



Introducing the African Chicken Genetic Gains project

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

Tadelle Dessie, ILRI

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Background



Chicken –in SSA

- Large in number and wide in distribution
- Multi-use animals utilized across a range of production systems
- Low-productivity but high-potential for growth
- Critical for income generation, nutrition & women empowerment

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

Village production system



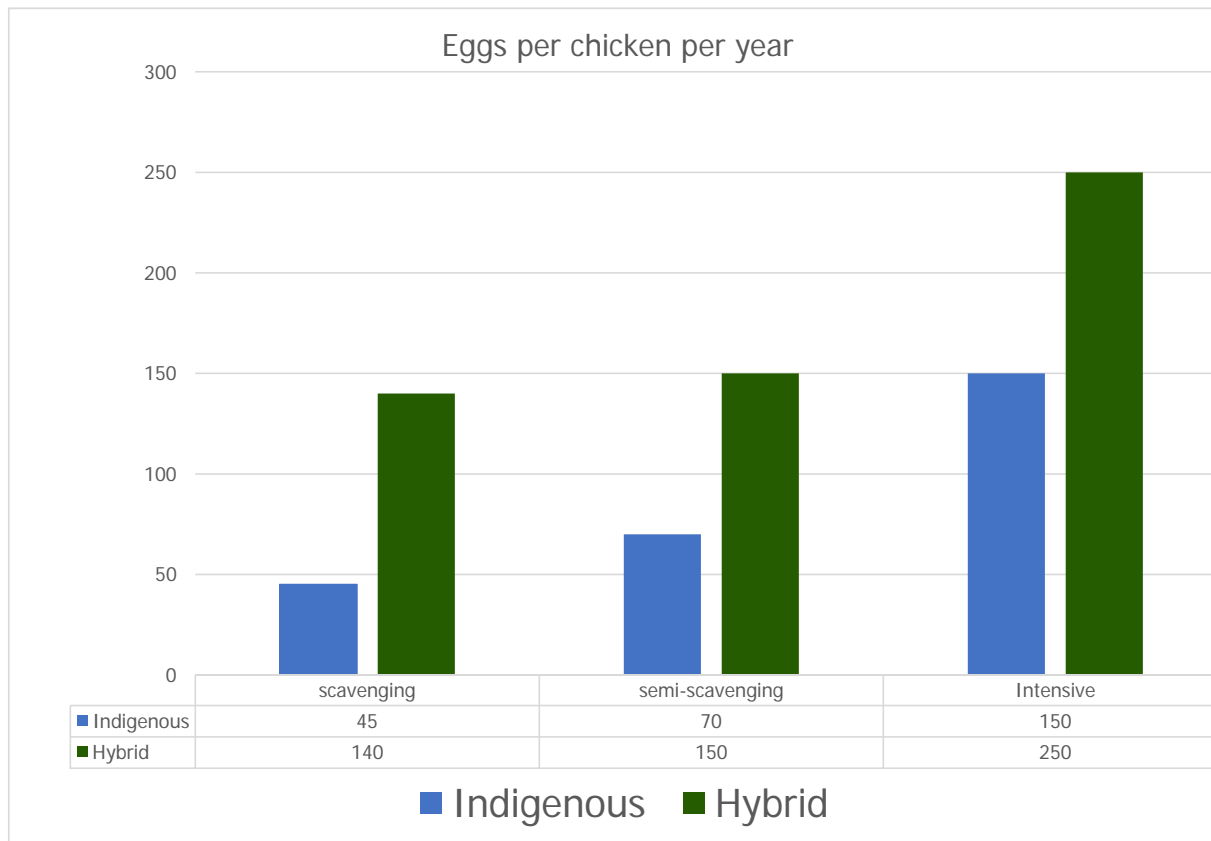
⇒ **Predominant system in SSA**

- 60 to 95% of chicken population
- 40 to 90% of meat & egg production
- Source of protein and small cash
- High percent of market

⇒ **Little attention to the system and animals**

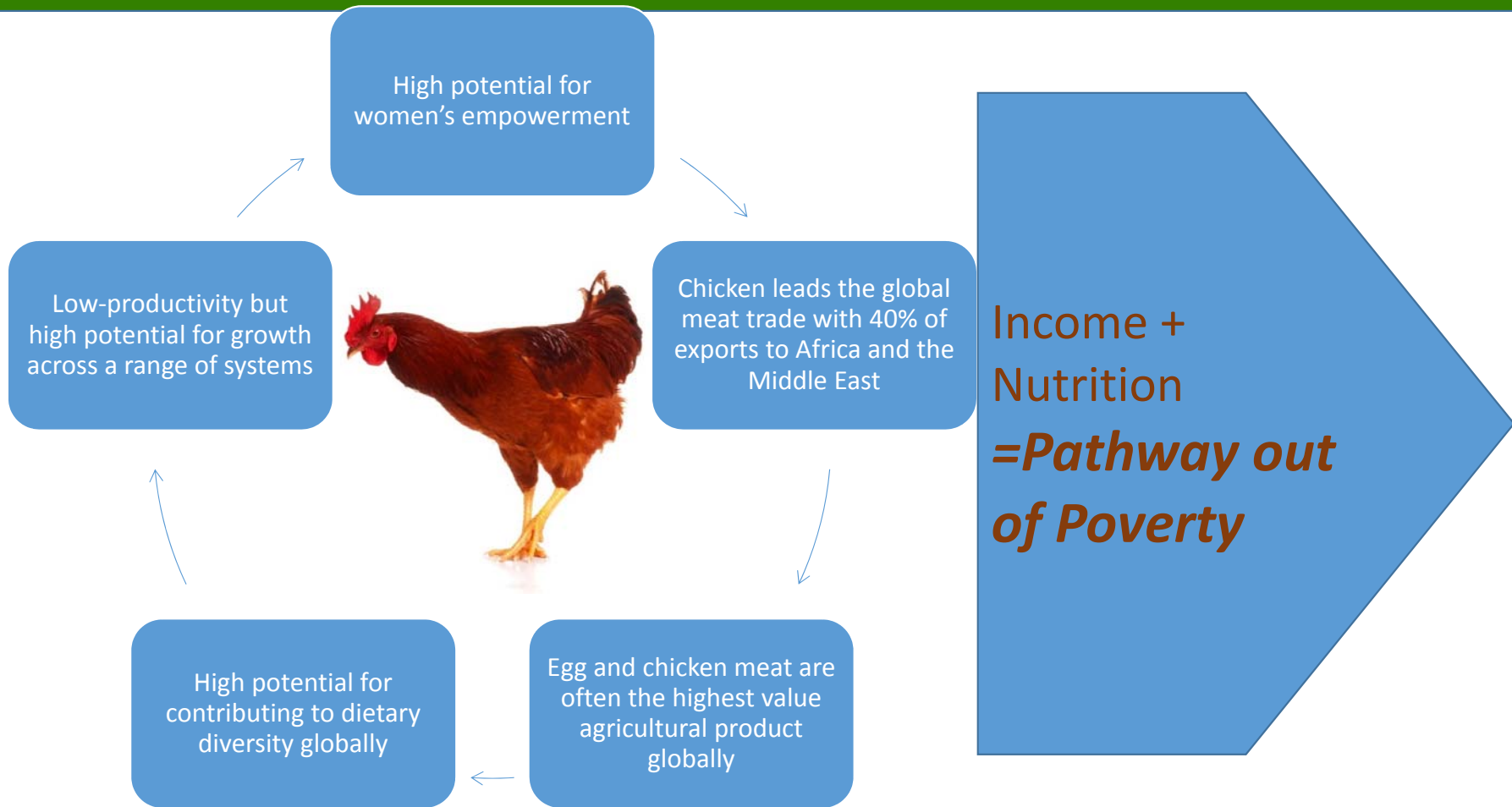
- Resulting in low productivity
- Little improvements to the system/animals
- Resulting in overall inefficiency

Background - Yield gaps in chicken production in Africa: the opportunity



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

Opportunity



Background – Past attempts of improvement and the way forward



What has happened in the past?

- Emulate the poultry industry found in the developed world
 - Most of these historical attempts at intensive, grain-driven, poultry production in Africa typically failed
- Cockerel exchange, pullet exchange and 'hatchable' eggs distribution programs
 - These programs again generally failed to achieve sustained impact and were not successful in transforming productivity
- Chicken production has historically presented tremendous growth opportunities in Africa BUT needs an innovative approach
 - “If we could establish a sustainable productivity program of chicken improvement, then we could produce more meat and eggs that would lead to more food, less poverty and more income”

What are we doing different?

ACGG Five Pillars of Change

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

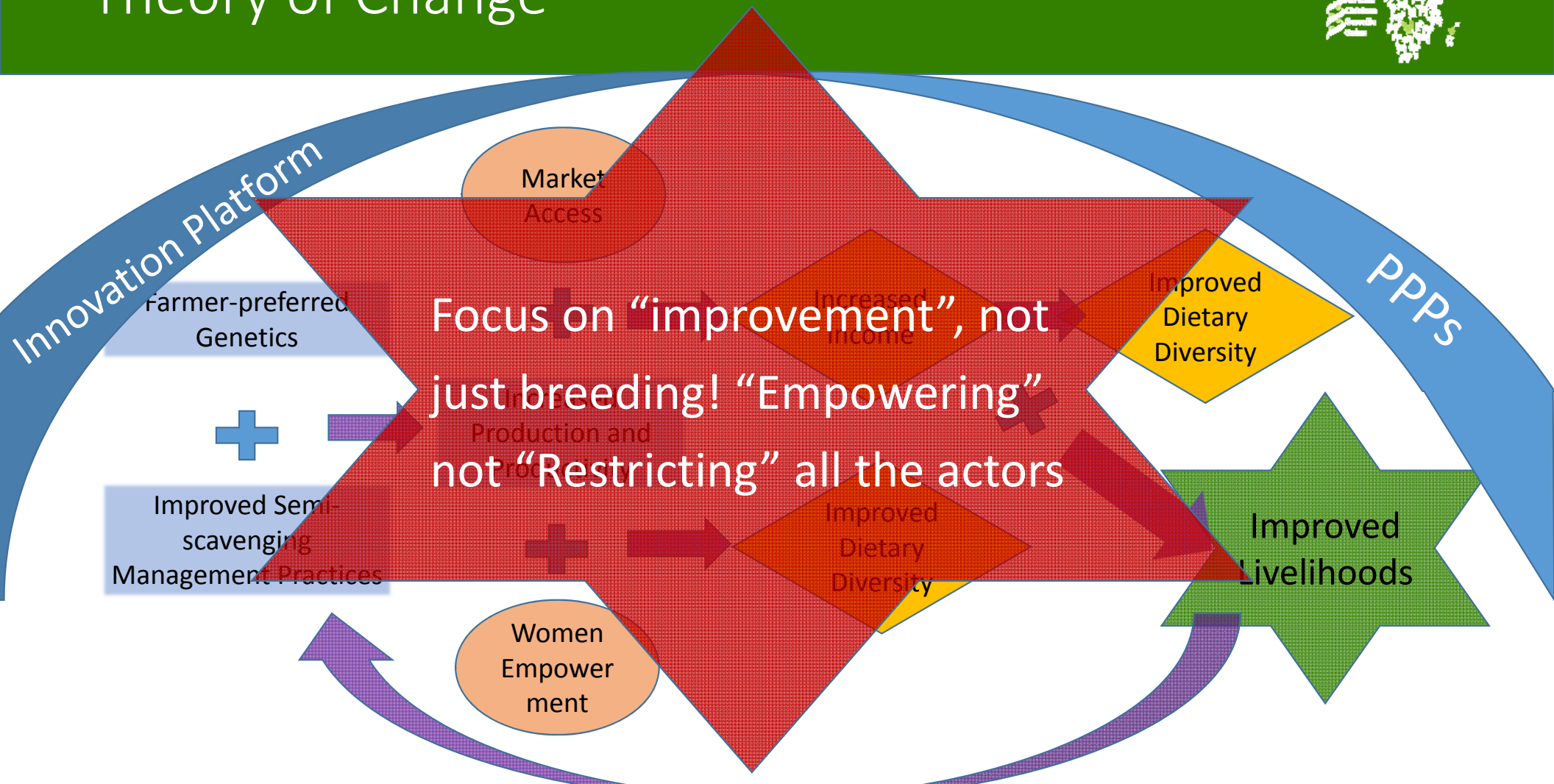
Vision



Our Vision

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.

Theory of Change



Impact Beneficiaries



Photo: www.impatientoptimist.com

Who benefits?

- **The poor:** Targeting individuals living on <\$2 / day -2.6 billion people in the world
- **Smallholders:** Targeting individuals with low flock sizes but a high percent of income from poultry
- **Women:** 70% of poultry keepers are women

How do they benefit?

- **Income**
- **Nutrition**
- **Capital accumulation**

Why (only) Genetics?



Identifying and delivering appropriate livestock genetics in developing economies is complex, but appropriate genetics can deliver substantial and long-lasting benefits

As seen in the developed world, huge gains can be unlocked through genetics

Fully benefiting from a genetic improvement program requires a systems approach, a context-specific strategy, understanding of the socio-economic landscape, and consideration of the existing genetic diversity.

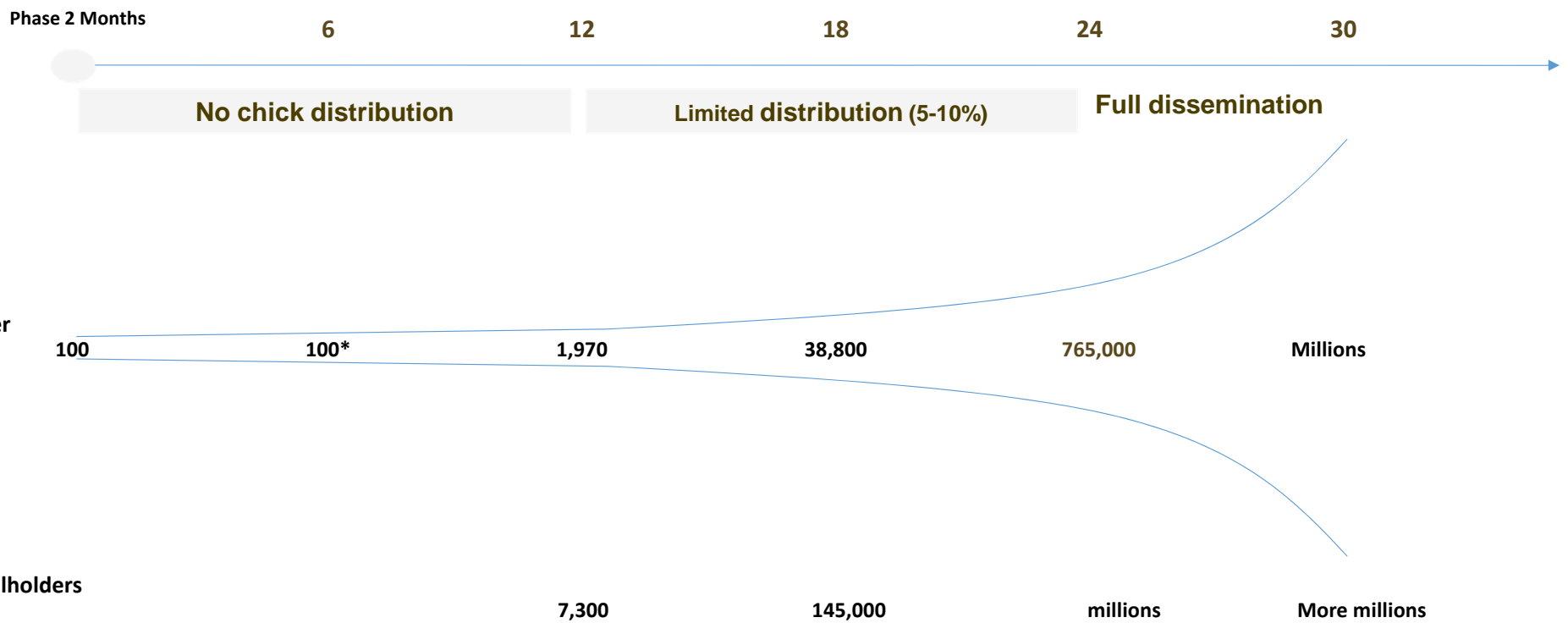
This sustainable genetic improvement program can be the primary driver for change
–GET the Genetics right and it will serve as a systemic pull factor

Be a catalyst and pull factor for improving the wider system –triggering input supply and better marketing in a developing chicken value chain

and...

Unlike many other types of intervention, benefits can span generations.

Chicken's high rate of reproduction enables rapid scale - distribution could begin after 18 months



This model can be implemented simultaneously in multiple geographies.

Partnership - Integrated into ACGGs core business



Partnership is
Key!

Communication-
*Move beyond
informing to
engagement*

Support-*Provide
support to
partners*

Service-*Serve the needs
of key partners (capacity
building, resource
mobilization, etc.)*

ACGG partnerships for impacts: *The give and take*



- **Development investors**
provide money, influence, advocacy
get better bang for their bucks, better-targeted impacts.
- **Researchers – international and national**
provide evidence, capacity building (act as catalysts and facilitators providing options to farmers to make decisions based on scientific evidence)
get co-development of new science.
- **Multinational agencies**
provide policies, advocacy, means to scale up interventions
get evidence-based knowledge.
- **Development partners**
provide relevance, reality checks, expertise
get practical science for real development.
- **Farmers (women):**
provide resources, indigenous knowledge; co-create solutions to their challenges
get solutions to their challenges; *Preferred yet productive chicken --continuously*

Some facts about the ACGG program



Project countries:

Nigeria, Tanzania and Ethiopia

Funding: BMGF and in kind contribution from partners

Program period:

5 years (2014 to 2019)

Starting date:

January, 2014)

End date:

December, 2019

Governance



What is the SIAC's Role in ACGG?

ACGG is guided by a Scientific and Industry Advisory Committee (SIAC) comprised of six leading professionals in business, research, and development. These individuals will be a key driver of ACGG's goals of a high standard of responsibility, culpability, and superior governance



Who is part of the SIAC?

- *Jerry Moye, Cobb-Vantress, Inc.*
- *Marcellina Chijoriga, University of Dar es Salaam*
- *Gilberto Schmidt, Embrapa*
- *Siboniso Moyo, ILRI*
- *Donald Nkrumah, BMGFT*
- *Tadelle Dessie, ACGG-ILRI*

ACGG management



What is ILRI's Role in ACGG?

ACGG team at ILRI provides leadership, technical backstopping and capacity building. Responsible for the donor (technical and financial), coordinate the identification, sourcing and testing of productive yet adaptive strains



Who is part of the ILRI team?

- *Tadelle Dessie –Project leader*
- *Jasmine Bruno –Coordinator*
- *Fasil Getachew – Research associate*
- *Tesfahun Alemayhu- Research Associate*
- *Hizkias Kassaye –Informationan*
- *Ayda Tegenu – Program Assistance*
- *Steve, Okeyo, Raphael, Jane, Absolomon, Luke, Linda,*

ACGG management



**What is
countries
Role in
ACGG?**

ACGG country team MANAGES the project implementation at country level : Baseline survey, on-farm and on-station testing, IP establishment and development, PPP management etc. Identifying and nurturing partnership as appropriate, resource mobilization, capacity building etc



**Who are part
of the Country
team ?**

- *PI, CO-PI, NPC, PMT members, six SNC's,*
- *Farmers in different Sub-nationals (2, 500 HHs)*
- *IP members (at different levels)*
- *Public and private sector operators*

Partners



WAGENINGEN UR
For quality of life



PICO-Eastern Africa
helping institutions work...



Koepon

more productive chickens for Africa's
smallholders

<http://africacgg.net>



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