



Capacity Sharing for Development (CapSha)

Update on Research Engagement, the development of CapSha, and the Breeders Academy

Purpose

This document provides an update on actions undertaken, and upcoming plans for the CGIAR Capacity Sharing for Development (CapSha) function, which is part of the Partnerships & Advocacy Global Group (P&A), under the Regions & Partnerships (R&P) Division. It builds on and complements, "Appendix B: Update on Capacity sharing for development" (pg. 8-10), shared during System Council 18 (SC-18), as part of Agenda Item 12, "Regions and Partnerships. Developing and Deepening our Engagement".

The CapSha function is being created as a vehicle for CGIAR to significantly improve its engagement with partners in the Global South, particularly by embracing a new approach to capacity development at the individual, institutional and system-level. This new model of engagement is based on mutual learning, and the co-development, sharing and exchange of evidence, innovations, and technologies with partners, versus the traditional unidirectional transfer of knowledge and skills. CapSha (originally called capacity development) is one of the critical impact pathways identified by CGIAR to scale research and innovation, and to accelerate global progress towards the Sustainable Development Goals.

This update focuses on three tracks of ongoing work, namely (1) research engagement with NARIS¹ partners; (2) the structuring of the CapSha function; and (3) the development of the CapSha Breeders Academy, all carried out in close coordination with targeted CGIAR Research Initiatives, Science Groups, and several CGIAR Centers.

Action Requested

System Council members are invited to support the design of CapSha based on their own experiences, and consider the function in their future investment decisions to maximize the value of engagement with partners in the Global South.

Document category: Working document of the System Council. There is no restriction on the circulation of this document

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¹ NARIS are constituted by National Agricultural Research and Extension Services (NARES), research centers, academia, civil society organizations, and the private sector.

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Background

- 1. As reported in the aforementioned documents (i.e. Appendix B, SC-18 Agenda Item 12), the mission of CapSha is "to facilitate demand-driven capacity sharing for development that empowers NARIS partners in Global South and CGIAR to co-develop and scale evidence-based solutions for food, land, and water systems transformation, sharing the risks and rewards."
- 2. CapSha plays a coordinating function across CGIAR, working collaboratively with other departments, units, and CGIAR Research Initiatives and Centers to deliver on:
 - I. <u>Research, scaling, and policy engagement</u>: Joint and/or aligned research, scaling, and policy engagement with NARIS partners.
 - II. <u>Education and Training</u>: Research-driven education and training resources for students and practitioners.
 - III. <u>South-South and Triangular Cooperation</u>: Sharing of knowledge, best practices, technologies, and innovations among Global South countries, and in partnership with CGIAR and countries from the north.
- 3. It is important to note that CapSha will not supplant existing or planned capacity development/sharing efforts conducted by CGIAR Centers or Research Initiatives. Instead, it aims to (1) bring together the leaders of these programs into a Community of Practice where opportunities for collaboration can be openly explored; (2) create a space where different models for CapSha are examined; lessons garnered, systematized, and shared; and standards for CapSha activities collectively defined, including with partners; (3) provide a System-wide entry point to partners for CapSha activities and opportunities offered throughout the organization; and (4) develop new CapSha opportunities where these are not covered by Center or Research Initiative efforts.
- 4. The Bill & Melinda Gates Foundation (BMGF) has granted \$4.75M to CGIAR CapSha for 2023-2024 to (1) develop a proof-of-concept of joint research, scaling and policy engagement with NARIS partners, working closely with select CGIAR Research Initiatives (\$3.5M); and (2) construct the CapSha function (\$1.25M)
- 5. The German Agency for International Cooperation (GIZ) has also expressed interest to invest in the creation of a CapSha Breeders Academy, building off a concept originally developed by CIMMYT, IITA, and the leadership of the Genetic Innovation Science Group, and complemented by the CapSha Task Force (described in Appendix B, SC-18 Agenda Item 12).

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Research Engagement with NARIS Partners

- 6. This work component aims primarily to improve the engagement between NARIS partners and CGIAR, by funding NARIS research, scaling and policy activities that align to CGIAR Research Initiative impact outcomes, and in which they share responsibilities, risks, benefits, and rewards.
- 7. This work component is not about deploying another research endeavor with partners, but rather about using research collaborations to develop functional and healthy modalities of engagement that enhance the capacities of partners, that improve interactions with CGIAR, and contribute to partners' efforts to meet national development goals.
- 8. As reported previously, an internal scoping exercise carried out with the Science Areas, resulted in the selection of the Research Initiatives and countries where CapSha Research Engagement will be prototyped, namely Excellence in Agronomy in Rwanda and Ethiopia, and the GI Research Initiatives, as a whole, in Senegal.
- 9. Three missions have been undertaken by the CapSha Task force to Ethiopia, Rwanda and Senegal between August and September 2023 to work with the NARIS partners and representatives from the selected Research Initiatives in co-defining research projects that the NARIS partners will lead. Advanced concept notes have been prepared by the partners in Ethiopia and Rwanda, and a preliminary ideas are being discussed with partners in Senegal. The following are the ideas under consideration and construction:

Action Area	Research Initiative	Research Topic/Idea/Question	Proposed Countries	Proposed NARIS Partners
Resilient Agri-Food Systems	Excellence in Agronomy	Transforming Soil Fertility and Fertilizer Management of Ethiopian Agriculture: Towards Decision Support Tools (DST)- based Integrated Nutrient Management and Digital Agro- Advisory Services for Improved Productivity of major Crops and Resilience to the Changing Climate. • What are the application rates of yield-limiting nutrients for optimum economic yields of major cereal crops for variable	Ethiopia	Ethiopian Institute of Agricultural Research (EIAR)

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Resilient Agri-Food Systems		 seasons and agro-ecologies in Ethiopia? What are the climate-smart integrated soil fertility and crop management practices, and their tradeoffs for maximizing productivity, nutrient use efficiency and environmental sustainability for major cropping systems? Integrated fertilizer and lime management for enhancing crop productivity and resilience to climate change in Rwanda. What are the fertilizer (macro and micro nutrients) and lime rates to optimize productivity of priority crops in different agroecological zones of Rwanda? What are the integrated (climate-smart) agricultural practices in crop management for increased productivity and resilience to climate change, their tradeoffs and economic return? 	Rwanda	Rwanda Agriculture and Animal Resource Development Board (RAB)
Genetic Innovation	All	Sorghum, pearl millet or groundnut breeding through Senegal's National Agricultural Research Institution (NARI), that has a long and successful history based on past collaboration with ICRISAT and CIRAD.	Senegal	Institut Sénégalais de Recherches Agricoles (ISRA)

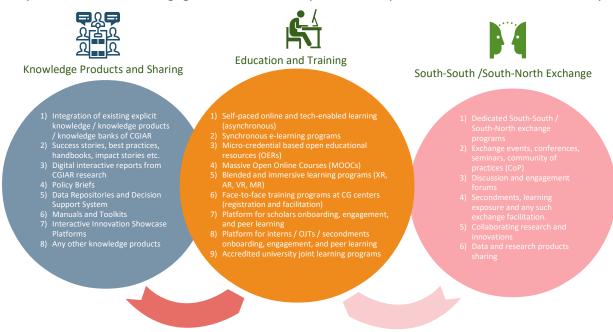
10. During October and November 2023, CGIAR will sign formal partnership agreements with EIAR, RAB and ISRA, and work with the CGIAR Research Initiatives in defining the mechanisms to deploy, monitor, document, learn from, and improve engagement modalities with NARIS partners.

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The Development of the CapSha Function

- 11. The CapSha Task Force has commissioned a study, led by the Institute for Development Strategy (Dr. Markus Palenberg), to generate key insights that will guide the development of the CapSha function and ensure that it is fit-for-purpose. This study includes a review of capacity development within CGIAR (stock take), and an analysis of the current external environment (benchmark). Both CGIAR staff and external partners have been interviewed and surveyed for this study, and a final report is expected in October 2023.
- 12. The CapSha Task Force has also advanced in the design of an Integrated Online Learning and Knowledge Sharing Platform for Food, Land and Water research and innovation systems. This platform is envisioned to be comprised of three core components: (1) Education and Training; (2) Knowledge Products and Sharing; and (3) South-South/South-North Exchange (see graph below).
- 13. This platform aims to bring together different sets of stakeholders such as researchers, policymakers, technology experts, extension agents, educators, students, private sector, civil society organizations, other value chain and relevant actors to enhance collaboration, learning, and the sharing of knowledge. It will comprise "evergreen" materials, as well as dedicated spaces for engagement to enhance capacities of partners and CGIAR.

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14. PhD students and post-doctoral fellows are of strategic importance to CGIAR. In addition to yielding important intellectual contributions, they are key to meeting institutional capacity development objectives, and "restocking" the research communities of partners and CGIAR. Discussions on how to create a robust doctoral and post-doctoral program for CGIAR are ongoing, particularly in the context of the Research Initiatives, which run on three-year business cycles, while most PhD programs take longer, thus requiring longer-term funding. Two options are under consideration: (1) interested universities create a fund in which CGIAR can invest the full costs of four years (or more) of education; or (2) CGIAR creates a fund/earmark to support PhD students as part of the Research Initiative portfolio that goes beyond the three-year business cycle. The CapSha Task Force will continue to facilitate discussions about these and other potential options as part of the development of the CapSha strategy.

The CapSha Breeders Academy

- 15. CIMMYT, IITA and the Genetic Innovation Science Group have brought considerable thought leadership into the design of a CapSha Breeders Academy, that not only seeks to produce the next generation of scientific leaders in the field, but also enhance the interactions between NARIS partners and CGIAR. The CapSha Breeders Academy addresses the need to develop enhanced and collective capacity of talent for sustaining NARIS-CGIAR breeding in future. It is envisioned as a one-year training program, from which successful candidates will then move into breeding-focused (and breeding-associated) roles in NARIS-CGIAR networks.
- 16. Although broadly consisting of traditional capacity development activities (e.g. formal and embedded training, secondments) it links to the wider objectives of CapSha, specifically in creating more equitable relationships for future research engagement

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17. The CapSha Task Force will continue to facilitate the co-designing process with CGIAR Centers, Research Initiatives and partners to ensure a function that delivers key benefits, namely: (1) standardized breeding methods training, including use of cross-CGIAR/NARES breeding improvement metrics; (2) optimized cost and time allocation related to recruitment and retention of trained breeders; (3) promotion of bottom-up cross-pollination of ideas between programs that builds greater flexibility in breeding mindsets based on enriched understanding of CGIAR-NARS breeding portfolio; and (4) cohort development, including specific soft skills development and embedded mentoring and career advancement.