

GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

Country report : United States of America

James P. Dobrowolski USA IRG Rep



Presentation to IRG Annual Meeting
24-25 June 2021

Specific contributions to IRG

Here, list any membership or leadership contributions of your country to IRG and IRG networks (and other groups if related to IRG activities)

- U.S. Government Introductory Workshop: Belmont Forum Climate, Environment and Health II Collaborative Research Action Wednesday, June 30 1–2:30 PM ET. The Belmont Forum is a group of science-funding institutions and partners from around the world that work together to develop and fund Collaborative Research Actions (CRA) for global environmental change issues.
- The National Alliance for Water Innovation (NAWI) led by the U.S. Department of Energy (USDOE) was awarded a five-year, \$100-million Energy-Water Desal to address water security issues in the U.S. The Hub will focus on early-stage R&D for energy-efficient and cost-competitive desal technologies and for treating nontraditional water sources for various end uses. NAWI is a research alliance with three DOE labs and 19 founding university and 10 industry partners. NAWI's goal is to advance a portfolio of novel technologies that will secure a circular water economy in which 90% of nontraditional water sources – such as seawater, brackish water, and produced waters – can be cost-competitive with existing water sources within 10 years.

Projects, initiatives and contributions to IRG's topics

Here, list the projects and initiatives linked to IRG topics (soil carbon sequestration, farm to regional scale integration, circular food systems, GHG inventories and NDCs,) : monitoring, reporting, modelling, existing or future projects, contribution to initiatives, research program, partnership, ... at different scales (field, farm, national, regional, global).

- The U.S. Department of Agriculture's National Institute of Food and Agriculture (NIFA) will invest at least \$21.7 million in several key programs to help agricultural producers manage the impacts of climate change on their lands and production. NIFA awarded \$6.3 million for 14 Soil Health grants and \$5.4 million for seven Signals in the Soil grants through its Agriculture and Food Research Initiative (AFRI). NIFA also is investing at least \$10 million this year in a new AFRI program area priority called, "Extension, Education, and USDA Climate Hub Partnerships," to train the next generation of agriculturalists and foresters to incorporate climate change research into their management practices.
- Certain Uncertainty: Next Generation Water Planning for Deep Uncertainty (1500 CET, World Water Week) - As attention turns towards implementation of climate commitments such as Nationally Determined Contributions, countries are in need of practical guidance on how to address climate risks and other uncertainties in water.

Opportunities, future actions and funding

Here, list the opportunities and future actions already identified for your country (soil carbon sequestration, farm to regional scale integration, circular food systems, GHG inventories and NDCs,) at different scale (field, farm, provincial/state, national, regional, global)

Funded this last year by USDA National Institute of Food and Agriculture:

- Pollinator Health: Research and Application Where is pollination in peril? Evaluating climate risks to wild and managed bees and pollination services across the U.S. USDA AFRI Foundational and Applied Sciences, Education and Workforce Development, K. McCluney, Bowling Green State University, \$491,00
- Modeling and Integrated Management of Southern Blight, an Emerging Threat in the Cornucopia of the United States. M.U. McCaghey, M., U. California at Davis. AFRI Foundational and Applied Sciences Plant Science Sub-priority, \$165,000.
- Professional Development for Agricultural Literacy: Culturally Responsive Forestry Curriculum Development for Native-serving Schools Under Changing Climate. The proposed program will provide immersive professional development opportunities for K-12 teachers in Native-serving schools to develop culturally responsive curriculum units in the food, agricultural, natural resources, and human (FANH) sciences. AFRI Foundational and Applied Sciences Critical Agriculture Research and Extension (CARE), Y. Km, Northern Arizona University, \$300,000.

Opportunities, future actions and funding

Funded this last year by USDA Agricultural Research Service:

- Development of Ecological Strategies for Invasive Plant Management and Rehabilitation of Western Rangelands. The Great Basin covers approximately 54 million hectares of the western U.S. with ranching, mining, and recreation as the primary economic activities. Invasive annual grasses and expanding native conifer populations have significantly altered ecosystems on over 20% of the Great Basin. Changes in plant type and cover, together with climate variability, drought, and land conversion have resulted in dramatic reductions in available forage and wildlife habitat, while increasing the frequency and intensity of wildfires. Rector B G; Newingham B A; Weltz M A; Snyder K A of the Agricultural Research Service, Reno, NV.
- The USDA Climate Hubs Supporting Natural and Working Lands Resilience by Co-Developing and Communicating Research-Informed Agro-Climate Practices. USDA California Climate Hub program will enable climate-informed decision-making through science-based, region-specific syntheses, information products, decision support tools and technologies for agricultural, forestry and natural resource managers. Ostoja S M; Bradford S A, Agricultural Research Service, Berkeley, CA.

Opportunities, future actions and funding

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Do we have any possible funding from USDA or other U.S. government agencies for projects or initiatives in this field?

Funding for USDA is provided by the U.S Congress each year for a wide variety of programs across the U.S. Government. Most funding supports domestically focused program. Internationally directed funding by the Department of State through the U.S. Agency for International Development (USAID) and the USDA Foreign Agricultural Service (USFAS) provide international assistance as directed by the U.S. Congress.



Thanks For Watching!
james.dobrowolski@usda.gov