

Organic/Biological Agriculture

- 16 October – declared the new direction for the MoA.....
- Bio Ag – Natural Science!
- Biological Agriculture focus on the biological community that lives in healthy soil and give natural abilities to grow vegetation

Mindset!

- **Paradigm Shift!**

Your **Mindset**

governs

your

DIRECTION

THE
OLD
PARADIGM

Everyday the farmer arises out of bed in the morning and goes to war, wondering what he is going to HAVE to kill today and by what means.

This is the “**WARRING MENTALITY**” or paradigm of the “**green revolution**”

It spreads death and destruction everywhere in the wake of its path **including the ENVIRONMENT**

The New Paradigm...

- Aligning ourselves with **NATURE**
 - A farming system that enhances the environment thus, enhancing nutrition
 - Correcting **environmental and climate change** problems

About NUTRITION?

Our food TODAY is LESS
NUTRITIOUS
than before World War II

- **USDA** data shows up to 38% decline in nutrition:
 - Protein, Ca, vit C, P, Fe, riboflavin
 - ABC News March 1, 2006 by Megan Carpenter
 - Fe, Zn, Cu, Mn, Se
 - Average 63% decline 1941 – 2001
 - Huling, December 15, 2001

Mineral Depletion in Food 1940-1991

- Vegetables
 - Lost 76% of their Copper
 - Lost 49% of the Sodium
 - Lost 46% of their Calcium
 - Lost 27% of their Iron
 - Lost 24% of their Magnesium
 - Lost 16% of potassium
- Fruits
 - Lost 19% of their Copper
 - Lost 29% of their Sodium
 - Lost 16% of their Calcium
 - Lost 24% of their Iron
 - Lost 15% of their Magnesium
 - Lost 22% of potassium

•David Thomas, Analysis of **UK** *Composition of Foods 1940-1991. Nutrition and Health 2003, Col 17, pp.85-115* from *The Composition of Foods*, Ministry of Agriculture, Fisheries and Foods and the Royal Society of Chemistry

Measuring nutritional quality

Brix definition:

Using the plant sap to measure the sucrose levels in plant juices which correlates to all other nutrition.

Brix Chart: Tree Fruit

| Crop | Poor | Average | Good | Excellent |
|-------------|-------------|----------------|-------------|------------------|
| Melon | 8 | 12 | 14 | 16 |
| Avocado | 4 | 6 | 8 | 12 |
| Cabbage | 6 | 8 | 10 | 12 |
| Lettuce | 4 | 6 | 8 | 10 |
| GpFruit | 6 | 10 | 14 | 18 |
| Lemons | 4 | 6 | 8 | 12 |
| Mangoes | 4 | 6 | 10 | 14 |
| Oranges | 6 | 10 | 16 | 20 |
| Papaya | 6 | 10 | 18 | 22 |
| Tomato | 4 | 6 | 8 | 12 |

**ONLY Natural Science
Agriculture CAN INDUCE
THE HIGHEST NUTRITIONAL
BALANCE IN PLANTS**

Health professionals talk about nutrition, but
don't produce any...

Farmers produce nutrition, however they
don't talk about it...

...but talk about \$\$\$\$!

WE ALL need to know how nutrition is
produced!

A Simple Science

- **Photosynthesis**

Is **Carbon Dioxide**
plus **Water**
Plus **Sunlight**

= **Sugar**

- Sugar = ATP
- ATP in plant is used up in 2-3 minutes and is replaced by another new unit of ATP.
- ATP = Nutrition - such as the **Vitamins** & **Proteins**.
- The more sugar made the more the mineral uptake from the **soil**.
- **SOIL** IS THE STOMACH of the **PLANT!**

Outcome is what counts!

High Nutritional plant matter results in:

- no pest, disease or weeds to **KILL**
- yields consistently greater than **norm**
- premier taste, **shelf life**, shipping, storability
- **carbon sequestration**, environmental reclamation.
- humane, clean, profitable,
sustainable production

This also dissolves the common myth of Agriculture.

Agriculture should be
at the front line of
Health!

The Future and Challenges

FACTS!

- **FACT 1**

- **Pre-war farming** for every calorie of fossil fuel energy we put into the farm system – we get back two calories of food energy.
 - 1:2
- **The modern food** systems. It takes 10 calories of fossil fuel energy to provide one calorie of fast food or processed food.
 - 10:1
- **The Organic System**. It takes 7 calories of fossil fuel energy to provide one calorie of food energy
 - 7:1

- **FACT 2**

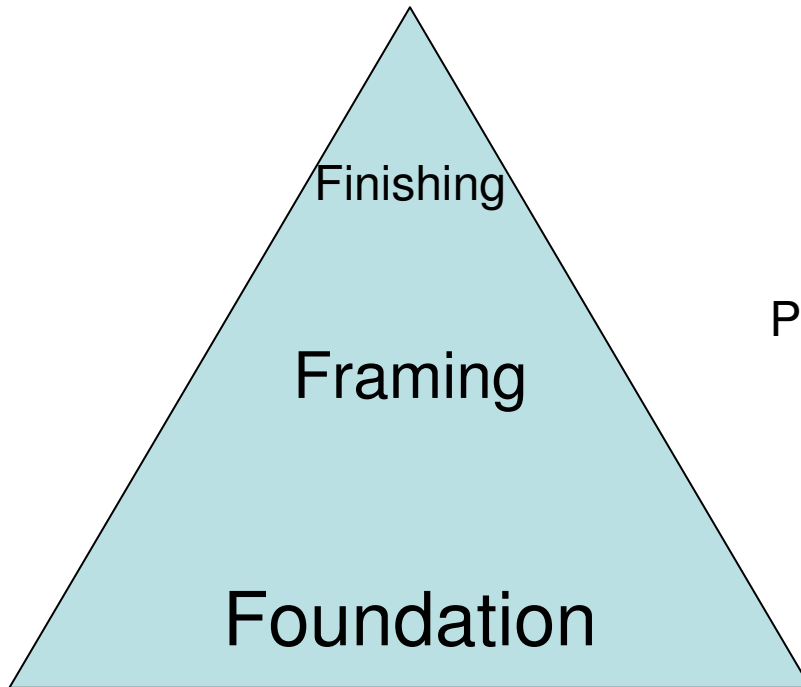
- Increasing the price of food is not the way to provide food security for us, or the world.
- However **the ten years prediction** for the cost of a barrel of oil is estimated \$350.00*
- What then, is the cost to agricultural production at this rate ??????

What we need is an
agriculture system that
squeezes out fossil fuel
dependants!

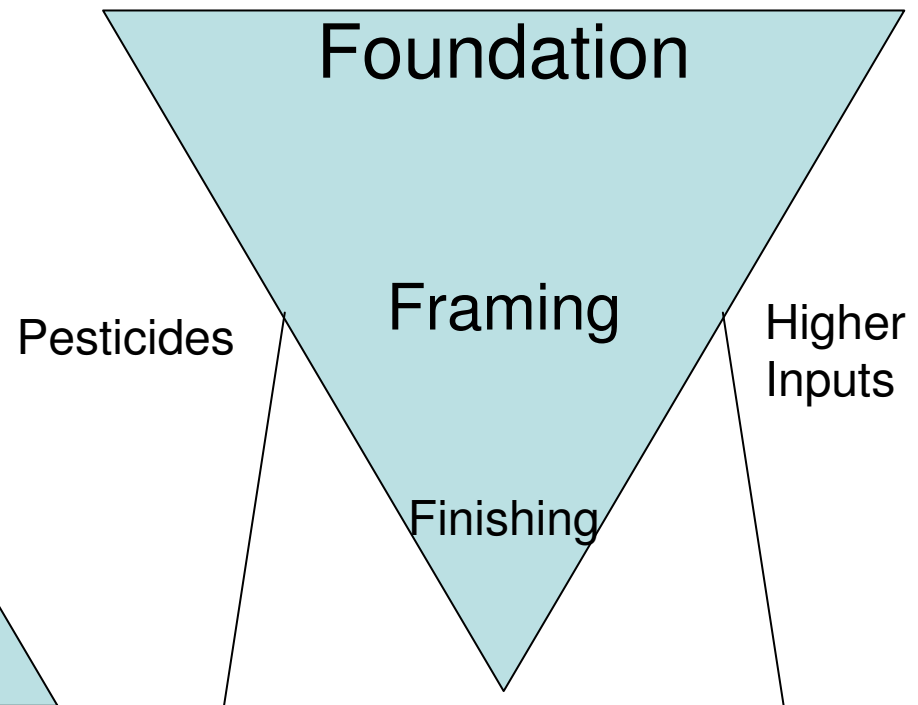
“Agricultural Sustainability is Food Security.”

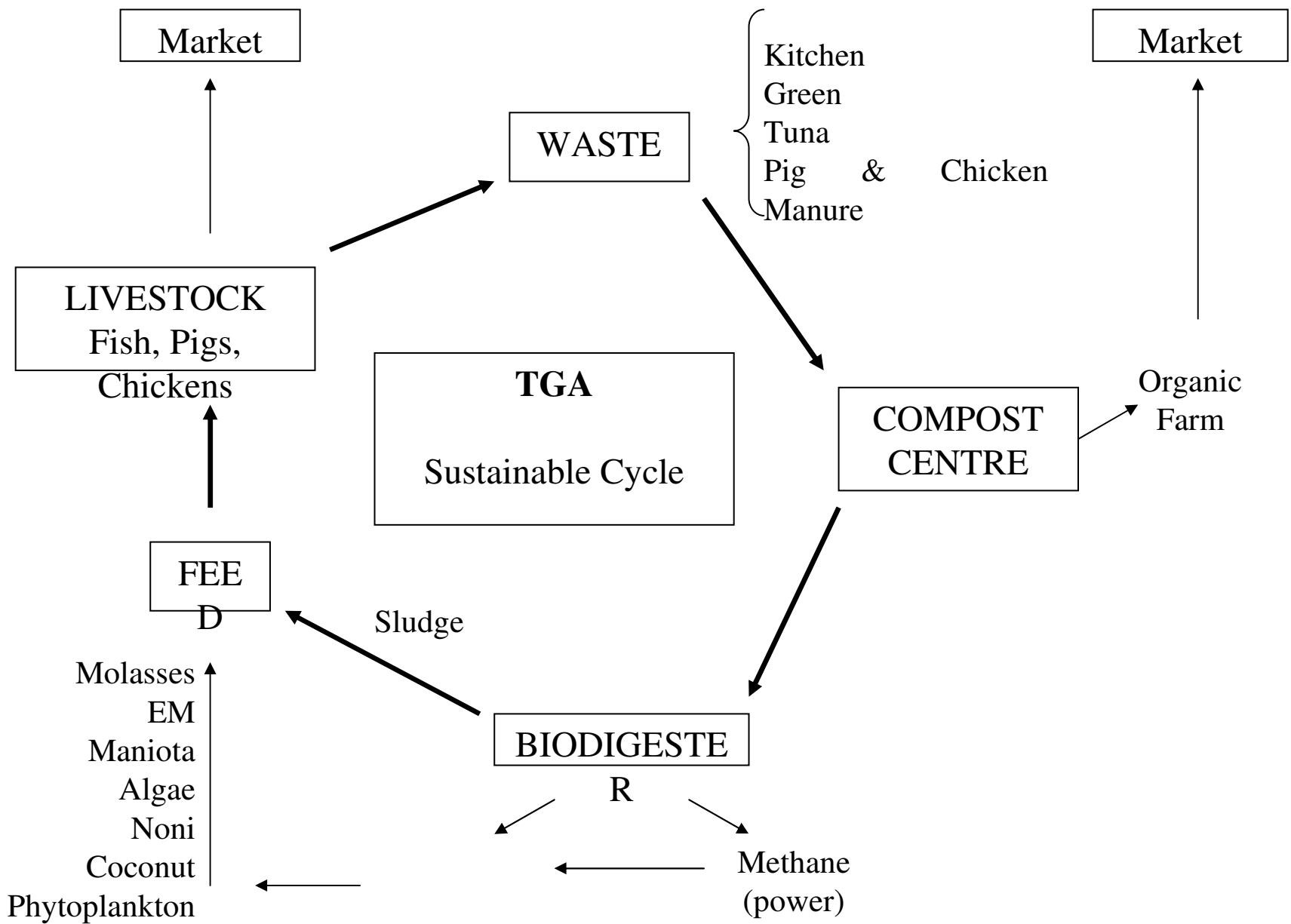
Bio Ag v. Conventional Ag

- Bio Agr



- Conventional Agr







PRACTICAL



ORGANIC/BIOLOGICAL PLANTING

