

REPORT ON THE TECHNICAL TRAINING WORKSHOP OF THE PROJECT FOR *‘‘STRENGTHENING THE IMPACT OF SECTOR AND TRADE POLICIES ON EMPLOYMENT IN GHANA’’*



International Labour Organization (ILO), Ghana

Venue: Volta Hotel, Akosombo - Ghana, 15th-18th May, 2017



TABLE OF CONTENTS

TABLE OF CONTENTS.....	ii
LIST OF ACRONYMS AND ABBREVIATIONS	iii
EXECUTIVE SUMMARY	iv
1.0. BACKGROUND.....	1
2.0. OBJECTIVE OF THE WORKSHOP	2
3.0. PARTICIPATION	2
4.0. WORKSHOP PROCESS.....	3
4.1. Opening Session.....	3
4.2. Thematic Sessions	4
THEME ONE: EMPLOYMENT IMPACT ASSESSMENTS IN INFRASTRUCTURE.....	4
THEME TWO: TRADE AND EMPLOYMENT	8
Theme three: Social Accounting Matrix (SAM) Framework and its use to assess employment effects in trade and sectors	13
Theme four: Agro-Processing, employment and exports in Ghana.....	17
Theme one (continued): Employment Impact Assessment in Infrastructure	24
5.0. NEXT STEPS AND WORK PLAN ON COUNTRY LEVEL ACTIVITIES.....	26
6.0. CONCLUDING REMARKS BY VICE CHAIRPERSON OF THE PROJECT	27
7.0. CONCLUSIONS AND RECOMMENDATIONS.....	27
8.0. ANNEXES	29
Annex 1: Programme	29
Annex 2: Site Visit Guide.....	31
Annex 3: Next Steps	32
Annex 4: Attendance list.....	32
Annex 5: Presentations	32

LIST OF ACRONYMS AND ABBREVIATIONS

AGI	Associations of Ghana Industries
ARRA	American Recovery Reinvestment Act
CPC	Cocoa Marketing Company
D-G	Director-General
ECOWAS	Economic Community of West African States
EMPIA	Employment Impact Assessments
EIAs	Economic Impact Assessment
EIIP	Employment-Intensive Investment Programme
EPA	Economic Partnership Agreement
ETE	Effect of Trade on Employment
EU	European Union
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GEA	Ghana Employers Association
GPRS I	Ghana Poverty Reduction Strategy
GPRS II	Growth and Poverty Reduction Strategy
HS	Harmonised System
FWSC	Fair Wages and Salary Commission
ILO	International Labour Organization
ITC	International Trade Centre
LEAP	Livelihood Empowerment Against Poverty
MDA	Ministries, Departments and Agencies
MELR	Ministry of Employment and Labour Relations
MOTI	Ministry of Trade and Industry
NECC	National Employment Coordinating Council
NEP	National Employment Policy
NDPC	National Development and Planning Commission
PPMED	Policy, Planning, Monitoring and Evaluation
PWG	Policy Working Group
SAM	Social Accountability Matrix
SMART	Social Accountability Matrix
UN	United Nations
UNSD	United Nations' Statistical Division
UNTAD	United Nation's Conference on Trade and Development
USA	United States of America
UK	United Kingdom
USD	United States' dollar
WITS	World Integrated Trade Solution
WTO	World Trade Organisation

EXECUTIVE SUMMARY

In recent times, most policy-makers and enterprises have affirmed that, trade has a strong potential to contribute to growth and that its effects will be beneficial for employment or job creation globally. However, the linkages between trade and employment have been missing. A reference to developing countries shows there are concerns about the distribution of gains from trade (ILO, 2011).

In view of this, the International Labour Organization (ILO) with financial support from the European Union (EU) and in close collaboration with the Ministry of Employment and Labour Relations (MELR), the Ministry of Trade and Industry (MoTI), the social partners, and other national stakeholders, recognizing the gap in knowledge on the effects of trade and sectoral policies on employment creation in Ghana, subsequently designed a 28-months project entitled, “Strengthening the Impact of Sector and Trade Policies on Employment in Ghana”. The Project focuses on two main components; a) Employment Impact Assessment of Public Policies in Selected Sectors, and b) Assessing and Addressing the Effects of Trade on Employment.

A technical training workshop was organised for representatives of selected Ministries, Departments and Agencies as well as the academia from 15th to 18th May 2017. The rationale was to improve participants understanding on how to scientifically measure the effects of trade and sector policies on employment generation. Resource persons combined academic style of lectures with field visits to expose participants to both the theories and practice of measuring employment effects of trade and sector policies.

Following deliberations at the workshop, participants unanimously adopted these action points with regards to the implementation of the project: A study should be conducted to assess how the value chain of agro-processing firms affects the creation and upgrading of employment. The study is expected to assess the value chain of yam, cassava and sweet potatoes on employment generation. Besides, Niche Cocoa Processing Industry, a free zone enterprise located in the free zone enclave of Tema, was seen as a classical model to improving exports and creating decent jobs in the agro-processing sector and hence the need to replicate it across the agriculture sector. In line with government commitment to introduce a mandatory job impact assessment for all public-sector projects or initiatives, the Ministry of Finance and the National Development Planning Commission should develop templates that will assist MDAs indicate the number of jobs that their investment activities would create. The economic model being developed by the National Development Planning Commission and Oxford Economics of the United Kingdom (UK) should make provision for forecasting employment generation at the micro level. The International Labour Organisation could support government effort to improve on employment impact assessment by assisting the sector ministries to develop models that will facilitate the

linking of government investments to employment generation in the country. The need to revisit the concept of decent work and probably review the parameters of measurement was extensively discussed and the proposal was that the definition of decent work should take into account the cultural settings of local communities so as to properly and adequately identify employees who are working in unacceptable conditions. In the end participants were of the view that the policy working group of the project should be integrated into the National Employment Coordinating Council as a sub-committee when it is established.

1.0. BACKGROUND

Employment creation in general is a fundamental human right; a prerequisite for equality in the world of work; contributes to economic growth and poverty reduction and is integral to the decent work agenda of the ILO. Recurring questions are whether trade policies of developing countries have positively translated their comparative advantage into more and better employment, whether firms and workers have been able to adjust to the pressures of more intense foreign competition, and who have been the gainers or losers. To this end, the labour-market consequences of trade policies are important to analyse in any country where the sole asset of the majority of the population is labour and where trade is expected to cause economic disruption to workers, thereby affecting their welfare.

It is against this background that Ghana is one of the ten countries where the project for Strengthening the impact of sector and trade policies on employment (STRENGTHEN) is being implemented. This project is being conducted by the International Labour Office (ILO) with financial support from the European Union (EU) and in close collaboration with the Ministry of Employment and Labour Relations (MELR); the Ministry of Trade and Industry (MOTI); the Social Partners; and other national project stakeholders. The project aims to strengthen the employment dimension in sectoral and trade policies and programmes with better analysis, more coherent policy-making and enhanced implementation to encourage employment creation and upgrading.

The purpose of the project in Ghana is to develop global knowledge on how to strengthen the positive impact on employment of sectoral and trade policies in the areas of agriculture and rural development; infrastructure and energy with a focus on private sector development in these sectors; strengthen country level knowledge on the impact of sectoral and trade policies on productive and decent employment and on measures to optimise the employment effects of selected sectoral and trade policies and related issues such as structural transformation, labour standards and skills development; build the capabilities of governments, social partners, development practitioners, and other relevant stakeholders in partner countries to identify, measure and assess the employment effects of sectoral and trade policies; provide guidance to development cooperation practitioners in partner countries as well as the European Union on how to address the employment opportunities and challenges resulting from sectoral and trade policies including public policies, trade and investment programs and operations in key sectors in developing countries; and generate improved knowledge on both the positive and negative impacts of international trade on productive and decent employment in Ghana.

In order to realise the capacity build dimension of the project, a four-day technical training workshop was organised from 15th to 18th May 2017 at Volta Hotel in Akosombo to strengthen the technical skills of specialists in empirical analysis of the effects of trade on employment by using a social accounting matrix (SAM) and analysis of the multiplier effect. In doing so, the training will lay the groundwork for researchers and

analysts interested in more complex methods such as Computable General Equilibrium (CGE) models.

2.0. OBJECTIVE OF THE WORKSHOP

The main objective of the technical training workshop was to enhance the understanding of beneficiaries to:

- identify, measure and assess the employment effects of sectoral and trade policies in their organisations and beyond;
- develop knowledge on how to strengthen the positive impact on employment of sectoral and trade policies;
- discuss relevant methods for employment impact assessment of sectoral and trade policies; and
- Strengthen knowledge on the impact of sectoral and trade policies on DW and on measures to optimize the ETE on structural transformation, labour standards, and skills development among others.

3.0. PARTICIPATION

The target for the workshop was technical Specialist from governments, social partners, development practitioners, and other relevant stakeholders that have expertise in key policy issues' trade and employment issues specifically one with advanced-level knowledge of economics including concepts related to international trade and employment, advanced experience working with statistics, and the ability to use Microsoft Excel and other software.

A total of forty (40) participants selected from key stakeholder institutions attended the training workshop. Out of this number, thirty-five were Ghanaian; two were Ivoirians and three from Geneva (two from ILO Headquarters and the other from the International Trade Centre respectively). Ten out of the forty participants were females and three out of the ten females represented the National Development Planning Commission. All the resource persons who facilitated the training workshop were male participants.

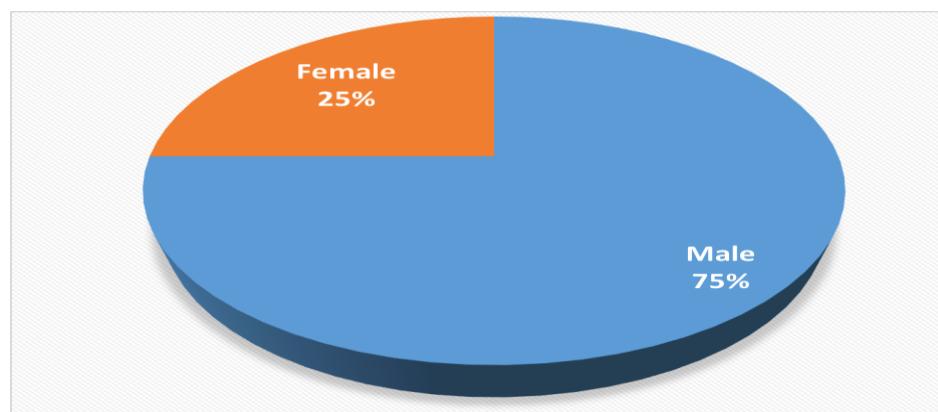


Figure 1: Proportion of male and female representation in the workshop

The sectorial composition of participation comprises directors; senior level staff and a couple of middle level officials from the Ministry of Employment and Labour Relations (MELR); the Ministry of Trade and Industry (MoTI); Ministry of Tourism and Creative Arts; Ministry of Food and Agriculture; Ministry of Roads and Highways; Ministry of Sanitation and Water Resources; Ministry of Works and Housing; Ministry of Finance; Ghana Employers' Association; Ghana Statistical Service; National Development Planning Commission; Ghana Export Promotion Authority; African Centre for Economic Transformation; other government institutions that contribute to the formulation of sectoral, trade and employment policies; and selected representatives of the academia among others.

Cross sections of the participants at the technical training workshop in Volta Hotel and Niche Cocoa Processing Company Limited

4.0. WORKSHOP PROCESS

The workshop was a hands-on training programme with opening sessions; presentations with discussions; and field trip.

4.1. Opening Session

Dr. Akua Ofori-Asumadu, National Project Manager of STRENGTHEN, welcomed participants to the workshop commended them for their keen interest in the ETE and EMPI by taking time off their busy schedule to participate in the workshop. The National Project Manager indicated that the technical training workshop is an important mile stone of the project for 'Strengthening the Impact of Sector and Trade Policies on Employment in Ghana' (STRENGTHEN).

She provided a brief introduction to the project to facilitate the understanding of participants who were new to the intervention. To this end, participants were updated on the particulars of the project - start date: June 2016; Location: ten developing countries across Asia, Africa and Latin America; end date: September 2018. Beneficiary countries beside Ghana include Benin, Ivory Coast, Morocco, Rwanda, Ethiopia, Guatemala, Honduras, Myanmar, and Philippines.

Dr. Ofori-Asumadu highlighted the key activity areas of the STRENGTHEN project which is being implemented in two components, a) the Effect of Trade on Employment (ETE) and b) Employment Impact Assessments (EmpIA). These key focus areas are the Social Dialogue (PWG) component, Programme Implementation component (STED, TRAVERA); Capacity Building component (Training Workshops); and Methodology, Tools and Employment Impact Assessments (EmpIAs) component. Agriculture and Infrastructure constituted the main sector focus areas for the project and discussions at the training workshop.

4.2. Thematic Sessions

The thematic sessions were covered by the under listed resource persons: Dr William Baah-Boateng of the University of Ghana Business School; Dr. Emmanuel Ekow Asmah of the University of Cape Coast; Mr. Maikel Kie-Lieuw-Song of the ILO Head Office in Geneva; Mr. Yvan Michel Decreux of the International Trade Centre (ITC) Office in Geneva; Dr. William Brafu-Inaidoo of the University of Cape Coast; Dr. Kwabena Nkansah Darfour of University of Cape Coast and Mr. David Cheong of the ILO Head Office in Geneva. The workshop was facilitated by the National Project Manager, Dr. Akua Ofori-Asumadu and Chaired by Dr. Ferdinard Ahiakpor, Chairman of the PWG. The presentations were made in PowerPoint covering the key themes of the training programme.

THEME ONE: EMPLOYMENT IMPACT ASSESSMENTS IN INFRASTRUCTURE

a) Draft Background Study on Employment in the Infrastructural Sector in Ghana

Dr. Kwabena Nkansah Darfour of the University of Cape Coast presented the findings of a background study on employment in the infrastructure sector in Ghana that had been commissioned by the ILO. As per their TOR the authors of the study used data from the Ghana Living Standard Survey one to six together with literature from related studies to provide insight on the overall employment situation in the infrastructure sector. Specifically, the study aimed to assess the employment characteristics in the infrastructure sector; identify the level of public investment and employment generation capacity in the infrastructural sector; pool data and other relevant information and documents on employment in the infrastructure sector; delineate the main existing infrastructure employment data into sub-sectors in order to understand the frequency and trends in employment in these areas and their relative importance; and provide in-depth analysis on the roads and building construction sub-sectors in Ghana in order to assess their relative strengths, weaknesses, opportunities and threats as compared to their capability to create employment.

The study established that Ghana's infrastructure indicators compared to other African middle-income countries remains low and the quality ranks far below the best performing African countries. It further revealed that the infrastructure sector is a very important contributor to reducing the unemployment situation in the formal and informal sectors of the economy.

The issue of decent work was also investigated by the study. The consultants' predefined decent work within the context of the study as: if workers work with binding contract; had affiliation with trade unions; had paid leave; sick leave and had

social security. the percentage of employees having decent work declined on the average between 1987 and 2013 and the situation as at 2013 depicts that a little over 98 per cent of all those working in the construction sub-sector do not have decent work.

Dr. Kwabena Nkansah Darfour ended the presentation by concluding that the infrastructure sector had great potential to create more jobs; there is uneven distribution of employment in the sector across regions; a greater proportion of employees in the construction sector are not in decent jobs; policies to improve job creation in the infrastructure sector need to be more integrated to ensure effectiveness; there is low level of involvement of females in the sector; roads and building sub-sectors hold promise of generating greater number of jobs; there is a missing link between the actual jobs created in each sub-sector of the infrastructure sector and the level of investments; and there is the need to establish a data hub to harmonise all existing data set and commission new rounds of data collection.

Comments, Questions and Feedback

Participants raised questions and in some cases provided feedback on some of the issues highlighted in the presentation.

These include:

- 1) Participants could not relate well with the findings and conclusions of the study because of lack of definitions of key concepts and terminologies. For example, what is the definition of a construction worker? Is a woman fetching water to facilitate the work of masons classified as a construction worker?
- 2) The zero to fourteen (0-14) age cohort used in the report suggests that children under one year were involved in the construction sub-sector. This may be misleading. The data should be further analysed to identify the correct age group. Situations like this happens when researchers failed to weigh the Ghana Statistical Service Data before analysis and use;
- 3) The authors of the background study should weigh the data sets from the Ghana Statistical Service before use and inclusion in the final report
- 4) The study focused much more on road and housing infrastructure at the expense of other critical areas including electricity and water infrastructure;
- 5) The use of nominal values in computing the growth rate of the construction sub-sector and its share of industrial GDP could be misleading since it does not consider inflation and other parameters;
- 6) The conclusions on policies were not very specific making it difficult for action to be taken by the institutions concerned. Moreso, the policy recommendations are not new and do not raise eyebrow at all;
- 7) What are the assumptions underlying the findings? The absence of these assumptions make the findings less convincing and reliable;
- 8) Indicators used to classify decent work were not comprehensive or exhaustive. The Ministry of Employment and Labour Relations should be contacted to improve this

section of the report. Occupational safety was completely missing from the characteristics of decent work;

- 9) Were there reasons why most of the analysis in the study were limited to 2013 when more information for 2014, 2015 and 2016 are available?
- 10) The analysis of the findings should be compared with the broader national and international situations;
- 11) A technical committee should be constituted to study the report of the research study and make recommendations for improvement;
- 12) The absence of labour information centre at the Ministry of Employment and Labour Relations makes it difficult in accessing labour statistics for such report.

***b) Introduction to Employment Impact Assessments in infrastructure (EMPIA)
(Short term effects, link to SAM based analysis)***

Mr. Maikel Lieuw-Kie Song, Employment-Intensive Investment Specialist at the ILO introduced participants to employment impact assessment in the infrastructure sector.

He elaborated on the general characteristics of the construction sector which included variation of skill levels and the ability to employ large number of low-skilled workers; highly capital or labour intensive; dangerous with health and safety concerns, has long and short term investment and could be strategic in overall economic development.

Mr. Kie-Lieuw-Song was full of praise for the Minister of Finance, Hon. Ken Ofori-Atta for his commitment to job creation and skills development as expressed in the 2017 budget statement. The Minister indicated in the budget that “in the push towards job creation and skills development, Government will introduce a mandatory job impact assessment for all public-sector projects or initiatives. Job impact assessment will also be required of private-sector entities that access government projects or contracts. In other words, all public-sector projects whether it is executed by the public sector or the private-sector contractors must undergo a job impact assessment to evaluate the potential job creation impact. This will enable Government to analyze how various jobs are being created to better structure incentives and stimuli for higher skill jobs and opportunities for Ghanaians”.

He then focused the rest of his presentation on how employment impact assessments could be done by participants in support of government’s commitment to creating jobs. He stressed that employment impact assessments aims to understand and quantify the relationships between specific interventions (policies, investments, programmes or projects) and employment in an economy. This is important because job creation has increasingly become political, economic and social issue due to pressure from citizens to know if the use of their taxes and other resources are creating the needed jobs in the country.

To convince citizenry that such investments made by government are creating the needed employment, state institutions must count and report on the jobs created at the economic wide level; programme level; and project levels.

There are difficulties in counting jobs, especially in developing countries. The resource person attributed the difficulties faced in counting jobs to the ease in determining where the jobs are being created (urban, rural, regions, districts); who gets the jobs (men, women, youth, disabled, migrants, nationalities); what sectors of the economy create the jobs (primary, secondary, tertiary, sub-sectors); what are the characteristics of those who get the jobs (school leavers, recent graduates, professional, artisans, technicians, skilled and years of experience); what are the conditions of the job; what are the salaries (minimum wage, relative to national averages); how good are the jobs (salaries, benefits, safety, duration, rights); and how many are the jobs.

The challenges notwithstanding, micro level indicators or variables exist for use by stakeholders in the sector to measure employment impact of infrastructure at the project level. These variables assess labour intensity during construction; wage levels; the ratio of skilled and unskilled workers' wage bill to professional, technical and administrative workers'; number of job opportunities; FTE years of direct employment per million USD during construction; the cost in USD per one FTE year of direct employment; the ratio between O&M and construction and other work related qualitative measures (formal contracts, provision for social security, medical insurance; paid leave, health and safety measures).

Indicators use at the macro level include employment per 1 Million US Dollars; Direct FTE years of employment per 1 Million US Dollars; indirect FTE years of employment per 1 Million US Dollars; and induced FTE years of employment per 1 Million US Dollars among others.

He concluded his presentation by demonstrating to participants how a spreadsheet could be used to estimate the impacts of infrastructure investment on job creation. The analysis requires information on the country's population (27 million people at 2016); number of the population that is economically active in the country (15%), GDP per capital (GH¢1,340), government expenditure as a share of GDP (22%), amount of government's annual expenditure on infrastructure; amount of government expenditure on wages; and number of working weeks in a year. Based on these information, the multiplier can be estimated using for example the input-output matrix or Social Accountability Matric to give some ideas on employment generation potentials of government expenditure in the infrastructure sector.

Comments, Questions and Feedback

The presentation elicited the following comments and questions from participants:

- Do higher multipliers imply good backward and forward linkages and vice versa?

- Can a higher multiplier imply poor quality jobs? Would there be the need to add some qualitative information before drawing conclusions on the implications of the quantitative figures from the analysis?
- Does it mean that indirect employment generated through investment in the infrastructure sector can only be estimated and not absolutely determined or calculated?
- Are there assumptions in the estimations of the multipliers and their interpretations?

THEME TWO: TRADE AND EMPLOYMENT

a) Impact of Trade on Employment in Ghana

Dr. William Brafu-Insaidoo of the University of Cape Coast presented the findings of a study commissioned by ILO to review identifiable literature (policy documents, research papers and articles) relating to the effects of sector and trade policies on employment generation. The rationale was to explore and evaluate available empirical studies on employment and wage effects of Ghana's sector, trade and investment policies; draw implications and raise issues for public policy; identify possible knowledge gaps and issues for future research and draw lessons from other empirical evidence for public policy.

The review revealed that Ghana did not have a comprehensive and coherent sector policy for employment generation until 2014. Successive governments until then only implemented several development policy strategies with the expectation that they would result in structural transformation and employment generation. Key among these policy frameworks are the first medium term plan of Vision 2020; GPRS I and II; and the Ghana Shared Growth and Development Agenda. In all these development frameworks prior to 2014, employment was just seen as an aspect of the development process. The underlying assumption was that jobs will automatically be created once the country commits resources to growth and development.

Due to the weaknesses inherent in this assumption, the National Employment Policy was developed in 2015 as the first comprehensive policy that will address the current employment challenges in the country. The intention is to define the interlink ages in the productive sector and institutional arrangements that need to work in synchronization to make employment a priority focus of the development agenda. It also seeks to address the problem of underemployment, particularly in the informal sector.

The empirical evidence on trade policies and the effects on employment generation was very revealing. Studies done by Ackah et al. (2012) indicate that trade protection (liberalization) impacts positively (negatively) on employment in the manufacturing sector of Ghana. The 2016 report of the European Commission also indicates that the Economic Partnership Agreements (EPA) between the European Union and ECOWAS has the tendency to marginally raise remuneration of labour and improve household

welfare in all countries. Karingi et al. (2005) also explored trade benefits of the Economic Partnership Agreement between the European Union and South-Saharan African countries and concluded that deeper regional integration reduces real returns to unskilled labor and increase real returns to skilled labor in Sub-Saharan Africa.

The literature review also disclosed the relationship between Foreign Direct Investment (FDI) and employment. Abor and Harvey (2008) established that greater inflows of FDI generates higher levels of employment in manufacturing. Aryeetey et al. (2004) and Gorg et al. (2002) pointed out that FDI inflows lead to increased demand for skill labour, skills upgrading and improved labor productivity.

Dr. William Brafu-Insaidoo finished his presentation by concluding that selective tariffs for protection of local manufacturing could boost employment in manufacturing sector. There should be a focus on skill development to minimize loss of real returns to labor associated with tariff reductions in manufacturing. Besides these, the study further concluded that measures should be put in place to encourage and create incentives for firms to become export oriented and improve workers' remuneration. Export promotion drive could focus on manufactures and value-addition and adverse consequences of trade liberalization on employment could be considered as only a short run adjustment cost. African countries should be encouraged and supported in their effort at strengthening intra-regional trade for a period before introducing reciprocity. Agricultural modernization and labour-intensive manufacturing could help maximize the likely employment benefits from the implementation of the EPA; and and FDI inflows into manufacturing could have great potential to generate employment.

Comments, Questions and Feedback

Participants discussed at length the presentation and made the following observations:

- 1) Did the review exercise assessed any macro level study on how trade (liberalisation) affects employment generation? If this was not done, then efforts should be made by the consultant to include, in the literature review, macro level studies on how trade affects employment generation. There is a study by Antwi Asare that tried to explore the macro level dimension of trade effects on employment generation and might be useful to consider;
- 2) Did the study establish that decent work is on the decline as discovered by other studies? If this is the case, then the report should have clear policy recommendations on how to address it;
- 3) The authors of the background study should weigh the data sets from the Ghana Statistical Service before use and inclusion in the final report
- 4) Did the review exercise discover any study on the facilitating role of technology and innovation in the competitive effects of manufacturing on employment generation?
- 5) Did the desktop review report include specific reasons why some of the literature reviewed concluded that trade liberalisation does not have long-term impact on employment generation?

- 6) What is the quantum of the impact of trade liberalisation on employment generation? Are there figures to support the assertion that it is worth liberalising one's economy because of the employment potentials?
- 7) What is the causal effects of trade liberalisation on employment generation?
- 8) Have the findings on Ghana been compared with similar situations in other economies, especially the industrialised economies?
- 9) Did the data limitation challenge affect the outcome of the desk review exercise in any specific way?
- 10) The topic, 'A Review study: Impact of sector and trade policies on employment in Ghana,' should have focused on assessing, for example the GIPC Acts and how it has generated employment; the Free zone area policy and how it has generated employment and the effects of all trade related policies and how they have impacted on employment;
- 11) The Consultant should gather data from the private sector (AGM, AGI, GEA and Chamber of Commerce etc.) and relevant government institutions such as the Labor Department of the Ministry of Agriculture to enrich the report
- 12) How do we synchronise the issue of modernising the agriculture sector which is likely to crowd out unskilled labour that the implementation of the European Economic Partnership Agreement is expected to generate in beneficiary countries?

Dr. William Brafu-Insaidoo of the University of Cape Coast presenting his findings at the workshop

b) Introduction to World Integrated Trade Solution (WITS)

Mr. David Cheong, Trade and Employment Specialist at the ILO introduced participants to the World Integrated Trade Solution (WITS) methodology of assessing the effects of trade on employment. He indicated that the WITS database was developed by the United Nation's Statistical Division (UNSD); the World Bank; the International Trade Centre (ITC); the World Trade Organisation (WTO) and the United Nations Conference on Trade and Development (UNTAD).

The database gives access to international trade and protection related data and offers built in analytical tools allowing users to assess the impact of tariff changes. It provides users with capabilities to retrieve and analyse trade and tariff data; convert data between different nomenclatures; customise country and product groups; calculate trade indicators; assess competitiveness of countries; and visualise and download data. This information is relevant to policy makers and private enterprises.

Mr. Cheong added that the process of computing the effects of trade on employment starts with the quantification of a country's trade policies such as import liberalisation and improving access to foreign markets. The WITS database contains many data set and simulating models to quantify national trade policies. The Software for Market Analysis

and Restrictions on Trade (SMART) is one of such useful stimulating model for quantifying national policies. SMART is based on partial equilibrium model.

The resource person illustrated how the SMART model works by using a scenario where Ghana is negotiating with its trade partners and there are proposals for Ghana to liberalise its import by reducing tariff to zero on edible vegetables, roots and tubers (HS07) from all countries. In return, India, for example, imposes a very high tariff on vegetable fats and oils (HS151590) exports to India by all countries and including those from Ghana.

To calculate the effects of this scenario, he explained that the model requires information, through queries, on parameters such as import on countries, the years of imports (the year must correspond to data on employment and production); the products concern by the trade policy; the trade partners involved in the policy as well as other parameters of the trade policy; and import demand elasticity (generated automatically by the model).

He concluded his presentation by providing a step by step process in computing the shocks required in conducting multiplier analysis. These are:

- 1) register to become a member of WITS by logging on to <http://wits.worldbank.org/WITS/Register.html> (registration is free)
- 2) choose Trade and Tariff Simulations (SMART)
- 3) fill in the SMART Query Name and SMART Query description boxes by providing the name of the policy; and choosing the TRAINS Data Source
- 4) Select the country that will change its import policies. (e.g. Ghana)
- 5) select the year of the transaction (e.g. 2013)
- 6) select the product
- 7) choose the nomenclature and level of aggregation
- 8) add a scenario in the scenario window (This opens another window)
- 9) select the product(s) covered by your scenario, and the tariff change)
- 10) choose the exporter or trade partner (choose the all countries category),
- 11) while still in the scenario window, remember to choose again the products, nomenclature and level of aggregation
- 12) Once all fields are completed, click on save and submit
- 13) Click on download when the status level is 100% complete
- 14) Click on the diskette icon to save the data in a zip file onto your computer
- 15) Prepare the trade data for estimating the effects of trade on employment by:
 - i. using the detailed data file downloaded
 - ii. use the rows and column with relevant trade partners; trade total effects and product codes
 - iii. match trade total effect to the accounts in the Inputs-Output table or SAM
 - iv. sum trade total effect according to the Inputs-Output table or SAM categories
 - v. write down or note the trade shocks for multiplier analysis

Comments, Questions and Feedback

The following issues were raised after the presentation:

- 1) This model is basically forecasting the outcome of trade and employment relationship or interaction when there is change in trade policies. If this is the case, is it economic model or mathematical model that is doing the estimation behind the scene and is the coefficient calibrated or estimated. How were the estimations determined for Ghana?
- 2) What are the assumptions for the calibration or estimation of the coefficient especially for Ghana since models work under assumptions;
- 3) Were the countries concerned contacted for information before the estimation or calibration of the country specific coefficient and were country specific assumptions factored into the estimation or calibration?
- 4) How widely is the model being used and what are the profiles of the countries using it and are there challenges or short falls reported from these countries and what the best practices are?
- 5) Is the trade ministry of Ghana currently using this model and what has been the lessons learnt?
- 6) Is the model a prescription and can it be used by countries with data challenges as pertains in Ghana?

Mr. David Cheong introducing the SMART Model to participants at the training workshop

c) Sporting Export Potential and Estimating Employment Effects

Mr. Yvan Michel Decreux of the International Trade Centre (ITC) exposed participants to methods used in computing the potentials of exports of a country (Ghana) to various markets. This analysis make use of available tools and techniques which are easily accessible online (ITC website).

He indicated that the ITC and similar institutions engage in export promotion projects. Some of these projects have horizontal dimension, but others the identification of specific products or markets on which activities will focus. To support the identification of most promising products and most attractive markets, ITC has designed an automated methodology based on trade and tariff data, distances between countries, economic and demographic growth, climatic conditions and access to the sea. The most used of these tools for quantitative analysis are Trade Map, Market Access Map and Investment Map.

Mr. Yvan Michel Decreux took participants through the detailed computation and derivation process of the coefficients of export potentials. He indicated that the coefficient have been calculated for every product exported by Ghana to its market, and aggregated at the level of sixteen (16) sectors and of three large regions: Africa, other developing countries and developed countries.

He ended his presentation on the following conclusions:

- Export potential assessments are primarily used to design export promotion activities. It allows for identification of products with highest potential in each market, or most attractive markets for a given product
- The Export Potential Indicator (EPI) can also be used in the design of a trade negotiation strategy. Companies often export to much fewer markets than they could, because they prefer to target their efforts on most profitable customers. If analysis is based only on existing trade, some issues and opportunities can be missed
- The impact of achieving unrealized potential on job creation can be estimated when sufficient data on labour and input-output relationship is available

Mr. Yvan Michel Decreux making a presentation on spotting export potential at the training workshop at Volta Hotel in Akosombo

Comments, Questions and Feedback

Mr. Yvan Michel Decreux's presentation generated these comments:

- 1) The Ghana Statistical Service has been providing monthly data, including trade information, to the United Nations. It is therefore surprising that the International Trade Centre has no recent trade data on Ghana as indicated in the presentation
- 2) Are the export potential tools discussed familiar to the Ministry of Trade and Ghana Export Promotion Centre?
- 3) Does the model assess price changes when there is an increase in export of products with major export potential?
- 4) It will be interesting to see how the model works under the assumption that different specifications of products are exported to different countries like the case of China. (the model assumes that the same product is exported to different countries)
- 5) The assumption that countries can expand export if there is new market may not be the case for all countries due to certain trade policies especially fiscal policy on foreign exchange

Theme three: Social Accounting Matrix (SAM) Framework and its use to assess employment effects in trade and sectors

a) Basic structure of a SAM and the Ghana SAM and Labour accounts

Dr. William Baah-Boateng of Economics Department of the University Ghana made a presentation on the Social Accounting Matrix and how it could be used to assess employment effects in trade and other sectors. He explained that the technique is dependent on national income accounting and due to the diversity of exposure of participants to Economics, he started the presentation by introducing participants to the concept of national income accounting. There are three different approaches to national income accounting and they all converge at one point. The underlying concept is that when an individual or a firm spends in an economy (Expenditure Approach) it is received by another individual or firm as income (Income Approach) and the transaction produces a product (Product Approach).

The Social Accounting Matrix (SAM) is a matrix that presents information on transactions and transfers that takes place between different production activities, factors and institutions usually in a year. It portrays both the input- output and national and external accounts in a consistent framework. It is essentially an accounting framework, which captures the circular flow of incomes from production to consumption and back to production. It is used to construct multipliers that allow for analyses of effects of macroeconomic policies on a range of outcomes including employment, distribution and poverty.

Dr. Baah-Boateng indicated that the key elements or account type in SAM includes activities; commodities; factors; institutions; and other accounts (taxes, interest, saving, capital, and investment).

He concluded his presentation by taking participants through a step by step process of preparing the SAM:

1. Draw a square matrix with rows and columns. The rows give total receipts and the columns give total spending;
2. Determine the activity income (activity that produces the commodities that will be marketed and consumed);
3. Sum up the total demand for the commodities generated from activities (intermediate, finished);
4. Calculate the total factor income (wages, rents, interests, foreign transfers);
5. Determine the total income of enterprise (derive from its own activities; government transfers and foreign transfers to enterprise);
6. Compute the total household income (factor income to the household –wages; enterprise income to the households-dividends; government transfers to households-pension-LEAP; foreign transfers to households-remittance);
7. Calculate the total income tax (tax from the production process, taxes on commodities, factor tax, enterprise tax, household tax);
8. Sum up total government income (from enterprise, household, tax and transfers);
9. Calculate the total savings (from enterprise, households and government); and
10. Determine the total foreign exchange out flow from the interaction with the rest of the world (spending on import, factor payment abroad, enterprise payment abroad, household payment abroad and government payment abroad)

The resource person pointed out that the same process is used to compute the total expenditure. However, the income must always be equal to the expenditure.

Comments, Questions and Feedback

The following comments were made after the presentation:

- 1) What is the definition of intermediate commodity and can fertilizer qualify to be intermediate good as the presentation suggests?

- 2) The presentation indicated that the number of columns must be equal to the number of rows in a Social Accountability Matrix. Why is saving as a parameter missing from the rows in the example?
- 3) How can households make transfers to government as suggested by the example?
- 4) Does the Ghana SAM differentiate between activities since one person, especially in the agriculture sector, can be involved in more than one activity?
- 5) The presentation dwells so much on land, labor and capital as factors of production in the SAM. Why is technology not included in the factors of production in the example?
- 6) The Economic Department of the University of Ghana is running a project that tries to measure the role of technology in the production process by assessing effects of the introduction of new products, introduction of new processes and technological innovation. The initial findings revealed that when firms introduced new products, they can generate employment as compared to introducing new processes
- 7) What accounts for negative effects on employment when new processes are introduced?

b) Economic Linkages & Multiplier Effects

Dr. William Baah-Boateng again introduced participants to how the SAM could be used to assess the outcome of introducing exogenous shocks in an economic system. The SAM contains both endogenous and exogenous elements. The introduction of exogenous shocks results in direct and indirect linkages. The indirect linkage further results in production linkage effects and consumption linkage effects and some of this can have backward linkage and forward linkage resulting in multiples of effects.

He indicated further that the multiplier effect analysis refers to increase in final income that results from an injection of new or additional spending. It relates to changes that occur in the circular flow of income following an injection of new demand and the new demand is expected to increase spending, and creates more income.

Dr. Baah Boateng added that three assumptions are behind the use of SAM to compute multipliers. These assumptions are that prices are fixed and any changes in demand lead to changes in physical output rather than prices; factor resources are unlimited or unconstrained, so that any increase in demand is matched by increased supply; and input coefficients of production and consumption patterns of households are unaffected by exogenous changes in demand (linkage effects are linear and there is no behavioural change).

He then took participants through the step by step process of deriving the coefficient of the multiplier:

- 1) Prepare the SAM
- 2) Replace the values in the SAM with letters
- 3) Divide each column through by its column total
- 4) Derive the coefficients matrix (M-matrix)
- 5) Define the identity matrix

- 6) Define the exogenous elements
- 7) Subtract the identity matrix (I) from the coefficient matrix (M)
- 8) Generate the multiplier formula by applying the requisite mathematical techniques including algebraic expression and change of subject
- 9) Replace the letters with figures in the formula to calculate the coefficient of the multiplier
- 10) Interpret the result

Comments, Questions and Feedback

Participants posed the following questions after the presentation:

- 1) Can the exogenous demand (E) be zero in a multiplier formula of:

$$Z = (I - M)^{-1} E$$

Where Z= total demand for each commodity; I= is identity matrix; **M** = coefficient matrix

- 2) How can this multiplier analysis (formula) be used to inform policy decisions by government and the public service?
- 3) It is an open secret that a gap exists between academia or research and public policy formulation. How can this multiplier analysis be used bridge the gap and effect policy changes at the policy level?
- 4) Even though there may be a gap between the academia and policy, the gap may not be total disconnection
- 5) A study by Dr. William Baah-Boateng for the African Development Bank on unemployment has helped to broaden the ILO's definition of unemployment in the context of Africa. This is a typical example of how academia and policy can interact to address policy issues
- 6) A forum like (organised by ILO on the effect of trade and sector policy on employment) is also an example of how the gap between academia and policy can be bridged
- 7) ILO is happy to know that this forum has exposed some participants, for the first time, to using a more rigorous scientific method (use of SAM and multiplier) in analysing the effects of trade and sector policies on employment

Dr. William Baah-Boateng presenting the SAM and multiplier analysis to participants at the workshop

c) Computing Direct and Indirect Effects

Mr. David Cheong assisted participants to use the multiplier formula to calculate the direct and indirect effects of trade and sector policies on employment. He highlighted parts of the Ghana SAM that would be relevant for the analysis and discussed the step by step process in conducting the analysis:

- 1) Calculate the input coefficient matrix for all the accounts in the SAM;
- 2) Determine the exogenous elements (Government; Savings-Investment; and the rest of the word) and exclude them from input coefficient analysis;

- 3) Calculate the multipliers (inputs and outputs);
- 4) Adjust the multipliers by getting rid of import intermediates;
- 5) Make assumptions about the policy;
- 6) Calculate the value of the trade shock caused by the policy;
- 7) Estimate the employment output ratio by taking the employment number of the sector and dividing it by the value of output of the sector;
- 8) Multiply the value of the trade shock by the multiplier and by employment output ratio of the sector to derive the employment effects of the trade policy.

He concluded the presentation by stressing that there are limitations of the model but it is easy to use, simple and transparent.

Comments, Questions and Feedback

The following were the issues raised after the presentation:

- This same model or methodology is used to estimate the effects of infrastructure on employment;
- What kind of message is being put across by extremely low (less than 1) multipliers especially when there are wide variations across sectors?
- Agriculture production uses more exported inputs for the production process in Ghana and it is therefore surprising that the share of agriculture output use as input into the sector is so high (0.93). What accounts for this?

Theme four: Agro-Processing, employment and exports in Ghana

a) Site visit to Yams House and Niche Cocoa

Participants were driven to Prampram (Yam Pack House) and Tema (Niche Cocoa Processing Industry) to observe and learn at first-hand the employment situation in the sector so that findings and recommendations from studies can be understood as part of reality.

At the Yam Pack House, participants were taken round the firm by the managing Director, Mr. Joseph Adams. He informed them that the firm was established fifteen years ago to add value to yams before export. The firm sources out the yams from supplier across the country, sorts them out and exports the selected ones to the United States of America, Holland and the United Kingdom. The annual exports have been constant around two thousand (2000) and three thousand (3000) metric tonnes and Pona and white yams are the main varieties used as inputs for the production. Other inputs besides the yam are curtains and papers for packaging. The firm has contract with suppliers who provide the inputs every week for the production. The rejected yams, after sorting out, are sent back to the suppliers to sell on the market. Beside observation, the firm also uses scientifically proven methods to assess the quality of the yams during the sorting out. Ghana Atomic Energy aided the firm in this regard during the initial stage of the business. The firm exports small or mini-size yams to Holland while the United Kingdom accepts all sizes of yams. The transit time for the export, mainly done through sea transportation, is twelve (12) days to Holland, twenty-one (21) days to the United

Kingdom and thirty-one (31) days to the United States of America. The company currently export only yams because of its limited market abroad. There has not been any opportunity to export to Asia.

Even though the firm is not directly involved in the cultivation of the yams, it provides financial assistance in the form of soft loans to its suppliers when the need arises.

A total of twenty (20) to thirty (30) staff have been recruited for the business and this increases by 5% during peak seasons. Recruitment is done in the catchment area of Prampram and there is no specific skills requirement before engagement. However, the firm provides training to newly recruited staff on how to go about their work. The workforce is divided into casual workers and permanent workers and there are ten (10) men and forty (40) women excluding administrative staff. There is only one woman among the four-permanent administrative staff. The daily wage for the casual workers is GH¢ 12 in addition to GH¢ 3 transport making a total of GH¢15 a day. The firm provides accommodation for the permanent workers at the premises and currently two casual workers who came from outside the catchment area are also being accommodated by the firm. On average, a worker has been engaged by the firm for eight years but the job security depends on discipline and consideration of the owner. The permanent workers have a union and a leader who discusses welfare issues with management.

The permanent workers do not have official leave but the firm breaks for one month (June to July) and the workers are paid during the period. The firm also pays for the health care expenditure of workers who fall sick while at work.

The main challenge of the firm is transportation cost of raw materials from the supply centres and this could be addressed if the government were to establish pack houses at vantage points across the country. For the firm to expand the business (buy more yams and export more), it will require more capital injections to buy more yams, recruit more people and build bigger storage centres.

Mr. Adams concluded his presentation by assuring participants that their concerns of the firm not providing for standing or sealing fans (the warehouse is very warm); gloves and; footwear to improve the working conditions of the workers would be taken up with management for redress.

Comments, Questions and Feedback

The following questions from participants informed the presentation by Mr. Joseph Adams:

- 1) How do you recruit you staff?
- 2) Do you have any men working for the firm?
- 3) What skills is required to work in the firm?
- 4) Where do you source the inputs of the firm from and is the sourcing done as and when it is needed?
- 5) Does the firm get the quality and size of yam required for production?

- 6) Are the workers affected in any way when demand for export falls or inputs for production falls?
- 7) What kind of training is given to staff?
- 8) Do you subject the yams to any scientific test before selection and export?
- 9) What is the workforce requirement for the firm's operation and does the firm increase the workforce during peak seasons?
- 10) What is the gender composition of the workforce?
- 11) Does the firm provide any assistance to the farmers or suppliers of the inputs?
- 12) Are the female workers entitled to maternity leave?
- 13) Are the workers entitled to social security?
- 14) How many hours are the workers required to work in a day? When does work start and end?
- 15) What is the daily minimum wage for the casual workers?
- 16) Why has the firm not provided the workers with gloves; shoes and fans to improve the working conditions of the workers?
- 17) Was the warehouse purposely built for this business?
- 18) Which countries are the main destinations for the yam export and are there other competitors?
- 19) How much T&T is paid to the casual workers and what are the considerations?
- 20) Is there job security for the workers? How are the workers dismissed if they must? Are there laid down procedures?
- 21) How long has a worker worked, on the average, for the firm?
- 22) What other benefits are available to the workers?
- 23) Are the permanent workers entitled to official leave with pay?
- 24) What support does the firm get from government?
- 25) Is there a health policy for the workers?
- 26) Does the firm export to Asia?
- 27) Does the firm export the same type and size of yam to all countries?
- 28) Is there any intention to sell other products beside yam?
- 29) How long does it take to transit the yam to exporting countries?

Participants interacting with workers at the Yam Pack House in Prampram during the visit,

The participants were also taken to Niche Cocoa Processing Company Limited in the Free Zone enclave of Tema, the main industrial city of Ghana, to see for themselves how agro-processing and exports affect employment generation in the agriculture and manufacturing sectors. Mr. Edmund Poku, the sole proprietor of the firm, provided a brief introduction of the company to participants through video presentation. The presentation and discussions revealed that the firm was established in May 2011 and is wholly owned by a Ghanaian. It processes cocoa into semi-finished products including Cocoa licker, Cocoa Cake and Cocoa butter for export. The total production of the company per annum is sixty-thousand (60,000) metric tonnes and these are exported to countries all over the world particularly European countries. The company processed 7% of the country's cocoa outputs and had a turnover of

\$120 million in 2016. Its long-term goal is to become the leading cocoa processor in West Africa.

The cocoa beans used for the production are purchased directly from the Cocoa Marketing Company of Ghana and the beans are examined upon arrival at the company's premises with high level technological equipment to confirm the quality. Niche partnership with well-known equipment manufacturers make their production departments one of the best in the industry. It has a state of the art equipment and latest technology for production. The company is certified by ISO FSSC (22000) Food Safety Management System and is noted for its compliance with industry best practices.

There is an ongoing partnership between Niche and Akuapa license buying Company to periodically provide assistance to farmers who deliver the cocoa beans to Niche. The only inputs imported are the laboratory equipment as well as milk powder and sugar during the production of chocolate.

Mr. Edmund Poku, further stressed that Niche Cocoa Processing Company is an equal opportunity employer and production is successful due to the highly skilled labour force in the organisation. There are two hundred and fifty direct employees and fifty indirect employees and the gender composition is 70% and 30% for men and women respectively. All the employees are fully employed and all have equal access to the company's health care package. All staff are entitled to leave with pay per the labour law. It offers periodic training to staff to ensure the utilisation of their full potentials. All the employees of the company are Ghanaian nationals.

He concluded that the company is currently using eighty (80) percent of its installed capacity on the average. It has a better relationship with the University of Science and Technology as students from various departments in the school undertake their internship service at Niche. It was only in 2016 that the company received some students from the University of Ghana.

The presentation ended on the note that the company was awarded the President's Special Award for export achievement in 2013, 2014 and 2015.

Comments, Questions and Feedback

The following questions were asked during the interaction and the responses have been integrated in the presentation:

- 1) What is Niche doing differently from its competitors in the industry?
- 2) Is it difficult for Niche to access the inputs (cocoa beans) for production all year around?
- 3) Does Niche have any advantage over its competitors in employment generation?
- 4) Is Niche a free zone company?
- 5) Does Niche have any plan for backward integration?
- 6) What percentage of Ghana's Cocoa output is processed by Niche?
- 7) What is the difference between Niche and CPC in processing cocoa?

- 8) How many employees work for Niche and what is the turnover?
- 9) Is Niche able to recruit already skilled labour from the market or it must recruit and train?
- 10) How is employment affected in Niche when there is an increase in demand for its outputs?
- 11) What is the gender composition of the workforce?
- 12) Does Niche have contract with its employees?
- 13) Are there casual workers working for the company?
- 14) Does the company provide for health and social security of its employees?
- 15) Is there provision for leave with pay?
- 16) What happens when the officer responsible for tasting the products, yet to be released, at the laboratory falls sick and fail to report at work?
- 17) Are there plans to localise the brand, promote and advertise the products of the company in order to boost local demand?
- 18) What is the secret of the company that make the workers work out their heart to achieve targets?
- 19) What is the percentage of inputs imported into the production process?
- 20) What benefits does the company derive from operating in the free zone enclave?
- 21) What is the average percentage use of the installed capacity of Niche?
- 22) What is the relationship between Niche and the Nutrition and Food Science Department of the University of Ghana?

Participants were taken round the production facilities and departments of Niche to have a first-hand experience of the production process.

Sections of the participants interacting with officials of Niche during tour of the facilities

b) Discussion and reflection on the site visit

Participants observed a sharp contrast between Niche Cocoa Processing Industry and the Yam Pack House. Whilst they observed that Niche had a plan for expansion, the Yam Pack House had no such arrangement. Elements of decent work deficit; job insecurity; occupational hazards; less automation of the production process; labour intensive; technological deficiencies; absence of guidelines of work as well as informality were more expressed at the Yam Pack house than the cocoa processing company. Some participants however argued that it was not realistic to compare the two firms as their focus of operations differ. Nonetheless the two firms, to a large extent, confirmed the reality of the theories that participants were exposed to in the first two days of the workshop (for example, Niche confirmed the classroom discussion that process innovation does not add much value to employment generation when they doubled their turnover by automating the processes and marginally increasing formal employment from 230 to 250).

An interesting common characteristic observed by participants about the two firms was their lack of interest in backward integration which nevertheless is very important in ensuring continuous availability and reliability of inputs for production.

In conclusion, participants proposed that a study should be commissioned to investigate the effects of these agro-processing companies (trade) on employment generation in Ghana. This will generate empirical evidence that will help improve understanding on how these variables interact and affect each other in Ghana).

c) Background Study on Employment in the Agriculture and Agro-Processing Sectors in Ghana

Dr. John Ansah of the University of Cape Coast presented to participants the findings of a background study, commissioned by the ILO, on employment in agriculture and agro-processing sectors in Ghana. The study was necessitated by issues such as high food import to Ghana (\$1.5 billion in 2014) and declining agriculture contribution to GDP which has culminated in declining labour absorptive capacity of the sector.

The purpose of the study was to undertake a situational analysis of the agricultural and agro-processing sectors in Ghana; harmonising data and key findings from the studies that have been conducted on employment in the agriculture and agro processing sectors; disaggregate the main existing agricultural and agro processing employment data into sub-sectors, size, gender and skills profile; review the availability and depth of macroeconomic tools; and provide in-depth analysis based on selected agro-processing units in Ghana.

Data was mainly collected from state and corporate institutions to do the analysis. The findings revealed that agriculture's contribution to GDP declined at the rate of 24 percent; agricultural sector's growth rate has been lower than the GDP growth rates; agriculture's contribution to GDP declined from 39.8 in 2003 to 19.7 in 2015; rate of employment in the agricultural sector continues to decline; majority of workers in the agricultural sector are into crop and livestock production; decline in the engagement of the youth in agro processing; decent work is very low in the sector (contracts, social security and paid holidays are mostly the least of the concerns of persons engaged in agriculture); ninety-nine (99) percent of employees in agro-processing are without decent work as at 2013; and poverty status, on the average, improves in both urban and rural communities.

Dr. Ansah finished his presentation by concluding that the agriculture sector is expected to lead growth and structural transformation of the Ghanaian economy. However, processing of agricultural produce will be fundamental to improving food supply and employment creation especially in rural areas.

Comments, Questions and Feedback

The participants made the following contribution after the presentation:

- 1) Protection of right of workers and tripartism or social dialogue are part of the definition of decent work;
- 2) The definition of decent work should be reviewed to include the culture setting of the sector. For example, farmers have on and off seasons, can the off season be taken as holiday and therefore decent work?
- 3) The authors of the background study should weigh the data sets from the Ghana Statistical Service before use and inclusion in the final report
- 4) What does the study mean by lower access to credit by the agriculture sector? What is the source of the data and how are the conclusions drawn?
- 5) What is the connection between the METACID programme and the findings of the study since the various phases of METACID seek to address the issues raised by the research;
- 6) The Department of Economics of the University of Ghana has much data on policies and decent work related issues of the agriculture sector and can be used to improve the report;
- 7) What are the reasons for the declining employment rate in the sector?
- 8) What statistical model was used to compute decent work in the agriculture sector?
- 9) What accounts for the insignificant contribution of forestry and logging to GDP?
- 10) It would have been more meaningful if the data on employment in the sector is disaggregated into people with permanent contract and 'by-day' work to determine the source of decent work;
- 11) How did the study arrive at the conclusion that agriculture has the potential to improve the economy through job creation? This conclusion should be taken out of the report since it does not seem to flow from the study;
- 12) The number of people engaged in agro-processing did not come out very clearly in the presentation. This should be elaborated upon in the main report;
- 13) Does the data from the Ghana Living Standard Survey and IBEG have the same parameters or definitions for agriculture and agro processing? If they do not have the same definition, then the comparison would be a bit of a problem;
- 14) The example observed at Niche could be used as a model on how agro-processing companies could be used to impact on employment generation in Ghana. The example of Niche could further be replicated all over the country.

d) Discussion on further work in this sector: Yams STED and TRAVERA Work

Participants were informed about the decision of the Project Steering Committee to use the Yam Pack House model for further studies into how its value chain may have the potential for exports and to create and upgrade employment.

After a thorough discussions on the subject, participants agreed that the study should be broadened to cover yam and other selected root and tuber products (yam, cassava and sweet potatoes).

A sample survey with sample size of two hundred (200) to two-hundred and fifty (250) enterprises will be selected from yam, cassava and sweet potatoes pack houses with a minimum of ten to

fifteen employees. Questions such as how many workers exist, how much is paid to them, whether they have social security and leave with pay among others will be asked. There would be a thirty-five (35) page questionnaire to elicit information from the interviewees. The questionnaire will be sent to participants for them to review and provide feedback for improvement.

Dr. John Ansah of the University of Cape Coast making a case during his presentation at the workshop

Theme one (continued): Employment Impact Assessment in Infrastructure

a) Monitoring of employment impacts including case studies

Mr. Maikel Kie-Lieuw-Song made a presentation on how employment impact could be assessed in the infrastructure sector. He illustrated it with cases from the United State of America and South Africa. In America, the focus was to use appropriate methodologies to assess the impacts of the American Recovery and Reinvestment Act of 2009 (ARRA) after the 2008 global recession. He indicated that two kinds of employment impacts were generated with respect to the ARRA stimulus programme and they were mainly: short-term impacts (jobs created during construction process) and long-term impact (jobs created after project is completed). He explained that the tools used to measure the short-term effects on jobs are mainly the input - output methods and structural macroeconomic models.

Mr. Kie-Lieuw-Song took participants through how the tools and models were used to calculate the quantum of jobs created in the USA by the ARRA stimulus package programme. He concluded that through this analysis, and appropriate reporting format, the USA was able to know that the \$264.4 million spent on infrastructure investment component of the stimulus programme created and retained about 2.9 to 3.4 million Jobs after two years of implementation.

These same tools and models were used to assess the effects of infrastructure projects in South Africa. For example, the Expanded Public Works Programme was introduced in 2004 by the South African government by shifting \$500 million annually from equipment based to labour based construction (low-volume roads, water, sanitation, sidewalks). The programme was expected to create 150,000 jobs per year, or 750,000 over 5 years. After the analysis (using the tools and models), it was observed that the project had positive effects on:

- GDP (The direct and indirect impact of the labour based option is about 0.1% (rounded) higher than the impact of the machine based approach);
- Sectors (Industries that benefited from the switching were beverages, trade and electricity, with the impact on output of the food processing sector standing at R150 million);
- Labour Demand (Impact on national employment estimated at about 1%, or 80,000 person year - equivalents out of about 8 million workers employed in South Africa).

He concluded the presentation by discussing the take-away from the case studies in the USA and South African for Ghana. This include: different methods or models incorporate different

assumptions and different assumptions influence results; measuring jobs has a political dimension and there is the need for dialogue among stakeholders; employment impact assessment in infrastructure (EMPIA) can have policy impacts.

Comments, Questions and Feedback

The following issues were discussed after the presentations:

- 1) Is the model being developed by NDPC addressing the issues of infrastructure and job creation in Ghana and if it is, what is the linkage between this model and the Ministry of Roads and Highway as well as Ministry of Housing? Currently, the draft model anticipates forecasting employment generation by government investment at the macro level. There will be the need to incorporate micro level job creation models in this national effort;
- 2) Job creation should focus on quality instead of quantity. Are the examples from USA and South Africa similar in terms of quality of jobs created? The innate appreciation for quality is so key in every job creation investment project;
- 3) Ministry of Finance and NDPC should develop template to assist MDAs indicate the number of jobs that will be created by government expenditure in their sectors. Even though, this has been suggested by the Project Steering Committee over the years, the two institutions are yet to consider it;
- 4) There is the need to deepen collaboration between NDPC, Bank of Ghana, academia and other relevant institutions in assessing the impact of investments on employment generation;
- 5) Does the Ghana Statistical Service and Ministry of Finance play a role in the generation of employment figures that the politicians use in the media?
- 6) There will be the need to expedite action on the creation of a functional National Employment Coordinating Council backed by law to properly manage employment data in Ghana;
- 7) The ILO should assist the sector ministries to develop model to facilitate the linking of government investments to employment generation in the country.

b) Approaches to measuring the long-term impacts of infrastructure investment on employment

Mr. Kie-Lieuw-Song further took participants through a step by step process of assessing the long-term effects of investment in the infrastructure sector on employment generation. He took participants through the approaches and methodologies, illustrating them with examples and case studies from selected countries.

Comments, Questions and Feedback

The following comments and questions were raised after the presentation:

- Why did the presentation focus on only the road sector at the expense of other modes of transportation? Ghana for example needs the railways to address congestions in its major cities including Accra

- Can the source of funding of a road project have a long-term impact on employment generation?
- The caption “employment generated by road construction” should be modified because it is mostly linked to road funds and the road funds is not used for construction but maintenance. A better caption would be “employment generated by road infrastructure development and maintenance”

Mr. Kie-Lieuw-Song presenting on how to measure the long-term impacts of infrastructure investment on employment

5.0. NEXT STEPS AND WORK PLAN ON COUNTRY LEVEL ACTIVITIES

Dr. Akua Ofori-Asumadu informed participants that Dr. Baah Boateng was unable to do the last presentation on the programme due to an emergency beyond his control. He has however requested list of policy advisory members and when and how to contact them for the way forward assignment. Dr. Baah Boateng is expected to have a one and one meeting with participants from the participating organisations as part of his assignment. It was agreed that both the participants of the training workshop and the list given to Dr. Baah Boateng should be combined to form a team for the exercise ahead. There were even suggestions that the list should be expanded to include staff of MDAs who did not benefit from the training programme but can be very useful in the exercise. The project secretariat would send the list to participants from MDAs for their feedback. The terms of reference for the activities of the exercise would be clearly spelt out by Dr. Baah Boating.

Dr. Akua Ofori-Asumadu indicated further that the study reports would be circulated, in track changes, to members of the policy working group by 22nd May 2017 to review within one week. The feedback from the review should be received by the project secretariat by 29th May 2017. This would be followed by circulation of the workshop report to participants by 31st May 2017. Dr. Baah Boateng would then visit participating agencies from 22nd may to 5th June 2017 to provide technical assistance to the teams (participants from MDAs and other selected staff) in applying the models or assessment methods learnt at the workshop to answer questions of interests in their MDAs.

The RSIM unit of the Ministry of Employment and Labour Relations must be actively involved in the planned study activities because of the strategic nature of the ministry in employment measurement in the country.

The sub-committee of the policy working group has met on the terms of reference for engaging consultants to undertake the TRAVERA studies between June and July 2017 and has short-listed consultants for consideration by the broader policy working group. Participants were informed that the whole procurement process would have to start again because the focus area of the study has been broadened to include other selected root and tuber products.

She concluded the next steps on the project activities by informing participants that a policy working group would be held on 12th July 2017 whilst dissemination of the studies would be done by 26th July 2017. The dissemination workshop is expected to share the findings of the studies with the public and engage political heads as well as heads of all agencies of the outcome of this workshop and follow up activities.

It was suggested, after the presentation of the next steps, that the capacity building and training for employment impact assessment (Dr. Baah Boateng's assignment) should be considered as one line of activity whilst policy support is treated as another line of activity. The policy support would include dissemination of all the study reports for political consensus and decisions.

6.0. CONCLUDING REMARKS BY VICE CHAIRPERSON OF THE PROJECT

Mrs. Emma Offori Agymang, Director of PPMED at the Ministry of Employment and Labour Relations and Vice Chairperson of the policy working group, thanked participants for their full and active participation in the training workshop. She indicated that the workshop could not have happen at a better time than this when the new government is making efforts to centre employment generation and impact assessment in its scheme of work as contained in the 2017 budget statement. She stressed on the pivotal role played by employment in the day to day decision making of Ghanaians and hence the need to effectively assess the effects of sectorial and national investment on employment generation. She indicated the commitment of the Ministry of Employment and Labour Relations to ensuring that employment generation in the country is guided by standards and best practices. Mrs. Emma Offori Agymang urged participants to put into practice what has been learnt to improve upon the measurement of employment in the country.

She expressed her appreciation to the International Labour Organisation for organising the workshop despite the cost implication. She revealed that the policy working group would be integrated as a sub-committee of the National Employment Coordinating Council when it is established to feed it with relevant modules and methodologies for assessing employment in the country. She concluded her remarks by thanking the resource persons for impacting the knowledge.

7.0. CONCLUSIONS AND RECOMMENDATIONS

The comments and discussions at the workshop suggest that participants were impressed with the outcome of the training. Many of them acknowledged that it was their first time of exposure to using rigours scientific methods and models to assess sectorial and national investment interventions on employment. The practical experience at the Yam Pack House and Niche Cocoa Processing Industry illustrate the empirical evidence of how such agro-processing companies have the potential and could be used as vehicles to create and upgrade employment especially in agrarian economy.

The following recommendations were proposed as the wayforwd for improving employment generation in the country and beyond:

- 1) The pre-agreed study on the value chain of yam processing firms should be revised to include cassava and sweet potatoes;
- 2) The modu-operandi of Niche Cocoa Processing Industry should be emulated across the country for improving exports and creating and upgrading jobs in the agro-processing sector;
- 3) The Ministry of Finance and National Development Planning Commission should develop processes to assist MDAs indicate the number of jobs that their investment activities would create;
- 4) The economic model being developed by the National Development Planning Commission and Oxford Economics of UK (at the macro level) should be harmonize and could include elements that can forecast employment generation at the micro level;
- 5) The International Labour Organisation should assist the sector ministries to develop models to facilitate the linking of government investments to employment generation in the country;
- 6) The parameters of decent work should be reviewed to take into account the cultural settings of local communities;
- 7) The policy working group of the project should be integrated as a sub-committee of the National Employment Coordinating Council when it is established.

8.0. ANNEXES

Annex 1: Programme

Day 1 Monday 15 May			
Starting Time	Activity	Responsible	Mode
11h00	Arrival at Venue		
12h00	LUNCH		
13h30	Introductions, objectives of workshop, adoption of the agenda	AAO	
	Theme 1: Employment Impacts Assessments in Infrastructure		
14h00	Draft Background Study on Employment in the Infrastructural Sector in Ghana	KND, DRIC, UCC	PPT
14h45	Discussion	All	
15h30	BREAK		
16h00	Introduction to Employment Impact Assessments in Infrastructure (EMPIA) (Short-term effects) (Also links into SAM based analysis)	MLKS	PPT
17h00	Group work exercise	All	Excel
Day 2 Tuesday 16 May			
Theme 2: Trade and Employment			
9h00	The Impact of Trade on Employment in Ghana	WBI, UCC	PPT
9h45	Discussion	All	
10h30	BREAK		
11h00	Introduction to WITS (World Integrated Trade Systems)	DC	PPT + demo
12h00	Spotting Export Potential	YMD, ITC	PPT
13h00	LUNCH		
	Theme 3: Social Accounting Matrix (SAM) Framework and its use to assess employment effects in trade and sectors		
14h00	Basic structure of a SAM and the Ghana SAM and labour accounts	Econ Dept. UG WBB	PPT
15h00	Multiplier analysis		PPT
16h00	BREAK		
16h30	Computing direct and indirect effects		PPT
Day 3 Wednesday 17 May			
	Theme 4: Agro-processing, employment and exports in Ghana		

8h30	Background Study on Employment in The Agriculture and Agro-Processing Sectors in Ghana	EEA, DRIC, UCC	
9h15	Discussion	All	
10h00	Site visits:	AAS	BUS
	Yams Pack House		
	Niche cocoa		
14h30	Lunch		
15h30	Discussion and reflection on site visits	MLKS DC, AAO	Facilitated discussion
16h00	Discussion on further work in this sector: Yams STED and TRAVERA work		
16h30	Focus areas for component A follows ups in Agro processing	All	
17h00	Spotting export potential: Estimating employment effects	YMD, ITC	
Day 4 Thursday 18 May			
	Theme 3 (continued): Employment Impact Assessments in Infrastructure		
9h00	Monitoring of employment impacts including case studies	MLKS	PPT
10h00	Approaches Long-term impacts of infrastructure investments on employment	MLKS	PPT
10h30	BREAK		
11h00	Way forward in Infrastructure sectors assessments in Ghana	All	Discussion
12h00	LUNCH		
	Way forward and closure		
13h00	Follow up work on SAM and multiplier analysis	WBB, Econ Dept. UG	
	Finalization and validation of studies	AOA	
	Next steps and workplan on country level activities		PPT
	Evaluation and Closure	All	
15h00	Departure back to Accra		

Annex 2: Site Visit Guide

Wednesday 16 May 2017

The purpose of the site visits is to observe and learn first-hand what employment in the selected sectors is like so that findings and recommendations from studies can be understood as part of reality. What are different Jobs like in these sectors?

Remember:

We are going to: **OBSERVE, LEARN, REFLECT and UNDERSTAND!**

We are **NOT** going there to **JUDGE, INSPECT, APPROVE or REJECT!**

Please be: **Respectful, polite, curious and open-minded!**

The questions below are suggestions only! Ask other questions based on your ideas and use your proper judgement

What are your observations on the following:

- Gender
- Youth
- Health and Safety at work
- Nature of work
- Skills
- Productivity

Discussions with workers:

- How many people are employed?
- What skills do they have?
- What skills do they lack?
- Do they do this work full-time?
- Do they do other work during other times of the year? What kind of work?
- How many hours a day?
- How long have they been in this job?
- Do they know how long it will last?
- Will they use these skills elsewhere?
- What does this work mean for them?
- What do they earn? How does it compare with other work?
- How did they get the job?
- Do they want to continue to work in this sector? Will they be able to?
- Do they have a worker's union?

Discussions contractor and employers

- How long have they been contractor/ employers?
- How many people do they employ? What professions and skill levels?
- How many are long term employees?
- How many projects do they implement?
- Are they finding people with the right skills to work?
- Can they find enough people willing to work?
- How do they select the people to work?
- Do they train workers if they lack some skills?
- Do they think the sector is growing/ attractive?

Overall Policy Questions to reflect on

- What are the advantages for government of generating/ stimulating employment in this sector?
- What are the disadvantages?
- Are there ways to improve on the advantages, or reduce the disadvantages?
- What do you think is the scope for **increasing** employment in this sector? What are feasible policies for doing so?
- What do you think is the scope for **improving** employment in this sector? What should be the priority? What are feasible policies for doing so?

Annex 3: Next Steps

Activities	Deadlines
1. Circulation of Studies	22 nd May
2. Feedback	29 th May
3. Workshop Report	31 st May
4. Follow Up Activities	22 nd May 5 th June
5. TRAVERA Studies	June/July
6. PWG Meeting	12 th July
7. Dissemination Workshop	26 th July

Annex 4: Attendance list

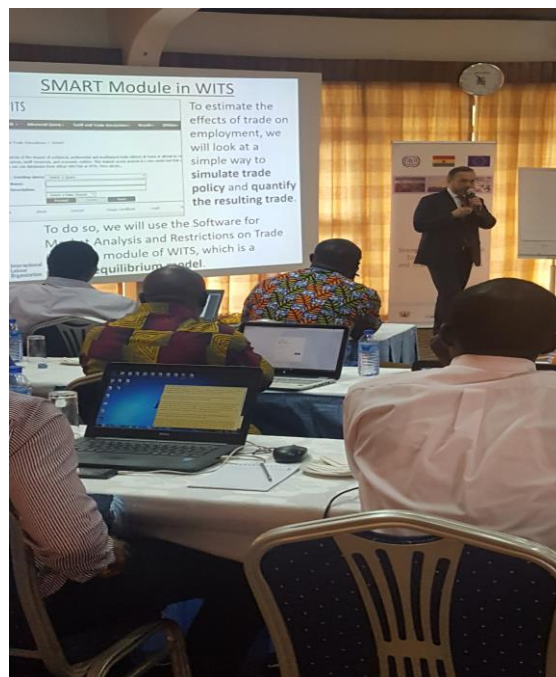
Annex 5: Presentations

Annex 6 Picture Gallery

Training Workshop



Workshop Participants during a presentation by Maikel Liuw-Kie-Song



Presentation by David Choeng



Q & A Session after presentation by Maikel Liuw-Kie-Song



Presentation by Professor William Baah Boateng

SITE VISITS



Women working at the Yam Pack House



Participants observing yams being packaged at the Yam Pack House



Visit to Niche Cocoa manufacturing plant



Meeting of participants with the management of Niche Cocoa