



Capacity development

The CGIAR Capacity Development Framework provides a comprehensive structure for systematically addressing capacity development along the impact pathways. RICE will adopt the 10 steps of this framework and address capacity from the farmer and village level to partner research and development organizations, scaling partners, and policymakers. Beside formal capacity development activities, there will be a strong emphasis on 'learning by doing' with action and reflection.

1. Capacity needs assessment and intervention strategy design

Needs assessment will be conducted across institutions and organizations along the impact pathway, taking account of both individual as well as institutional needs. Lessons from GRiSP have shown that needs assessments and an intervention strategy require expert facilitation of innovation processes in order to successfully develop and disseminate new technology. In turn, successful facilitation requires interdisciplinary and gender competences, as well as business development skills. CoA1.3 of FP1 supports the development of skilled facilitators, who will be embedded in RICE institutions and partner R&D organizations. These facilitators will also be trained in gender-sensitive approaches so that they will be able to recognize gender gaps in access to improved technologies and technical knowledge, and to identify gender-disaggregated constraints and opportunities.

2. Design and delivery of innovative learning materials and approaches

CoA1.3 will collaborate with all FPs to gather, consolidate, and translate information gained and lessons and principles learned into knowledge that can be disseminated and brought to scale. Demand-driven technology material will be produced in targeted formats and media, in print (fliers and billboards), smartphones and tablets, radio, and videos to reach large numbers of beneficiaries. RICE innovations (products, approaches, and services) will be described and catalogued using standard protocols, and stored and made easily accessible in rice information systems. Young professionals from agricultural colleges will specifically be trained on access to and use of new knowledge through online rice information systems (e.g., Ricepedia, Rice Knowledge Bank, Rice-eHub, AfricaRice wiki), smartphones, and tablet technology. Training materials will combine innovative approaches such as distant learning and ICT technologies, with practical methods that give participants experience in the field. Learning approaches and materials include resource materials for trainers/extension workers in conducting training activities, guidelines on how to create extension materials (familiarize trainees with the factors needed to craft extension materials that will definitely motivate change in targeted audiences), guidelines on how to conduct farmer-participatory approaches (encourage farmers to undertake 'learn by doing' experiments themselves), and guidelines on how to increase research impact (learn how to create a positive and lasting impact). Innovations will include low-cost models for developing field-level rural advisory services that are practical

skilled-based. Digital Green may provide opportunities for partnering with their new initiative for a virtual agricultural institute and 'AccessAgriculture' for quality video products that support knowledge dissemination at the field level. Where there is a need to develop localized and context-specific course curricula or innovative capacity development approaches, CoA1.3 will engage in partnership to support the capacity of local institutions to take charge, for example in vocational and enterprise capacity development for youth (with 30% women) (also contributing to step 6 institutional strengthening).

3. Development of CRPs' and centers' capacity to partner

Accelerating the adoption of rice products and services resulting from research depends on full and equitable partnership among key stakeholders to ensure that products and services that are developed are inclusive and demand-driven. CoAs 1.3 and 1.4 will establish, maintain, and expand partnerships with major scaling partners from the public and private sector to scale-out RICE technologies and services to reach millions of beneficiaries beyond the action sites. Scaling partners include national extension services; national research, technology, agricultural, and rural development ministries; the private sector (e.g., seed industry and machinery providers); international development and donor agencies (e.g., international development banks). Other partnerships include those for innovations such as the International Center for development-oriented Research in Agriculture (ICRA), DigitalGreen and NGOs such as Catholic Relief Services, Rangpur Dinajpur Rehabilitation Services, and the Bangladesh Rural Advancement Committee that have inclusive programs for marginal farmers, women, and youth. CoA1.3 will also develop the capacity of grassroot stakeholders to interface with

policymakers and decision makers to foster a favorable policy environment that will support scaling-out of partnership practices and promising technology innovations. Regular communication with enabling and scaling partners will lead to buy-in and commitment and investments in scaling-out of new technologies and services beyond the action sites. Discussions may reveal problems related to coordination and collective action among partners; FP1 will facilitate institutional learning to overcome such problems. The capacity for partnering will be the positive outcome of the partnering experience itself, and thereby become embedded in the culture of the partner institutions.

4. Developing future research leaders through fellowships

The development of the next generation of science leaders is an essential ongoing and long-term investment to ensure strong national research capacity. CoA1.3 will coordinate the allocation and use of MSc and PhD scholarships among all FPs. Besides increasing disciplinary expertise, coaching and mentoring are important for developing science leaders. The focus of such efforts will be young scientists, at least 30% of whom will be women. CoA1.3 will also address the need to refresh mid-career scientists through exchanges and opportunities for collaborative research.

Through FPs 1, 2, and 3, vocational training across the value chain and the rice-based farming system will also be carried out through local institutions and organizations. To address the limited purchasing and bargaining power of women and youth, training will be provided in entrepreneurship and business management to develop leaders or potential leaders. These trained women and youth leaders will be able to make informed decisions on investments needed to realize business opportunities. The involvement of such trained young men and

women as village extension agents may fill a very critical knowledge gap in the extension services.

5. Gender-sensitive approaches throughout capacity development

Together with FPs 2 and 3, CoA1.2 and 1.3 will develop capacity enhancement programs to address gender concerns in the whole R&D process (as identified under capacity needs assessment and intervention design); to train women on all aspects of production, processing, and farm management; and to train grassroots women farmers and actors in the rice value chain. Concrete outputs will include training material, people trained on women and youth aspects in value-chain development and products, and advisory delivery systems that work for women and youth. Future farming, owning a small enterprise as part of the rice-based value chain, or becoming a skilled employee are livelihood options for women and youth. RICE will experiment with new cost-effective models that develop the required competencies and are structured in a way that will attract women and youth.

6. Institutional strengthening

In line with recommendation 8 from the IEA evaluation of GRiSP “In order to achieve sustainable outcomes from investments in institutional and human capacity development, GRiSP should support participating countries to develop long-term capacity building strategies and tailor GRiSP capacity building support to the priorities of those strategies” (IEA report, p xvii), RICE will strengthen institutional capacity development of research and scaling partners from the public and private sector and civil society organizations. This may involve technical competency, multipartner and village-level facilitation skills, ability to use new ICT extension tools,

scaling-up appropriate mechanization, and business development and negotiation skills.

RICE will strengthen the capacity for collective and institutional innovation by its R&D partners, particularly through FPs 1–3. Particular attention will be paid to problems of lack of coordination; fostering effective inter-institutional collaboration, bargaining, and negotiation power of women and youth; and the inclusion of marginal farmers and small enterprises along the value chain. In FP 5 and CoA 1.4 of FP 1, RICE will specifically strengthen the capacity of national institutes on modernizing rice breeding programs, increasing genetic gain, and accelerating the delivery of new rice varieties.

7. Monitoring and evaluation of capacity development

The RICE framework for results-based management and for monitoring, evaluation, and learning is presented in Annex 6. This framework proposes a set of milestones and indicators to track progress toward RICE’s outcomes and IDOs. One of the high-level key indicators of RICE is the ‘number of [functional] innovation platforms, learning alliances, and other multistakeholder platforms’ (see Annex 2 for definitions) which contribute to the sub-IDOs ‘increased capacity for innovation in partner development organizations and in poor and vulnerable communities’ and ‘increased capacity of beneficiaries to adopt research outputs’. Other outcomes, sub-IDOs, and milestones are listed in the PIM tables in the RICE proposal. Supporting these high-level key indicators will be more detailed indicators that RICE proposes to track, selected from the proposed list by the CGIAR capacity development community of practice (see summary listing in the capacity development table of section 1.0.10 of the RICE proposal). As these indicators have not yet been tested in practice, RICE will evaluate their usefulness and make adaptations

based on experience in the coming years of implementation.

8. Organizational development

CoA1.3 will contribute to the organizational development of scaling partners from the public and private sector and civil society organizations. Particular emphasis will be placed on organizational engagements in multistakeholder platforms for collective impact. Here, public research institutions; businesses in input and output markets; civil society organizations for farmers, women and youth; extension services; and microfinance agencies will collectively strive toward common goals. Capacity will be developed for creating and implementing action plans—building on the strength of member institutions—for scaling-out promising technologies from RICE. In addition, capacity development will involve technical competency, multipartner, and village-level facilitation skills, use of new ICT extension tools, scaling of appropriate mechanization and business development, negotiation skills, and the formulation of agreed metrics for impact and accountability. Particular emphasis will be given to establishing effective rural advisory services, that is, linkages between knowledge seekers (in particular women) and knowledge resources. This is of particular importance in Africa, where farmers have limited access to relevant knowledge and the capacity of national extension services and NGOs is inadequate.

9. Research on capacity development

RICE will undertake research on effective capacity development models. It will also learn and gain insights from experts in capacity development research through participation in networks such as the CGIAR capacity development community of practice, as a basis for addressing future needs in this field.

10. Capacity to innovate

One outcome of most of the above steps of capacity development will be the capacity to innovate. Specifically CoA1.3 will nurture an environment of local actors concerned with innovation for scaling-out technologies and concerned services. The establishment and/or strengthening of existing innovation platforms is a key activity of CoA1.3 and is also supported by FP2,3 and 5. It will strengthen the capacity of the RICE research and development partners (operating in FPs 2, 3, and 5) for innovation that builds on local knowledge and iterative cycles of collective planning, action, and learning. The capacity of rice value-chain actors (producers, millers, input suppliers, etc.) at the RICE action sites to generate innovations will be strengthened.