

# **A model for sustainable egg production in sub- Saharan Africa**

**Bruce Dooyema**

# Population Estimates

## World

7.3 Billion

800 Million chronic malnourished

Every day 30k children under 5

43% of the World Population lives on less than \$2/day

## United States

321-325 Million

7 M severe food insecurity

40% of food in US thrown out

In 500 BC, an anonymous Chinese poet wrote:

- If you are thinking a year ahead, sow seed
  - If you are thinking ten years ahead, plant a tree
  - If you are thinking one hundred years ahead, educate the people
- 
- By Sowing a seed once, you will harvest once
  - By planting a tree, you will harvest tenfold
  - By educating the people, you will harvest one hundredfold

# Africa:

Continent  
of two  
Extremes





09/15/2013



















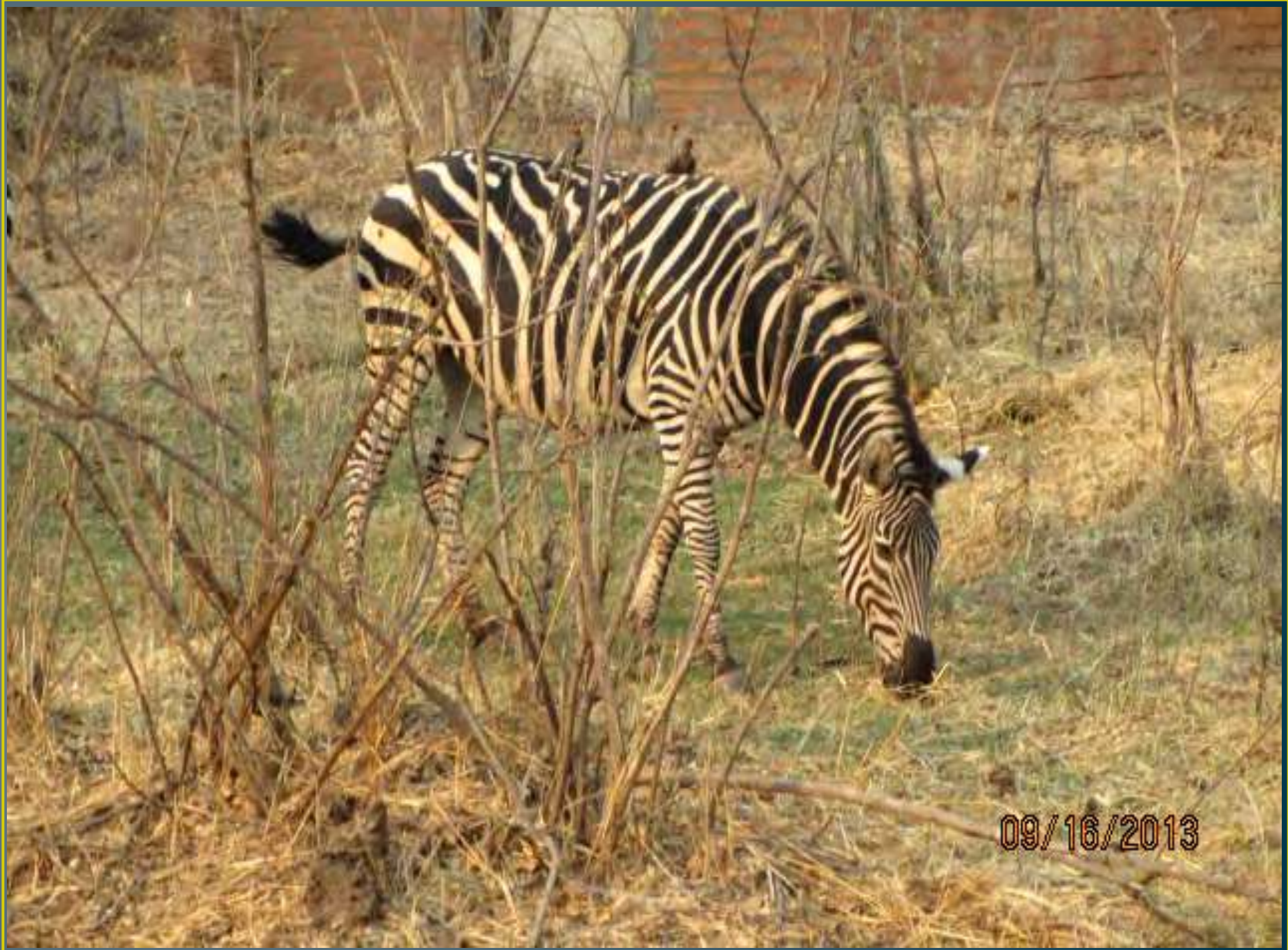












09/16/2013



## The other Extreme

43% of the worlds population  
live on lees than \$2 / day

















# Africa

56 Countries  
195 worldwide  
1.17 billion

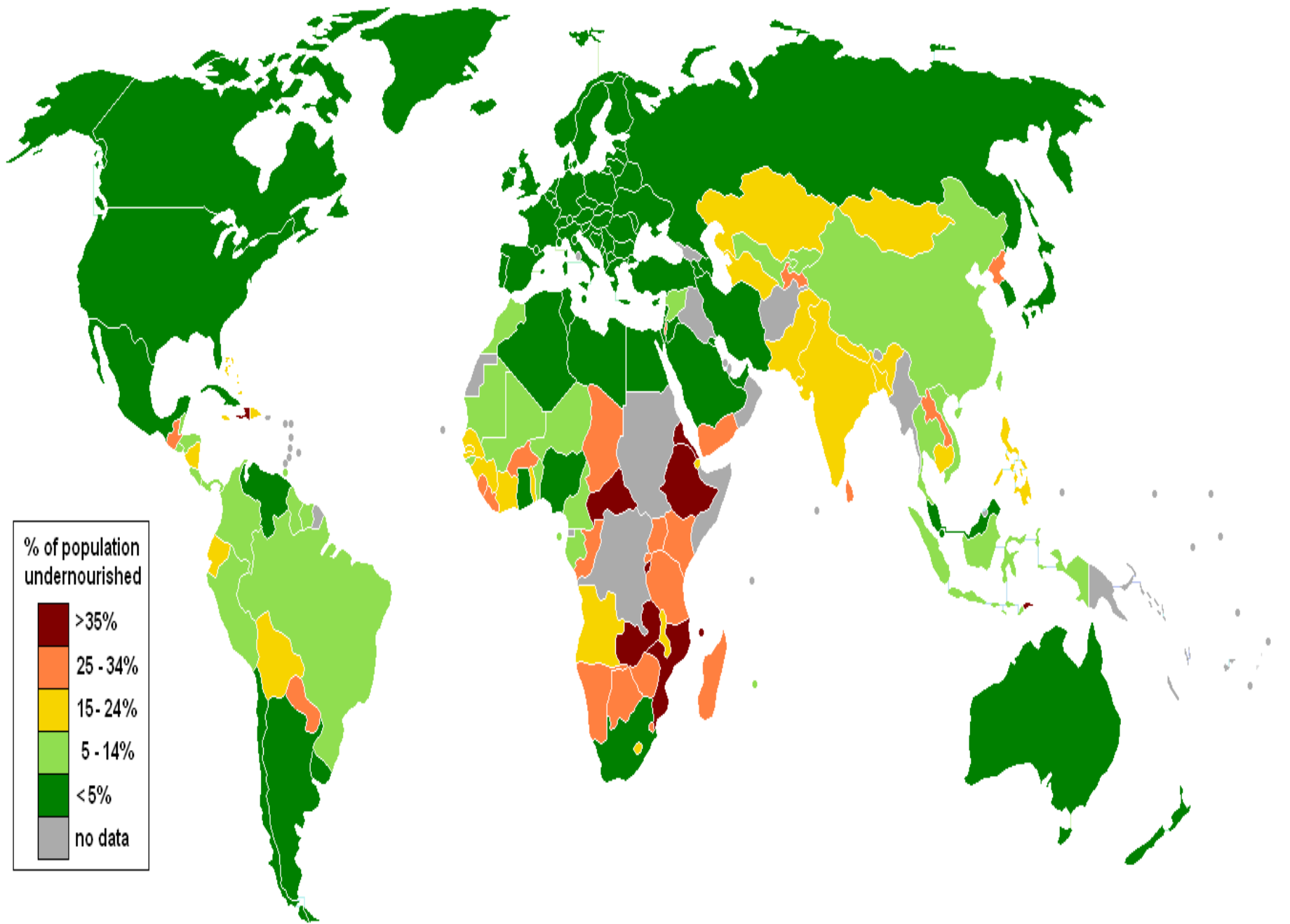


# Africa

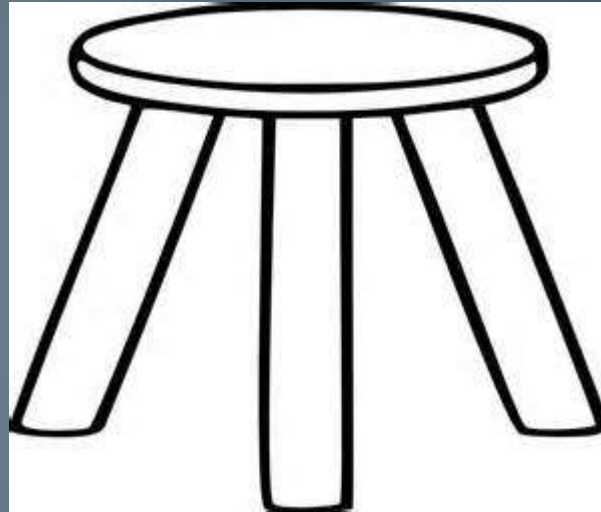
By 2050  
2 billion

By 2100  
4.1 billion  
Sub-Saharan





# Factors

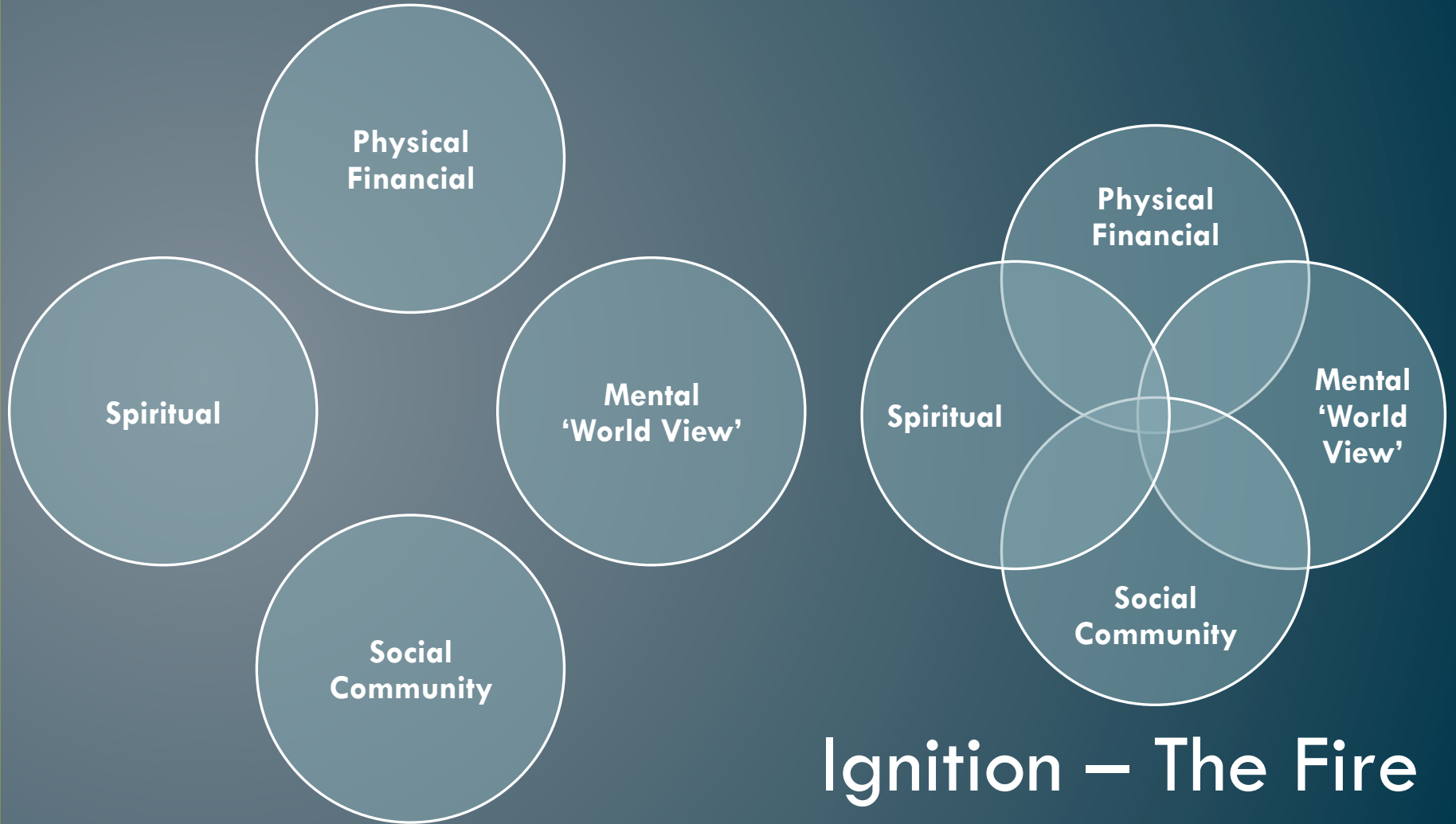


Farming/Grain

Education

Egg  
Production

# Business: The Context



Ignition – The Fire  
Within



# communities of fusion



novos horizontes

# New Horizons

## Broiler Breeders



## Broiler Processing

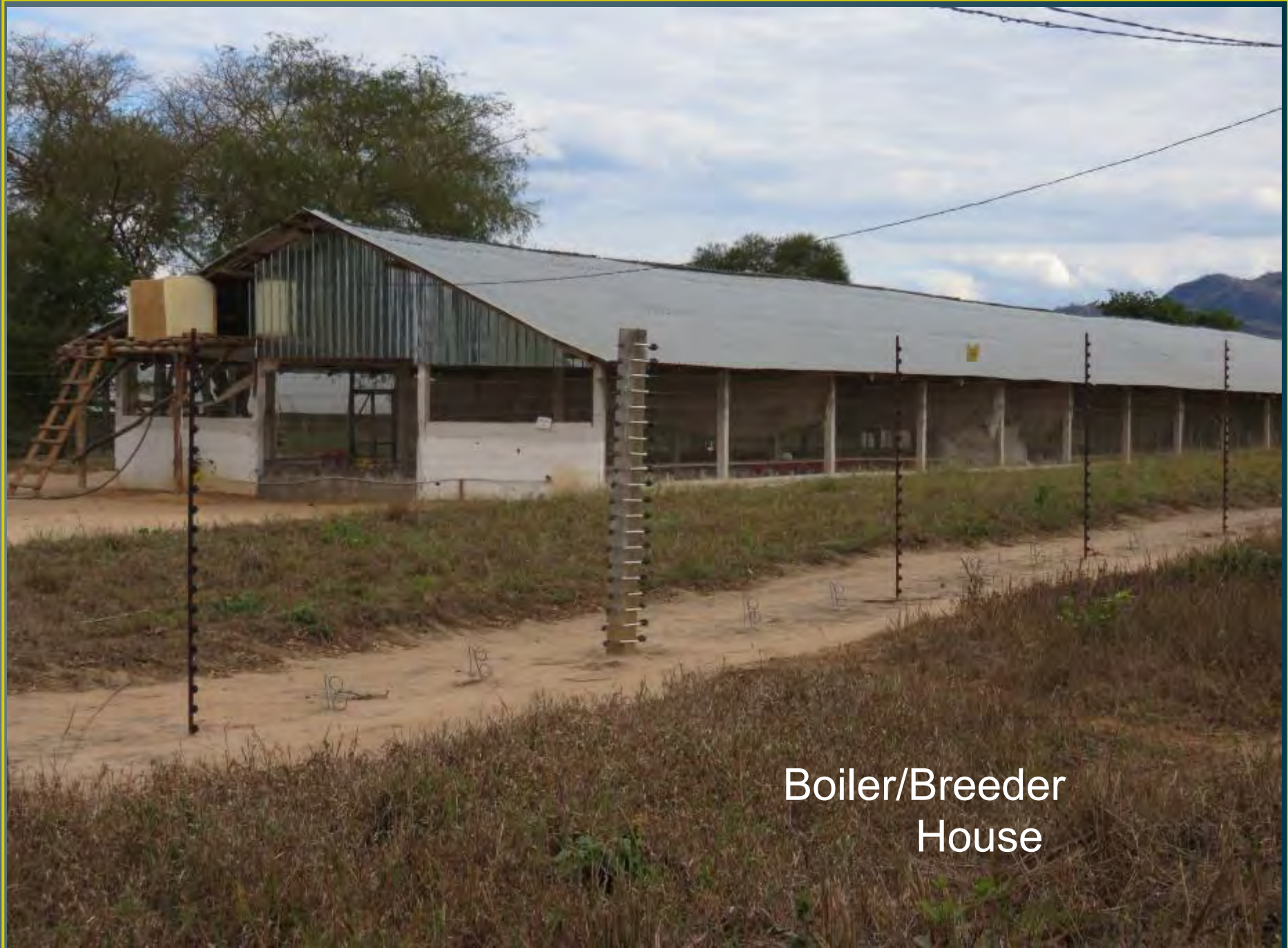


## Feed Milling



## Hatching





Boiler/Breeder  
House

# Typical Boiler Outgrower House



# Community Outgrower



Water, sometimes as far as 2 miles away



Collecting Water from a near by dam



New way to  
carry water  
Holds 25 gals.





Community Well

09/19/2013



Grain Storage



Premix Mixer



# Feed Milling



# Mixing Feed



# Boiler Processing





80-90k / week



# Ebenezer Training Centre-Zimbabwe/Mozambique



# 1st Class of Students @ Ebenezer Mozambique



# Ebenezer, Mozambique



03/06/2014













# Ebenezer Dorms



A photograph of a brick water kiosk. The structure is built with reddish-brown bricks and has a corrugated metal roof supported by wooden beams. A concrete basin is attached to the front wall, with a faucet and a red hose. The kiosk is situated outdoors on a dirt path, with trees and a clear sky in the background. The text "Ebenezer Commons" is overlaid in the center of the image.

Ebenezer Commons



# Rapale International Christian School





03/06/2014

An aerial photograph of the Rapale International School. The school is a long, single-story building with a white roof, situated in a clearing surrounded by lush green trees. To the left, a large, steep, rocky mountain rises prominently. The foreground is a mix of dry, brownish grass and green vegetation. The background shows a vast, hilly landscape with dense greenery under a clear sky.

# Rapale International School



Rapale International School

09/19/2013











09/19/2013

1<sup>st</sup> & 2<sup>nd</sup> Graders





# Eggs for Africa

## Egg Laying Operations







# Local Rendering Plan



**Center Fresh Egg Farm**

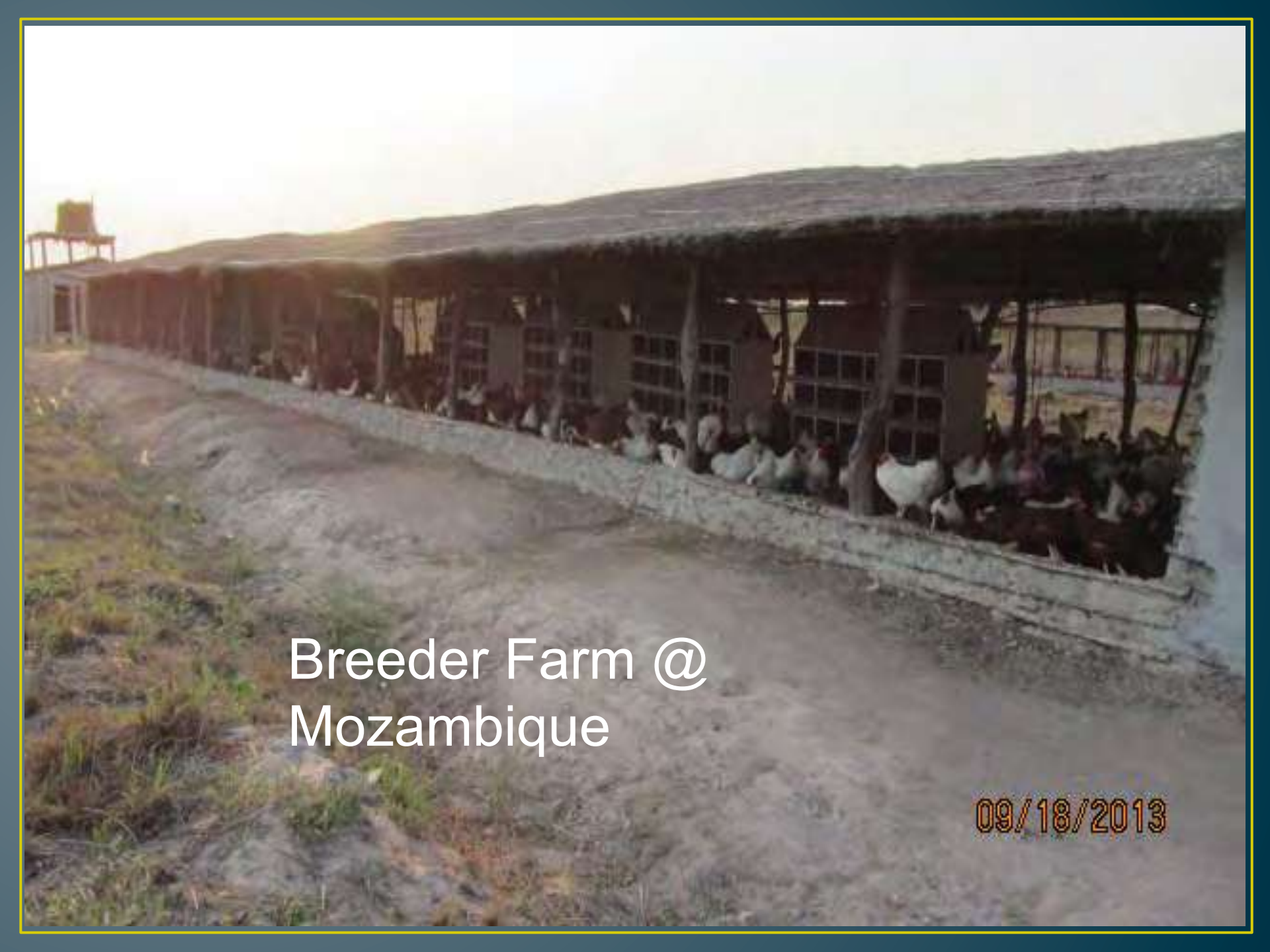


**Visser Elevator**



**Mozambique Fresh Eggs**





Breeder Farm @  
Mozambique

09/18/2013







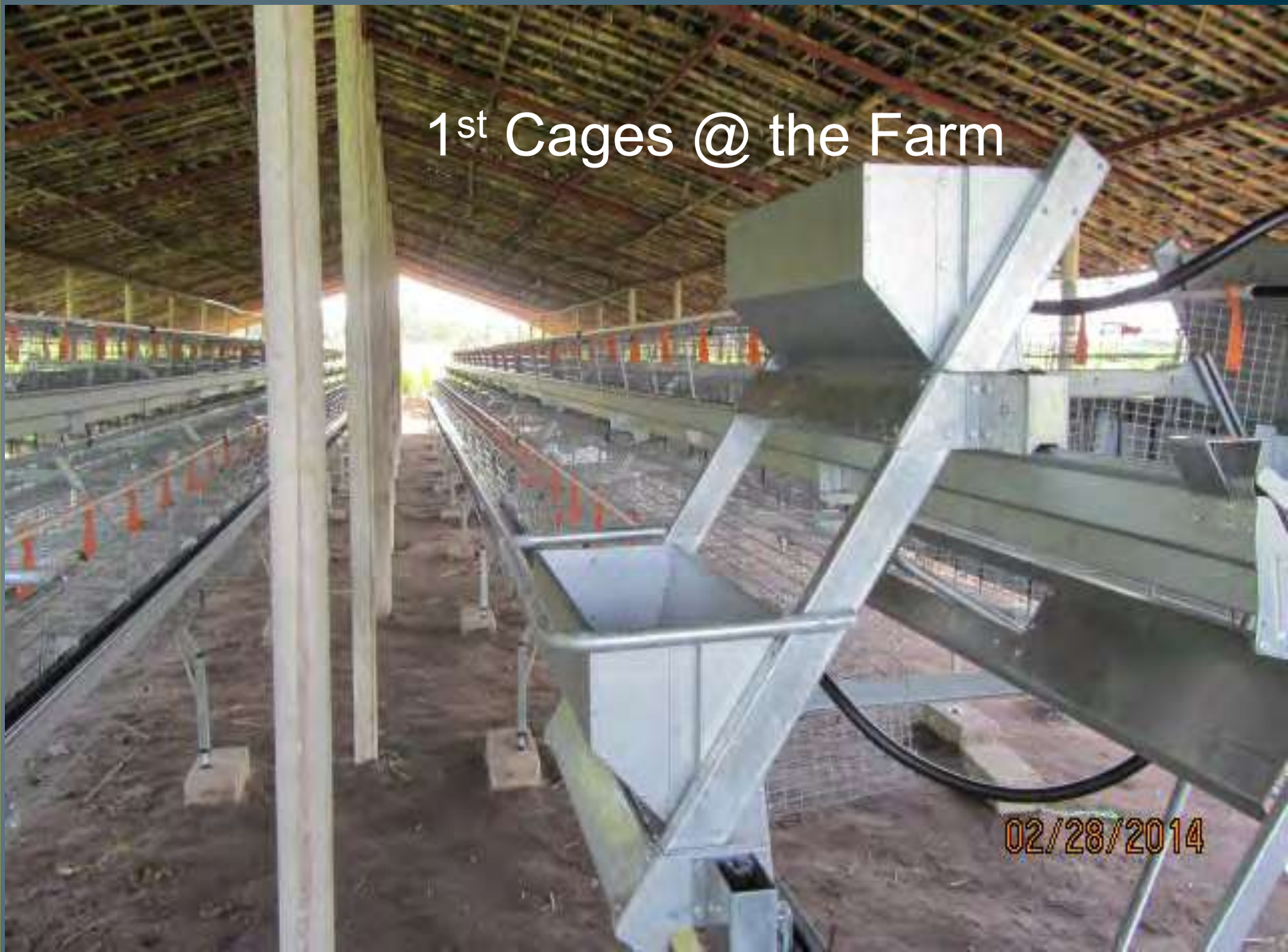








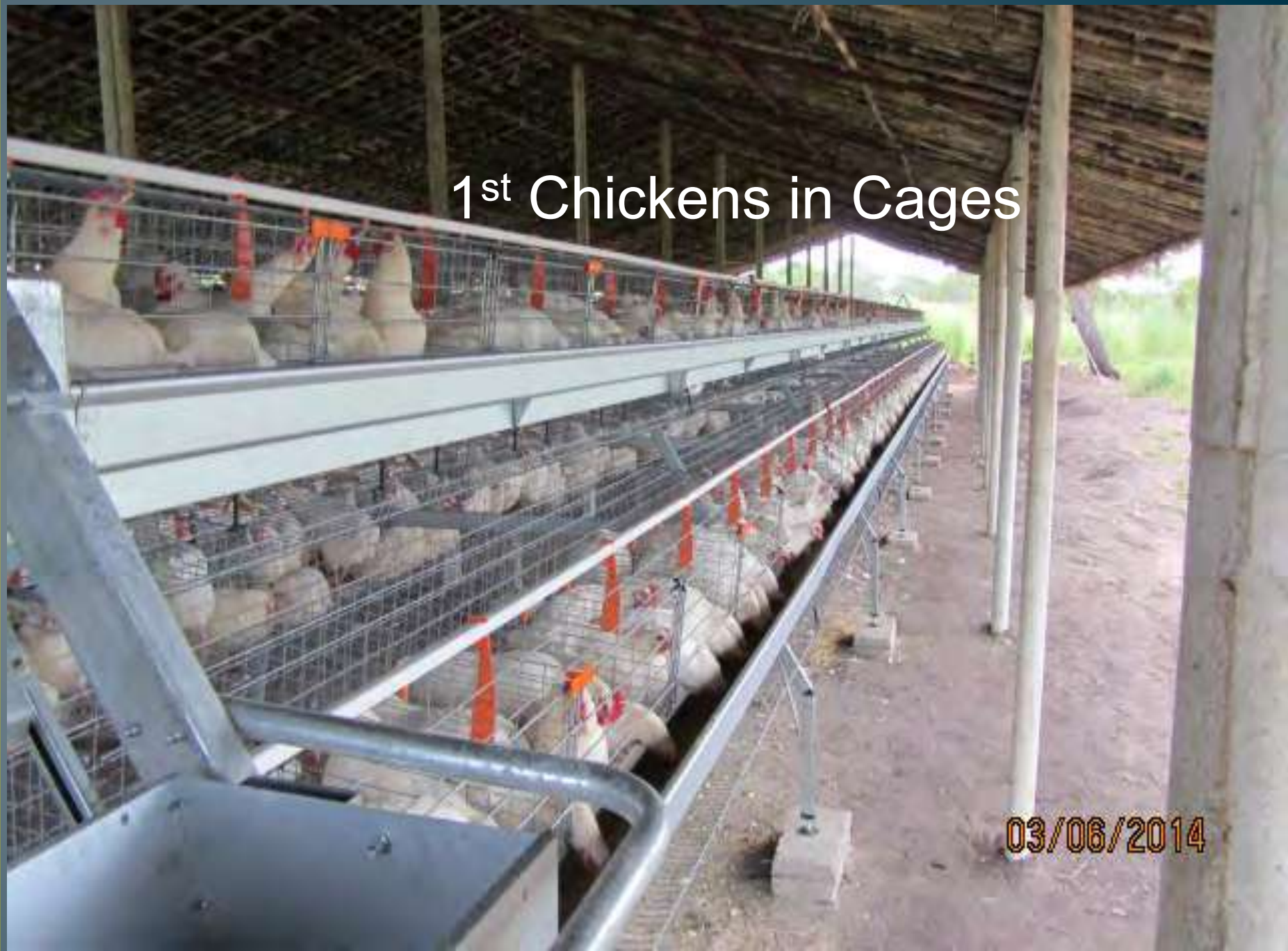
# 1<sup>st</sup> Cages @ the Farm



02/28/2014

# 1<sup>st</sup> Chickens in Cages

03/06/2014

























Backup Plans are Needed



# Egg Farmer of Canada



# Training Workers



03/07/2014

A large industrial poultry farm with rows of metal cages and wooden crates. The facility has a high ceiling with a complex metal truss structure and corrugated metal roofing. The floor is covered in dark, granular bedding material. In the foreground, there are several wooden crates and a white plastic bag. The cages are arranged in long, parallel rows, extending into the distance. The overall atmosphere is industrial and functional.

Contract Production

112 bird units

# Community Fair



Lot's of local interest



Mozambique  
Fresh Eggs

O seu  
negócio!

À venda:  
Poedeiras  
-842666731

À venda:  
Poedeiras  
-842666731

Comerciante  
oficial  
BIG P

À venda:  
Poedeiras  
-842666731

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# Well Drilling

Farm

Contract Growers

Commercial

Local Community

Schools



# Brick Production.

Farm  
Local Housing  
Schools  
Community  
Churches





# Railroad Construction

Largest Coal Mine  
in the World

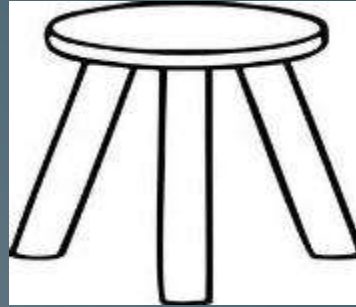


# Railroad Construction

Right through the  
middle of our  
new breeder farm



# Communities of Fusion



## Farming Improvements

- 2 Grain Farms
- Well Drilling
- Brick Making
- Health Care
- Carpentry
- Mechanical
- Training

## Egg/Boiler Production

- Novos Horizontes
- Frango King
- Eggs for Africa
- Mozambique Fresh Eggs

## Education

- Ebenezer
- Rapale International
- Foundations for Farming
- Church Planting
- Special Needs Children
- One Egg A Day

# Community Transportation



What's wrong with this picture?



What's odd with  
this picture?





Thank  
You