

**Background material for the expert meeting with African peers and stakeholders**

**ROUND TABLE ON:**

**“RESEARCH AND POLICY CHALLENGES IN FOOD AND NUTRITION SECURITY IN AFRICA AND BEYOND”**

**9 October, 9:00-14:00 hrs, ILRI campus, Lalibela Meeting Room**

Organizers Assefa Admassie (EEPRI) and Thom Achterbosch (LEI Wageningen UR)

Chair: Assefa Admassie (EEPRI)

**Part I. Expert panel, 9 October, 9:00-11:00**

**Setup:** Panelists will be invited by the chair to make statements of 7 minutes, on the key FNS challenges facing Africa countries, the research priorities in this regard and the policy options from the perspective of your organization. The statements will be followed by an animated discussion with the floor.

Opening by roundtable chair, Dr Assefa Admassie (EEPRI) – 10 min,

Followed by introductory statements from panel members (5 x 7 min, no room for questions)

Q&A with the audience – 1 hr

Wrap up and closing of the panel session by the chair

Note regarding media exposure: Please note that there will be camera recording of the expert panel by FOODSECURE staff. The footage material will be used to inform our stakeholders and interested audience on the proceedings of the conference. In addition, we are expecting some journalists of the written press; we kindly ask your cooperation in addressing the press.

For press related issues: please contact Dr Bekele Hundu of the Ethiopian Economics

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**Panelists:**

**Dr Maurice N'Guessan, Senior advisor, Department of Rural Economy and Agriculture, African Union Commission**

The Department of Rural Economy and Agriculture (DREA) was established with the objectives of promoting agricultural and rural development and ensuring food security for Africans, and achieving sustainable development and improved livelihoods for the population, and ensuring effective protection and development of the African environment underpinned by sound environmental and natural resources management including disaster risk reduction and adaptation to climate change. It has the following vision and mission statements. AUC-DREA's Vision is: "A transformed African agriculture with diverse and sound environment that provides the basis for continental sustainable growth and prosperity, food security and poverty reduction, reinforced by prudent management of the natural resources including proactive responses to climate change".

**Dr Adama Coulibaly, Head, Food Security, Agriculture and Land, UN Economic Commission for Africa**

Dr Coulibaly is chief of the section Food Security, Agriculture and Land at the UN Economic Commission for Africa. It is the objective of ECA, through the Food Security, Agriculture and Land section (FSAL), to emphasize strategies and policies for structural agricultural transformation and rural development, taking into account the integrated approach to the economic, social and environmental dimensions of sustainable development, as well as forward and backward linkages between agriculture and other evolving sectors of the African economies. To this end, the section contributes to the overall goals of the Regional Integration and Trade Division by promoting agricultural and rural development, food, and land as well as the growth of agribusiness in Africa through successful agricultural and rural economic transformation.

**Prof Claude Adandedjan, Université d'Abomey-Calavi, Chairman of the CORAF/WECARD Scientific and Technical Committee**

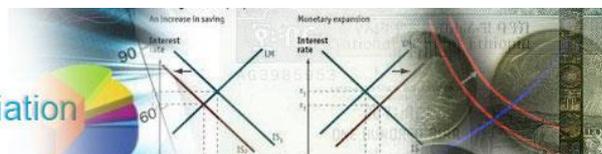
Prof Adandedjan is the Chairman of the Scientific and Technical Committee of CORAF / WECARD (West and Central Africa Council for Agricultural Research and Development). He is a professional of agriculture with 27 years of post Ph.D experiences in Research, Development. Training, Extension and Higher Education at national & regional levels in Africa. His areas of competence include capacity building in agroforestry & natural resources management. He is also active in the development and improvement of curricula for education & training of land use disciplines. Before taking up his current positions, he was chairman and Senior Education Fellow in charge of Capacity Strengthening for ANAFE in West & Central Africa (African Network for Agriculture, Agroforestry and Natural Resources Education). His areas of interest include the development of approaches for rapid transformation of research results into impacts, for development of partnerships, for innovative systems design & implementation, for qualitative management of research systems and for improvement of animal-based Agro forestry systems.



**Dr. Alemayehu Seyoum, President of Ethiopian Economics Association**



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Ethiopian Economics Association



short bio

**Prof Willis Oluoch-Kosura, University of Nairobi, member of the FOODSECURE review board**

Willis Oluoch-Kosura is Professor of Agricultural Economics, University of Nairobi. He holds a PhD, Agricultural Economics from Cornell University, Ithaca 1983, MSc Agricultural Economics from the Australian National University 1978 and BSc Agriculture from the University of Nairobi, 1976. His interest is in the field of Agricultural Development Policy, focusing on Rural Factor and Product Markets, Poverty Dynamics, Technology Generation and Adoption and Institutional Analysis. He was the Program Director, Collaborative Msc in Agricultural and Applied Economics (CMAAE) at the AERC 2004-2011, consultant to Kenya's Agriculture sector ministries, FAO, World Bank, CTA, UNCRD and several other National and International Organizations and Networks; Founding President of the African Association of Agricultural Economists (AAAE) (2004-2007); member at large in the Executive Committee of the International Association of Agricultural Economists (IAAE) (2003-2007). He has interest in facilitating collaboration in teaching, research and outreach with professional colleagues at best practice universities and development organizations for the benefit of the African Universities, institutions and farmers.



**Part II. Understanding the African food and nutrition security challenges.**  
**9 October, 11:30-13:00**

FOODSECURE aims to have an impact by strengthening the knowledge base to support EU policy makers and other stakeholders in the design of consistent, coherent, long-term policy strategies for improving food and nutrition security. This session introduces the project and features invited papers to further inform the FOODSECURE research roadmap regarding sustainable agriculture and the formulation of enabling policies and investments in Africa and beyond. The contributions include papers by invited experts under the partnerships with CTA and IFPRI/ILRI, as well as work of research teams in FOODSECURE.

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**11:30-11:45 Opening (plenary)**

Opening by chair, Assefa Admassie (Ethiopian Economics Association/EEPRI)

Introduction to the project "FOODSECURE – Exploring the Future of Food and Nutrition Security" by Hans van Meijl (LEI Wageningen UR), project coordinator

**11:45-13:00 Parallel roadmap session A [Lalibela Meeting Room]**  
***Sustainable intensification of agriculture in Africa***

Objective: In this session, researchers will examine the role of innovations in arriving at a sustainable agriculture and food security in Africa.

moderator: Derek Eaton, leader WP9 of FOODSECURE

Setup: 3\*10 minutes of presentation supported by powerpoint slides, each directly followed by a discussion with the audience. The moderator concludes with a wrap-up of the session.

Contributing papers:

**"Value chain analysis of smallholder pineapple in the Akuapim South municipality of Ghana" by Samuel Asuming-Brempong, Boahen Atta Oppong and Sampson Osei (Department of Agricultural Economics and Agribusiness, University of Ghana, Legon)**

Pineapple production contributes significantly to the economy of Ghana but its potential has not been fully realised due to factors militating against the growth of the industry. The study examines the performance of the actors in the pineapple value chain in the Akuapim South Municipality (formerly called Akuapim South District) to facilitate policy initiatives that will maximise profits along the chain as an incentive to improve industry performance. The study includes forty primary producers, eight processors of fresh pineapple, and five each of wholesalers of fresh pineapple fruits, retailers of whole pineapple fruits, and retailers of fresh cut pineapple. The results of the study reveal that all the actors exhibit differences in their share of profits along the chain. Processors obtain the highest profits and return on investment per 1kg of

pineapple fruit in the chain as a result of their largest share of value addition. The study concludes that all the actors make positive profits making their operations financially viable. The total value addition in the chain per 1kg of fresh whole pineapple amounts to GHS 0.60 (or US\$ 0.30) to realise total profit of GHS 1.31/kg (or US\$ 0.70/kg) in the chain. The study recommends that primary producers should be provided training on best agronomic practices to become fully efficient while at the same time minimising cost. Also, they should be trained on farm management practices such as production planning, cash management and records keeping to enhance their decision making skills. Pineapple processors should embark on production methods that enhance their economies of scale to maximize their share of value addition in the chain. Wholesalers and retailers should emphasize on the healthy attributes of their products to enjoy regular demand to exert an upward pressure on the prices they receive.

**“Biofuels and food security: Micro-evidence from Ethiopia” by Martha Negash and Johan Swinnen (LICOS)**

There is considerable controversy about the impact of biofuels on food security in developing countries. A major concern is that biofuels reduce food security by increasing food prices. In this paper we use survey evidence to assess the impact of castor production on poor and food insecure rural households in Ethiopia. About 1/3 of poor farmers have allocated on average 15% of their land to the production of castor beans under contract in biofuel supply chains. Castor production significantly improves their food security: they have fewer months without food and the amount of food they consume increases. Castor cultivation is beneficial for participating households’ food security in several ways: by generating cash income from castor contracts, they can store food for the lean season; castor beans preserve well on the field which allows sales when farmers are in need of cash (or food); spillover effects of castor contracts increases the productivity of food crops. Increased food crop productivity offsets the amount of land used for castor so that the total local food supply is not affected.

**“The impact of the promotion of improved agricultural technologies: The case of row planting and its impact on teff yields in Ethiopia”, by Joachim Vandecasteele, Mekdim Dereje, Bart Minten and Alemayehu Seyoum Taffesse (LICOS, IFPRI Ethiopia)**

While adoption of yield-increasing technologies is seen as a key driver to increase agricultural production in Sub-Saharan Africa, there is currently a lack of empirical evidence on the potential and constraints to adoption for such technologies at the farm level. To fill this gap, this paper assesses the impact of the promotion of a new agricultural technology, i.e. row planting at reduced seed rate, on farmers’ teff yields in Ethiopia. A Randomized Control Trial (RCT) was set up in 19 villages in the Oromia region. The results of the RCT show that row planting increases teff yields on average by between 2% and 16%, depending on the measure of yield used. These findings are in contrast with much larger yield increases found at village demonstration plots and in more controlled settings as well as with expectations of teff farmers. The differences are seemingly linked to problems in implementation of the program and with its recommendations, methodological issues, and likely over-optimism on the potential of row planting in real farm settings.

**Parallel roadmap Session B: An enabling environment in Africa: domestic policies and investments to strengthen food security**

*Konso Meeting Room, 11:45-13:00 hrs*

moderator: Sebastien Treyer, IDDRI, senior researcher in WP10 of FOODSECURE

Objective: In this session, the researchers will examine the building blocks for the coherence of EU aid and development policies with national policies and investments that aim at enhancing FNS.

Setup: 3\*10 minutes of presentation supported by powerpoint slides, each directly followed by a discussion with the audience. The moderator concludes with a wrap-up of the session.

Contributing papers:

**“An impact evaluation of cereal banking as a rainfall and price variability risk management strategy for food insecurity in The Gambia”, by Raymond Jatta (University Cheikh Anta Diop, Senegal)**

There is an increasing body of knowledge that suggest that climate change and climate variability will have considerable negative impacts on food production and food price uncertainty (IPCC 2007, AITP 2012). The effect will further constrain the capacity of households in meeting their basic needs such as food security, healthy lives especially in most import dependent developing countries (CCAFS 2008). The food crisis of 1973, 1984 and 2008 has revealed significant market failures in ensuring food security for all faced with an increasing global demand. As a result, the argument for and the practice of keeping food reserves has re-emerged on the global agenda.

Cereal banking is a risk management strategy that have been employed to generate local level savings with the purpose of smoothing consumption, especially during lean periods, providing a buffer when disaster strike and a guard against food price fluctuations. Cereals are bought when prices are low, stored for four to six months and then given out on loan or sold at lower prices during the hungry season, when prices would have otherwise being high. It is a widely practiced community based risk management strategy in arid and semiarid regions of the world including West Africa but for which little empirical research exist.

Using quasi experiments, we evaluate the usefulness of cereal banking by comparing some livelihood outcomes between villages and households participating in cereal banking and their closest counterfactual villages without cereal banking. Both cross sectional and panel data from 140 villages and about 100 households from six of the eight regions in The Gambia are interviewed. We test the hypothesis that communities that operate functional cereal banking scheme have better livelihood outcomes and are more food secured than those without cereal banking.

**“The Role of ASARECA in Enhancing Food and Nutrition Security in the Eastern and Central Africa Region” by Kenneth Masuki, Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA)**

Agricultural sector is central to ensuring national and household food and nutritional security is achieved. As Sub Saharan Africa faces food and nutrition insecurity, it is hypothesized that technological innovations in agriculture can improve food and nutrition security through a generic increase in income, specific increase in consumption of particular types of nutritious food, and/or through reduced labor, especially for women who are mainly involved in smallholder farming in Africa. Improving agricultural yields efficiently and sustainably must be central in addressing Africa’s food and nutrition insecurity challenges. Many studies show that agricultural interventions appear to have a positive impact on productivity and can improve the diet of beneficiary households. Association for Strengthening Agricultural Research in Eastern and Central Africa, (ASARECA) for nearly two decades has been involved in leading agricultural research and development for improved livelihoods by facilitating improved sustainable productivity, value added and competitiveness of agricultural systems. This was done through enhanced utilization of agricultural research and development innovations in eastern and central Africa. ASARECA’s mission is to enhance regional collective action in agricultural research for development, extension and agricultural training and education to promote economic growth, fight poverty, eradicate hunger and enhance sustainable use of resources in Eastern and Central Africa. This presentation is prepared to showcase efforts that ASARECA has put in addressing the challenges of food and nutrition security in the Eastern and Central Africa region.

**“Commercialization of High-Value Vegetable Crops and Food Security among Smallholder Farmers in Kenya” by Beatrice Wambui Muriithi, Center for development Research (ZEF), University of Bonn, Germany**

Production of high-value vegetable crops has often been promoted in Kenya as a pro-poor development strategy due to its contribution to food security, income, employment and poverty reduction. However, increased dependence on market conditions for farm outputs and inputs implies significant risks. Erratic market prices for these vegetables and farm inputs, climate, pest

and disease related crop failures and collapse of marketing channels all represent significant risks that can severely affect the income and food security of rural farm households. This study utilizes data of over 350 households to assess the effect of high-value export vegetable crops on food security in two purposefully selected districts in Central and Eastern provinces of Kenya, where vegetables are predominantly produced for commercial purposes. Per capita calorie intake and household dietary diversity Index (HDDI) were derived from a 7-days recall of household food consumption. To explore the effects of commercialization of export crops on food availability among high-value vegetable growers, the propensity score matching method was applied. Using the 2250 kcal threshold, the descriptive analysis shows that both growers and non-growers of export vegetables in Kirinyaga district are food secure while those of Mbooni district are below the threshold. The regression analysis estimate positive and highly significant response of per capita calorie intake to the participation in export vegetable production for Kirinyaga but declining significant effect for Mbooni. Food security impacts may be related to level of specialization and poverty. Low levels of specialization are less likely to impact on household calorie availability, and more so among low income households. Policy intervention should focus on promoting diversification into domestic market vegetables and production of food (staple) crops in Mbooni, while the participation of smallholder farmers in high-value vegetable markets should be enhanced in Kirinyaga.