#### **Economics & Livelihood Impacts of HPAI**

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#### **Overview**

□ What we do know: Summary of key findings

□ What we don't know: Main knowledge gaps

□ Initial proposal to fill these gaps



### What we do know...



## **Poultry Production Capacity**

Poultry population in Nigeria has grown on average by 5.49% from 2000 to 2005



Source: National Bureau of Statistics



#### Trade

#### Import of products of animal origin has been on an increasing trend over the years



Importation trend of live animals and animal products in Nigeria (N million)

Source: NBS



# **Poultry Import and Export**

 In 2003, Nigeria imported poultry and poultry products worth N 5.6 billion from 14 countries:

- Asia & Middle East: Singapore, Hong Kong, Israel
- Africa: Egypt
- South America: Dominican Republic, Christmas Island
- **Europe & America:** UK, Germany, Italy, USA, Belgium, France, Netherlands, Switzerland
- In 2003 the import of poultry and poultry products was banned to help domestic poultry sector.
- In 2006 only poultry products worth N32 million was imported from three countries (UK, USA & Germany).
- Export of poultry and poultry products is low overtime.



# **Poultry Prices**

- Poultry prices are relatively higher than those of its substitutes
- Average price of beef in 2005 was N433/kg while that of frozen/dressed chicken was N475/kg in the same year
- Prices of poultry in urban areas are usually higher than the national averages

#### Trend in urban poultry price in Nigeria (2005)





#### Importance of Poultry in Poor Households

- Poultry keeping is an important component of rural livelihood system:
  - Source of income
  - Source of micronutrients
- Smallholders (village extensive and backyard intensive production) dominate the poultry sector-60% (FDLPCS, 2007)
- Decision making in small scale poultry:
  - Mainly women in the south
  - Mainly men in the north
- Division of labour in small scale poultry:
  - Men and children work on construction of housing ,
  - Women and children work on husbandry (feeding, hygiene & health management), and
  - Children are mainly responsible for letting the birds in and out.

# Poultry Income

- Previous research show that village poultry keeping is not the major occupation in rural areas (Sonaiya et al., 1993).
- According to a recent review by Gueye (2007) the main reasons for keeping village poultry are:
  - household consumption in north-west,
  - source of income in south-east and
  - both household consumption and source of income in south-west and north central.
- Women especially depend on poultry income to provide household needs (e.g. children's schooling expenses) (Alabi et al., 2006)



# **Consumption & Nutrition**

- Poultry meat and eggs are an important sources of protein and micronutrients.
- Village poultry contributes significantly to daily household protein consumption.

 However, average per capita consumption of poultry meat and eggs is not sufficient compared to the WHO recommendations (Okuneye, 2002).



# **Economic & Livelihood Impacts of HPAI**

- A rapid rural appraisal done by the UNDP in 2006 found that:
  - HPAI caused 80% of households stop purchase & consumption of poultry
  - 75% of poultry farmers stopped ordering poultry input and were prepared to opt out of poultry sector
  - Small commercial and backyard poultry farmers suffered most losses
  - Prices of poultry and poultry products dropped, causing employment loss

# Summary of Key Findings

- Village poultry constitutes 60% of the poultry sector in Nigeria.
- It is an important component of rural livelihoods, contributing to household income and nutrition
- Women derive significant incomes from poultry.
- Even though poultry is an important source of protein and micronutrients, there are significant deficiencies among rural poor households.
- Preliminary research findings show that HPAI outbreaks have caused significant reductions in poultry prices, consumption, production and consequent losses in income and UNIVERSITY OF employment.

# What we don't know...



# Poultry, HPAI & Rural Livelihoods





## **Household Behaviour**

#### Likely Ex-ante and Ex-post Responses to HPAI Threat and Outbreak









# Knowledge Gaps

- Even though there are a few studies on the contribution of poultry to total household income and nutrition, these are conducted in a handful of LGAs.
- Therefore, a uniform national level data base on poultry production and consumption is missing.
- There is no data at national level on the intrahousehold dynamics of village extensive poultry production.
- Gender specific information on poultry management and ownership among household members is limited.



# **Knowledge Gaps Continued**

- There are no studies which estimated the impact of HPAI on rural livelihoods (income and nutrition).
- Further, there is no information on the
  - Knowledge, attitude and perceptions of rural household with regards to HPAI and
  - Impact of the compensation schemes on household livelihoods and biosecurity practices.



# Initial proposal to fill these gaps

- Country wide qualitative and quantitative data collection in selected sites through
  - Structured household surveys to estimate the contribution of poultry to household income and the impact of HPAI thereof
  - Focus group discussions and participatory poverty assessment to understand the importance of poultry, biosecurity and the impact of HPAI at the community level
  - KAP surveys to understand rural households' knowledge attitudes and perceptions with respect to HPAI
  - Anthropometric measures and food consumption data to estimate the impact of poultry on nutrition



# Initial proposal to fill these gaps

- Ideally data collection should be implemented in all six geopolitical zones
- State selection criteria: Highest poverty and rural poultry production and at least one LGA with HPAI
- LGA selection criteria: HPAI status, depopulation and compensation
- Community selection criteria: Stratified according distance from the HPAI outbreak



### Thank You



