3rd Climate Change and Population Conference on Africa

CCPOP - GHANA2014

22nd - 25th July 2014

Venue

ISSER Conference Facility, Legon
University of Ghana

Host

Regional Institute for Population Studies

Theme

Climate Change, Migration and Security in Africa

IDRC CRDI

3rd International Climate Change and Population Conference on Africa

CCPOP-GHANA 2014

22nd – 25thrd July, 2014

Venue

ISSER, ConferenceFacility,
University of Ghana, Legon

Theme:

Climate Change, Migration and security in Africa

Time:

9:00am each day

Keynote Address:

Mr. Daniel Sam
International Organisation for Migration (IOM)

Message from the Host

Director, Regional Institute for Population Studies
Professor Samuel Nii Ardey Codjoe

I am pleased to welcome all to this year's conference on climate change and population. I proudly announce this as the third in the series of such conferences successfully organized by the Regional Institute for Population Studies (RIPS). Since its inception in 1972, jointly by the United Nations and the Government of Ghana, RIPS has distinguished itself as a regional centre of excellence for population research and training of population scientists at the postgraduate level. In recent times, RIPS has increased its student enrolment and attracted international students notably from English-speaking Central, Eastern, Southern and West African countries. Over the years, RIPS has attracted and continues to attract several research grants from diverse funding sources for supporting infrastructural development, international conference travel for students and staff, providing seed grants for research, and providing scholarships for Master's and Doctoral training as well as staff development.

The Vision of the institute is "to be globally recognised as a leading centre for research and training in population health, population, and the environment". This vision is centred on key areas including: Improving current circumstances and practices, Expanding and propagating the best aspects of the institute's portfolio, and importantly, sustaining the momentum generated at RIPS. Our Mission, consistent with that of the University of Ghana, is to build on our "core strengths as a centre of excellence for high quality teaching and research" and "to secure and sustain world-class competitive advantages".

Madam Chairperson, it is delightful to note that the theme of this year's conference concerns climate change as a security issue relating to migration. Recent discourse has produced arguments that migration could be key in the interplay of events linking climate change and security. It is thus our pleasure to host all stakeholders from academia, policy, security agencies, international organisations, and civil society to the Third Climate Change and Population Conference on Africa under the theme: Climate Change, Migration and Security. This conference provides a common platform to discuss climate change, migration and security nexus and strengthen the case for strategic thinking about policies that factor climate change induced migration and its implication for security. To achieve this, the conference aims to bring closer the eminent security threat of global warming to the doorsteps of stakeholders. An expected resulted is to share lessons of climate innovation with stakeholders to demonstrate the relevance of scientific research to solving societal problems in the sub region.

Madam Chairperson, I wish to thank the Office of Research, Innovation and Development (ORID) of the University of Ghana, the International Development Research Centre, (IDRC) Canada for their support in preparation for this conference, the members of the Organizing Committee, the staff and students of RIPS and all those who have contributed their untiring efforts to make this conference a success. I would like to conclude by wishing all participants and guests a productive and successful conference, and a pleasant experience with the Regional Institute for Population Studies. Thank you.

PLENARY SPEAKERS

Dr. Kwasi Appeaning Addo , Department of Marine and Fisheries Sciences, University of Ghana
Prof. Chris Gordon, University of Ghana, IESS, University of Ghana
Prof. Michael White, **Brown University, USA**
Dr Laurent G. Sedogo, WASCAL Project, University of Ghana
Mr Samuel Dotse, Climate Action Network –Ghana

CHAIRS

Dr. Elaine Lawson, (Institute of Environmental and Sanitation Studies, (IESS) University of Ghana

Dr. Elias Ayuk United Nations University Institute for Natural Resources in Africa (UNU)

MODERATORS

Mr Winfred Nelson, National Development Planning Commission (NDPC), Ghana
Dr. Christiana Amoatey, College of Agriculture and Consumer Sciences, University of Ghana
Prof. George Owusu **,** *Institute of Statistical Social and Economic Research* **(ISSER), University of** Ghana
Dr. Joseph Intsiful, IDRC Africa Adaptation Research Centre of Excellence , RIPS, University of Ghana
Prof. Peter Odjugo, Department of Geography and Regional Planning, University of Benin, , Nigeria
Dr. Margaret Badasu **,** Regional Institute for Population Studies (RIPS), University of Ghana
Dr. Delali Dovie, Department of Geography and Resource development, University of Ghana
Prof John Anarfi, Regional Institute for Population Studies (RIPS) University of Ghana
Prof. Wisdom Akpalu, United Nations University (UNU-WIDER) – University of Ghana
Prof. Paul Yankson**,** Department of Geography and Resource development, University of Ghana
Prof. Stephen Kwankye, Regional Institute for Population Studies (RIPS) University of Ghana
Prof. Samuel Codjoe **,** Regional Institute for Population Studies (RIPS) University of Ghana

CONFERENCE CONVENER

Prof. Samuel Codjoe, RIPS, University of Ghana

CONFERENCE ORGANISERS

Dr. Nancy Akwen, RIPS, University of Ghana
Dr. Addo. A. Irene RIPS, University of Ghana

CONFERENCE PROGRAMME CO-ORDINATORS

Dr. Pearl Kyei, Dr. Naa Dodoo

PROGRAMME

Tuesday, 22nd July 2014

8:00 – 9:00am	Arrival and registration of participants
9:00 - 9:05	Opening prayer: Rev. Elias Asiama School of Performing Arts, University of Ghana
9:05 - 9:10	Cultural Display
9:10 - 9:20	Host remarks and introduction of Chairperson
9:20 - 9:25	Chairperson and acceptance remarks: Prof. Audrey Gadzekpo, School of Communication studies, University of Ghana
9:25 - 9:40	Welcome address: Prof. Agyei- Mensah, Interim Provost College of Humanities University of Ghana
9:40 - 9:50	Remarks from Government (EPA)
9:50 -09:55	Interlude with cultural display
09:55 -10:30	Keynote address and opening: Mr. Daniel Sam, International Organisation for Migration (IOM)
10:30 – 11am:	Snack Break and Close of official opening ceremony

10:30 – 11am: Snack Break

11-12:30pm	**Plenary Session 1**
Venue:	Auditorium
Chair:	**Dr. Elias Ayuk**, United Nations University Institute for Natural Resources in Africa (UNU)
Speaker 1:	**Dr. Kwasi Appeaning Addo**, Department of Marine and Fisheries Sciences, University of Ghana **The Threat of Sea Level Rise on Delta Coastal Communities in Ghana: Engineering or Migration?"**
Speaker 2	**Dr. Joseph Intsiful,** Africa Diaspora Scientist, IDRC Africa Adaptation Research, Centre of Excellence, RIPS, University of Ghana Co-chair, OPACE 5, WMO Commission on Climatology **Modeling Climate Change and its application in adaptation planning: Implications for migration and security**

12:30 – 2pm: Lunch

2-3:30pm **Parallel session 1: Climate change, agriculture and fisheries**

Venue: Seminar Room 1

Moderator: **Dr. Christiana Amoatey**, College of Agriculture and Consumer Sciences, University of Ghana

Joseph N. Padi: Potential Geographic And Economic Extinction Of Fisher Populations In Ghana: Can It Be Prevented?

Takele Nemomsa, Girma Mamo, Tesfaye Balemi: Analysis of the impact of climate change on maize(zea mays) productivity in Central Ethiopia

Okon, Asuquo E; Essoka, Pauline, A. & Bisong, Francis. E.: Occupational migration and trailing of *Ethmalosa fimbrata* (Juveniles): A Climate change implication on fishing in Cross River Estuary, Nigeria

Manei Carolyne: Integration of indigenous knowledge with ICTs in coping with climate change and variability effects on agriculture in Kajiado County, Kenya.

Parallel Session 2: Population and migration policy

Venue: Seminar Room 2

Moderator: **Prof. George Owusu, Institute of Statistical Social and Economic Research** (ISSER), University of Ghana

Mavis Dako-Gyeke: Migration Intentions Of Youth In Ghana: A Qualitative Stud y

Chinasa Uttah: Consequences of rural-urban migration on agricultural production in Yala communities of Cross River State, Nigeria.

Nana Yaa Gyane Boakye: "I Need You To Survive" – 'Dependence' Of Young Migrants And Non-Migrants In Three Urban Poor Communities In Accra

Irma Elo: Africans in America

3:30- 4pm: Snack Break

4-5:30pm **Parallel session 3: Climatic extremes**

Venue: Seminar Room 1

Moderator: **Prof. Peter Odjugo,** Department of Geography and Regional Planning, University of Benin, Nigeria

Joseph Intsiful, Frank Kyei-Arthur, Desmond Klu, Lily Owusu: Examining Climatic Extremes in Navrongo: Socio-economic Implications on Livelihoods

Teke Johnson: Rainfall Variations and Socio-Spatial Changes in the Logone-Waza Plain of the Sahel Region of Cameroon

Catherine. I. Ikhile: The Impacts of Climate Change on the Discharge of Osse-Ossiomo River Basin, S. W. Nigeria

Reuben. T. Larbi, Joseph Intsiful, Mumuni Abu, Grace A.Frimpong: Examining Climatic Extremes in Accra: Implications on Urban Livelihoods

Emmanuel C. Uttah and Chinasa Uttah: Seasonality of Physiological age composition of female anopheline mosquitoes: An indicator of impact of climate change on efficiency of vectors of public health importance?

Parallel session 4: **Urbanization and population dynamics**

Venue: Seminar Room 2

Moderator: **Dr. Margaret Badasu,** Regional Institute for Population Studies (RIPS), University of Ghana

Peter Elias, Olamide Afolayan and Olatunji Babatola: Analysis of Intra-Regional Disparities in South-Western Nigeria and its Planning Implications

Nelago Indongo: Urbanisation and demand for housing in Namibia

Maria. E. Agbo: Problems &Prospects Of Home Ownership Among Middle Class Civil Servants In Abuja Nigeria

Eric Adjei Boadu, Survival Status of Parents, Level of Household Wealth and Children' Highest educational Level Attended

Pearl Kyei: Home Learning Environment and Child Achievement in Ghana

5: 30pm: Cocktail reception and networking

Wednesday 23rd July 2014

8 – 9am:	Registration
9:00-10:30am	**Plenary Session 2**
Venue:	Auditorium
Chair:	**Dr. Elaine Lawson**, Institute of Environmental and Sanitation Studies, (IESS) University of Ghana
Speaker 1:	**Prof. Michael White**, Brown University, USA
Title:	Population Redistribution, Environmental Change, and Inequality
Speaker 2:	**Dr Laurent G. Sedogo,** WASCAL Project, University of Ghana
Title:	WASCAL: A Climate Service Centre for resilience in land use West Africa. All the best in the preparation and see you next week

10:30 – 11am: Snack Break

11-12:30pm	**Parallel session 5: Climate change adaptation**
Venue:	**Seminar Room 1**
Moderator:	**Dr. Delali Dovie,** Department of Geography and Resource development, University of Ghana

Mahugnon Serge Djohy, Georges Djohy, Ange Honorat Edja : Population migration and adaptation to climate change in Western Africa: the case of internal migration between the islands of Cape Verde

John Laah: Climate Change and Adaptation Strategies among Transhumance Population in the Upper Niger River Basin of Nigeria

Nda E. Mundi, Vincent A. Tenebe & R.M Bashir: Indigenous Farming Practices and Constraints of Climate Change among Small Scale Farmers

Sangotegbe Nathaniel: Correlates and determinants of climate change adaptation of food crop farmers in Oke-Ogun Area of Southwest Nigeria

Parallel Session 6 **Population and human development**

Venue: **Seminar Room 2**

Moderator: **Prof John Anarfi**, Regional Institute for Population Studies (RIPS) University of Ghana

Stephen Yao Fiatornu: Transforming Population Data for Interdisciplinary Usages: From census to grid

Babalola Blessing: Impact of Peer Sexual Health Education Program on HIV/AIDS Prevention in Abia State, Nigeria

Nurudeen Alhassan, F. Nii - Amoo Dodoo, and Eunice Nkrumah: Sexual Communication with Parents and Friends: Influences on Adolescent Sexual Behaviour in Urban Poor Communities in Ghana

Prince Owusu Adoma, Elijah Yendaw: Ageing and chronic diseases in Ghana: A case study of Cape Coast Metropolitan Hospital'

12:30 – 2pm: Lunch

2 – 3:30pm

Parallel session 7 **Climate change and environmental issues**

Venue: Seminar Room 1

Moderator: **Prof. Wisdom Akpalu** , United Nations University (UNU-WIDER)– University of Ghana

Prince Amadichukwu : Mapping the Linkages between population dynamics and climate change

Elias Asiama: Communicating Climate Change information to the Rural Populace of Ghana - Bowiri and Agbogbloshie study

Romanus Gyang: Managing climate uncertainties for reduced agricultural risks: The role of climate information and communication

Lupwana Kandala: The Regulation of Sustainable Biofuels Production and Use in the SADC Region

Maureen Chukwu: A Study on the Effects of Cement Dust on Cassava Yield in Ewekoro, Nigeria

Parallel Session 8: Child mortality, child health and nutritional status

Venue: Seminar Room 2

Moderator: **Prof. Ama de-Graft Aikins**, Regional Institute for Population Studies (RIPS), Centre for Social Policy Studies, University of Ghana

Ngianga-Bakwin Kandala, P Tumwaka Magungu, Kisumbula Mbela, PD Kikhela Nzita, B Banza Kalambayi, P Kalambayi Kayembe, Jacques B O Emina: Child mortality in the Democratic Republic of Congo: cross-sectional evidence of the effect of geographic location and prolonged conflict from a national household survey

Gbemiga Adeyemi, Christiana Alex-Oje: Child Marriage and Reproductive Outcomes: Evidence From Nigeria

Frank Mawutor Borbor; Elijah Yendaw: A Study of the determinants of Anaemia among Under-five Children in Ghana

Solomon Tetteh: Sanitation and Diarrhoe among Children Less Than Five Years in Ghana.

Aaron Kobina Christian, Colecraft EK, Marquis GS, Lartey A, Sakyi-Dawson O, Ahunu B, LM Butler: The relationship between caregivers' opinions on feeding 2- to 5-year old children and children's intake in Ghana

3:30- 4pm Snack Break

4 – 5:30pm **Parallel session 9: Climate change, migration and urbanization**

Venue: Seminar Room 1

Moderator: **Prof. Paul Yankson,** Department of Geography and Resource development, University of Ghana

Odjugo, Peter Akpodigaga: Impact of Climate Change on Migration and possible conflicts in Nigeria

Uno Ijim Agbor, Otu Offiong Duke: Traditional-leadership, spiritualism and climate change in Nigeria: Implication for security and migration in turbulent locales

Idowu Oladele: Climate change induced migration among rice farmers in Nigeria and Ghana

Adejumo A. A, Adekoya A. E, Sangotegbe N. S: Perceived effect of waste generation to climate change among rural households in Oyo State, Nigeria

C.K Ajaero, A.T Mozie, I.C. Okeke, J.P. Okpanachi, C.Onyishi: Climate change-induced migration and conflicts in Nigeria

Parallel session 10 **Reproductive health**

Venue: Seminar Room 2

Moderator: **Prof. Stephen Kwankye,** Regional Institute for Population Studies (RIPS) University of Ghana

Lucile Djianou Kamga: Transition de la fecondite et politiques de population au Cameroun

Christiana A. Alex-Ojei, Blessing I. Babalola: Influence of Autonomy on Ideal Birth Spacing in Oyo State, Nigeria.

Blessing I. Babalola, Christiana A. Alex-Ojei: Influence of quality of basic education on antenatal care utilization in Nigeria

Ihuoma Ubosi: Factors Affecting the Utilization of Antenatal Care Services in Lagos State: A Case Study of Lagos Island Maternity

Thursday, 24th July 2014

Fieldtrip to Ada: Impact of sea level rise on coastal communities in Ghana

Friday, 25th July 2014

8 – 9am: Registration

09-10:30am IDRC roundtable discussions

Venue: Auditorium

Moderator: **Prof. Samuel Codjoe,** Regional Institute for Population Studies (RIPS) University of Ghana

Berhane Gebru, Edison Mworozi, Edith Adera, Patrick Kibaya, Mwanjalolo J.G. Majaliwa, Mfitumukiza David, John Kaddu: ICT Use to Improve Climate Change Adaptation and Livelihood Resilience in Uganda

Kanono Thabane: Strengthening Evidence-based Climate Change Adaptation Policies (SECCAP) in Southern Africa

Matere, S. J., Nyamwaro, S.O., Kwena, K., Ndegwa, W: Assessing Climate Change Impact and Adaptation strategies in Smallholder Maize-based Production systems of Semi-arid areas of Lower Eastern Kenya.

Abdoulaye Diarra, Sévère Fossi: Supplemental irrigation and climate information: from research to building institutional and community adaptation capacities in the Sahel

Leonard K. Amekudzi, Margaret Appiah and Samuel Nii Ardey Codjoe: Malaria transmission modelling over Accra and Ada of Ghana, using the VECTRI model

10:30 – 11: am: Snack Break

11-11:45am Special Session on Climate Change Negotiations

Venue: Auditorium

Moderator: Mr Winfred Nelson, National Development Planning Commission (NDPC) Ghana

Speaker: Mr Samuel Dotse, ClimateAction Network –Ghana

UNFCCC Negotiation and Stakes for Africa

11:45 -12:30pm: Awards and official closing ceremony

12:30 – 2pm Lunch/Departure

Posters

Margaret Appiah, Aaron Christian, Joseph Intsiful, Donatus Yaw Atiglo, Owiredu Gyampo, Linda Sarpong: Climate Variability, Coastal Vulnerability and Resilience: Mainstreaming Climate Adaptation in the Dangme East District of Ghana.

Irene Appeaning Addo, Samuel N A Codjoe, Nancy S Akwen: Application of Knowledge management systems in climate change research in Ghana: drivers and constraints

Appiah- Agyekum, Nana Nimo Kayi, Esinam Afi and Biney, Adriana . Abortion methods among Ghanaian University students'

Olutobi A Sanuade, Mawuli Kushitor, Raphael Baffour Awuah: Determinants of hypertension awareness, treatment and control in Ghana

Ama de-Graft Aikins and Sandra Boatemaa**:** Food beliefs, food habits and chronic non-communicable disease risk in an urban poor community in Accra, Ghana

Aaron Kobina: Selecting and identifying climate change adaptation options and constrains in an urban coastal community in Accra, Ghana.

Atiglo, Donatus Yaw & Intsiful, Joseph: Vulnerability to Climate Change Impacts and Sea Level Rise in the Volta Delta

Abubakari Sulemana, Yeetey Enuameh, Obed Ernest Nettey, Charles Zandoh, Emmanuel Mahama, George Adjei, Seth Owusu-Agyei: Adolescents' Intentions And Willingness For Contraceptive Use In Rural Ghana

ABSTRACTS

Modeling Climate Change and its application in adaptation planning - Implications for migration and security

Joseph Intsiful
IDRC Africa Adaptation Research, Centre of Excellence, RIPS, University of Ghana

Abstract

An increasing body of evidence has shown that our earth climate system is changing at a rate that is already having severe impacts on our human and natural systems globally. For instance, of all the ddisasters caused by natural hazards and their impacts in Africa for the period between1980 and 2007, 96 % of évents, 99 % of casualties and 50 % of economic losses are related to hydro-meteorological hazards and conditions. Hazard intensity and frequency is increasing linked to climate variability and change and this relationship is projected by the IPCC Special Report on Extremes (SREX 2013) to strengthen as climate change gathers pace. The character and severity of impacts from climate extremes depend not only on the extremes themselves but also on exposure and vulnerability of communities and systems to climate extremes. Adverse impacts lead to disasters when they lead to widespread damage and cause severe alterations in the normal functioning of communities/societies, and eventually degradation in well-being index. Well-being index is an indication of the security level in communities/societies. In effect, climate-induced resource scarcity could breed resource competition and conflicts. Migration has been used as a coping strategy in addressing impacts associated with weather and climate variability throughout all civilizations. This presentation provides an analysis of the complex climate variability and change, migration and security nexus and its implication to sustainable development.

Population Redistribution, Environmental Change, and Inequality

Michael J White
Brown University, USA
michael_white@brown.edu

Abstract

Climate change and the host of environmental challenges that accompany it will greatly impact developing nations in the coming decades. Population redistribution, in the forms of international migration, internal migration, and urbanization, are implicated in these environmental challenges. Of additional concern, these dynamic changes will be felt differentially both across populations and within populations. Much attention has been directed to the burden of differential adaptation and mitigation across nations, but there are sharply differential burdens within nations, as well. Understanding how inequality will manifest itself in the coming decades is crucial to both understanding the impacts of climate change and finding tenable policy paths to address these challenges.

Potential geographic and economic extinction of fisher populations in ghana: can it be prevented?

Joseph N. Padi
Water Research Institute, Council for Scientific and Industrial Research, Achimota, Ghana

Abstract

Ghana's fisheries economy comprising marine and freshwater sectors supports a significant proportion (10%) of the country's population, and contributes approximately 5% to Gross Domestic Product (GDP). However, the marine capture fisheries are in crises evidenced by recent mass grounding of canoes and call for dialogue by fishers to address their challenges. A study was conducted to identify key challenges for development of strategies to improve livelihoods. Marine capture fisheries data were analysed to determine trends in fish production, and literature was reviewed to identify tools for diversifying fishers' livelihoods in the face of climate change. Semi-decadal (5- years) analysis of marine fisheries statistics data indicates that from 1970 to 2010, increases in per capita marine fish production were negative as compared to positive population growth. Ninety-six percent (96%) of marine fishes are at least fully exploited in the East Central Atlantic Ocean, the arena where Ghanaian marine fishers operate. Additionally, discovery of crude oil in Ghana has excluded fishers from fishing in designated though productive geographical areas in the ocean thereby endangering economic security of fishers. Alternative livelihoods to compensate for declining fisheries including ocean farming (mariculture), temporary no access fisheries with compensation and fisher education is recommended to avert potential geographic and economic extinction of fisher populations.

Analysis of the Impact of Climate Change on Maize (Zea Mays) Productivity In Central Ethiopia

Takele Nemomsa, Girma Mamo & Tesfaye Balemi
Ambo University, Ethiopia

Abstract

Climate change refers to a change in the state of the climate that can be identified (e.g. using statistical tests) by changes in the mean and/or variance of its properties and that persists for an extended period, typically decades or longer. In Ethiopia, maize production in relation to climate change at regional and sub- regional scales have not been studied in detail. Thus, this study was aimed to analyse impact of climate change on maize productivity in Bako and Ambo Districts, Central Ethiopia. To this effect, weather data, soil data and maize experimental data for BH660 hybrid were used. APSIM software was used to investigate the response of maize (zea mays) yield to different agronomic management practices using current and future (2020s -

2080s) climate data. The climate change projections data from global climate models were downscaled using SDSM. The outputs of HadCM3 A2a and B2a emission scenarios which were downscaled to the study areas grid for 2020s-2080s were used as input of climate data for the impact analysis. During the calibration of APSIM the model showed good agreement between simulated and observed data for days to flowering, days to maturity and yield. In sequence, Sensitivity test was conducted and showed as Plant population increased to 6plants/m^2 and if fertilizer rate increased by 30Kg/hectare the yield increased. However, as temperature increases by 2OC-3OC; the yield decreases. Within 2020s-2080s in Ambo area the yield of BH660 hybrid is projected to reduce by 0.88% to 1.4%. While in Bako area it is projected to increase by 1.3% to 3.5% in 2050s and 2080s. However, compared to agronomic practices the impact of climate change is minute. As a result, to adapt to the changing climate farmers should consider increasing plant density and fertilizer per hectare.

Occupational migration and trailing of *ethmalosa fimbrata* (juveniles): a climate change implication on fishing in cross river estuary, nigeria.

Okon, Asuquo E; Essoka, Pauline, A.&Bisong, Francis. E.
Department of Geography and Environmental Science, University of Calabar, Nigeria

Abstract

The challenges posed by climate on the distribution of biological resources may increase threat to livelihood, affect food security and increase the frequency of human mobility to areas of abundance. The coping strategy of resource users in averting the challenges requires mobility modification in line with the distributional pattern of the resources. Fishing activities are likely to be affected by climate related problems such as sea level rise and change in rainfall pattern. This study adopts a field survey using Geography information system (GIS) in analyzing the pattern of occupational mobility for tracking *ethmalosa fimbrata* with specific data from location quotient and participatory research appraisal. The results show that 73% of fishermen involved in fishing *ethmalosa fimbrata* migrate in response to tracking the movement of *ethmalosa fimbrata*. 69.4% of the catch per effort is for *ethmalosa*. The mobility ratio shows that 8:3:1 is for permanently, temporary and no movement scenario. The catch per day decreases by 6:3kg per 0.5 kilometers at near shore and 0.4kg at 0.5kg at offshore. 81% of the fishers attribute the movement of *ethmalosa fimbrata* to climate change and therefore force to move in response to that. Hence, it is recommended that mangroves should be planted around the degraded areas.

Integration of Indigenous Knowledge with ICTs In Coping With Climate Change And Variability Effects On Agriculture In Kajiado County, Kenya

Carolyne Naanyu Manei
University of Nairobi, Kenya
kianyux87@gmail.com

Abstract

Climate change threatens production stability and productivity. In many areas of the world where agricultural productivity is already low and the means of coping with adverse events are limited, climate change is expected to reduce productivity to even lower levels and make production more erratic. To help cope with the negative impacts of climate change, local people employ Indigenous-Knowledge based practices. This local based knowledge, which has evolved over several hundreds of thousands of years in tandem with the domestication of plants and animals, is critical for responding to climate change risks at the local level. ICTs have the potential to improve access to this knowledge. Specific objectives of the research were to assess relevant indigenous knowledge used to cope and adapt to climate change and variability effects on agriculture as well as evaluate opportunities for utilizing ICTs in dissemination of agricultural information. Results indicate that farmers are aware of the changing aspects of climate and their impacts especially prolonged droughts, high crop failure, loss of animals and increase in pest and diseases. These have led farmers to shift to farming historically known drought tolerant crops, rain water harvesting, use of organic manure, preservation of pastures, vaccination and migration. Farmers are also increasingly relying on indigenous knowledge in determining weather patterns rather than scientific knowledge. ICTs such as radios and mobile phones are emerging as viable avenues for acquisition and dissemination of agricultural information mainly because they are affordable and use local language. The study recommends increase in the level of awareness to farmers on the importance of environment conservation, drought tolerant crops, rain water harvesting techniques, preservation of pastures, and use of radios to disseminate agriculture-related information to farmers as well as documentation and dissemination of indigenous knowledge on climate change adaptation strategies through use of the new ICTs.

Migration Intentions of Youth In Ghana: A Qualitative Study

Mavis Dako-Gyeke
Department of Social Work, University of Ghana

Abstract

Migration is a multidimensional phenomenon with both positive and negative effects. As a result, the extent to which migration positively or adversely affects the life opportunities of people, especially the youth is partly influenced by their plans, aspirations and expectations prior to embarking on their journeys. This notwithstanding, generally, migration research hardly

focuses on pre-migrants or their intentions but rather on observable outcomes in the form of aggregate flows or individual behaviour. This qualitative study therefore aimed to explore the migration intentions of youth in Ghana. Thirty-four final year undergraduate and graduate students enrolled in a public university in Ghana (sixteen females and eighteen males) were purposively recruited as participants for the study. The participants pursued courses in Biochemistry, French, Linguistics and Social Work, and each of them participated in one out of four digitally recorded focus group discussions. The data was analysed to identify emerging themes that addressed objectives of the study. Analysis of the data revealed that the participants, aged between 22 and 34 years were eager and determined to leave Ghana, in order to seek better lives abroad. A major finding from this study was that participants' intentions to migrate were based on comparison between constraints in Ghana and opportunities in developed countries. The findings draw attention to the need for research and policies that consider migration intentions of pre-migrants as an important component of the migration decision process.

Consequences of Rural-Urban Migration on Agricultural Production in Yala Communities Of Cross River State, Nigeria

Chinasa Uttah

Department of Geography and Environmental Science, University of Calabar, Nigeria

Abstract

This study was aimed at investigating the consequences of rural-urban migration on agricultural production. Primary and secondary data were obtained, and the stratified random sampling technique was employed in the study. The Rank correlation (Spearman's) coefficient was used to test hypotheses. Results indicated rural-urban migration was high in Yala LGA; 82.5% of the surveyed communities had their members living as migrants elsewhere. Migrants were mostly males between 15 and 24 years old. Reasons for rural-urban migration in the area included lack of amenities in the village, lack of employment opportunities, to acquire education, and due to political motivation. A significant proportion of respondents (78.5%) attested that migration had serious effects on agricultural production in the various communities. From all possible reasons for low agricultural production in the area, migration of able-bodied youths was regarded as the major factor. Rural-urban migration at the source (rural) had enormous economic, socio-cultural, or demographic consequences leading to low productivity, depopulation, and shortage of labour force. Migration is becoming a threat to food security, and is increasingly become significant in its impact and distribution. Urgent development and strategic planning are needed to stem migration from causing further distortions to source populations.

"I Need You to Survive" – 'Dependence' Of Young Migrants And Non-Migrants In Three Urban Poor Communities In Accra

Nana Yaa Gyane Boakye
Regional Institute for Population Studies, UG
nanayaaboakye@yahoo.com

Abstract

There is a lot of documentation on migration of young people into urban areas for various reasons, but mostly in search of better livelihoods. Studies have explored coping strategies of young migrants. Using qualitative methods, this study explores the issue of dependence for young migrants between the ages of 15 and 24 in Ga-Mashie and Agbogbloshie, in their efforts to survive, and how this dependence compares with that of young non-migrants their age. The study found among other things, that, while some young women depend on men for a source of livelihood, non-migrants differ in the ways and reasons for dependence. The study also found that, while migrants seemed to hope for any kind of help, non-migrants were more aware of ways of attaining the assistance they need. Unlike migrants, non-migrants tend to either belong to associations and groups or form groups that become a source of support. The study suggests programmes to encourage the formation of support groups among migrants as a way of facilitating easier integration and bettering their livelihoods.

Examining Climatic Extremes in Navrongo: Socio-Economic Implications On Livelihoods

Frank Kyei-Arthur, Desmond Klu, Lily Owusu
Regional Institute for Population Studies, University of Ghana

Abstract

The climate is a major resource for production and affects all sectors of the economy but faces a lot of risk, hence the need to integrate climate issues into development planning in Africa. Extreme climatic events such as floods and droughts can cause major impacts and disruptions to humans, environment and the economies of African countries, thus exacerbating vulnerability. This study examines rainfall and temperature extremes as well as hydrological and other surface characteristics of Navrongo and the implications for livelihoods. Monthly rainfall and temperature data from the Ghana Meteorological Services Department (GMet) for Navrongo in the Upper East Region of Ghana from 1970 to 2010 were used. RClimdex was used to extract and clean the data and to compute indices for the climatic extremes. The FAO local climate estimator (NewLocClim) was used to provide the hydrological descriptions. The model results showed a high evaporation rate (82.4%) and run off rate of 15.3%. The model indicated a precipitation deficit of 665 mm/year, meaning there is water deficit in Navrongo. Also, there were significant associations between climate indices (Max 1-day precipitation amount,

summer days, cool nights, tropical nights, cool days, warm days, monthly maximum value of daily maximum temp) and number of years (1970 -2010). The results also showed that Navrongo has arid climate, steppe vegetation and generally high temperatures. High temperatures affect energy requirement for ventilation and have negative implications for agriculture, physical health of both humans and animals, mental health of humans, disease outbreak and changes in vector-pathogen host relation and infectious diseases. Recommendations include cultivating drought resistant crops, fodder cropping to supplement feed needs of livestock during dry season and construction of irrigation dams at low land areas.

Rainfall Variations and Socio-Spatial Changes in the Logone-Waza Plain Of The Sahel Region Of Cameroon

Teke Johnson
Census Bureau, Cameroon
tekejt2002@justice.com

Abstract

The Logone-Waza Plains of the Sahel region of Cameroon, like many other parts of the Sahel region, has undergone profound changes as a result of frequent and unpredictable variations of rainfall and temperature. Rainfall amounts which are key for agriculture and animal rearing - the predominant activities of the populations of this area - vary enormously both within the year and between years. The number of days of rainfall per year varies between 79 days to 184days. The mean yearly variation of the time when continuous rainfall kicks off is as high as three months (June to September). Key characteristics of the climate of this region are the frequent occurrence of droughts, rainfall deficits, frequent unpredicted torrential rainfall and high and varying temperatures. These unstable climatic conditions have brought about significant socio-spatial changes in the region. These changes include the extension of the area of land cultivated up to the extent of encroaching into the protected Waza National Park, outmigration of youths especially to the more humid south, abandonment of the cultivation of crops that require much rainfall in favour of drought resistant ones, the cutting down of acacia plants in order to permit animals feed on their branches, farmers' reduction of the risk of suffering enormously from agricultural failure by combining crop production with other activities such as rearing of small animals (goats, sheep, fowls), commerce, fishing, collection of wood and wild fruits, hunting, increased crop irrigation, relocation of settlements from dry to more humid areas, etc. Spatial changes introduced into the area in the process of adaptation to rainfall variations and frequent droughts include the creation of new settlements, extension of cultivated surface and the extension of bare surface (desertification).

The impacts of climate change on the discharge of Osse-Ossiomo river basin, s. W. Nigeria

Catherine Imhangulaya Ikhile
Department of Geography/Regional Planning, University of Benin, Edo State, Nigeria
ikhilek@yahoo.com

Abstract

The impacts of climate change in Osse-Ossiomo River Basin, South Western Nigeria under different climatic scenarios were investigated using information on rainfall - temperature for forty years (1961 - 2000). Discharge information of Osse and Ossiomo rivers was from 1989-1994. A number of water resource development schemes including hydroelectric and water supply projects have been planned in the south-western river system of Nigeria. Results revealed fluctuating rainfall pattern with great uncertainties in the mid-1980s. Temperature shows increasing trend and the highest temperature of 37°C was obtained in 1998 during the 40-year period. There is strong evidence of global warming using the index of temperature in the drainage basin. River discharge also indicated fluctuating trends from year to year in the decades with available discharge records. It was concluded that the river discharge pattern of Osse-Ossiomo River Basin exhibited similar behaviours as other drainage basins of the world. Climate change has impacted on the river discharge of Osse-Ossiomo River Basin. This has had implications for sanitation and health of the inhabitants in the river basin. Most people were forced to resort to various sources for the numerous uses of water. This had a negative impact on water security and consequent health and sanitation. Statistical tests showed that the changes in rainfall and temperature and rainfall and discharge were significant at the 5% level.

Examining Climatic Extremes in Accra: Implications on Urban Livelihoods

Joseph Intsiful, Reuben Tete Larbi, Abu Mumuni, Grace Agyemang Frimpong
Regional Institute for Population Studies, University of Ghana
reuben.tete.l@gmail.com

Abstract

Climate extremes have significant effect on the development of Africa; floods and droughts can cause major human and environmental impacts and disruptions, exacerbating vulnerability. Rainfall and temperature extremes have been examined along with hydrological and other surface characteristics of Accra and their implications on livelihoods. Data from the Ghana Meteorological Agency for Accra in the Greater Accra Region from 1970 to 2010 was used. RClimdex was used to extract the data and compute indices of climate extremes. The FAO local climate estimator was used to provide the hydrological and surface descriptions. The model results showed high evaporation rate (88.6%) and run off rate of 11.4%, and precipitation deficit of 541mm/year, giving an indication of dryness with a moisture index of -38%. Also, there was high inter-annual rainfall variability with only a slight increase in the total annual rainfall, but increasing rainfall extremes (above the 95th and 99th percentile) in the last two

decades. In addition, a decrease in the consecutive dry and wet days and a decline in rainfall below 10mm (R10mm) but an increase in R20mm and above were observed; indicating more severe rainfall. With regards to temperature, both warm days and warm nights were on the increase, but a decrease in the diurnal temperature range indicated that the minimum temperature is increasing at a higher rate than the maximum. Temperature increase affects both power transmission and energy requirement for air-conditioning. It could also affect food production and human health. Rainfall extremes on the other hand could result in increased flooding episodes, transmission of diseases like malaria and cholera, destruction of infrastructure like roads; affect economic activities like access to markets and vehicular movement; and finally human security and death. It is therefore recommended that climate extremes be factored into the development planning.

Seasonality Of Physiological Age Composition Of Female Anopheline Mosquitoes: An Indicator Of Impact Of Climate Change On Efficiency Of Vectors Of Public health importance?

Emmanuel C. Uttah[1]and Chinasa Uttah[2]

[1]Department of Biological Sciences, Cross River University of Technology, Calabar, Nigeria

[2]Department of Geography and Environmental Science, University of Calabar, Calabar, Nigeria

Abstract

The study was aimed at ascertaining the effect of seasonality on the physiological age composition of anopheline mosquitoes in an area endemic for malaria and filariasis. A total of 1350 mosquitoes were caught during the study. The monthly catches ranged from 210 to 360. Out of this, 1306 (96.7%) were dissected. Overall, parous rate was 75.0%, and ranged from 62.2% in August to 91.3% in December, 2012. The variability in parous rates between months was statistically significant (×2-test, $p < 0.05$). Relating monthly parous rates with the wet and dry seasons within the sampling months showed significant variability, with higher parity in the dry than wet season (×2-test, $p < 0.05$). The analysis of parity levels among female mosquitoes caught during the study showed that Parous-one (P1) was most abundant followed by parous-two. Parous-four (P4) was the least. The distribution of parity levels in relation to the sampling months indicated that the proportion of P3s increased in the dry season months while the P1s decreased. Comparing these findings to observations in earlier studies some decades ago indicate that anopheline mosquitoes tend to live longer now than previously. This could be due to impact of climate change which shows that there are relatively higher temperatures now than previously. In conclusion, ascertaining the age distribution of vectors is very important as it is useful in monitoring the success or otherwise of large-scale vector control measures. Secondly, it could be helpful also in understanding the impact of climate change on the epidemiology of vector-borne diseases. It is therefore recommended that control measures against adult mosquitoes be initiated and sustained in the study area. Periodic verification of the success or otherwise of such control measures should be carried out using the physiological age determination method.

Analysis of Intra-Regional Disparities in South-Western Nigeria and Its Planning Implications

Peter Elias, Olamide Afolayan & Olatunji Babatola
Department of Geography, University of Lagos, Lagos, Nigeria
pelias@unilag.edu.ng

Abstract

Despite the relative homogeneity in the south-west of Nigeria, there is marked disparity in the socioeconomic characteristics and development patterns in the region. The influence of local history, population dynamics, geography, politics and governance ha s contributed to spatial inequality in the South West of Nigeria. Considering the implications of this for socioeconomic development, inclusive and sustainable regional development, it is imperative that the nature, trends and determinants of this spatial disparity are analysed and understood. Similarly, by deploying appropriate indices for regional analysis the underlying causal determinants of disparity could be revealed and used to define future development trajectories. This paper therefore attempts to analyse intra-regional disparity in the states that comprise the south-western region of Nigeria (excluding Lagos) - Ogun, Osun, Oyo, Ondo and Ekiti States using Descriptive Statistics, Gini Coefficient and Lorenz curve. The nature, engendering factors and patterns of the spatial inequality are discussed. Key indicators such as population and demographics, health (access and child mortality), social infrastructure provision, welfare (employment) and education (adult literacy and enrolment) are used for regi onal analysis. The performance of each state (as well as the region as a whole) on each of these factors is compared with the national HDI and Poverty index values and the observed patterns of regional development are justified and projected. Furthermore, the attempts by (successive) states/federal governments at bridging the divide are highlighted and their performance is assessed. Suggestions for planning and policy formulation are made.

Population Migration and Adaptation to Climate Change in Western Africa: The Case Of Internal Migration Between The Islands Of Cape Verde

Mahugnon Serge Djohy[1], Georges Djohy[2], Ange Honorat Edja[2]*
[1] West Africa Institute (WAI), Praia, Cape Verde
[2] Faculty of Agronomy, University of Parakou, Parakou, Benin
sergedjohy@gmail.com

Abstract

In 1990, the Intergovernmental Panel on Climate Change declared that the greatest single consequence of climate change could be migration. Estimates of the number of global climate change migrants by the year 2050 range widely from 25 million to 1 billion people. Our study aims to analyse the socio-political dynamics of internal migration between the islands of Cape Verde in the climate change context in Western Africa. Statistics are centralized on internal migration in Cape Verde at the National Institute of Statistics and direct interviews are organized through a well-developed questionnaire. In addition, two focus group discussions were conducted. A mixed approach, forged discourse analysis (qualitative), but also descriptive statistics (quantitative) was adopted. Climate change fuels more internal migration in Cape Verde. It is a major factor pushing people to leave their island to other islands. "Environmental refugees" will increase from 4% to 15% of the Cape Verdean population by 2050. Drought, desertification, and rising sea level are causing more migration.

Climate Change and Adaptation Strategies among Transhumance Population In The Upper Niger River Basin Of Nigeria

John Laah
Kaduna State University, Kaduna, Nigeria
jglaah@yahoo.co.uk

Abstract

Rising incidences of drought, desertification and other potential effects of climate change in the extreme northern parts of Nigeria, have pushed the Fulani pastoralists further southwards into the Upper Niger River Basin. Although environmentalists have identified climate change as a major problem affecting Fulani pastoralists in many regions of the world, there is dearth of empirical studies on country-specific adaptation strategies to climate change. The paper presents empirical evidence of pastoralists' adaptation techniques to changes in climatic events in the Upper Niger River Basin, which is emerging as a corridor of violence in Nigeria. The movement of pastoralists into the central basin has provoked the indigenous people to confront the Fulani incursions, leading to uprisings. The paper utilises both quantitative and qualitative data from sampled households in two states (Kaduna and Niger States) and the Federal Capital Territory, Abuja. A total of 312 pastoralist households were administe red with a

structured questionnaire, while, six focus group discussions (FGDs) were held in six locations. The findings indicate that the pastoralists are adopting various strategies to cope with climate change. Although migration is generally known as a traditional way of coping with changes in climatic events by pastoralists, increasing proportions of pastoralists are now taking to sedentary living. The paper points out that while government apparatus in Nigeria has been on the need to create more grazing routes, there is need to strengthen the emerging architecture for climate change adaptation among the transhumance population.

Indigenous Farming Practices and Constraints of Climate Change Among Small Scale Farmers

Nda E. Mundi, Vincent A. Tenebe & R.M Bashir

School of Science & Technology, National Open University of Nigeria

ndamundi@yahoo.com

Abstract

A survey was conducted to investigate indigenous farming practices and constraints of climate change among small scale farmers in Makurdi Local Government Area (LGA) of Benue State, Nigeria. The target population for this study comprised one hundred and twenty (120) men and women farmers randomly selected from ten (10) districts in the study area. All ten districts of the local government namely: Agari, Mbaign, North Bank I, North Bank II, Warromaio, Modern Market, Baa Ward, Fiidi, Wadata and Clask as identified by BNARDA were used for the study. The research instruments include structured and open ended questionnaires. The study revealed that about 72.0% of the respondents are males while only 28% are females. Indigenous practices regularly undertaken by farmers include crop rotation, shifting cultivation, bush fallowing, use of organic manure, tillage, and mulching, except zero tillage which they claimed they rarely practice. Over the last 10 years (2004 – 2014), farmers have experienced certain weather abnormities which they claimed to include increased temperature, change in sunlight intensity, change in the seasonal rainfall, and fluctuations in harmattan intensity and decline in crop yield. The farmers encountered a number of problems in the course of farming as a profession such as lack of finance (36.6%) and high cost of labour/inputs (52.50%). The analysis of variance (ANOVA) of age, educational level and occupation of the farmers in statistically related to source of indigenous farming practices. It was recommended that government should design a strategy which will enhance meeting farmers' financial needs in financial institutions since the major problem of rural farmers is fund.

Correlates and Determinants of Climate Change Adaptation of Food Crop Farmers In Oke-Ogun Area Of Southwest Nigeria

Sangotegbe Nathaniel
Dept of Agric Extension and Rural Development, University of Ibadan, Nigeria
siji004u@yahoo.com

Abstract

In spite of several climate change adaptation strategies available to farmers, climate change has continued to hamper food production in Oke-Ogun, the food basket of South-Western Nigeria. The study therefore investigated determinants of climate change adaptation among food crop farmers in the rural Oke-Ogun Area of Oyo State. Multistage sampling procedure was used to select 160 food crop farmers, and data were collected with the aid of well-structured interview schedule. Being a purely inferential study, Chi-square, Pearson Product Moment Correlation (PPMC), and Multiple Linear regression were used in analyzing the data. Chi-square results reveal that the practice of mono-cropping (χ^2= 14.213), access to extension services (χ^2= 6.201) and access to credit facilities (χ^2= 8.077) had significant relationships with respondents' level of adaptation strategies. PPMC results show that farm size (r = 0.232), level of awareness (r = 0.199), information exposure (r = 0.205) constraints (r = -0.228) and perception (r = 0.319) also had significant relationships with respondents level of adaptation strategies. Farm size ($\hat{I}^2$ = 0.259), perception of climate and effects ($\hat{I}^2$ = 0.257), constraints to adaptation to climate change effects ($\hat{I}^2$ = -0.118) were the three most important determinants of climate change adaptation strategies of food crop farmers in the study area. Agricultural extension activities should intensify awareness creation, while it also provides solutions to all climate change adaptation related constraints.

Transforming Population Data for Interdisciplinary Usages: From Census To Grid

Stephen Yao Fiatornu
Geo-Tech Surveys Limited, Ghana
stephenyaofr@gmail.com

Abstract

In Ghana, the Demographic data from Ghana Statistical Service (GSS) are often represented by using choropleth mapping for population density which aggregates the data to arbitrary areal units causing inaccuracies in spatial analysis and distribution. Dasymetric mapping on other hand takes qualitative areal data by dividing spatial data into smaller units of analysis, using ancillary datasets to better locate populations. This paper discusses the methods used to make this conversion, associated error, the strengths and shortcomings of this approach in creating the Gridded Population data base. Also known as a grid, a raster data set is a type of tessellation (mosaic) that divides a surface into uniform cells or pixels. The raster data model is common for representing phenomenon that vary continuously over a surface, administrative boundaries and on producing better population estimates for each unit. The process of Geographic Information System (GIS) method was used on the year 2000 population census of Ghana into 1 km square grid which seeks created areas more closely resembling the actual "facts on the ground", rather than the geographic units based on arbitrary administrative boundaries such as the enumeration area (EA) boundaries. To test the accuracy of the dasymetric approach, the EA populations were compared with the dasymetric mapping distributions which yielded differences of 2 as the minimum to that of 87 as the maximum for the population distribution of Ghana.

Impact of Peer Sexual Health Education Program On Hiv/Aids Prevention In Abia State, Nigeria

Babalola Blessing, Christiana A. Alex-Ojei
Federal University, Oye-Ekiti, Ekiti State
blessing.babalola@fuoye.edu.ng, christiana.alex-ojei@fuoye.edu.ng.

Abstract

Several intervention programs have been targeted at preventing HIV/AIDS among adolescents in Nigeria. However, the impact such programs have on HIV/AIDS prevention has not been well researched. The peer sexual health education program is being implemented by the Peer educators' community development group of the National Youth Service Corps program in Nigeria. Abia State, a south eastern part of the country was chosen due to the fact that it ranked 8th out of the 12 states in Nigeria with high HIV prevalence of more than 5%. The infection rate of HIV among adolescents of age 15-19 is 3.3% and that of the age 20-24 was 4.6%. Therefore, this study seeks to examine the impact of peer sexual health education

program on HIV/AIDS prevention in Nigeria. This study will achieve its objective by using a semi-structured questionnaire of 298 in-school adolescents in Abia State. Data generated from this study would be analysed at the univariate, bivariate and multivariate levels using SPSS version 16. The study hopes to reveal that peer sexual health education program has a positive influence on HIV/AIDS prevention in Abia State. It is hoped that the findings from this study will appreciably impact policy design and implementation in the health sectors in Nigeria.

Sexual Communication with Parents and Friends: Influences on Adolescent Sexual Behaviour In Urban Poor Communities In Ghana

Nurudeen Alhassan[1], F. Nii- Amoo Dodoo[1, 2] and Eunice Nkrumah[1]
[1]*Regional Institute for Population Studies, University of Ghana*
[2]*Population Research Institute, the Pennsylvania State University*

Abstract

Adolescence marks a period of considerable experimentation and is characterised by increases in risky behaviours including alcohol, drug use, petty crime and risky sexual behaviours. More than 85% of the global adolescent population is found in developing countries, with more than one-third of the total population of sub-Saharan Africa aged 10-24 years. The consequent dilemma of adolescent risk taking, especially sexual risk taking is disproportionately a problem in sub-Saharan Africa. Available evidence in the sub-region suggests that adolescents in poor urban settings are particularly vulnerable to risky sexual behaviours and poor reproductive health outcomes. Communication about sex and sexual issues has been identified as important in promoting responsible sexual behaviours among adolescents, including delaying sexual debut and promoting contraceptive use. Communication about sex and adolescent sexual behaviour in urban poor communities were examined using data from 326 adolescents in a survey by RIPS, University of Ghana. Adolescents' self reported discussions about sex with their parents (mothers and fathers) and friends were linked to their sexual behaviours (ever kissed; ever fondled or been fondled; ever watched a pornographic movie, and ever had sexual intercourse). Univariate analyses showed higher frequencies of sexual communication between adolescents and their mothers and friends compared to fathers. Bivariate and binary logistic regression analyses showed sexual communication with parents to be significantly associated with less risky sexual behaviour compared to communication with friends. Therefore, parent-adolescent sex communication needs to be integrated into programmes aimed at promoting responsible adolescent sexual behaviour.

Ageing and Chronic Diseases in Ghana: A Case Study Of Cape Coast Metropolitan Hospital

Prince Owusu Adoma[1] and Elijah Yendaw[2]

[1]Seikwa Health Assistant Training College, Brong Ahafo Region, Ghana

[2]Department of Community Development, University for Development Studies, Wa, Ghana

Abstract

The world has undergone a swift epidemiological transition towards non-communicable diseases. Chronic diseases are now the leading causes of death and illness in the world but in sub-Saharan Africa it coexists with infectious and parasitic diseases. This study analyses the types of chronic disease associated with the aged who reported for care at Cape Coast Metropolitan Hospital using 2004 and 2009 year records. In all, 1333 patient folders were extracted and used for the study. The descriptive cross-sectional research design was engaged for the study. The types of chronic diseases reported among the aged were categorized into two thematic areas: Heart related chronic diseases (HRCDs) and Non-heart related chronic diseases (NHRCDs). The results revealed that Hypertensive heart disease (HHD) emerged as the major HRCDs reported among the aged in both 2004 and 2009 whereas diabetes reportage topped the list of NHRDs in 2004. More aged females reported chronic diseases than aged males in both years. But it was observed that reported case load for diabetes were prevalent among aged males in 2009. Overall, the results indicated that reported chronic diseases increased phenomenally in 2009 compared to 2004. The upward trend observed, however, could be attributed to high utilisation of the National Health Insurance Scheme which is barely free for the aged. This study recommends that much priority should be given to chronic diseases in Ghana since it has a significant burden among the aged. This will help improve the health conditions of the aged and, therefore, reduce the chronic diseases epidemiology in the country. More so, similar studies should be replicated nationwide so as to ascertain the chronic disease burden among the aged in Ghana.

Communicating Climate Change Information to the Rural Populace Of Ghana - Bowiri And Agbogbloshie Study

Elias Asiama

School of Performing Arts, University of Ghana

Abstract

Of recent, the household words are: 'Climate Change'. However, a careful inquiry reveals that definitions laymen give differ from what and how experts define and describe it. Climate change is a scientific phenomenon least understood by a majority of the Ghanaian populace. Therefore, communicating these complex phenomena to the populace is the question Theatre for Development (TfD) seeks to address. This was a collaborative work between Regional Institute of Population Studies (RIPS) and Theatre Arts, specifically Theatre for Development Unit. RIPS conducted the research within Agbogloshie and some parts of the Ussher Town and

Adedemkpo all in Greater Accra. After the research, educating the people on what Climate Change is became a challenge because, to them, the method of communication would have been a lecture approach only. Theatre for Development as it were, is a medium through which information is readily disseminated through 'participatory approach'. Theatre is a tool for communicating holistically for rapid change. This is what the Bowiri Community Climate Change education project undertaken by the team of scholars from Penn State University and the Regional Institute of Population Studies - University of Ghana Climate Change study seeks to examine. This paper will focus on how theatre is adopted in the promotion of Climate Change education process in Ghana. There is no doubt that Climate Change effects and impact are already being felt in Ghana particularly among the fisher folk and farmers of Ghana. The methodology adopted was to educate the younger generation to really appreciate the fact that climate change is a gradual process and its greater impact would be experienced some years to come and therefore the challenge for them is to really be involved in the process. The method adopted was the "observer-participant" approach and this was to involve the children directly. Communicating to and educating the general populace of rural Ghana on climate change will clearly be illustrated in the ensuing page of this paper.

Managing Climate Uncertainties for Reduced Agricultural Risks: The Role Of Climate Information And Communication

Romanus Gyang,
Care International Ghana
romanusgyang@yahoo.co.uk

Abstract

Climate change is recognised as a development challenge. Governments and individuals in Sub-Saharan Africa suffer losses and damage to properties and livelihoods from the increasing intensity and frequency of climate events such as floods, droughts and windstorms. The magnitude of these disasters could be reduced if timely climate information was provided to trigger early action. The populations most affected by these disasters are the illiterate rural poor whose livelihoods are climate-dependent and yet do not have access to reliable climate information in user-friendly formats. Small holder farmers in the rural communities of Northern Ghana for instance suffer yearly from crop failures due to their total reliance on indigenous knowledge of seasonal weather forecasting for agricultural decision making which is becoming increasingly illusive. Even though the generation and dissemination of climate information for agricultural risks management is gaining recognition among DRR practitioners and governments, relatively little work is done in this area. Weather forecast information produced by MET agencies does not target farmers. Weather forecast is not accessible, affordable, and down-scaled and communicated in formats that meet the information needs of the most vulnerable such as small holder farmers whose livelihood activities are climate-dependent and sensitive. Communicating climate information for Early Warning and Action is not timely and there seem to be mistrust between conventional climate scientists and indigenous weather forecasters which undermine the credibility and utilisation of weather forecast produced by

national Meteorological services. The paper investigates how current poor access to seasonal forecast inhibits Disaster Risk Reduction efforts. The paper shares lessons on a climate information communication model - Participatory Scenario Planning (PSP) implemented by the CARE International Adaptation Learning Program for Africa (ALP) in 8 communities of Northern Ghana which has helped the farming communities reduce agricultural losses caused by climate events, with policy recommendations.

The Regulation of Sustainable Biofuel Production And Use In The Sadc Region

Lupwana Jean Jacques Kandala
University of Johannesburg, South Africa

Abstract

It is estimated that by 2050 biofuel will represent fifty percent of the fuels for transport consumption worldwide. This implies that fossil fuel is gradually being replaced by biofuels. The Southern African Development Community (SADC) has shown interest since the dawn of the 21st century in the large-scale production of biofuel. The SADC Secretariat is optimistic that biofuel has the potential to halt underdevelopment, create jobs, and save foreign exchange. Owing to perceived concerns of the multidimensional risks that biofuels pose, existing regulatory system in the SADC region appears very detrimental. In addition, the region spans different land tenure systems, inequality of local capacities of producers, differences of tropical and ecological processes, as well as different legislative regimes and national development priorities. By implementing national biofuel policies in isolation, SADC runs the risk of creating markets that may be too small to sufficiently encourage supply, or establishing protectionist policies that undermine the prospects of international trade. If these risks are to be minimized and the benefits maximized policies and laws as well as specific harmonized regulatory framework are needed. The idea under discussion is to promote the development of biofuels in the SADC region through effective laws and policies. This is done by tackling deviations on existing regulatory framework system that rely on national legislative confirmation. The research therefore pleads for the adoption of a regional binding instrument to be supplemented by an enforceable control system of regional standards and certification schemes. Regional cooperation can help to safeguard against any pitfalls by offering national governments a harmonised regulatory framework and capacity building assistance. Collective synchronisation will also provide the opportunity to coordinate R&D initiatives and transfer knowledge across national borders.

A STUDY ON THE EFFECTS OF CEMENT DUST ON CASSAVA YIELD IN EWEKORO, NIGERIA

Maureen Chukwu
School of Science and Technology, National Open University of Nigeria
mchukwu@noun.edu.ng

Abstract

The study investigated the effects of cement dust on cassava yield in Ewekoro, a rural community in Ogun state. Cassava grown around Lafarge cement was used as study plants. Rates of photosynthesis, quantity of dust deposit, chlorophyll contents and number of stomata on the plants' leaves and the direction of wind were measured every three weeks. Farmers in the area were also interviewed. Accumulation of cement dust on leaves of plants lowered their photosynthetic rates; an indication of lower yield. Chlorophyll synthesis was impaired as a result of high concentration of dust on the surface of the leaves. The number of stomata per area of leaf surface was also reduced by cement dust accumulation. Weather conditions and location of plants from the source of dust emission influenced the distribution of the dust. Plants experienced more damages, lower yield and a reduction in the chlorophyll content during the dry than wet season. Plants at the Northern direction of the factory accumulated more dust than those at the Southern direction. The farmers also complained of increased reduction of crop yield the closer their farm to the factory. Pollution control devices; Mechanical collectors, Electrostatic precipitators, Fabric filters and Particulate wet scrubbers should be used to remove pollutants from the exhaust stream before they are emitted into the atmosphere while farmers should be advised to relocate their farmlands.

Child Mortality in the Democratic Republic Of Congo: Cross-Sectional Evidence Of The Effect Of Geographic Location And Prolonged Conflict From A National Household Survey

Ngianga-Bakwin Kandala[1,2,3*], P Tumwaka Magungu[4], Kisumbula Mbela[5], PD Kikhela Nzita[5], B Banza Kalambayi[5], P Kalambayi Kayembe[6], Jacques B O Emina[5,7]

[1]*The University of Warwick, UK*
[2]*University of Oxford, KEMRI-University of Oxford-Wellcome Trust Collaborative Programme, Malaria Public Health and Epidemiology Group, Centre for Geographic Medicine, Nairobi, Kenya.*
[3]*University of Witwatersrand, Johannesburg, South Africa*
[4]*Institut National de Statistique, Ministère du Plan, Kinshasa, DRC*
[5]*Département des Sciences de la Population et du Développement, Université de Kinshasa, DRC*
[6]*School of Medicine, University of Kinshasa, DRC*
[7]*INDEPTH Network, Accra, Ghana*
N-B.Kandala@warwick.ac.uk

Abstract

Several years of war have created a humanitarian crisis in the Democratic Republic of Congo (DRC) with extensive disruption of civil society and the economy, which have devastated health services. The basis for political stabilization is not still in place and major efforts are required nationally and internationally for reconstruction. These challenges are faced against a background of heavy disease burden (AIDS, tuberculosis, malaria), malnutrition, maternal and under-five mortality. Recent crude estimates of under-five mortality rate of 205 per 1,000 live births for DRC are unacceptably high but this is likely to present a gross under-estimate because of displacement and conflicts. Mortality rates in the DRC are not only influenced by socio-economic, demographic and health variables; they also vary significantly across provinces. Despite some attention from the community and the media, scientifically rigorous analysis of under-five mortality and economic consequences is scarce. This paper analyses under-five mortality in the DRC using flexible geo-additive Bayesian survival model, which enables the measurement of small-area provinces/district-specific spatial effects simultaneously with possibly nonlinear or time-varying effects of other predictors. Inference is fully Bayesian and is based on Markov Chain Monte Carlo (MCMC) simulation. Data for the study come from the 2007 DRC Demographic and Health Survey (DRC-DHS) and includes 8992 children born between 2002 and 2007.Results indicate that despite the severity of conflicts in certain location, province/district-level socio-economic characteristics are important determinants of under-five mortality. More importantly, we find district clustering of under-five mortality, which indicates the importance of spatial effects. The presentation of this clustering through maps facilitates visualisation and highlights differentials across geographical areas that would, otherwise, be overlooked in traditional data analytic methods.

Child Marriage and Reproductive Outcomes: Evidence from Nigeria

Gbemiga Adeyemi and Alex-Oje Christiana
Department of Demography & Social Statistics, Federal University, Oye –Ekiti, Nigeria
gbemibola@gmail.com, christiana.alex-oje@fuoye.ed.ng

Abstract

Child marriage is still the norm in many cultures around the world, especially among developing countries where one in every nine girls is married before age 15. Most of these girls suffer health risks associated with early sexual activity and childbearing, leading to high rates of maternal and child mortality as well as sexually transmitted infections. The study therefore examines the impact of child marriage on reproductive outcomes using data from the 2008 Nigeria Demographic and Health Survey. The sample was made of 25,364 married women aged 15-49 years who have at least one child. Three levels of analysis were used in this study. From the study, 60% of the respondents married as children. Seventy percent of thos e women who married as children reported that they have lost at least one child. Place of residence, education, age, wealth index, partner's education, religion and region were identified as predisposing factors for child marriage. Pregnancy termination will increase among mothers who married as children (OR=1.016, CI 0.977-1.056) when compared with mothers who married as adults. Use of contraceptives (OR=0.89, CI 0.858-927, P<0.001), age at first birth (OR=0.951, CI 0.950-.953) and number of living children (OR=0.991, CI 0.981-1.000) will reduce among those who married as children compared with other categories. It is therefore necessary to introduce programmes that will capture social norms that tolerate gender inequality to give the girl child access to education and enjoy her girlhood.

A Study of the Determinants Of Anaemia Among Under-Five Children In Ghana

Elijah Yendaw[1] and Frank Mawutor Borbor[2],
[1]*Department of Community Development, FPLM, University for Development Studies, Wa Campus.*
[2]*Hilltop School and international Science College Kumasi- Daban, Ghana.*
elijahyendaw@yahoo.com

Abstract

In spite of the numerous interventions in place to control anaemia in Ghana, the prevalence of anaemia among under-five children is still high and classified as a severe public health problem. The study examined socio-demographic factors influencing anaemia among under-five children using the Ghana Demographic and Health Survey data of 2008. The general objective of the study was to assess socio-demographic characteristics of household associated with anaemia among under-five children in Ghana. The logistic regression estimates identified a significant relationship between the prevalence of anaemia in children and a set of socio-demographic variables. For instance, children who were aged 6-24 months were at a higher risk of anaemia compared to children aged 25-59 months. Children of fathers with lower level of education were more likely to be anaemic. In conclusion, it was found that child age, mother's age, place

of resident and father's level of education were important determinants factors of anaemia in Ghana. It is recommended that the Ghana Health Service should provide appropriate education on complementary feeding for mothers with under-five children in order to reduce prevalence of anaemia. Also, education on anaemia by MOH and GHS should target not only mothers, but fathers as well as especially those with low levels of education.

Sanitation and Diarrhoea among Children Less Than Five Years In Ghana

Solomon Tetteh
Regional Institute for Population Studies, University of Ghana
niiaryaa@yahoo.com

Abstract

In an ideal situation, over 97 percent of newborn infants can be expected to survive through the first five years of life. Reduction in this survival probability in any society is due to the operation of social, economic, biological, and environmental forces. The aim of this study was to investigate the relationship between sanitation and diarrhoeal diseases among children who are less than five years in Ghana. A sample of 2005 women who had given birth in the last five years preceding the survey was drawn from the women's file of the 2008 Ghana Demographic and Health Survey. In the survey the women were asked whether or not their children suffered from diarrhoeal disease two weeks preceding the survey. Selected socio-economic characteristics of women, environmental factors, and child characteristics were used in the analyses for this study. Due to data limitation, other sanitation variables which might have allowed rigorous analyses of the interaction between sanitation and diarrhoeal diseases could not be included in the study. Both bivariate and multivariate statistical techniques were employed in the analysis of the data for the study. The analysis shows that wealth of mother, child stool disposal and age of child were the significant predictors of under-five diarrhoeal disease. Most striking is the finding that toilet facility and source of drinking water were not significant predictors of under-five diarrhoeal disease at the multivariate analyses. The study therefore recommends that, education should be intensified on the potential threats of child stool, and the proper way of disposing of it; deliberate focus by government and other institutions should be directed at providing improved sanitation service delivery to rural and urban slum dwellers; and women should be educated on more hygienic way to handle complementary feeding of their children.

The Relationship between Caregivers' Opinions on Feeding 2- to 5-Year Old Children and Children's Intake in Ghana

Aaron Kobina Christian[1], Colecraft EK[2], Marquis GS[3], Lartey A[2], Sakyi-Dawson O[4], Ahunu B[5], LM Butler[6]

1. *Regional Institute for Population Studies, University of Ghana, Legon, Ghana.*

2. Department of Nutrition and Food science, University of Ghana, Legon, Ghana

3. School of Dietetics and Human Nutrition, McGill University, Montreal, Canada.

4.Department of Agricultural Extension, College of Agriculture and Consumer Sciences, University of Ghana 5.Department of Animal Science, College of Agriculture and Consumer Sciences, University of Ghana, Legon

6. Department of Sociology and Center for Sustainable Rural Livelihoods, Iowa State University, Ames, USA

Abstract

Childhood malnutrition is high in Sub-Saharan Africa. Knowing caregivers' opinions about feeding children may aid in designing effective nutrition interventions. Data on caregiver feeding opinions, and diets of 2- to 5-year old children were collected from 608 caregivers living in three ecological zones (EZ) of Ghana. This analysis compared caregivers' feeding opinions across three ecological zones. About 27.8% of caregivers believed that their children needed to be fed only 2 to 3 times daily. Reasons for adult supervision during child meal times, feeding diverse foods, and prioritizing a child to receive animal source foods (ASF), and the perceived child benefits of ASF differed across EZ ($P<0.001$). Caregivers' opinions in agreement with recommended child feeding practices were scored as good opinion otherwise their opinion scored as poor. Children of caregivers with good feeding opinion scores consumed more diverse ASF compared to those of caregivers with poor opinions (5.0 ± 2.1 vs. 4.6 ± 2.1; $P=0.026$). Age and education of caregivers positively predicted better feeding opinions ($P<0.01$); living in the Guinea Savannah ecological zone was associated with poor feeding opinions. A key component to improving child nutrition is to understand the opinions held by caregivers in order to address them adequately within the specific locale of the caregiver and child.

Impact of Climate Change on Migration and Possible Conflicts in Nigeria

Odjugo, Peter Ovuyovwiroye Akpodigaga
Department of Geography and Regional Planning, University of Benin, Benin City, Nigeria
paoodjugo@yahoo.com

Abstract

The vulnerability of the coastal region of Nigeria due to sea level rise and that of the semi-arid region due to desertification was analysed and the possible forced migration and conflicts were looked into. Climatic data (temperature and rainfall) in the coastal region and that of the semi-arid region were analysed to evaluate the possible evidence of climate change. The vulnerable areas in the two eco-climatic zones were assessed and the population affected was determined. The possible ecological zones that will absorb the migrant and the expected conflicts were also analysed. While some of the information needed were sourced from the literature, the Nigerian Meteorological Agency provided the 60 years climatic data (1954-2013) and 500 copies of a questionnaire were administered in four states (two in the south and two in the North) to solicit information on possible impacts, migration and conflicts. The results show rising temperature and decreasing rainfall in the two eco-climatic zones, but the changes in the climatic elements are more in the semi arid region. It also shows that while sea level rise will force millions of people from the coastal area to the northern forest zone and the guinea savanna, desertification will also push people from the north to these zones. This will result in a scramble for arable land for farming and grazing, water resources among others. The paper observed that the conflict between farmers and herdsmen have claimed many lives in Nigeria and this may graduate to tribal and religious conflicts with much pressure on the land and water resources. Appropriate measures to reduce the impacts of climate change and possible adaptation measures to limit migration and conflicts were recommended.

Traditional-Leadership, Spiritualism and Climate Change In Nigeria: Implication For Security And Migration In Turbulent Locales

Uno Ijim Agbor
Department of Public Administration, University Of Calabar, Nigeria
kenijim@yahoo.com

Abstract

Before now the forest was very close to the rural locales of forest regions in Nigeria. Recent realities show a complete disappearance of these natural ecosystems leaving contemporary forest localities very bare and prone to many environmental hazards and security challenges. What is obviously worrisome is how local traditional leaderships are convinced to destroy dedicated forest and domestic trees; a practice that contributes to climate change. The aim of the study is to show the relationship between spiritualism and climate change and the implications of that on communal security and migration. It examines the contributions of Human Spiritual Superiors (Clergymen and witchdoctors) to careless damage of natural

vegetations in Nigeria. I conducted the study in selected states of the south-south geo-political zones because of the dominance of forest in this part of the country. I generated data through interviews and Focus Group Discussions and analysed them qualitatively with thematic discussions. Results suggest that activities of spiritual leaders variously describe dedicated forest and outstanding domestic trees as evil and satanic and enforce their destruction. The implications of these actions are diverse. Massive forest destruction obviously contributes to climate variation. It works against the economic security of many rural dwellers. The consequence has been massive migration to other localities for menial jobs for survival. Again, security from physical attack is also compromised as it destroys their protective cover and forces them to migrate during communal conflicts to neighbouring localities for protection. Such refugeeism has been found to cause security challenges for host communities, as the case of Ebom-Ebijiakara, Ikot Offiong-Ikot Ekpo communities in Cross River State has shown. The study recommends among others the introduction of climate change education into curricula of theological colleges in Nigeria. Again, climate change awareness programmes should be mounted through various media to reach local leaders and rural populations with much emphasis on the usefulness of the forest and trees.

Climate Change Induced Migration among Rice Farmers In Nigeria And Ghana

Idowu Oladele

Department of Agricultural Economics and Extension, North West University, South Africa

oladimeji.oladele@nwu.ac.za

Abstract

This paper presents the trends and pattern as well as determinants of climate change induced migration among rice farmers in Nigeria and Ghana. This is based on the fact that agriculture plays a leading role in the non-oil sector of these countries and is principally practiced by small-scale farmers at subsistent level that is rain fed. This exposes them to the vagaries of weather and the variability over the years has led to less accuracy in predicting the patterns for rainfall and other climatic features. The effect of climate change has made the fluctuations in climatic conditions more severe such as sharp rise in temperature, and severe proneness to droughts among other effects. In response to the foregoing, farmers are migrating to areas where they can guarantee their livelihoods. Over the last few years, the use of wetlands, floodplains and inland valleys for agriculture has increased by both pastoral and agro-pastoral communities, because of their high potentials for a diversity of livelihoods activities and their importance for poverty reduction and wealth creation to the local communities with less disruption by climatic features. A cluster sampling technique was used to select 100 farmers from dry land zones that are cultivating wetlands and a structured questionnaire was used to elicit information on trends and pattern as well as determinants of their migration to the wetlands. Data collected were described using frequency and percentages and a multiple regression analysis was used to identify significant variables that are determinants of migration. The results of the analysis show that significant variables include location/distance of wetland, household size, crop preferences, farming system, drought proneness, changing eco-system and farmers' age.

Perceived Effect of Waste Generation to Climate Change among Rural Households In Oyo State, Nigeria

Adekoya A. Adejumo, A. E Sangotegbe N.S
The University of Ibadan, Ibadan, Nigeria

Abstract

This study examined the perceived effect of waste generation on climate change among rural households in Oyo State, Nigeria. Two local government areas were randomly selected from the three senatorial districts in Oyo State from which five villages each were randomly selected. A total of 15 households were across the selected villages randomly selected to give a total sample size of 150 respondents. Data were collected through the use of interview schedule and analysed using frequencies and percentages to present the descriptive analysis, while Pearson Product Moment Correlation and Chi-Square were used for inferential analysis. The findings of the study revealed that the average age of the respondents in the study area was 37 years, as majority (75.0%) were married and had no formal education (63.2%). Majority (90.0%) were farmers, had small farm size (86.1%) of range 1-5 acres. Kitchen waste (94.7%), crop waste (88.8%) and animal waste (65.3%) were the major waste generated within the households in the study area. Most (92.0%) of the respondents disposed their wastes making use of sacks (83.3%) 62.0% and 74.7% dispose their waste into drainage channels and flowing stream respectively. Few (14.7%) obtained information on waste management practices through the radio. Majority (78.2%) had low knowledge level on waste management practice and wrong perception (79.2%) of the effects of waste generation to climate change. Level of education (áµ²2 = 9.273, sources of information on waste management practices (r = 0.325) and knowledge on waste management practices (r = 0.276) have influence on the perceived effect of waste generation to climate change. There is the need to create awareness on the environmental effect of waste and inappropriate waste management practices among rural households.

Mapping the Linkages between Population Dynamics and Climate Change

Prince Amadichukwu
Our Soil Africa Foundation, pamadichukwu@yahoo.com

Abstract

Climate change has been identified as the biggest global health threat of the 21st century. World population is expected to reach 9.1 billion by 2050, with most of this increase in developing nations. While the principal reason for climate change is high utilisation in the developed nations, its effect will be greatest on populace in the developing world. Climate change and population can be linked through adaptation (reducing vulnerability to the adverse causes of climate change) and more contentiously, through mitigation (reducing the greenhouse gases that create climate change). The contribution of low-income, high-fertility

nations to global carbon emissions has been minor to date, but is rising with the economic development that they require to reduce poverty. Fast population growth imperils human development; provision of basic services and poverty eradication and deteriorates the capability of poor communities to adapt to climate change. Important mass migration is apt to take place in response to climate change and must be considered as a lawful reply to the effects of climate change. Linking population dynamics with climate change is a perceptive issue but family planning programmes that value and guard human rights can bring a significant variety of advantages. Population dynamics have not been assimilated methodically into climate change science. Against this background this paper shall seek to investigate the contribution of population growth, migration, urbanization, ageing and household composition and other to mitigation and adaptation programmes. In conclusion, it shall explore the importance of relationship between social dynamics and climate change focusing on the links based on existing realities and current trends.

Transition de la Fécondité et politiques de population au Cameroun

Lucile Djianou Kamga.
Démographe bucrep (Bureau of Census) Yaoundé Bp 12932
laurakopa@yahoo.fr

Abstract

La population du Cameroun a pendant longtemps eu un comportement pro-nataliste. Avec « l'accroissement impétueux de la population », le Gouvernement a créé en 1985 la Commission Nationale de la Population afin d'allier croissance démographique et ressources ; le pays a aussi souscrit aux accords internationaux afin de prendre en compte les problèmes émergents tels que la santé de la reproduction. La fécondité connaît une baisse relative depuis les deux dernières décennies, malgré son niveau encore élevé, qui est passé de 6,2 enfants par femme en 1976 à 5,6 en 1987 et à 5,0 enfant par femme de nos jours. Les différences de fécondité observées tant au niveau spatial qu'au niveau des différentes composantes de la population traduisent la complexité des facteurs liés à la transition de la fécondité. A partir des donnés des trois premières Enquêtes Démographiques et de Santé, cet article analyse la transition de la fécondité en relation avec la politique de population; il met en exergue le rôle déterminant des politiques de population dans la baisse soutenue de la fécondité et rend compte des entraves y relatives. Les résultats issus de l'analyse différentielle menée à partir des données du 3ème RGPH permettront de confirmer ces données ainsi que la complexité du lien étroit entre le substrat social et toute sa dynamique matrimoniale, la transition de la fécondité, et les programmes des politiques de population. Des enquêtes sociales permettront sans doute à l'Etat d'améliorer la prise en charge des besoins sociaux des populations, tout en les conscientisant au changement voulu, gage d'un développement durable.

Fertility Transition and Population Policies in Cameroon

Lucile Djianou Kamga
BUCREP (Census Bureau), Yaoundé, Cameroon
laurakopa@yahoo.fr

Abstract

Cameroon's population has long been pro-natalist. As a result of the "the impetuous growth of the population," the Government in 1985, established the National Population Commission to manage resources and population growth; the country has also signed international agreements to take into account emerging issues such as reproductive health. Fertility experienced a relative decline over the past two decades from 6.2 children per woman in 1976 to 5.6 in 1987 and to 5.0 children per woman today. Fertility differences observed both in space and the different components of the population reflect the complexity of factors related to fertility transition. Using the first three Demographic and Health Surveys in Cameroon, this article analyzes fertility transition in relation to population policy, examines the role of population policies in sustained fertility decline and identifies the barriers relating thereto. The results of the differential analysis conducted confirm inextricable links between marital dynamics, fertility transition, programs and policies population. Social surveys are fundamental to improve the State's ability to make informed choices on awareness raising strategies and implementing structures that meet needs of people

Influence of Women Autonomy on Ideal Birth Spacing In Oyo State, Nigeria

Christiana A. Alex-Ojei and Blessing I. Babalola,
Department of Demography and Social Statistics, Federal University, Oye-Ekiti, Nigeria
christiana.alex-ojei@fuoye.edu.ng, blessing.babalola@fuoye.edu.ng

Abstract

The traditional inequality between the sexes in Nigeria has led to women being valued more for their reproductive, rather than productive potentials. Studies on women's status have focused largely on actual birth spacing with respect to level of autonomy, paying little attention to their preferences. This study investigated the relationship between autonomy and birth spacing preferences among rural and urban women in Oyo State, Nigeria. Data were collected via 360 survey questionnaires, 6 Focus Group Discussions and 6 In-Depth Interviews from ever-married women aged 15-60 in both rural and urban communities. Findings reported a negative relationship between level of autonomy and ideal birth spacing ($r=-0.342$, $p=0.000$). This implies that more autonomous women in Oyo State actually prefer shorter birth intervals contrary to previous findings. Therefore, more attention needs to be focused on encouraging longer birth intervals among women with higher autonomy through public enlightenment and education about the dangers of smaller birth intervals. Further studies should examine why this negative relationship exists.

randomly selected respondents. The information used for the analysis was demographic and socio-economic status. The data were analysed using descriptive statistics; frequency tables, simple percentages and chi-square. The results revealed that age, parity level, income and distance affected utilisation of antenatal care services. A greater number of women who utilised antenatal care services were in 25-40 years age bracket. There was no significant relationship between income, parity level, educational level and antenatal care visit in the study area. Nearness of the respondents' home to the health centres also affected antenatal visits. A more pragmatic enlightenment campaign on the benefits of antenatal care for women of child bearing age is imperative.

Posters

Application of Knowledge Management Systems In Climate Change Research In Ghana: Drivers And Constraints

Appeaning Addo, I, Codjoe S N A, Akwen, Nancy
Regional Institute for Population Studies

Abstract

Knowledge management (KM) is the combination of all the actions necessary for ensuring that organisations and communities learn from past practice and make effective use of all skills and knowledge that they possess. It is about making processes efficient through people, systems and technologies, methods and techniques, holistic approaches, consistency and persistence, innovation, competitive advantage, and transfer of lessons learnt. In recent times KM Systems are driven by changes in policy context, fundamental shifts in scientific basis for research and development and shifting funding patterns for agricultural research and development. Presently in Ghana, KM systems are applied in forest management, soil fertility management, water management and natural disaster preparedness. However in developing an efficient KM system, organisations and communities are faced with challenges that either drive or constrain the full benefits of knowledge management systems as a management tool in Ghana. Co-management of knowledge produced through participatory research is recommended as the way forward in overcoming this hurdle. This presentation looks at some of the challenges associated with developing efficient KM systems in Ghana and what the implications are for climate change research.

Climate Variability, Coastal Vulnerability and Resilience: Mainstreaming Climate Adaptation In Dangme East District Of Ghana

Margaret Appiah, Aaron Christian, Joseph Intsiful, Donatus Yaw Atiglo
Regional Institute for Population Studies

Abstract

The sustainability of many coastal communities and resources is under threat by an increase in the intensity and frequency of extreme climatic events, precipitated by anthropogenic climate change. In the Dangme East District of Ghana, livelihoods are mainly dependent on natural resources, which are susceptible to shocks by climatic extremes. This study examined the climatic patterns and trends, the implication for sustainable livelihoods and climate-resilient adaptation strategies in the area. The study used both primary (field observation) and secondary (climatic data) sources of data. Temperature and precipitation data between 1970 and 2012 from the Ada synoptic station of the Ghana Meteorological Agency were analyzed using RClimdex and NewLoclim. The analyses identified a uni-modal rainfall pattern

characterised by a long dry season and a short growing period. The high evaporation rate results in about 90% loss of rainfall received annually with a radiative index of dryness of 2.1, indicating relatively dry conditions in the area. Results further show a rise in temperatures over the years with a significant increase in the number of days where temperature exceeds the 90th percentile, the number of sunny days, tropical nights and highest daily monthly temperature. Meanwhile growing season remains the same with declining total rainfall. The observed climatic patterns and trends have potential impacts on farming, fisheries, tourism, health, energy requirement and salt mining industry. Short, medium and long term adaptation strategies including warm season crops, short-gestation crops, rain-water harvesting, alternative livelihoods, infectious disease monitoring and surveillance, renewable energy use and sea defence are recommended. It is acknowledged however that an effective climate adaptation hinges on community participation and decision making. A cross sector analysis is therefore proposed for the selection of appropriate adaptation strategies with optimum benefits without conflicting with each other or resulting in mal-adaptation.

Abortion methods among ghanaian university students'

Appiah-Agyekum, Nana Nimo[1]; Kayi, EsinamAfi[2]; Biney, Adriana[2]
[1]*Department of Public Administration and Health Services Management, University of Ghana Business School*
[2]*Regional Institute for Population Studies, University of Ghana*
nananimo@gmail.com

Abstract

Induced abortion is the largest direct cause of maternal mortality, second only to haemorrhage. Studies indicate that young adults are more likely to die from complications due to induced abortions. Anecdotal evidence suggest the existence of different abortion methods practiced in Ghana, yet, little documentation exists on young adults' experiences with these practices. The study utilised unstructured interview guides to conduct in-depth personal interviews during data collection. 119 university students from a public university who had ever experienced induced abortion participated in the study, out of 4,250 randomly sampled from different faculties and halls of residences. Interviews were recorded and transcribed and data analysed thematically. Findings show that four major unsafe induced abortion methods are used by students. Pharmaceutical based abortifacients were reported as the most widely used method, and were either ingested or vaginally inserted. Herbal/traditional and alcohol based abortifacients were also used as cheaper and more accessible methods of pregnancy termination but usually led to complications. Hospital/clinical methods were also used by some; however, "quack" doctors and health personnel tended to be their preferred initiators of the abortion. About two-thirds of students encountered various post-abortion effects, ranging from mild to severe physical and psychological problems. Participants reported that the male partner tends to play a significant role in the abortion process. Reproductive and sexual health programs should focus on promoting friendly abortion services.

Determinants of Hypertension Awareness, Treatment and Control in Ghana

Olutobi A Sanuade, Mawuli Kushitor, Raphael Baffour Awuah
Regional Institute for Population Studies, University of Ghana
oluwatobisanuade@gmail.com

Abstract

High blood pressure is the leading cause of cardiovascular disease (CVD) worldwide. Although information on hypertension awareness, treatment, and control is necessary for improving hypertension control, such information is lacking in Ghana. This study examined the determinants of hypertension awareness, treatment and control in Ghana. We used wave 1 of the World Health Organization (WHO) Study on global AGEing and adult health (SAGE) data (2007/2008).The sample was limited to 5573 respondents. The data was analysed using simple descriptive statistics and binary logistic regression. About 60.0% had been diagnosed of hypertension or had a systolic BP of ⩾140, and/or diastolic BP of ⩾90. The mean age was 61.6±13.2.The highest proportion (53.3%) was Akan and 58.1% were married. Out of the 3261 hypertensives, about 19.0% were aware of their hypertension. Out of the people who were aware of their hypertensive status, more than two-thirds (67.7%) were treating their condition. Out of the people who were treating their hypertensive condition, 11.6% had their hypertension controlled. The logistic regression showed that ethnicity, marital status, current working status, place of residence, and education were predictors of awareness of hypertension. Further, level of education and getting health care services predicted hypertension treatment. People who got healthcare the last time they sought for health services were 4.2 times more likely to treat their hypertension compared to those who did not. In terms of hypertension control, none of the background characteristics of respondents determined hypertension control. This study shows an urgent need for hypertension intervention in Ghana as high blood pressure is a major determinant of cardiovascular diseases.

Food Beliefs, Food Habits and Chronic Non-Communicable Disease Risk in an Urban Poor Community in Accra, Ghana

Ama de-Graft Aikins[1, 2 and] Sandra Boatemaa[1]
[1]Regional Institute for Population Studies, [2]Centre for Social Policy Studies
University of Ghana, Legon

Abstract

As part of a large scale study of cardiovascular disease prevalence, risk and experiences in Ga Mashie, an urban poor community in Accra, Ghana, we sought to explore the multilevel context of food beliefs and practices. Using survey (800 respondents) and individual interviews and focus group discussions (54 respondents), we examined food perceptions, beliefs and everyday food practices. The majority of respondents consumed traditional staple foods as well as foreign processed foods. The staple foods included tubers, fish and soups typically described as healthy by nutrition experts. The foreign processed foods included refined grains, high fat snacks and high calorie soft drinks, typically described as unhealthy and associated with obesity and NCD risk. Less than 50% of respondents consumed vegetables and less than 1% consumed fruits on a regular basis. The in-depth interviews suggested that individuals shared consensual ideas about what constituted good food (e.g. traditional complex grains and soups) and bad food (e.g. processed foods). However, the relationship between food beliefs and food habits was not linear. Food habits were shaped by psychological and structural factors. The psychological factors included taste and food preference. Structural factors included availability, cost (and financial status) and social legitimisation of healthy and unhealthy foods. Structural factors, in particular poverty status and food market globalisation, were strong mediators of everyday food practices. The data suggests that while there is a social awareness of healthy and unhealthy eating habits and the legitimisation of unhealthy eating habits, everyday dietary practices are poor and are shaped by complex multilevel factors. We consider what these findings mean for developing dietary interventions for the community that address their increasing risk of obesity and NCDs.

Selecting and Identifying Climate Change Adaptation Options and Constraints In An Urban Coastal Community In Accra, Ghana

Aaron .K. Christian, Samuel N.A. Codjoe, Irene. A. Addo
Regional Institute for Population Studies

Abstract

Methodologies employed for assessing climate change adaptation options are critical for the development of efficient climate change policy to make use of the limited resource for adaptation interventions in Sub-Saharan Africa. This paper focuses on adaptation evaluation methods used to identify climate change adaptation options and constraints especially in urban coastal communities. An integrated approach, based on a multi-criteria decision making technique, is used to determine these adaptation options. Using community surveys, focus group discussions, in-depth interviews, expert consultations and workshops the adaptation options were identified. The findings are analyzed for sustainability of selected adaptation options. Selected adaptation options were based on the involvement of different agents community- landlords, adults men and women, youth groups, local government authorities and traditional / opinion leaders. Adaptations considered were based on the intent, timing and duration of employment of the adaptation; the form and type of the adaptive measure; and the relationship to existing processes to support adaptation measures and, also critically, amount of resources available. A synthesis of research in 3 coastal communities identified four main adaptation options: (i) Repairing and construction of drains to lessen the communities' vulnerability to floods (ii) Formation of community environmental volunteer groups (iii) Provision of shelter for fish smoking activity and building of cold storage facility (iv) Recycling of household waste . Constraints identified include the difficulty in separating the consequence of climate change from the environmental impact of the actions and inactions of communities, example being sanitation. That notwithstanding, we contend that these uncertainties cannot be a reason to wait for more clear-cut scientific knowledge and justification to emerge and that a number of principles for adaptation can be emphasized. Selected adaptation options are likely to negate the impact of climate change on the environment and livelihoods of individuals in these communities.

Adolescents' Intentions and Willingness For Contraceptive Use In Rural Ghana

Abubakari Sulemana, Yeetey Enuameh, Obed Ernest Nettey, Charles Zandoh,
Emmanuel Mahama, George Adjei, Seth Owusu-Agyei,
Kintampo Health Research Centre, Kintampo, Ghana
abubakari.sulemana@kintampo-hrc.org, yeetey@gmail.com, ernest.nettey@kintampo-hrc.org,
charles.zandoh@kintampo-hrc.org, emmanuel.mahama@kintampo-hrc.org,
george.adjei@kintampo-hrc.org, seth.owusu-agyei@kintampo-hrc.org

Abstract

Efforts made to improve availability and access to adolescent sexual and reproductive health (ASRH) services such as family planning (FP) in Ghana have not yielded the expected results and the Kintampo Health and Demographic Surveillance System (KHDSS) area is no exception. This study sought to explore contraceptive use intentions and preferences among adolescents in rural Ghana. The study also examined the differences and determinants of intentions and preferences observed in the study population to make contributions towards meeting MDG 5b which has been described as the most underachieved of all MDGs. Data for this study were from the ASRH Survey, which was part of a larger Sexual and Reproductive Health (SRH) survey conducted by the KHDSS from August to November, 2012. A total of 2,641 adolescents (10 to 19 years) were sampled and 2,128 were interviewed. This study used intention and/or willingness of adolescents to use contraceptives as the outcome variable and the explanatory variables were demographic and socio-economic factors. Descriptive and multivariate analyses were done using STATA 11.1. From the findings of the study 54.3% of adolescents were willing to use contraceptives. The most popular contraceptive method among adolescents was the injectables (48.6%) followed by the pill (29.6%) and the least was foam or jelly (0.2%). The most commonly cited reason for not intending to use contraception was adolescents' opposition to FP use (31.5%) followed by a fear of side effects (25.8%). Some variations were observed among adolescents willing to use contraceptives, their choice of contraceptive types and reasons for not using contraceptives by age, educational level and place of residence but not by religion and ethnicity. There is a need to increase the level of FP messages and services to target adolescents to enhance the achievement of MDG 5b.

SPECIAL THANKS TO RIPS, FACULTY & THE FOLLOWING TEAMS

REGISTRATION TEAM :
Mr Samuel Quaye
Esinam Kayi
Sarah Abordo
Mawuli Kushitor
Hleziwe Hara
Felix Ayensu

LOGISTICS:
Nurudeen Alhassan
Ernest Kwabena
Mrs. Henrietta Antwi-Bosiako
Margaret Appiah
Oluwatobi Sanuade
Mr Issah Aparik
Simpri Winfred
Rev Beatrice Richardson

RIPS Climate Change Resource Centre

EXHIBITION:
Sandra Boatima
Stephen Amo
Paul Hoyah

PUBLICITY:
Reuben Tete Larbi
Yaw Atiglo
Michael Wiredu
Edwin Foli
Aaron Kobina Christian

RAPPORTEUR:
Adriana Biney
Desmond Klu
Mawuli Kushitor
Grace Agyemang
Maame Peterson
Raphael Barfour Awuah

ADMINISTRATION:
Mrs Abiti Arhizah
Emmanuel Adoko

MEDIA:
Mr Abdulai Abubakar
Dr Abu Mumuni
Mr Abubakar

AFRICAN ADAPTATION RESEARCH CENTRE - AARC