## **Nuffield Presentation: Catalyzing Transformation.**

First: Thank you for the invitation to speak at the Nuffield Contemporary Scholars Conference.

It is an honor to speak with so many distinguished panelists and talented future leaders, especially here at the World Food Prize Hall of Laureates.

Disclaimer: Not official USG position but drawn from experiences as an agricultural diplomat, consultant to big/small firms, founder of a public health NGO, and one who bounces back and forth between ag trade and development. Maybe someday I will pick a lane – but not yet.

I still start with a quick summary of Global Ag Megatrends and then go on to the past and future of ag development.

#### **World Agricultural Megatrends**

Major changes affecting world agriculture between now & 2030:

One: Globalized Supply Chain

<u>Two</u>: Rising Food Security Concerns

Three: Growing Global Middle Class

Four: Changing Rich Country Consumption

<u>Five</u>: Science Anxiety Six: The Energy Issue

Seven: Moving Beyond the WTO

Eight: Exclusion from Growth

#### One: Global Supply Chain

Shifting consumption and production

China will increase production but can't keep up

Concentration in Ukraine, Brazil, US, Europe & Africa

Increasing trade flows & murkier national origins

Concerns about safety & reliability of imports

Rules getting stricter under FSMA

How to balance security & openness (bioterrorism)

Concern for possibly vulnerable US allies Future 2030: More trade complexity & dependence on core exporters such as the United States, Ukraine, Brazil, EU & Russia

### **Two: Food Security Concerns**

Link of food & national security

Rising competition for resources such as land & water

Vulnerability of agriculture & food to threats (biodefense)

Could affect political stability & military priorities

More defensive moves in export & imports

Reducing price & supply volatility

Protecting local production against imports

Food export restrictions when prices are high

Market access a concern in export dependent countries

Import sanctions & trade wars

More need for sustainability

Pollution, soil erosion & biodiversity issues

Reducing waste in production & inputs

Future 2030: Attempts to secure resources & local production.

More use of safeguards, SPS & anti-dumping

Future 2030: Likely falling returns to scale because of

environmental constraints. How to reduce waste?

#### Three: Rising Global Middle Class

Increasing demand in developing countries

Middle class will increase by 104% by 2020 in poor & middle income countries versus 9% in rich countries Eating out & meat consumption to increase sharply In East Asia and Sub-Saharan Africa, per capita meat consumption by weight is projected to increase by 55% and 42% by 2030

Modernized distribution spreading

Cold chain & logistics to cut waste, reduce consumer prices & increase farm prices

More sales through modern retail formats

Future 2030: Continued strong increases in food demand could press resource limits & strain transport

# Four: Changing Rich Country Consumption

Demand for ag products has been flat

Move away from red meat

Consumption changing

Obesity affects 650 million

Local, organic & health food in rich countries

Nutrition, allergens & new concerns to arise (private standards)

WHO focus on food issues (IARC - red meat)

Increasing use of big data and traceability

These new concerns include:

Environmental (agriculture contributes 12–14% of greenhouse gas)

Human rights & child labor

Animal welfare, vegetarian & vegan

Religious issues - Halal

Aging & health issues

Future 2030: Food characteristics will become more important

#### **Five: Science Anxiety**

Loss of faith in regulators

BSE, Dioxin-chicken in Europe

Consumer questions about biotech

Resistance in Europe

Complicated in China

Africa caught in the middle

Unclear for some technologies (CRISPR)

Could affect support for research & development

Will it undermine emerging technologies?

Future 2030: Persistent science skepticism could undermine productivity & drive up prices

## Six: The Energy Issue

Energy demand is rising

Consumption projected to increase by 45% between 2006 & 2030

Already diverts 30% of US corn, oils & sugar

Put pressure on food & feed prices

Energy supplies are also rising

North American & other energy production

Return to early 20th century food/feed/fuel land use patterns

Renewables & next generation biofuels

Future 2030: Energy prices affected by demand & supply changes. Volatility will still be with us

#### **Seven: Beyond the WTO**

WTO is "stuck" and may unravel

Complexity of Doha talks with multiple actors, need for unanimity

Gridlock defining "sound science" (Codex)

Dispute Settlement often not effective (EU-US ag, Brazil Cotton)

Trade wars and national security exemptions to trade rules Countries moving to FTA and other bilateral agreements

More than 600 bilateral or regional trade agreements in place by 2010

Increasing FTAs could complicate sourcing rules of origin Most FTA agreements not likely WTO consistent

Future 2030: WTO marginalized by FTAs & other agreements

#### **Eight: Exclusion from Growth**

Poverty remains a global challenge

1.4 billion people live in poverty, especially small farmers Poverty increases vulnerability to weather, disease & price volatility

Problems can drive refugee flows & fuel political instability Development continues – but too slowly

Progress in China, India & elsewhere

Slowed by lack of shared vision between donors & private sector

Future 2030: Progress underway but many will still be poor

### What is to be done?

Development has a mixed record. For example, USAID shaped by Cold War, domestic priorities, trade flows, and changing foreign policy objectives:

1950s: Food for Peace PL-480 (1954). Surplus disposal – but started earlier.

1960s Cold War priorities such as Vietnam stabilization and development alongside the military in Vietnam. USAID provided key support to enable the Green Revolution.

1970s The 1973 Foreign Assistance Act refocused USAID on the critical basic needs of the poor, including food production, rural development, and nutrition.

1980s Move to a private sector investment.

1990s After the end of the USSR, USAID set up 24 new Missions to help countries make the transition from centrally-planned to market-based economies.

2000s September 11th 2001 prompted USAID to search for new ways through agriculture to expand opportunities, reach new markets, and raise rural incomes, including major efforts in Afghanistan and Iraq.

2010s Feed the Future, a whole-of-government initiative to reduce hunger and poverty in 19 focus countries through agriculture-led economic growth. Country Ownership; private sector partners; research and develops innovation; and resilience to complex risks

Now: Ag development has its fads and distractions – most recently Youth in Agriculture or local foodism. It's not necessarily bad, but these can distract from focusing on the most important challenges:

# The Fundamentals: Ending Poverty & Building Peace, Prosperity & Security through Food/Ag

One: Infrastructure

Roads, cold chain, energy, airports & ports

Two: Biodefense & Pests

Detection, containment & remediation

Three: Resource Management

Conserving soil, water & energy

Four: Agricultural Research

Increasing long-term returns to production

Five: Trade Policy

Ensuring farm incomes & food security

Six: Investing in People

Investing in capacity on/off-farm

Seven: Cut Food Waste

Reducing post-harvest losses

**Eight**: Nutrition Sensitivity

Investing in improved nutritional outcomes

Nine: Empowering Women

Supporting farmers and the next generation

Ten: Property Rights

Ensuring land title & tenure

Eleven: Markets!

Connecting farms to consumers

Twelve: Legal & Regulatory

Reducing government barriers to ag. Follow science always!!

At MCC, to achieve these things, we are transforming our Approach in these ways:

### **Catalyzing Transformation**

Collaborate with the Private Sector
Blended Finance for Projects
Blended Finance for Innovation

Think beyond the farm
Agriculture is a system from inputs to retail

Invest in public goods
Improved policy & regulation
Improved human & physical capacity (cold)
Improve SPS/vet systems

Invest in people

Nutrition sensitive systems

Training & capacity building

Factor in resource opportunities & constraints Water, soil, sunlight, temperature & disease

Understand the overall business environment Corruption, public finance & ease of doing business

## **Example: MCC Morocco.**

MCC and Morocco signed a five-year, \$697.5 million compact in August 2007 that invested in five project areas based on Morocco's own national growth strategy.

Olive tree product (worked). Tripled farm incomes in 5 years by moving away from wheat. Drew people back to the farm.

Olive oil processing (didn't). The cooperatives didn't have a market so plants are losing money.

Progress is possible but difficult

We face many daunting challenges but have a unique opportunity:

We can be the first generation in human history to end mass poverty.

Every one of you has the opportunity to create that future.

The rest is up to you.

15-20 minutes