Agriculture to Nutrition (ATONU): Improving Nutrition Outcomes through Optimized Agriculture Investments

ATONU Side Event at the ANH Week
Hilton Hotel, Addis Ababa
Presentations

1. Overview of ATONU and ACGG projects – Dr Simbarashe Sibanda, FANRPAN and Dr Tedelle Dessie, ILRI

2. Frameworks for selecting agricultural development projects with potential for integrating nutrition, and NSI identification and selection – Dr T Madzivhandila, FANRPAN

3. Nutrition-sensitive interventions, what works – Dr Amy Webb-Girard, Emory University

4. Proposed nutrition-sensitive interventions for ACGG – Bertha Mkandawire, FANRPAN

5. Impact evaluation designs for agriculture-nutrition interventions in research and development projects – Dr Jef Leroy, IFPRI

6. Proposed design for the ACGG Project – Dr Nilupa Gunaratna and Dr Abdallah Noor, Harvard Chan School of Public Health
Agriculture to Nutrition (ATONU):

Improving Nutrition Outcomes Through Optimized Agriculture Investments

Simbarashe Sibanda

Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN)
• Sustainable Development Goals (SDGs)
• Africa Agenda 2063 Goal 3: Healthy and well nourished citizens
• Malabo Declaration: reduce stunting to 10% by 2025
• Focus on how agriculture can deliver positive nutrition outcomes to smallholder farm families through the generation of robust evidence
• Six-year project being implemented in Ethiopia, Nigeria and Tanzania for now
• Target groups: women of child-bearing age and children in first 1,000 days of life, high burden of malnutrition
ATONU Approach

• ATONU works with **existing agricultural development projects and programmes**

• **Identify and design** nutrition-sensitive interventions to deliver positive nutrition outcomes

• Assess and collect **evidence of the impact** of interventions

• **Provide technical assistance** to ensure effectiveness of nutrition-sensitive interventions in agriculture programmes
ATONU Theory of Change

1.a) Promising agricultural projects identified for possible interventions

1.b) Methods for designing, implementing and evaluating interventions identified, adapted and assembled

2) Tailored nutrition sensitive interventions are designed, implemented and evaluated

3) Successful models communicated, disseminated and promoted for adoption

4a) Lessons and successes from ATONU outscaled to other agriculture projects

4b) Practitioners knowledgeable and equipped with evidence on how to design nutrition sensitive agriculture projects

4c) Policy makers and investors incorporate a nutrition lens in the design of agriculture projects

5) Agriculture projects generate nutritional outcomes that benefit smallholder farm families particularly women of child bearing age and children in the first 1,000 days
Opportunities for Nutrition-Sensitive Interventions

Can be anywhere along the agricultural value chain, depending on the design and objectives of project
Pilot Projects

• Two pilot projects:
  - African Chicken Genetic Gains (ACGG) in Ethiopia
  - African Chicken Genetic Gains (ACGG) in Tanzania
Two pilot projects, one each in Tanzania and Ethiopia

Elaborated nutrition-sensitive interventions and impact evaluation study designs

Ready to conduct baseline surveys and start implementation and impact evaluation

1. Ready to provide TA to other projects
2. Knowledge toolbox
3. Evidence and lessons for policy engagement
Well-nourished rural smallholder farm families

Policy makers and investors incorporate nutrition in the design of agricultural policies and programmes

Validated evidence of nutrition interventions

Ag-Nutrition community of practice equipped to design nutrition-sensitive agriculture projects

Agricultural experts working with nutrition and health experts to deliver positive nutrition outcomes

What Will Success Look Like?
Sponsorship by the Bill & Melinda Gates Foundation

www.fanrpan.org/projects/ATONU

#ATONU
African Chicken Genetic Gains

A platform for testing, delivering, and continuously improving tropically-adapted chickens for productivity growth in sub-Saharan Africa

Addis Abeba, Ethiopia
June 21, 2016
Some facts about the ACGG project

- **Project countries:** Nigeria, Tanzania and Ethiopia
- **Funding:** BMGF and in-kind contribution from partners
- **Program period:** 5 years with a possibility of additional 5 years
- **Starting date:** January, 2015
- **End date:** December, 2019
- **Implementing Institute:** ILRI with partners
- **Main beneficiaries of the project:** Women, Youth and CVC actors
- **Main Trust of the project:** Get the genetics right
Chicken production systems in SSA

- Village production system
- Small-scale production system
- Commercial production system

⇒ **Based on:**

- Objectives of the producer
- Type and number of animals
- Management system followed
Yield gaps in chicken production in Africa: the opportunity

<table>
<thead>
<tr>
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<th>Eggs per chicken per year</th>
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<tbody>
<tr>
<td>scavenging</td>
<td>45</td>
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<tr>
<td>semi-scavenging</td>
<td>70</td>
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<tr>
<td>Intensive</td>
<td>150</td>
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- **Indigenous**
- **Hybrid**

**Sources:** The data for the hybrid used here are from Kuroiler from an Indian environment (Ahuja et al., 2008); while for indigenous birds the data are from Hill and Modebe 1961; Oluyemi and Oyenuga, 1971; Akinokun and Dettmers, 1976; Nwosu et al, 1979; Nwosu and Omeje, 1985; and Sonaiya, 1990. Dessie, 1995 etc
The vision of this program is to catalyze public-private partnerships for increasing smallholder chicken production and productivity growth as a pathway out of poverty in sub-Saharan Africa.
The three cardinal aims of ACGG -outcomes

1. Employment creation
2. Wealth creation
3. Poverty reduction
ACGG Program Overall Outcomes

• **Data driven understanding** of the breeds and specific traits that poor smallholder farmers, especially women, **prefer** across the various countries and agro-ecologies;

• Farmer preferred lines, that produce at least **200% more egg and meat** than existing local breeds production, are made accessible to smallholders through public and private organizations;

• Increased **realized productivity for smallholders** with access to the tested, farmer preferred strains;

• Empowered smallholder **women** engaged as chicken producers, input supplier, marketer;

• Long-term chicken genetic gains programs with clear plans for breeding are established in each country with the capacity to drive accelerated genetic gains (**Long term Genetic Gains program**);
Overview of ACGG Objectives:

• Identify, characterize, and **test tropically-adapted chicken germplasm** to determine productivity across agro-ecologies and management conditions and to define farmer preferences.

• **Establish stable multiplication lines of farmer-preferred germplasm** and develop IP models to facilitate private and public sector access to the germplasms through a long-term genetic gains program focused on continual improvement.

• **Develop and nurture Innovation Platform** at different levels to facilitate private sector engagement and business model development focused on empowering poor smallholder farmers especially women in the chicken value chain to improve their livelihoods.
What are we doing differently?

ACGG Five Pillars of Change

1. High-producing genetics well-adapted to low-input production systems;
2. Farmer preferred breeds of chickens;
3. Public-private partnership for improvement, multiplication, and delivery;
4. Women at the center to ensure success; and
5. Innovation platforms for developing solutions across the value chain.
ACGG-ATONU Theory of Change

Focus on “improvement”, not just breeding! “Empowering” not “Restricting” all the actors

Farmer-preferred Genetics
Improved Semi-scavenging Management Practices
Women Empowerment

Innovation Platform

Market Access
Increased Production and Productivity

Increased Income and purchase of other foods
Improved Consumption of Eggs, Chicken and other Foods
Improved Dietary Diversity

PPP

ACGG-ATONU
A New Generation Genetic Gain

Theory of Change Focus on "improvement", not just breeding! “Empowering” not “Restricting” all the actors
Chicken strains to be tested in project countries (Options)

- Kuroiler
- Koekoek
- Sasso
- Embrapa 051
- Shika Brwn
- FUNAB Alpha
- Fulani + XX ecotypes in the sites
- Fayoumi???
- Horro + XX ecotypes in the sites

- Kuroiler
- Koekoek
- Embrapa 051
- Sasso
- Fayoumi???
- Australorp + XX ecotypes in the sites
On-Farm Testing Sub-National Zones (The context)

**Tanzania**
- SNZ:
  1. Lake
  2. S. Highland
  3. Central
  4. Eastern
  5. Southern

**Ethiopia**
- SNZ:
  1. Amhara
  2. Oromia
  3. Southern
  4. Tigray
  5. Addis Ababa

**Nigeria**
- SNZ:
  1. Humid Forest
  2. Derived Savanna
  3. Guinea Savanna
  4. Sudan Savanna
  5. Mid altitude
Sampling frame for the on-farm test and villages identified

- 5 per country
- 4 per SNZ
- 3 per district
- 6 introduced + local strains tested in Tanzania

Strains will be tested for farmer preference in about 9,000 households in Tanzania, Ethiopia and Nigeria

- 40 HH per village
Fertile eggs imported, hatched and being brooded in three of the countries!
Outcomes of functioning partnership
more productive chickens for Africa’s smallholders

http://africacgg.net
Ese!
Asante Sana!
Amesegnalhu!
Thank you!