

Enhancing Human Capacities: Training and Education

Speakers:

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Discussants:

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Lack of 'Capacity' Highlighted as a Need in Developing Economies

- Recognized as barrier to adaptation and adoption of biotechnologies in agriculture:
 - Needs assessment – selection of relevant technologies
 - Discovery of new knowledge
 - Applications to address needs
 - Developing and implementing relevant guidelines for release of new varieties
 - Communications with public about new technologies
 - Training producers, creating markets for new products



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Why this is the right time for a change in support of agriculture:

“The lessons of history led the Committee on a New Biology for the 21st Century to recommend that a(n) . . . initiative be put in place and charged with finding solutions to major societal needs: sustainable food production, protection of the environment, renewable energy, and improvement in human health. These challenges represent both the mechanism for accelerating the emergence of a New Biology and its first fruits.”





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Why this is the right time for a change in support of agriculture:

1. Climate Change
2. Bioenergy
3. Food safety
4. Nutrition and childhood obesity
5. International food security



Guiding Principals for Agriculture

Must be sustainable

- Defined by scientific principals, not by philosophies
- It is a goal; it is not a method of production
- “meets the needs of the present without compromising the ability of future generations to meet their own needs.” (UN, 1987)
- Economically successful and socially acceptable





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Who are the Next Generation of 'Agricultural Scientists' and Where Will they be Trained?

- Classical and advanced agricultural sciences
- Non-agricultural scientists (physicists, chemists, informaticians, nutritionists, biomedical scientists)
- Social, economic, policy making, communications





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Building Partnerships and Institutions to Feed the Agriculture Science Pipeline

- USG has a renewed commitment to global food security, including through building capacities
- Strengthening institutions in food and agriculture
- USDA and USAID to play central roles
- Opportunities for public and private sector to partner
- Call for other country commitments



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What types of training? What Institutions? What Countries?

- Regional centers of excellence to create 'hub-and-spoke' capabilities?
- Multiple centers-of-excellence with complementary strengths?
- Ubiquitous training of on-the-ground agriculturists