Building Human Resources and Institutional Capacity through CRSPs:

Achievements, Best Practices and Constraints

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Objectives of Presentation:

- Clarifying the goal – human and institutional capacity development
- Define the CRSP model for human and institutional capacity building
- Briefly review CRSP achievements in long-term training
- Consider challenges and innovations in the CRSP approach

Clarifying the goal: What is human and institutional capacity building?

- It involves developing two primary components in an organizational setting:

  - **Training and development**–developing human expertise (intellectual and human capital) for the purpose of improving performance at the individual level

  - **Organizational development**—unleashes human expertise for the purpose of improving performance at the group, process and system level (i.e., increasing organizational effectiveness, leadership and strategy)

Both the components are necessary to achieve the goal of human resources and institutional capacity building

CRSPs have the <u>potential</u> to achieve both these components

What is the CRSP model?

- **Three sets of players**:
  - 1. Investor → ▪ USAID
  - 2. Management Entity → ▪ A U.S. University
  - 3. Partners → ▪ U.S. universities
  - ▪ Host Country institutions
  - ▪ Other U.S. and int. org. (incl. NGO, pvt. sector)

- **Essential elements of the model design**
  - Goal—**Research** for development (R4D)
  - **Projects**—are the units of research planning and implementation, built on the principle of:
  - **Collaboration**—between U.S. university and host country institutions

  Collaborative research projects—are the building blocks and a defining feature of the CRSP model

How do CRSPs build human and institutional capacity?

CRSPs **mobilize capacities of U.S. universities** for Improved **human capacity** and **institutional resource development** of partner host country institutions through:

- Long-term degree training opportunities for host country institution's scientific/research staff
- Short-term training and experiential learning opportunities for technical and field staff
- Skills upgrading opportunities for the collaborating researchers
- Hands-on mentoring in project/contract/financial management for administrative staff
- Facility/infrastructure upgrading opportunities for host country institution (research equipment, vehicle, communication tools)
- Networking opportunities for host country researchers

The CRSP Approach:

Capacity building is not a stand-alone activity but **integrated** with research

The CRSPs empower host country institutions to address recognized needs and constraints through the creation of new technologies and knowledge while <u>concurrently</u> developing human and infrastructure resource capacity and competencies in strategic areas of agriculture and natural resource sciences, thus leading to institutional self-reliance and sustainability

Comparative Advantage of CRSPs in Human Resources and Institutional Capacity Development

The CRSP model allows

- Opportunity for a comprehensive approach to institutional capacity building encompassing both components--training and organizational development
- Collaboration with diverse partners (e.g., agribusiness, government institutions, IARCs, NGOs, foundations, etc.)
- Long-term institutional collaborative relationships

Long-term Degree Training Through CRSPs: Salient Features and Best Practices

- CRSPs invest around 20-25% of their funds in training young professionals from developing countries to build the capacity of host country NARS, agricultural universities and the private sector

- Degree training -- an integral part of research workplans, not an afterthought

- Trainees selected by host country collaborators based on their academic potential, the institution's desire to strengthen it's capacity in strategic areas of research, and the professional interests and goals of the candidate

- Trainees placed for graduate degrees at both U.S. universities and 'advanced institutions" in Africa, Asia and Latin America ('south-south' approach)

Long-term Degree Training Through CRSPs: Salient Features and Best Practices (cont'd)

- Post graduate mentorship, networking and financial support – As one element of an institutional capacity building program, CRSPs seek to support recent graduates upon return to their home institution so that they are able to establish a viable research program
- High return rate to home institution and continued involvement in field of study

Advantage of CRSPs in Long-term Degree Training

- Access to the academic programs of world class U.S. and advanced regional universities
- Under the tutelage of the major professor (a CRSP PI), the trainee has the opportunity to be directly involved in an internationally recognized cutting edge research program
- Integration of academic, research and outreach in degree training programs (synergies, 'land-grant' mission)
- Focus on finding solutions to private and public sector problems in host country (i.e., thesis research focus on a problem or constraint of importance to the agriculture sector in the home country)

Advantage of CRSPs in Long-term Degree Training (cont'd)

- Economies in the cost to USAID for the graduate degree training (due to cost-share and leveraging of resources)
- Long-term collaborative relationships beyond degree training

CRSP Achievements in Long-term Degree Training

Total Across all CRSPs
(Rough estimate)

- Total Degrees (BS, MSc and PhD) awarded (1978-2010) **3550**

- Total post-graduate degrees awarded (1978-2010) **3086**

- Total number of degrees supported (1978-2010) **3900**

- Total ongoing support for degree training (current) **350**

Source: Data gathered by the author from the CRSP Management Offices and the CRSP Digest Project

Average number of CRSP-supported trainees completing their degree programs per five-year period, 1980-10
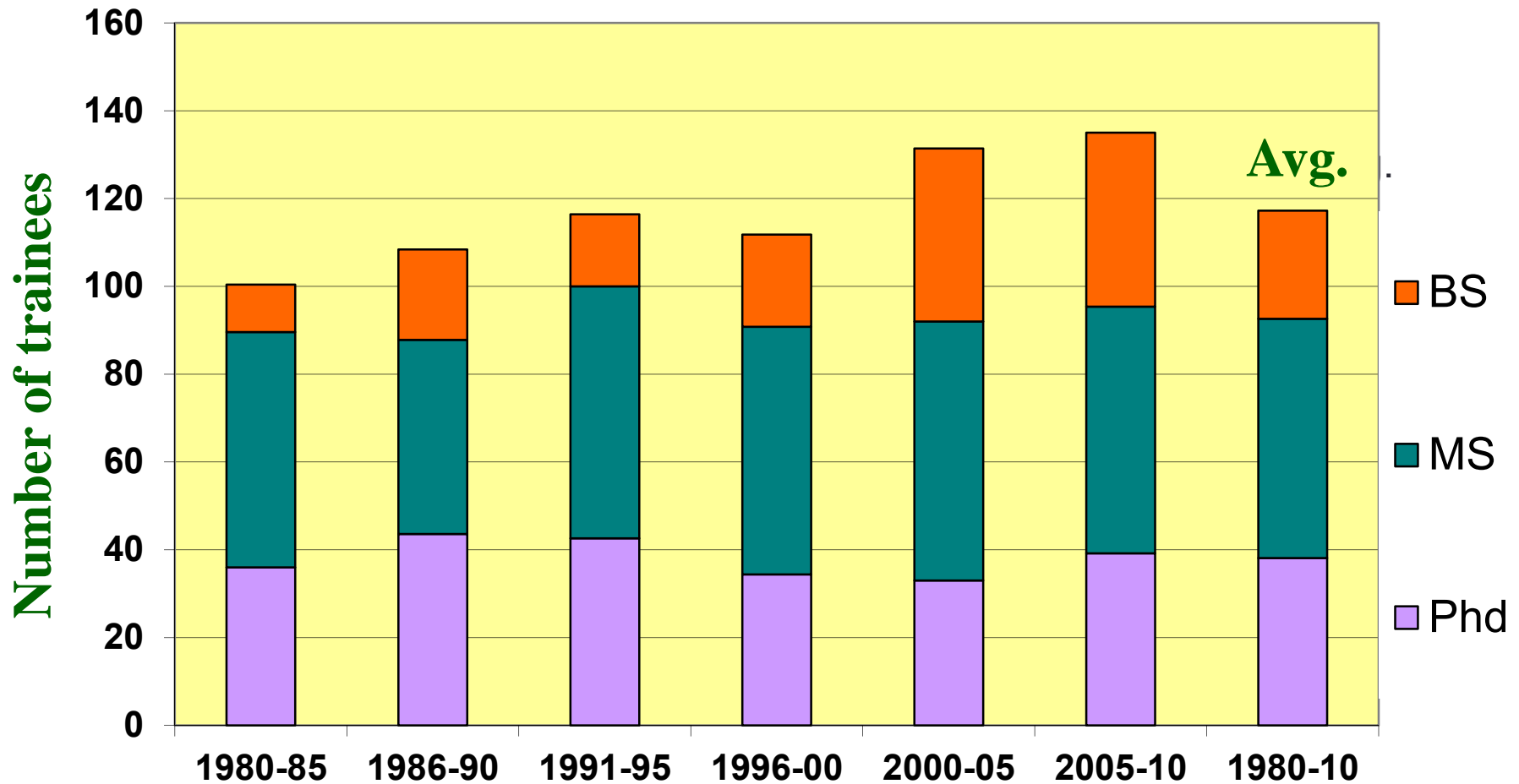
Average over 30 years: 117 degrees awarded per year (93 post-graduate degrees and 25 undergraduate degrees)

Case study of the Bean/Cowpea CRSP
(Main findings of the study by Jamora, N. 2007)

Total number of survey respondents = 76

Relevancy and learning impact:

- 83% reported CRSP thesis research as highly relevant to their current work/job responsibilities
- Ability to "design/conduct/analyze scientific research" was the most important knowledge, skill and attitude (KSA) acquired

Return Rate:

- 86% of Host Country trainees returned to a developing country after graduation
- 79% of HC trainees returned immediately to home institution

Post Training Collaboration:

- 40% continued collaboration with U.S. professor

Examples of Successes in Capacity Building through CRSPs

- Angola: Building IIA's capacity in bean breeding research (where none existed) through degree training of two research staff

- Kenya, Thailand, Mexico: CRSP trainees assuming leadership positions in fish farming (Deans, managers, high level advisory role, successful entrepreneurs)

- South Africa: Partnership with private sector in training farmers and producer organizations in horticultural marketing

- Peanut industry incubator model: Links host country institution with local industry; serves as a platform for training, workshops and resources to solve local industry problems and launch new products

Challenges in the CRSP Model

1. Keeping the **focus on institutional capacity building** (i.e., need assessment of HC institution, trainee selection, organization development) – **Simply training students from developing countries ≠ institutional capacity building**

2. Being **relevant** so as to contribute to the enhancement of sustainable capacity of developing country institutions and addressing Strategic Objectives of USAID Missions (matching the opportunity with the need)

3. Providing **innovative** educational experiences in long-term degree training (internships, exposure to private sector linkages)

Challenges in the CRSP Model (cont'd)

4. Tradeoff between the **changing nature of CRSP research projects** (short-term, competitive grants) vs. long-term needs of institutional capacity building

5. Preparation of a new generation of **"global leaders"** for private/public sector professions and meeting the challenges of agricultural development in a rapidly changing environment (changing food demand structures, increasing resource constraints, enhancing food and nutrition security, climate change, gender issues)

Specific Challenges in U.S. Based Capacity Building Approaches

1. Keeping educational programs of U.S. universities **competitive** on both—academic and cost basis

2. Consideration of the **academic needs** of both domestic and international graduate students (i.e., global knowledge, attitudes and skill sets, knowledge of emerging issues, etc.) in degree program development.

3. English **language proficiency** (limits accessibility for non-English speaking host countries or increases the cost)

4. Stringency in the **visa process** (e.g., TraiNet requirements)

Specific Challenges in U.S. Based Capacity Building Approaches (cont'd)

5. Reforming graduate programs in the agricultural sciences and **being flexible on program requirements** without compromising academic quality and scholarship
   - Admissions requirements (GRE?)
   - Residency requirements (trainees away from home country too long)
   - Course requirements
   - Type of scholarly activity
   - Thesis defense requirements

Innovations in Graduate Training: Can CRSPs incorporate more widely some of these elements?

1. **New models for graduate degree programs (e.g., UILTCB)**
   - Joint or dual institutional degree programs
   - Sandwich programs
   - Distance education programs
   - "Designer" graduate programs for target populations

2. **Value Addition to Host Country Graduate Programs**
   - Research opportunities for host country students in U.S. university laboratories
   - Internships in U.S. agribusinesses
   - Participation in U.S. university outreach programs (Land-Grant Model)
   - U.S. university faculty instruction of courses at HC universities

THANKS

Discussion welcome…