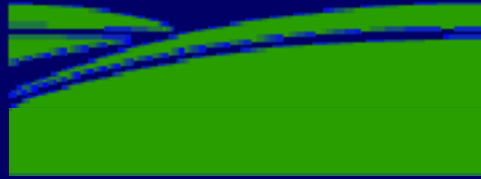


USDA



Enhancing Agricultural Research Through Partnerships

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ARS is the
in-house science
research arm
of USDA





ARS MISSION

Conduct research to:

- Ensure high quality, safe food and other products;
- Assess the nutritional needs of Americans
- Sustain a competitive agricultural economy
- Enhance the natural resource base and the environment
- Provide economic opportunities to rural citizens and society as a whole.



ARS Research Priorities

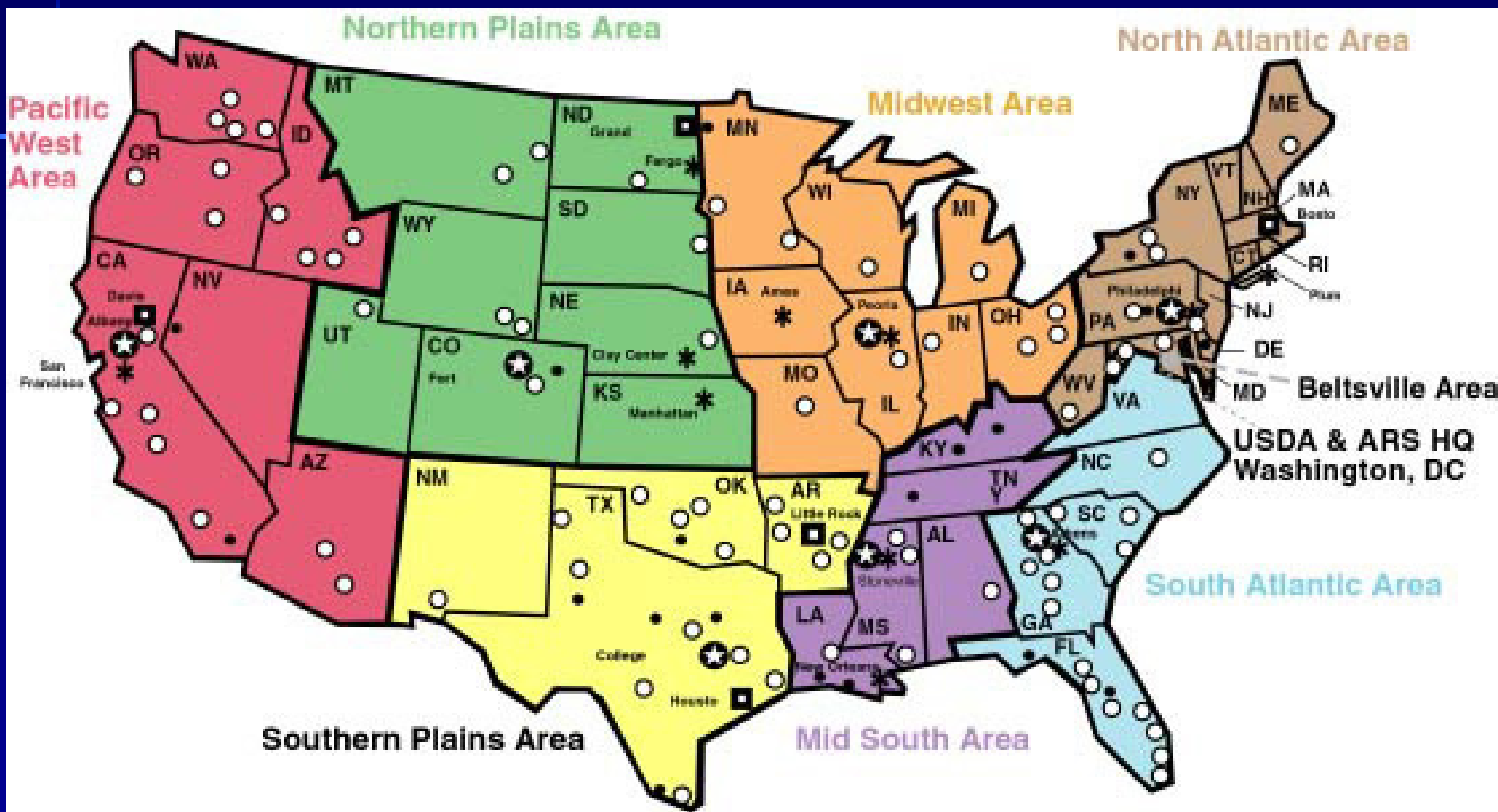
- Emerging Diseases and Invasive Species
- Homeland Security
- Biotechnology & Genomics
- Genetic Resources
- Biobased Products & Bioenergy
- Human Nutrition, Obesity
- Food Safety
- Natural Resources
- Nursery Crops, Floriculture, Aquaculture
- Electronic Information Dissemination
- Systems Integration



ARS Profile

- 2,500+ scientists and post docs
- 6,500 + other employees
- 100+ laboratories
- \$1.1 billion annual budget
- Partnerships with universities and industry
- International collaborations
- In-house science research arm of USDA
- Farm-to-table research scope
- Information and technology transfer
- Administration and stakeholder priority setting process
- National Programs
- 1,200+ projects

ARS Locations



- ⊙ Area
- * Research Centers
- Human Nutrition Centers
- Research Locations
- Research Worksites





ARS Partners In Research

- USDA
- Other Government Agencies
- State Universities
- Private Organizations
- International Organizations
 - U.N. Food and Agriculture Organization
 - World Bank
 - Consultative Group of International Agricultural Research
 - Tropical Ag Research & Higher Ed Center
 - U.S./Israel BARD



Cooperative Research and Development Agreement (CRADA) program

- The primary tool linking government and industry researchers
- Authorized under the Federal Technology Transfer Act of 1986
- Allows federal labs and businesses to form partnerships that help move new technologies to the marketplace
- ARS and companies work together to conduct research consistent with the agency's mission
- A CRADA allows the company the first right to negotiate a license to inventions emerging under the agreement.
- Cooperative research helps foster American businesses and enhances global and domestic competitiveness
- ARS has seven-geographically based Technology Transfer Coordinators who negotiate CRADA agreements





Material Transfer Agreements

- Used when ARS wants to provide material to someone outside of ARS, but maintain control and avoid public disclosure.
- Used to bring in material to ARS from outside parties for research purposes
- States specifically what the material is, what it can be used for, restricts giving it to a third party without permission, and prohibits commercial use

Confidentiality Agreements



- Used by ARS to share certain confidential information with a company to determine mutual interest to develop CRADA and/or patent license
- To ensure that a company will not disclose or use the confidential information for any other purposes than determining mutual interest
- In most cases, a confidentiality agreement can be entered into by the ARS scientist and the respective company official
- Confidentiality Agreements between ARS and the private sector remains in effect for two years

Memorandums of Understanding

- Broad agreements that require a mutual interest in objectives by both parties
- Do not require mutual contributions of personal or financial resources by either party
- Essentially an agreement to coordinate activities and outline mutually acceptable goals and procedures, leading to mutual decisions
- Transfer of resources (money, people etc.) is NOT done with an MOU

Trust Fund and Reimbursable Cooperative Agreements

- Both allow companies to directly support an ARS project or program
- Trust Fund Cooperative Agreement
 - involves cooperative research between ARS and another party where ARS is paid in advance to conduct research
 - May also require the private sector partner to share in the cost of a research project conducted by ARS
 - Can also be used to allow private sector partners the use of ARS laboratory facilities, which in some cases may require a formal lease



Trust Fund Cooperative Agreement

- The relationship is with an individual or for-profit organization
- ARS will hire a post-doc or temporary/term employee(s) or purchase major equipment or supplies necessary to conduct the research work.
- Under these circumstances, ARS requires all funds up front to pay salary costs before making a commitment to hire personnel or prior to incurring costs for purchasing equipment or supplies.
- ARS requires payment in advance for work to be performed. An annual advance payment schedule should be included in the agreement.





Reimbursable Cooperative Agreements

- A Reimbursable Cooperative Agreement is similar to a Trust Fund in arrears
- The difference, however, requires the private sector partner to pay ARS
- Representatives from the private sector partner and ARS should be actively engaged in the cooperative effort and mutually contribute resources to the research effort
- Mutual interest in the objectives should also be specifically stated

When Are Reimbursable Cooperative Agreements Used?

- ARS has an ongoing, long-term relationship with the cooperator, such as a specific State or non-profit organization.
- The working relationship provides a good idea that the organization is reliable and support will be forthcoming.





ARS International Research

- Office of International Research Programs (OIRP)
- ARS Overseas Laboratories:
 - Montpellier, France
 - Brisbane, Australia
 - Buenos Aires, Argentina
 - Panama City, Panama
 - Beijing, China
- Bilateral Research (e.g., S. Korea, Israel, Mexico, Brazil, South Africa, Japan, India, Europe, Canada, China, Australia)
- Cooperate with International Research Centers
- International Conferences and Meetings



How Do We Meet Our Mission?

Through National Programs

- A National Program is a set of research projects directed toward **common goals** to solve agricultural problems of high **National priority**.
- National programs have 110-130 projects
- About 22 different national programs
- National Programs are outcome driven, e.g., "A safer food supply"





ARS National Programs

Natural Resources & Sustainable Agricultural Systems (~20%)

- Water Quality & Management
- Soil Resource Management
- Air Quality
- Global Change
- Rangeland, Pasture & Forages
- Manure & Byproduct Utilization
- Integrated Agricultural Systems
- Bioenergy and Energy Alternatives

Crop Production & Protection (~35%)

- Plant Genetic Resources, Genomics, and Genetic Improvement
- Plant Biological & Molecular Processes
- Plant Diseases
- Crop Protection & Quarantine
- Crop Production
- Methyl Bromide Alternatives

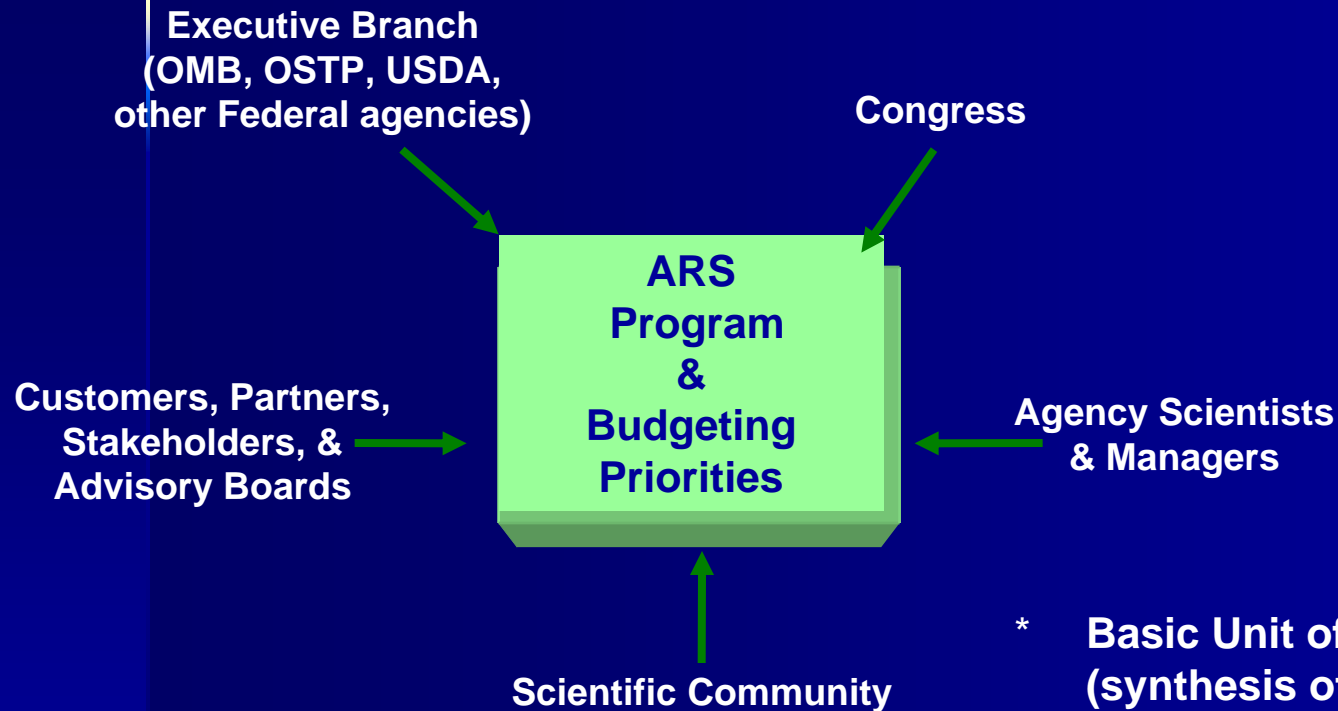
Animal Production & Protection (~15%)

- Food Animal Production
- Animal Health
- Arthropod Pests of Animals and Humans
- Aquaculture

Nutrition, Food Safety & Quality (~30%)

- Human Nutrition
- Food Safety
- New Uses, Quality & Marketability of Plant & Animal Products

Sources of Input to ARS Research Program Planning and Priority Setting Process*



* Basic Unit of relevance planning (synthesis of inputs to determine priorities) is a National Program each of which is made up of multiple research projects that contribute in a coordinated and complementary way to achievement of 5-year objectives

Information & Technology Transfer

- Scientific publications, conferences, workshops, field days
- Public germplasm releases
- National Agricultural Library - Departmental resource for agricultural and related information.
- Office of Technology Transfer - CRADAs, patents, and licensing with industry and other partners.
- Information Staff - ARS public affairs, Ag Research Magazine, news releases, exhibits, web page.





Budget Issues

- Administration's USDA/ARS FY09 budget proposes a total of \$146 million adjustment
 - 7.5% reductions and 5.5% redirections
- Proposes an increase of \$3.25 million for Agricultural Genomics, germplasm, and Collections
 - from redirection of existing research projects
- Senate already "marked-up" the Administration's FY09 ARS budget and restored many of the reductions proposed
- House not yet completed its "mark-up" of the ARS budget
- FY09 budget currently continuing resolution authorizing spending at the FY08 level until early March 2009
- An "omnibus spending bill" will be introduced in January that would fund USDA for the remainder of FY09



Thank You!