# West Africa agriculture: socio economy and biodiversity conservation in traditional farming systems







Hope Ovie Usieta, Ph.D.

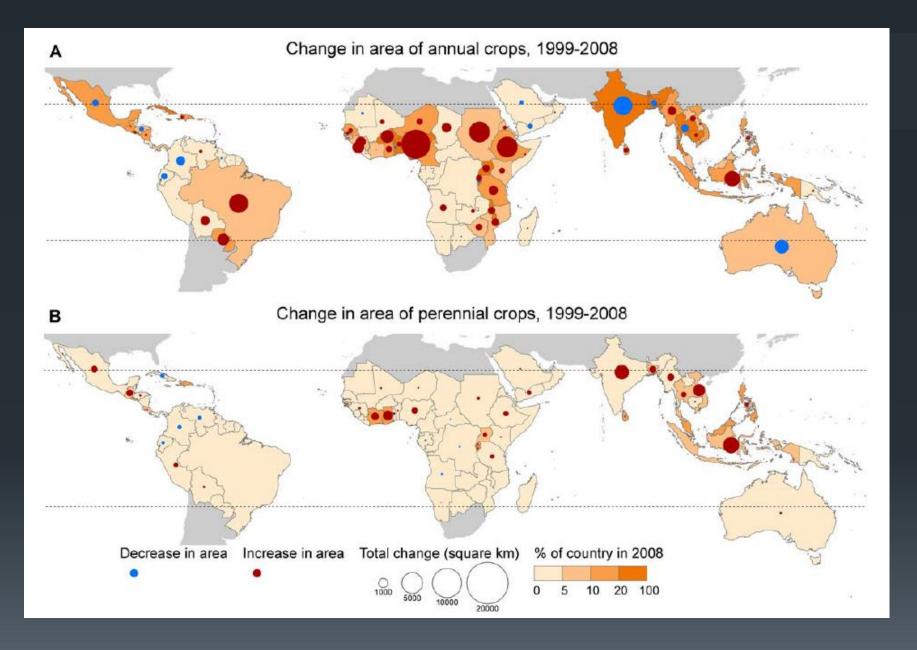
Leventis Foundation (Nigeria)











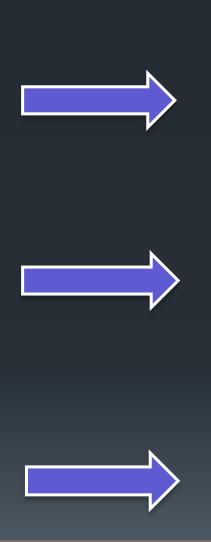
Phalan et al. 2013, Plos one; Laurance et al. 2014, Trends Ecol.& Evol.

## West African agriculture



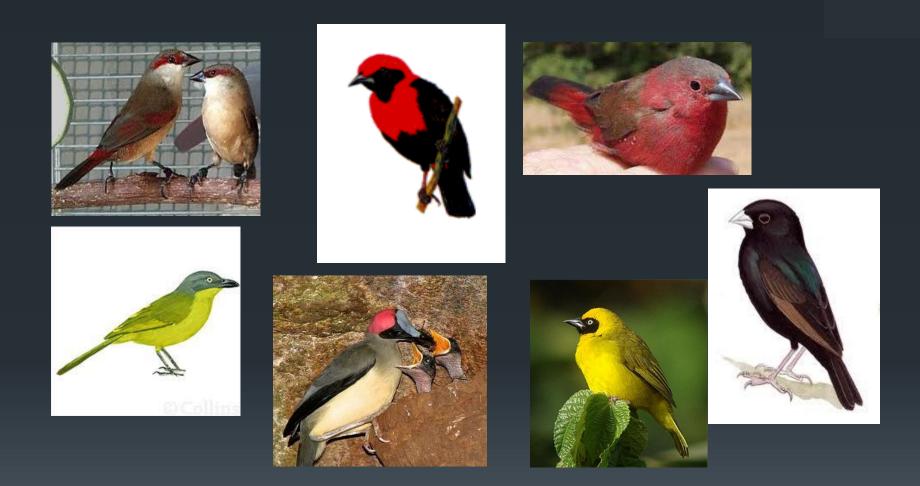
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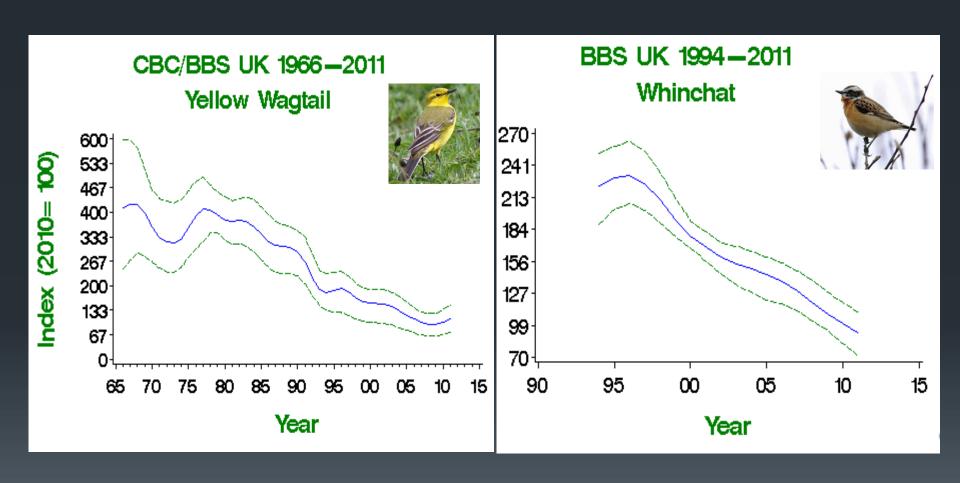




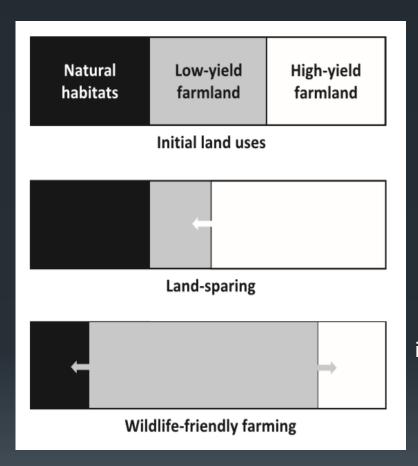
### Region holds endemic and globally threatened birds



#### ...and declining Palaearctic migrants



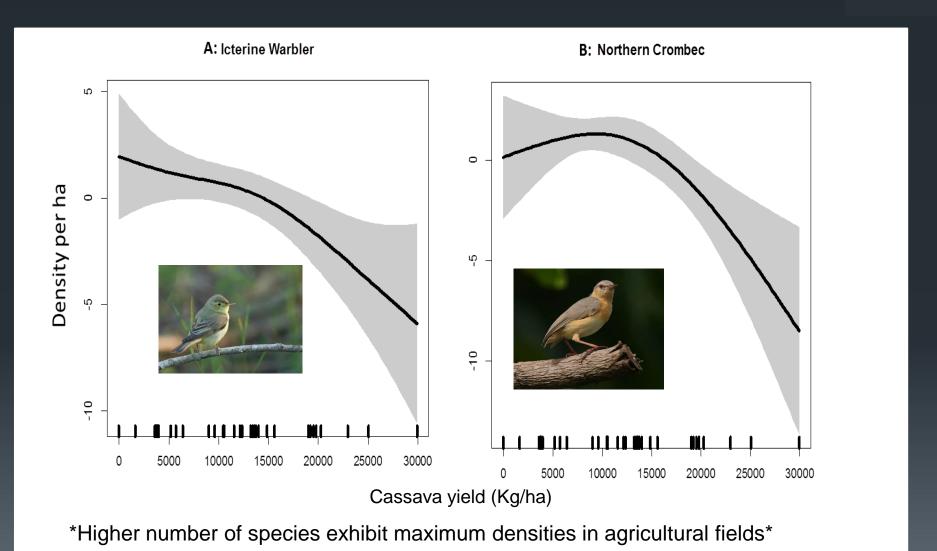
#### Strategies for sustainability



Consists of separating land for conservation from land for crops, with high yield farming facilitating the protection of remaining natural habitats from agricultural expansion

integrates biodiversity conservation and food production on the same land

# Of the 62 species analysed, approximately 61% exhibited a 'concave' density-yield curve (classed as wood-farmland mosaic specialist,



#### Socio-economy of the smallholder farmer

#### **Smallholders**

manage over 80 per cent of the world's estimated 500 million small farms

provide over 80 per cent of the food consumed in a large part of the developing world

contribute significantly to poverty reduction and food security.

#### Level of Education:

Rural dwellers still lag behind in education, particularly women and girls

Wealth and financial services smallholders everywhere face constraints in accessing credit and other assets

#### Technology

The share of farmers using mechanical equipment and tools is quite low in all countries

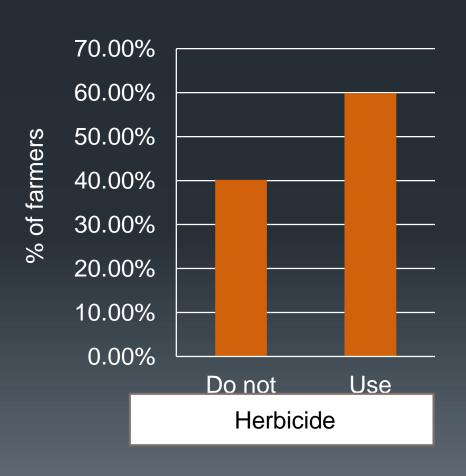
#### Information and extension

Extension provision in developing economies remains low for both women and men

Also Gender gap exists for many assets, inputs and services, including land, livestock, labour, education, extension and financial services, and technology

#### Some recent trends

60% of farmers show herbicide uptake; 93 % started in the 3-6 years prior to 2011



Older farmers (55 years and above) show higher herbicide uptake

Tendency to apply herbicide twice (efficiency) increases with level of education

### Leventis Foundation Nigeria

#### Promoting self sufficiency in food production







#### Vision

To attract youths into agriculture, train and support them to adopt improved, eco-friendly farming practices and technology aimed at reducing drudgery while increasing the national food/fibre basket and ensuring sustainable livelihood for the farming families.





Nine schools have been established in Nigeria and Ghana specialising in innovative ways of training small scale farmers to improve productivity and efficiency while considering the environment

#### Message

- Constraint to access to assets and inputs still persist
- Intensification of farming practices
- Smallholders play important role in food production
- There is a huge potential to increase yield in traditional systems while still retaining natural features within the farmed area that support farmland-restricted species.

#### **Acknowledgements**

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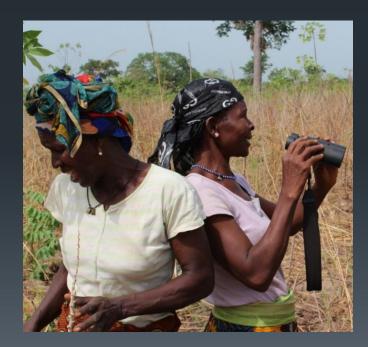
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# Thank you for listening!









Email: usieta2002@yahoo.com