

This bulletin highlights policy briefs, papers, journal articles and major news stories from UNU-INRA in 2017

Policy Briefs and Working Papers

Takim, F. O. (2017). *Climate Change Adaptation Options: Importance of Drought Tolerant Maize Seeds*, UNU-INRA, Accra.



This research evaluated the performance (yields and profits) of drought tolerant (DT) hybrid and open pollinated varieties (OPV), using on farm trials under different localities. The findings of the study indicated that DT maize hybrid yields were higher than the yields of OPV. Furthermore, maize hybrid production was more profitable than the OPV-based production system. The results suggest the importance of promoting maize hybrid seeds among farmers through on-farm trials and field days.



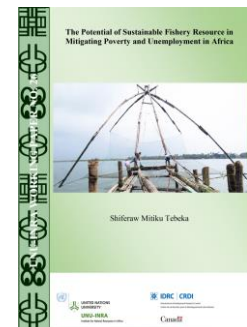
The policy brief is available at <https://collections.unu.edu/view/UNU:6262#viewAttachments>.

The full paper can also be downloaded at <https://collections.unu.edu/view/UNU:6264#viewAttachments>

Tebeka, S. M. (2017). *Sustaining Fishery Resources for Economic Growth in Africa*, UNU-INRA, Accra.



This study examined the potential of the fishery sector to mitigate poverty and the growing unemployment rate in Africa. The findings revealed that the fishing sector's potential in mitigating poverty and unemployment in the context of a green economy was unsustainable due to over-exploitation of the fishery stock, underutilization of the fishery resource, high employment pressure on the sector, and the increased frequency of export border rejection in the export market destinations because of quality deterioration.

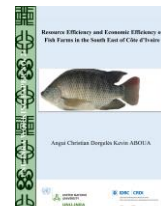


The policy brief is available at <https://collections.unu.edu/view/UNU:6273#viewAttachments> and the working paper is at <https://collections.unu.edu/view/UNU:6274#viewAttachments>.

Aboua, A. C. (2017). *Overcoming the Challenges of Fish Farming in Africa*, UNU-INRA, Accra.



This research assessed the efficiency of resource use and the economic efficiency of 32 fish farmers in the southeast of Côte d'Ivoire. It highlights the productive and economic potential that fish farmers could realize if they efficiently use resources in the production process.



The policy brief is available at <http://collections.unu.edu/view/UNU:3302#viewAttachments> and the working paper at <https://collections.unu.edu/view/UNU:6233#viewAttachments>

Ajah, J. (2017). *Reducing the Impact of Grazing Livestock on Crop Production*, UNU-INRA, Accra.



This policy brief presents recommendations from the findings of a study that assessed the impact of grazing livestock on crop production in Abuja, Nigeria. The brief calls for the need to create awareness on the importance of using grazing routes so as to avert the negative impacts on crop production. Similarly, supporting farmers to adopt intensive livestock management systems (confined animal rearing), and the establishment of a Rangeland and Grazing Routes Commission to oversee the development and management of rangelands and grazing routes may help reduce

the impact of grazing livestock on crop production in Nigeria.

The policy brief is available at <https://collections.unu.edu/view/UNU:5990#viewAttachments>

Peprah, J. A., Afoakwa, C. and Koomson, I. (2017). *Reducing Crop Yield Volatility among Smallholder Farmers*, UNU-INRA, Accra.



This brief explores factors that influence crop yield volatility among rural and urban smallholder farmers in Ghana. The study revealed that smallholder farmers who had access to credit obtained more yield per acre than their counterparts who did not have access to credit. Similarly, smallholder farmers who adopted farming technologies such as improved seeds and fertility-restoring technologies like organic manure, had more yield per acre than farmers who did not adopt any farming technology. To increase yield among smallholder farmers in Ghana, policy should focus on making credit available to farmers, especially those in the rural areas.

Measures to enhance adoption of farming technologies such as organic manure, improved seeds, modern agricultural machinery and education of smallholder farmers on their use and importance, would help increase yield and reduce crop yield volatility.

The brief is available at <https://collections.unu.edu/view/UNU:5991#viewAttachments>

Osiolo, Helen H. (2017). **Green Energy Benefits: Policy Options for Kenya**, UNU-INRA, Accra.



The importance of renewable energy in creating employment, boosting economic growth, addressing poverty, environmental degradation, pollution, soil erosion and biodiversity loss has received less attention in Kenya. Employment creation and economic growth drivers have largely been ignored despite their positive contribution to citizens' welfare. In designing renewable energy policies, it is imperative to understand the importance of renewable energy in creating employment and enhancing economic growth.

This brief is available at <https://collections.unu.edu/view/UNU:5989#viewAttachments>

Egbedewe, A. Y.G., Lokonon, B. K., Naga, C. and Atewamba, C. (2017). **Climate Change, Agricultural Trade and Food Security in ECOWAS**, UNU-INRA, Accra.

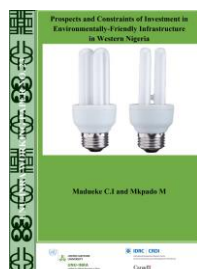


This research investigated the impact of climate change on agricultural trade flows within and outside the Economic Community of West African States (ECOWAS). To achieve its objectives, the study used a trade module of trade cost minimization built within a bio-economic optimization model of cropland allocation. The results showed that the pattern of trade in ECOWAS region induced by climatic factors will depend on socio-economic conditions that may prevail during the century. No specific pattern of trade flows is predicted, but there are some countries that may export food to other countries some years and

may later become importers in other years.

The policy brief is available at <https://collections.unu.edu/view/UNU:5987#viewAttachments>

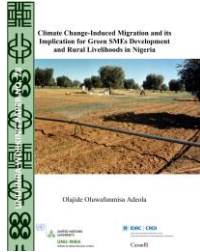
Madueke, C.I. and Mkpado M. (2017). **Prospects and Constraints of Investment in Environmentally-Friendly Infrastructure in Western Nigeria**, UNU-INRA, Accra.



This paper examined awareness, acceptability, uses and constraints associated with the use of environmentally-friendly infrastructure (EFI) in rural western Nigeria. Results show that only about 23 percent of the respondents are fully using EFI like energy saving bulbs, while about 48 percent are partially using it. Factors that determine the use of EFI technologies include level of awareness of climate change, age, and income level. There is therefore the need to create more awareness on the use of EFI technologies.

The working paper is available at <https://collections.unu.edu/view/UNU:6024#viewAttachments>

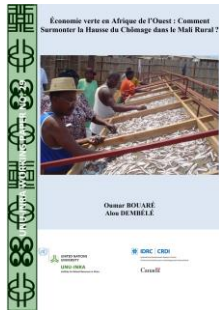
Olajide, Adeola O. (2017). *Climate Change-Induced Migration and its Implication for Green SMEs Development and Rural Livelihoods in Nigeria*, UNU-INRA, Accra.



This paper discusses migration as an adaptation to climate change and the potentials that this could hold for Green Small and Medium Enterprises (G-SMEs) development and rural livelihoods improvement. The results suggest that failing to give attention to the implications of climate change-induced migration could pose a developmental challenge. This therefore requires various policy options including those that favour the development and establishment of green SMEs to meet the needs of farm families in different socio-economic contexts.

This working paper is available at <https://collections.unu.edu/view/UNU:6354#viewAttachments>

Bouaré, O. and Dembélé, A. (2017). *Économie verte en Afrique de l'Ouest : Comment Surmonter la Hausse du Chômage dans le Mali Rural ?*, UNU-INRA, Accra.



Malgré l'application de la Stratégie de Croissance et de Réduction de la Pauvreté au Mali, la hausse du chômage continue dans le monde rural, entraînant l'augmentation de la migration des villages vers les villes. Cet article vise à répondre à cette préoccupation en augmentant l'emploi rural. Nous y avons donc montré que la mise en œuvre de l'économie verte au Mali augmentera son Produit intérieur brut (PIB) national, le PIB de son secteur primaire, ses dépenses d'infrastructure et son emploi rural. Ceci a été fait en utilisant annuellement les scénarios de 2% d'augmentation du PIB national, du PIB du secteur primaire et des dépenses d'infrastructure de 2013 à 2032.

Disponible à : <https://collections.unu.edu/view/UNU:6361#viewAttachments>

Assande, P. K., Naoure, F. A. and Vangah, Y. (2017). *Développement Durable et Petites et Moyennes Entreprises (PME) : Comment relever les défis de la mobilisation des PME ivoiriennes ?*, UNU-INRA, Accra,



Le développement durable / la responsabilité sociale de l'entreprise (DD/RSE) occupe de plus en plus une place importante dans la gestion des entreprises. L'objectif de cette étude est d'identifier les déterminants de l'engagement des Petites et Moyennes Entreprises (PME) ivoiriennes dans le DD/RSE. Nos analyses montrent que les PME dans le contexte ivoirien adoptent une posture favorable au DD/RSE en matière de gestion de personnel, de l'environnement et du climat organisationnel.

Disponible à : <https://collections.unu.edu/view/UNU:6339#viewAttachments>

Zanga O., Paul D. (2017). *Pratiques de la finance verte et performance des groupes bancaires en Afrique : une analyse régionale*, Accra, UNU-INRA.



Cette recherche se propose d'analyser l'influence des pratiques de la finance verte sur la performance des groupes bancaires implantés sur ce continent. Au terme d'une régression en données de panel, il apparaît qu'en Afrique, l'adoption des normes et procédures de gestion vertes, la parité hommes/femmes au niveau de l'équipe dirigeante et les investissements philanthropiques sont positivement corrélés à la performance économique et financière des holdings bancaires. Par ailleurs, les produits et services financiers verts, la proportion de crédits accordée aux investissements nocifs à l'environnement, la qualité de la politique de crédits verts, la parité au sein du conseil d'administration, l'actionnariat salarial, la pratique de la finance solidaire, la transparence bancaire et les activités bancaires offshores influencent négativement la rentabilité financière et économique des organisations bancaires à vocation internationale sur le continent. Au final, on peut dire que la pratique de la finance verte est une opportunité d'affaires certaine que les banquiers et les États africains gagneraient à s'en approprier ou à créer un cadre propice. *Disponible à: <https://collections.unu.edu/view/UNU:6363#viewAttachments>*

Journal Articles

Pedro, A., Ayuk E. T., Bodourogrou, C., Milligan, B., Ekins, P. and Oberle, B. (2017). “Towards a sustainable development licence to operate for the extractive sector”, *Mineral Economics*, 30(2), 153–165.



This paper documents the shortcomings of existing governance architecture in the extractive sector. It builds on the ‘social licence to operate’ and draws from its limitations to propose a new framework called the ‘sustainable development licence to operate’. The latter is a holistic multi-level and multi-stakeholder governance framework aimed at enhancing the contribution of the mining sector to sustainable development.

The article is available at <https://link.springer.com/article/10.1007/s13563-017-0108-9>

Atewamba, C. and Boimah, M. (2017). “Policy Forum: Potential Options for Greening the Concessionary Forestry Business Model in rural Africa”, *Forest Policy and Economics* 85, 46–51.



Over the years, the Concessionary Forestry Business Model in Africa has largely driven the production of tangible forest products such as timber. There are concerns, however, that this approach does not include local communities as important stakeholders of the decision-making process. Little regards are also given to environmental sustainability, which would ensure inter-generational equity. This paper develops options for addressing these issues, thereby greening the Concessionary Forestry Business Model in Africa. Firstly, socioeconomic, environmental and technological challenges facing concessionary forestry businesses are discussed by

reference to country case studies. The paper then continues to provide the core elements of a greener Concessionary Forestry Business Model, with more emphasis on business infrastructure, value propositions, customer interfaces, and profit models.

This is available at <http://dx.doi.org/10.1016/j.forpol.2017.08.015>

Ayuk, E. T. and Klege, R. A. (2017). “**Extractive resources, global volatility and Africa’s growth prospects**”, *Journal of Sustainable Development Law and Policy* 8(1), 259-287.



This article reviews the importance of the extractive sector to selected African countries. It identifies sources of global volatility that affect the sector and further attempts to establish the factors that drive the volatility-growth nexus. We use panel data covering 18 selected African countries from 1970-2013 to explain the gross domestic product (GDP) growth. Volatility persistence estimates are also calculated. The article further examines the policy space that African governments might consider to make the extractive sector play a major role in the development of the continent. We find that the extractive sector makes a huge contribution to GDP of the selected countries.

Available at <http://dx.doi.org/10.4314/jsdlp.v8i1.11>

Ngondjeb D.Y. and Nlom J.H. (2017). “**Institutions, economic growth and natural resources in Sub-Saharan African countries**”, *International Journal of Sustainable Development* 20, 3/4, 269-284.



The study explores a sub-mechanism by which growth is implicitly slowed down: efficiency of institutions due to the illicit outflow of capital. The empirical analysis explores direct linkages between institutions, economic growth and natural resource rents in a panel dataset of 32 Sub-Saharan African countries between 1980 and 2010. The result indicates that an increase in natural resource rents by one percentage point increases the capital flight-to-GDP ratio by approximately 12.9%.

Available at: <http://www.inderscience.com/info/inarticle.php?artid=89996>

Major News Stories/Articles

Nutakor, P. (2017). ***Business of the Environment Must be Everybody’s Business***, UNU-INRA.



Businesses should aim at reducing the negative impact of their activities on the environment. This was one of the key messages that emerged from a Green Business Forum organised by UNU-INRA and SNV Ghana. The discussions at the forum focused on the importance for businesses to adopt principles and practices that protect the environment and lives. The forum discussions strongly emphasized the need for businesses to reduce resource inputs and increase efficiency in their production processes, minimize waste and strengthen their infrastructure to reduce environmental impacts while providing environmental goods and services. [[Read more](#)]

Nutakor, P. (2017). *Life below Water: Saving Africa's Fishery Resources*, UNU-INRA.



...Challenges in the fishery sector are similar in many African countries. For a sector that provides food, jobs and income for many people, perhaps increased awareness on best practices on the part of policy actors and all key stakeholders in Africa, could help conserve and sustainably use water resources such as oceans, seas and marine towards sustainable development. [[Read more](#)]

Policy implementation should be a collective responsibility, UNU-INRA.



Implementation of policies and regulations that aim at promoting climate and clean technologies in Africa remains a challenge. Stakeholders at a consultative workshop on climate and clean technology policies, organized by UNU-INRA, agreed that policy implementation should be a collective effort on the part of governments, private sector actors, civil society organizations (CSOs), non-governmental organizations (NGOs), community leaders and the media. The workshop concluded that active involvement of all these stakeholders in policy

implementation efforts, would put many African countries on the path to attaining the Sustainable Development Goals (SDGs). [[Read more](#)]

Science Communication Requires Collaboration



Effective science communication requires more collaboration between researchers, communications officers and journalists. This was one of the key messages in a 2-day science reporting workshop jointly organized by the United Nations University (UNU-INRA & UNU-MERIT) and the United Nations Information Centre (UNIC), Accra. The workshop, which aimed to help bridge the gap between science communication and science journalism, emphasized the

need to communicate research findings not only to scientists but also to policy makers and the general public in a clear, compelling, non-technical and inclusive language. [[Read more](#)]



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