, and associated research and policy making bodies will facilitate better development outcomes, and more transparent and efficient governance.

This project funded by USAID aimed to improve access to evidence used by parliamentarians and policy makers in their legislative and policy making work. Under the project, the following reports/ documents have produced to facilitate the uptake of evidence in Parliaments:

1. Assessment of Current State of Use of Evidence, Government Oversight, and Accountability Structures, and Legislative and Policy-Making Processes
2. Guides and toolkits to strengthen

evidence-based legislation and policies

3. Development and dissemination of syntheses and Knowledge Products (KPs) on the use of evidence in legislation and policies
4. Dialogue forums and exchanges for lessons-sharing on evidence use.
5. Thirteen videos (13) were also produced and published on the TSUE online repository to highlight some of the successes, challenges and lessons learned by Members of Parliaments on ways to strengthen evidence use and achieve greater outcomes for development. Some of these videos have been posted at the USAIDAfrica Youtube Channel and generated over 80 views in the first month of its publication.
6. An online repository to host TSUE materials and other related materials on evidence use and knowledge translation has been developed and linked to the website of the Bureau of Integrated Rural Development (BIRD) of the Kwame Nkrumah University of Science and Technology (KNUST).
7. TSUE also facilitated the subscription of the research centres of the Parliament of Uganda and Parliament of Ghana to Statistica, a data website hosting over 1,000,000 statistics

on more than 80,000 topics and the Journal of Africa Affairs to aid their access and use of evidence to support legislative, oversight and policy-making functions.

8. The Activity supported the development of a website for the Africa Parliamentarians Network on Development Evaluation (APNODE) to increase the dissemination of products and materials that will improve use of evidence among Parliamentarians and policy-makers in Africa

Project Team: Prof. Paul Sarfo-Mensah, Dr. Ebenezer Owusu-Addo, Dr Albert Arhin, Dr. Thomas Yeboah, Mr. Nathaniel Mensah-Odum

RETROSPECTIVE ASSESSMENT OF PAST USAID LEGISLATIVE STRENGTHENING PROGRAMMES IN KENYA AND UGANDA

This project funded by USAID Africa Bureau builds on the TSUE. USAID legislative strengthening and economic governance projects have frequently supported Parliamentary Budget Offices (PBOs) and relevant committees to conduct the analysis required to conduct their role in budget authorization (revenue and expenditure) and oversight. For instance, Uganda established their PBO in 2001 and USAID provided training, equipment, and technical assistance as the office grew into its new functions.

In Kenya, USAID supported reformers in the National Assembly who established their PBO in 2007 as a unit under the Directorate of Information and Research Services through a resolution of parliament. In order to learn from such interventions to strengthen legislative assistance programmes, this ex-post review is being undertaken to review donor interventions in PBOs and similar efforts to support committees on budget oversight.

The assessment provided insights into the extent to which the various protocols, Standard Operating Procedures (SOPs), or manuals that were developed with donor support are still in practice or relevant; and, whether the variety of products or resources offered continue and at what scale when compared to the previous interventions. The project included BIRD staff and an external assessment team contracted by KNUST.

Project Team: Prof. Paul Sarfo-Mensah, Dr. Ebenezer Owusu-Addo, Dr Albert Arhin, Dr. Thomas Yeboah, Nathaniel Mensah-Odum

META-EVALUATION: QUALITY REVIEW AND SYNTHESIS OF USAID EVALUATIONS IN THE AFRICA REGION CONDUCTED BETWEEN 2017-2021

This project funded by USAID is being undertaken to support USAID Africa Bureau programmes. The quality of evaluations conducted in the Africa region has gradually improved since the adoption of USAID's Evaluation Policy in

2012. However, there are still significant quality challenges which have been documented through various evaluation quality assessments. This assessment of evaluation quality covers a sample of evaluations conducted in the African Region from 2017 to 2021. AFR expects the results of this activity to generate information that will raise awareness among Africa Mission and Africa Bureau leadership about the strengths and weaknesses of the evaluations produced by the Bureau as a whole. Information

on factors affecting evaluation quality will help the Bureau and Missions to devise strategies for quality improvement. In addition, this assessment sheds light on overall project/activity performance in the Africa Region, including some of the key factors that facilitate or inhibit performance. The project included BIRD staff and an external assessment team contracted by KNUST.

Project Team: Dr. Ebenezer Owusu-Addo, Prof. Paul Sarfo-Mensah, Dr Albert Arhin

CONTRIBUTIONS TO GLOBAL RESEARCH

STROBE-EQUITY REPORTING GUIDELINE: IMPROVING SOCIAL JUSTICE IN OBSERVATIONAL STUDIES (ONGOING)

Health inequities can go frequently unreported in observational studies. This project comprises international group of scientists, educators, decision-makers, ethicists, funders, and patients, using an integrated knowledge translation approach, proposes to develop an extension to the STROBE (STrengthening

the Reporting of OBServational studies in Epidemiology) guideline to deal specifically with these disparities. The overall goal is to develop guidance on reporting health equity considerations in observational studies to make health equity data more readily available for synthesis and decision-making. This project is planned with a global stream and an Indigenous research stream, and carried out with an integrated knowledge translation approach. The project embeds a parallel stream focused on evidence related to Indigenous research. After assessing available guidance for

reporting health equity in observational studies and assessing current reporting, they plan to seek international feedback, then conduct an evidence and consensus-driven process to develop a reporting guideline. The project started in January 2021. The following papers have been completed: scoping review of existing guidance on equity reporting in observational studies; the methods study protocol has been submitted. A series of empirical studies are planned for 2023, followed by a global consensus meeting, with the final reporting guideline and statement expected in 2024. BIRD staff, Dr. Ebenezer Owusu-Addo is part of the international group of scientists working on the STROBE-Equity Reporting Guideline.

ACCOUNTING FOR DIVERSITY IN RANDOMISED CONTROLLED TRIALS (ONGOING)

Ethnically diverse participants remain underrepresented in medical research, especially in Randomised Controlled Trials (RCTs). Trial populations with poor diversity are a public health issue. The need to include ethnically diverse participants in RCTs has therefore, been widely recognised by researchers, policy-makers, service providers, and consumers. This project comprises international group of scientists, educators, decision-makers, trialists, funders, and consumers, using an integrated knowledge translation approach, to develop an inclusion extension to the Consolidated Standards

of Reporting Trials (CONSORT) guideline to deal specifically with diversity in trials. The aim of this research is to produce foundational guidance materials for the recruitment, collection and reporting of relevant variables and techniques for inclusion of ethnic minorities in RCTs. The project started in February 2022 and will end December 2023. To date, a systematic review of systematic reviews on reporting of variables related to ethnic diversity in randomised controlled trials has been completed. Primary data collection has also been completed in Australia. BIRD staff, Dr. Ebenezer Owusu-Addo is part of the international group of scientists working on this project.

DEVELOPMENT OF WORLD HEALTH ORGANIZATION'S OPERATIONAL FRAMEWORK FOR MONITORING OF SOCIAL DETERMINANTS OF HEALTH EQUITY

This project, led by the Department of Social Determinants of Health, World Health Organization aims at developing a global framework for monitoring the social determinants of health (SDH). The SDH are closely linked to the achievement of the United Nations (UN) 2030 Sustainable Development Goals (SDGs) and targets, which aim to encourage action in areas that have profound effects on health, wellbeing, and health equity. Routine monitoring of social determinants of health equity—that is, SDH and actions (e.g., interventions and policies) addressing SDH that can promote health

equity—is critical to ensure governments make informed decisions, implement actions, and are held accountable for creating healthier and more equitable communities. In the UN 2030 Agenda for Sustainable Development, Member States underscored the importance of “quality, accessible, timely, and reliable disaggregated data...to help with the measurement of progress and to ensure no one is left behind”. This project focuses

on developing an operational framework to provide guidance for countries in monitoring of SDH and actions (e.g., interventions and policies) to address SDH that can help to achieve health equity. BIRD staff, Dr. Ebenezer Owusu-Addo is part of the international group of scientists working on this project. The final framework can be accessed from <https://www.who.int/publications/i/item/9789240088320>

TEMPORAL EMPLOYMENT FOR ██████████ UNEMPLOYED GRADUATES

During the year under review, BIRD engaged a total of more than 250 unemployed graduates in implementing various commissioned research and evaluation studies. Aside the creation of temporal employment for these unemployed graduates, the Department contributed to building their capacity and equipped them with employable skills in research, evaluation and data analytics.

COLLABORATIONS

INTERNATIONAL COLLABORATIONS

The Bureau collaborated with the under-listed international organizations on various tasks:

1. Winrock International
2. The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
3. Institute for Housing and Urban Development Studies, Erasmus University, Rotterdam.
4. United Nations Population Fund (UNFPA)
5. United Nations Children Emergency Fund (UNICEF)
6. PBL Netherlands Environmental Assessment Agency

7. University of Iowa, USA.
8. United State Department of Agriculture (USDA), Washington Office
9. United State Agency for International Development (USAID) Accra Office
10. University of Rhode Island, USA
11. National Ageing Research Institute, Australia
12. INTRAC, UK
13. The International Centre for Evaluation and Development (ICED)



LOCAL COLLABORATIONS

The Bureau collaborated with the under-listed local institutions and organizations on various tasks:

1. Ministry of Local Government and Rural Development (MLGRD)
2. Sekyere Afram Plains District Assembly,
3. Sene East District Assembly



COMMUNITY SERVICE

Academic staff continued to serve as Editorial Board members and reviewers of International Journals. Senior members play the roles of Principal Investigators, Coordinators, Moderators and Members of Councils, Committees, Boards and also as technical consultants/advisors to both National and International Institutes. Staff also served on various KNUST boards and committees, professional associations and other national and corporate organization boards.

PUBLICATIONS (2022-2023 Academic Year)



During the 2022/2023 academic year, 27 papers in referred journals were published from of the research activities undertaken by BIRD staff. In addition, BIRD members contributed to seven (7) book chapters and seven (7) conference proceedings. Some of the areas covered include Mining, Rural

Youth and Livelihoods, Gender, Housing, Public Health and Health promotion, Sanitation and Waste management, youth development, Climate change and Sustainable development. Twelve (12) technical reports and six (6) policy briefs were also presented.

PEER-REVIEWED JOURNAL ARTICLES

1. Addison, M., Ohene-Yankyera K., Adjei, P.O.W., Mujawamariya G. and Asante, B. (2023). Uptake and income distribution effects of targeted farm technologies on rice farmers in forest and Guinea Savannah Zones of Ghana: Does gender matter? *Journal of Agriculture and Food Research*, 11:100516. <https://doi.org/10.1016/j.jafr.2023.100516>
2. Addison, M., Anyomi, B.K., Acheampong, P.P., Wongnaa, C.A., Amaning, T.K. (2023). Key drivers of adoption intensity of selected improved rice technologies in rural Ghana. *Scientific African*, Vol. 11: e01544. <https://doi.org/10.1016/j.sciaf.2023.e01544>
3. Ntow, T.K., Wongnaa, C.A., Nyadu-Addo, R., Addison, M., Awunyo-Vitor, D. and Abokyi, E. (2023). Effects of entrepreneurial behaviour on market outlets choice: Evidence from rice producers in Ashanti Region, Ghana. *Sustainable Technology and Entrepreneurship*, Vol. 2 (2):100037 <https://doi.org/10.1016/j.stae.2023.100037>
4. Arthur-Holmes, F., Yeboah, T., & Busia, K. A. (2023). Dimensions of women's mobility, livelihoods and vulnerability in artisanal and small-scale mining-induced local economy. *Journal of Rural Studies*, 101, 103061.
5. Arthur-Holmes, F., Yeboah, T., Cobbinah, I. J., & Busia, K. A. (2023). Youth in artisanal and small-scale mining (ASM) and higher education nexus: Diffusion of innovations and knowledge transfer. *Futures*, 103201.
6. Yeboah, T., & Boafo, J. (2023). The social significance of children's work in cashew supply chain activities in Ghana. *Children's Geographies*, 1-16.
7. Owusu-Addo E, Renzaho AMN, Sarfo-Mensah P, Sarpong YA, Niyuni W, Smith BJ. (2023) Sustainability of cash transfer programs: A realist case study. *Poverty & Public Policy*, 15:173–198
8. Owusu-Addo, E., Owusu-Addo, S. B., Bennor, D. M., Mensah-Odum, N., Deliege, A., Bansal, A., ... & Odame, J. (2023). Prevalence and determinants of sexual abuse among adolescent girls during the COVID-19 lockdown and school closures in Ghana: A mixed method study. *Child Abuse & Neglect*, 135: 105997.
9. Osei, L., & Yeboah, T. (2023). Imagining a future from the pit: Future aspirations of young artisanal-small scale miners in rural northern Ghana. *Cogent Social Sciences*, 9(1), 2167316.
10. Boafo, J., Yeboah, T., Guodaar, L., Stephanie, Y., & Nyantakyi-Frimpong, H. (2023). Understanding non-economic loss and damage due to climate change in Ghana. *Climate and Development*, 1-10.
11. Ojeleke, O., Groot, W., Bonuedi, I., & Pavlova, M. (2023). The impact of armed conflicts on the nutritional status of children: Evidence from Northern Nigeria.

The International Journal of Health Planning and Management. <https://doi.org/10.1002/hpm.3742>

12. Kamasa, K., Ankrah, D., Tetteh, A., & Bonuedi, I. (2023). How Germane is Banking Regulation and Supervision to Financial Sector Stability in Emerging Economies? Empirical Evidence from Ghana. *African Journal of Economic Review*, 11(4), 66-84.
13. Mensah-Odum, N., Sarfo-Mensah, P., & Antoh, E. F. (2023). Institutional Response to Mining in Forest Reserves in Ghana: A Case Study of the Atewa Range Forest Reserve. *British Journal of Healthcare and Medical Research*, 10(6), 10–24. <https://doi.org/10.14738/bjhm.106.15703>
14. Yeleliere, E., Yeboah, T., Antwi-Agyei, P., & Peprah, P. (2022). Traditional agroecological knowledge and practices: The drivers and opportunities for adaptation actions in the northern region of Ghana. *Regional Sustainability*, 3(4), 294-308.
15. Boafo, J., & Yeboah, T. (2022). Disenfranchising young people from customary land access; a case of commercialised cashew production in the Brong Ahafo Region of Ghana. *Cogent Social Sciences*, 8(1), 2148419.
16. Kandilige, L., Yeboah, T., & Abutima, T. K. (2022). Citizenship, Belonging and Crisis Induced Returns of Ghanaian Migrants from Côte d'Ivoire. *African Human Mobility Review*, 8(1), 34-58.
17. Wireko-Gyebi, R. S., Arhin, A. A., Braimah, I., King, R. S., & Lykke, A. M. (2022). Working in a Risky Environment: Coping and Risk Handling Strategies Among Small-scale Miners in Ghana. *Safety and Health at Work*, 13(2), 163-169.
18. Adu-Gyamfi, A., Owusu-Addo, E., Inkoom, DKB., & Asibey, MO. (2022) Peri-urban interface: An alternative residential location of low-income migrants in Kumasi, Ghana. *Cities* 123: 103570.
19. Akowuah, JA., Owusu-Addo, E., & Opuni, AA. (2022). Predictors of Anaemia Prevalence Among Ghanaian Pregnant Women: A Cross-Sectional Study. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 59, 00469580221086919.
20. Yeboah, T., Antoh, E. F., & Kumi, E. (2022). Strategic responses of microfinance institutions to the Coronavirus disease (COVID-19) crisis in Ghana. *Development in Practice*, 32(1), 112-127.
21. Kofi K., Kpodo, E. E., Bonuedi, I. & Forson, P. (2022), "Does inflation uncertainty hurt domestic investment? Empirical evidence from Ghana", *Cogent Economics & Finance*, 10:1, 2115673. <https://doi.org/10.1080/23322039.2022.2115673>.
22. Kamasa, K., Nortey, D.N., Boateng, F. and Bonuedi, I. (2022), "Impact of tax

- reforms on revenue mobilisation in developing economies: empirical evidence from Ghana", *Journal of Economic and Administrative Sciences*. <https://doi.org/10.1108/JEAS-01-2022-0011>.
23. Ojeleke, O., Groot, W., Bonuedi, I., & Pavlova, M. (2022). The impact of armed conflicts on health-care utilization in Northern Nigeria: A difference-in-differences analysis. *World Medical & Health Policy*, 1– 41. <https://doi.org/10.1002/wmh3.501>.
 24. Addison, M., Ohene-Yankyera, K., Acheampong, P.P. & Wongnaa, C.A. (2022). The impact of uptake of selected agricultural technologies on rice farmers' income distribution in Ghana. *Agriculture & Food Security*, Vol 11(2), <https://doi.org/10.1186/s40066-021-00339-0>
 25. Acheampong, P.P., Addison M. & Wongnaa, C. A. (2022). Assessment of impact of adoption of improved cassava varieties on yields in Ghana: An endogenous switching approach. *Cogent Economics & Finance*, 10:1, 2008587, DOI: 10.1080/23322039.2021.2008587
 26. Adjei, P.O.W., Serbeh, R., Adjei, J.O. & Addison, M. (2022). Women's political participation and performance as local government authorities under Ghana's decentralization system. *SN Social Science*, 2, Article number:251. <https://doi.org/10.1007/s43545-022-00559-6>
 27. Wadei, K. A., Asaah, J. A., Amoah-Ashyiah, A., & Wadei, B. (2023). Do the Right Thing the Right Way! How Ethical Leaders Increase Employees Creative Performance. *Journal of Leadership & Organizational Studies*, 30(4), 428-441. <https://doi.org/10.1177/15480518231195597>

BOOK CHAPTERS

1. Okyere, S., Boamah, E. F., Asante, F. A., & Yeboah, T. (2023). Children's Work in Ghana: Policies and Politics. In Sumberg, J., and Sebates-Wheeler, R. (eds). *Children's Work in African Agriculture* (pp. 204-232). Bristol University Press.
2. Kumi, E., Yeboah, T., Kusi, N. K., Fomunjong, J. C., & Vandyck, C. K. (2023). Shifting the Narrative: Localisation and Shift the power in the African context in Reimagining Civil Society Collaborations in Development, 190-204
3. Yeboah, T., & Egyir, I. (2023). Children's Work in Shallot Production on the Keta Peninsula, South-Eastern Ghana. In *Children's Work in African Agriculture*. Bristol University Press.
4. Garba, F., & Yeboah, T. (2022). Free Movement and Regional Integration in the ECOWAS Sub-Region. In *Migration in West Africa: IMISCOE Regional Reader* (pp. 19-34). Cham: Springer International Publishing.
5. Owusu-Addo, E. (2022). Researching the Practices of Policymakers in

Implementing a Social Policy Intervention in Ghana. In: Potvin, L., Jourdan, D. (eds) *Global Handbook of Health Promotion Research*, Vol. 1. Springer, Cham. https://doi.org/10.1007/978-3-030-97212-7_31

6. Owusu-Addo, E. (2023) Evaluation. In Cross, R. *Health Promotion and Education in Nursing* (pp. 158-182). London: Sage
7. Acheampong, P. P., Owusu-Danquah, E., Agyeman, K., Dankwa, O. K. and Addison, M. (2021). Research and Development for Improved Cassava Varieties in Ghana: Farmers' Adoption and Effects on Livelihoods. In A. Frediansyah, (Ed.), *Cassava - Biology, Production, and Use*. (pp 75-90), IntechOpen, <http://dx.doi.org/10.5772/intechopen.87488>

PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS

1. Addison, M., Arhin, A., Bonuedi, I. and Wadei, W. (2023). Exploring the impact of technological transformation on smallholder farmers' livelihood in Ghana. A paper presented at 27th ICABR virtual conference 2023, on the theme: "Institutions and Sustainable Transformation in the Bioeconomy Chain," Centro Cultural de la Ciencia - C3, Buenos Aires, Argentina. July 5-8, 2023.
2. Owusu-Addo, E., Owusu-Addo, SB., Mensah-Odum, N., Yoshikawa, M., ansal. A. (2023) The Impact of COVID-19 on Adolescent Girls' Sexual and Reproductive Health and Rights: A Mixed Method Study. A paper presented at the 2023 International Society for the Prevention of Child Abuse and Neglect, September 24-27, 2023. Edinburgh, UK.
3. Owusu-Addo, E., Padilla, K., Christiana, D., Lu, M., Amo-Adjei, J., Fry, D., Yoshikawa M. (2023) The prevalence of sexual violence against children and young women between 2011-2021 in Ghana: Findings from a systematic review. A paper presented at the 2023 International Society for the Prevention of Child Abuse and Neglect, September 24-27, 2023. Edinburgh, UK.
4. Owusu-Addo, E (2022) Health Promotion Research: Reflections on the practices of policy makers in implementing a social policy intervention in Ghana. Proceedings from the 24th International Union for Health Promotion & Education World Conference on Health Promotion, May 15-19, 2019, Montreal, Quebec, Canada.
5. Owusu-Addo E (2023) Evaluating Public Policy Interventions Using a Realist Evaluation Framework: Reflections. Proceedings from the 6th International Conference on Public Policy, June 27-29 2023, Toronto, Canada.
6. Owusu-Addo E, Mensah-Odum, N., Sarfo-Mensah P (2023). Marine Plastic Pollution in Ghana: An Equity Lens. Proceedings from the The 2023 University of Rhode Island Global Plastics Forum, May 15-16, Kingston, USA.

7. Owusu-Addo, E. & Owusu-Addo, S. B. (2022) The Impact of COVID-19 on Adolescent Girls' Sexual and Reproductive Health and Rights: A Mixed Method Study. Proceedings from the 24th International Union for Health Promotion & Education World Conference on Health Promotion, May 15-19, 2019, Montreal, Quebec, Canada

TECHNICAL REPORTS AND WORKING PAPERS

1. Owusu-Addo E., Bonuedi I., Yeboah T., Addison M., Sarfo-Mensah P., Wadei B., Arhin A. A., Mensah-Odum N., Tetteh R. O. (2023). Socio-economic Impact of Guinness Ghana's Local Raw Material Sourcing. Prepared by the Bureau of Integrated Rural Development, KNUST, for GGBL PLC.
2. Owusu-Addo E., Bonuedi, I., Wadei B., Yeboah T., Antoh, E F., Mensah-Odum N. Tetteh RO. (2023). Assessing the Impact of Post-Production Infrastructure on Women's Economic Empowerment and Access to Nutritious Diets among Female Groundnut Growers And Processors In Northern Ghana. Prepared by the Bureau of Integrated Rural Development, KNUST for International Centre for Evaluation and Development (ICED)
3. Owusu-Addo E., Sarfo-Mensah P., Bonuedi I., Arhin A., Yeboah T., Addison M., Wadei B., Mensah-Odum N. Tetteh RO. (2023). Baseline Survey of the COVID-19 Relief and Resilience Grants. Washington, D.C.: United States Agency for International Development (USAID). Prepared by Bureau of Integrated Rural Development, KNUST for Palladium International under the Ghana MFA Activity.
4. Owusu-Addo E., Bonuedi I., Yeboah T., Addison M., Sarfo-Mensah P., Mensah-Odum N., Tetteh R.O. (2023). Socio-economic Impact of Guinness Ghana's Local Raw Material Sourcing. Prepared by the Bureau of Integrated Rural Development, KNUST, for GASIP.
5. Sarfo-Mensah, P., Addison, M., Yeboah, T. and Aidoo, R. (2023). Assessment of User Satisfaction with the Agromovil Platform among Smallholder Farmers and Aggregators in Northern Ghana. Prepared by the Bureau of Integrated Rural Development, KNUST, for USAID/METSS/ USDA.
6. Owusu-Addo E., Addison M., Yeboah T., Wadei B., Bonuedi I., Arhin A., Sarfo-Mensah P., Mensah-Odum N., Tetteh R. O., Fiscian B. (2023). Endline Evaluation of the Ghana Agriculture Sector Improvement Programme. Prepared by the Bureau of Integrated Rural Development, KNUST, for GASIP.
7. Owusu-Addo E., Sarfo-Mensah P., Bonuedi I., Arhin A., Yeboah T., Addison M., Wadei B., Mensah-Odum N. Tetteh RO. (2023). Baseline Survey of the COVID-19 Relief and Resilience Grants. Washington, D.C.: United States Agency for International Development (USAID). Prepared by Bureau of Integrated

Rural Development, KNUST for Palladium International under the Ghana MFA Activity.

8. Owusu-Add E., Yeboah T., Mensah-Odum N., Arhin A. (2022) An Assessment of Child Labour Monitoring and Remediation Systems (CLMRs), Washington DC: WinRock International
9. Owusu-Add, E., Amisah S., Sarfo-Mensah P, Arhin A., Yeboah T., Mensah-Odum N., Amo S. (2022) Performance Evaluation of the Sustainable Fisheries Management Project. Washington DC: USAID. https://pdf.usaid.gov/pdf_docs/PA00ZPDS.pdf
10. Owusu-Addo E., Yeboah T., Bonuedi I., Wadie B., Mensah-Odum N., Fiscian B., Bennor DM., A (2023). Final Evaluation of the United Nations Joint Programme on Empowering Adolescent Girls through Improved Access to Reproductive Health Education and Rights-Based Quality Sexual and Reproductive Health Services in Ghana. Accra: UNFPA & UNICEF.
11. Owusu-Addo E., Owusu-Addo SB., Mensah-Odum N., Bansal A., Deliege A., Yoshikawa M. (2022). The Impact of COVID-19 on Adolescent Sexual and Reproductive Health and Rights. Accra: UNICEF Ghana
12. Mason, E., Owusu-Addo, E., Hoang AT., Maclean, C., Podems, D., Farzaneh, N. (2022) Meta-Evaluation: Quality Review and Synthesis Of USAID Evaluations in the Africa Region Conducted between 2017-2021. Washington DC: USAID

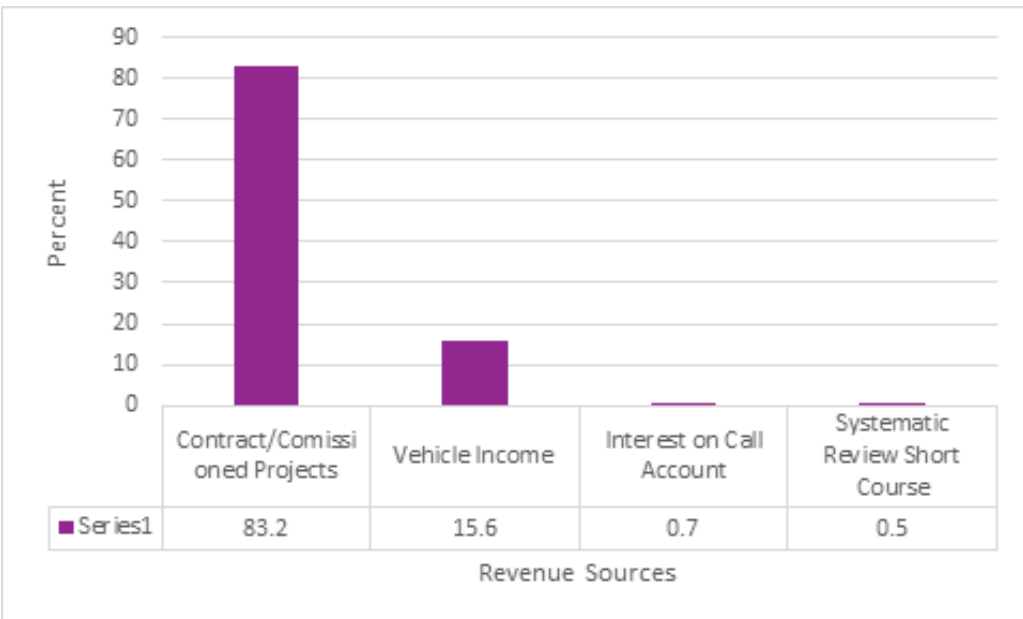
FINANCES

STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 30TH SEPTEMBER 2023

Revenue	GHS
Contract/ Commissioned Projects	2,203,601.80
Vehicle Income	413,899.65
Interest on Call Account	17,391.72
Systematic Review Short Course	13,452.89
Total Revenue	2,648,346.06
Expenditure	
Project Cost	1,079,668.88
Research Support	129,537.13
Staff Benefit	364,547.60
Operational Expenses	245,023.74
Others	122,776.91
Total Expenditure	1,941,554.26
Surplus / Deficit	706,791.80
Fixed Deposit	869,551.37
Dollar Account	USD
BIRD (OVERHEADS from Grants)	449,058.29
PI Share Balance	4,490.67
International Centre for Evaluation Project	37,983.20
PI Share for ICED	18,000.00
Total	509,532.16

Full audited financial statements are part of KNUST's audited accounts

BREAKDOWN OF REVENUE



HOW YOU CAN HELP



Rural development, as it is proceeding now in Ghana, is not likely to meet the socioeconomic Sustainable Development Goals (SDGs) established in the 2030 Agenda for Sustainable Development. More pragmatic and sustained efforts are required to promote sustainable and inclusive rural

development in Ghana. BIRD is committed to this agenda through our research, teaching and outreach programmes focused upon improving the wellbeing and livelihoods of rural people. There are many ways you can get involved and make a difference.



RURAL DEVELOPMENT ENDOWMENT FUND (RDEF)

BIRD has had preliminary engagement with different actors on establishing Rural Development Endowment Fund. The objective of the RDEF is to provide a stable and predictable funding for BIRD to design and implement strategic development interventions in rural Ghana. These interventions will be designed and implemented using a co-creation approach with district and community level stakeholders. We count on your generous contributions to support this fund.

For further information about how you can support BIRD-KNUST, please call +233 (0) 322493501 or email us at bird@knuست.edu.gh



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