

The GNC: Uniting agricultural research to tackle global challenges

Interview with Prof. Dietrich Darr

Agricultural research is under growing pressure to address climate change, food insecurity, and biodiversity loss. In Europe, challenges like soil degradation and prolonged droughts highlight the urgent need for sustainable, resilient farming systems. However, research efforts remain fragmented, with limited cross-border collaboration.

The Global National Agricultural Research Systems (NARS) Consortium (GNC) aims to change that. In this conversation, Professor Dietrich Darr of Weihenstephan-Triesdorf University of Applied Sciences, and Chair of the European Forum for Agricultural Research (EFARD), discusses how the GNC can strengthen agricultural research and innovation in Europe and beyond.

Q: What is the GNC, and what makes it unique?

The GNC brings together national agricultural research institutions across continents to give them a stronger voice in shaping global research and policy. For the first time, many NARS in the Global South are coming together with shared priorities.

Historically, these institutions were often sidelined by donor-driven agendas. The GNC helps shift this power dynamic, allowing countries to define their own research focus. It leverages local scientific expertise to improve the relevance and impact of development policies.

Q: Why is the GNC important now?

The GNC gained momentum with the revival of the Global Forum on Agricultural Research and Innovation (GFAiR), creating an opportunity to mobilize collaboration at a time of rising protectionism and shrinking international cooperation.

As geopolitical tensions challenge traditional partnerships, the GNC offers a neutral space for global collaboration, particularly around pressing issues like climate change and biodiversity.

Q: How has the role of agricultural research evolved?

Agricultural research today goes far beyond yields. It addresses nutrition, food safety, climate resilience, and sustainability. It's increasingly interdisciplinary, integrating insights from water, health, rural development, and market systems.

There's also a stronger emphasis on innovation – turning research into practical tools and technologies that benefit farmers and society at large.

Q: What are Europe's key agricultural challenges?

Europe faces intensifying climate pressures, especially in southern regions. This demands innovations in irrigation, breeding of drought-tolerant crops, and biotechnology. Decoupling productivity from carbon emissions is another top priority.

The rapid shift toward Agriculture 4.0 and 5.0 – driven by digital technologies – offers opportunities but also raises issues around data access, ownership, and equity, especially for smallholders.

These challenges require robust research and coordinated solutions. That's where the GNC can play a crucial role.

Q: How can the GNC support Europe in tackling these issues?

The GNC enables Europe to learn from the Global South, where countries are already managing climate-related challenges like drought and salinization. Instead of starting from scratch, European researchers can adapt proven solutions to local contexts.

It's a two-way exchange. Europe brings expertise and resources that can benefit partners in the South. The GNC helps streamline access to specialized knowledge and fosters more efficient, impactful collaboration.

Q: What are the barriers to operationalizing the GNC in Europe?

There are structural and cultural barriers. National research agendas often reflect domestic priorities, making alignment across countries difficult. Language and coordination challenges further complicate cooperation.

Many institutions also need to better understand how global collaboration can benefit their work. Building a shared identity within the GNC will be critical.

To address this, advocates are raising awareness of the GNC's goals, promoting shared interests like climate adaptation, and identifying key entry points through leading research institutions.

Q: What impact do you expect the GNC to have?

The GNC has the potential to drive real progress on the Sustainable Development Goals by encouraging more relevant, efficient, and equitable research. It will facilitate the transfer of tested innovations from the Global South to Europe, speeding up adaptation to emerging challenges.

By preventing duplication and encouraging knowledge-sharing, it will make research investments more impactful. It also expands networks and opens access to global expertise.

Ultimately, the GNC can help transform agricultural systems through inclusive, cross-border collaboration – at a time when that's needed more than ever.