The Vision and Future of the WORLD FOOD CENTER

California State Board of Food and Agriculture
May 6, 2014
Overview

• The challenge

• Our vision

• Looking ahead
Challenges of the 21st Century

Source: Food and Agriculture Organization of the United Nations
Challenges of Agriculture in the 21st Century

- To feed/nourish another 2+ billion people
- In a world that is richer and more urban
- On the land area now used + ~10%, with less predictable available water
- Increase food production 70%: grain production by 43%, and meat production by 75%
- Made more difficult by
  - Competing demands for bioenergy/biomaterials
  - Negative impacts of climate change, water security
The Vision

The World Food Center will connect visionary research and teaching with innovators, philanthropists, industry, and public and social leaders to drive economic, health, social, and environmental value in the world’s food system.
Right place, right time

- #1 in the world in agriculture sciences
- Changing demands and a changing climate
- Leveraging existing collaborations, creating new ones
- Unprecedented interest in solutions
Our goals

- Transformative knowledge and practical solutions
- Enhance research capacity
- Increase impact
Thematic Pillars

- A stable future for agriculture and consumers
- Healthier outcomes
- Realizing sustainability
- Leveraging knowledge: WFC as the ‘go-to’ source of info in food and agriculture
A stable future

- Understanding and adapting to climate change
- A diverse food basket
- Grow value through innovation
Temperature and Fruits and Nuts

- Warmer temperatures >> earlier bud break or flowering in the spring
- Warmer temperatures >> faster development of the crop
- Warmer temperatures >> increase pests and diseases*
- Warmer temperatures could impact chilling requirements for many plants; >> early development with damage from cold snaps

* 2014 priority topic/focus area
Preparing for Decadal Increases in Pests and Diseases

- Engage broad based team to provide input and make predictions
- Assess the landscape of policy and regulations
- Develop strategies for detection and disease prevention
- Initiate research and development on solutions
- Engage private sector and innovation to deliver solutions to producers
Healthier outcomes

- Nutrition
- Healthier choices
- Broad studies in biology/medicine
- Ensuring a safe food supply
Realizing sustainability

- Water and energy efficiency
- Managing land resources
- Reducing pesticides/chemicals
Leveraging knowledge

- Knowing and impacting food system
- UC Davis and the worlds
How do we get there?

- Convene experts
  set goals
- Catalyze new ideas
- Collaborate to achieve goals
- Develop funding mechanisms
Your input and advice are welcomed and anticipated

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Goals for 2014

- Establish governance procedures, engaging faculty, building partnerships, communications and marketing, etc
- Prioritizing and initiating programmatic activities: seminars, grant applications
- Building development strategies, initial visits, constructing networks
- Developing the ‘China Strategy’ for WFC
Impacts of Weather on US Corn Yields