



# COMPETITIVE RESEARCH GRANTS: LEARNING FROM KRISHI GOBESHONA FOUNDATION, BANGLADESH

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The creation of Competitive Research Grants (CRGs) is globally recognized as an institutional innovation for improving the effectiveness of agricultural research. Unlike block grants for research, CRGs are expected to bring in many top-quality proposals from a wide range of actors, selecting the best out of them and thus getting more value for money.

The Government of Bangladesh established the Krishi Gobeshona Foundation (KGF) in 2007 as an agency to administer and promote competitive research grants in agriculture. Beyond this, KGF was also tasked with building partnerships and strengthening research capacities. Over the last 15 years, KGF has funded 10 basic research proposals and 260 Competitive Grant Proposals (CGPs). It has also supported several short-term projects/studies. KGF, over the years, has also promoted pluralism in agricultural research and multi-institutional research functioning. Along the way, it also made several changes in its governance and rules related to grant making as well as management processes.

In this Good Practice Note, Dr Wais Kabir, reflects on the performance of KGF over the years, its success and challenges and he draws several lessons for all those who are trying to initiate and promote CRGs in agriculture.

With technical support of

Cover photo: KGF participation in the 'Food Fair'on World Food Day. All photos are credited @ Krishi Gobeshona Foundation

## CONTEXT

Under Bangladesh's agricultural research system there are 13 public research institutions that administratively come under five ministries. Bangladesh Agricultural Research Council (BARC) coordinates agricultural research, and it has a Governing Board chaired by the Minister of Agriculture and co-chaired by the Minister of Livestock and Fisheries with representation by varied stakeholders, that include Secretaries of relevant ministries, Members of Parliament, representatives of agricultural universities, heads of research institutes, representatives of private sector, extension departments and NGOs. Among the many institutions, some are autonomous in nature while others are government departments. The autonomous institutes are governed by their individual legal instruments. This makes the National Agricultural Research System (NARS) more complex when responding to national production constraints.

In Bangladesh, the private sector has strengthened its research contributions in agriculture and have contributed immensely to the country's seed industry. They have been very successfully dominating the maize and vegetables seed sector. NGOs are also actively involved in extension service delivery, adaptive research, and rural credit operations. Farmers are also mobilized as groups to promote technology uptake and engage in collective marketing.

While pluralism exists in agricultural research, resource allocation for research has been erratic. Lack of sustainable research funding has been a major constraint for agricultural research in Bangladesh. Moreover, the country spends only 0.38 percent of its AgGDP on agricultural research ([Stads et al. 2019](#)). Even though financing for projects has

been enhanced recently it is insufficient. Human resources development has always been project linked, especially for higher studies abroad. Only 37 percent of researchers have qualified with a PhD in 2016 which is far below global and the regional standards. Bangladeshi researchers also must find their own ways to get an international education using their own funds as higher qualifications are essential for their career development.

## KRISHI GOBESHONA FOUNDATION

As research support within public research organizations is weak and there is very limited participation from the private sector, especially in public-private partnership mode, a new mode of research funding became apparent. Moreover, the erratic availability of funding and the long bureaucratic process to access these funds have also started hindering technology generation and dissemination. This issue was raised during the formulation of the World Bank-supported National Agricultural Technology Project (NATP) during 2005-06. It was agreed then to establish an independent foundation under the Companies Act, creating an endowment fund worth USD 50 million. Initial support to this foundation would be from the NATP project. The plan was to start funding of research projects after having a comfortable deposit through income generation. A separate body under the Society Act, Bangladesh Krishi Gobeshona Endowment Trust (BKGET) was created to manage the fund. This trust was to be chaired by the Secretary, Ministry of Agriculture, and represented by financial experts for investment of initial fund to maximize income. However, currently only bank fixed deposit interest is being used for supporting research and administrative costs.

Initial plan for the governance of the foundation was to have it led by an eminent person from outside the public sector (may not be in the service of the republic) and get eminent persons from the country who are engaged in agriculture (public, private, university, NGO and individual) onboard. Later, the governance of the foundation was to be shifted to the public sector. As a company, KGF is governed by a 15-member General Body (GB) and a seven-member Governing Body elected from among the GB.

The major objective of the foundation is to support agricultural research through a competitive grant mechanism and create an enabling environment for conducting research. All relevant organizations – public, private, NGOs and even individuals – can get funding with final approval of the Board of Directors. The Independent Technical Advisory Committee receives proposals under different categories (see Box 1) and

recommends funding. Size of the funding varies with the quality of research, ranging from one million to 100 million taka until 2020.

### Box 1: Categories of funding opportunities in KGF

Until 2021, the KGF program was organized under the following categories:

1. Competitive Grants program (CGP) - short to medium term
  - 1.1. Applied Research
  - 1.2. Basic Research
2. Commissioned Research program (CRP) - medium to long term
3. Capacity Enhancement program (CEP) - short to medium term
4. International Collaborative Program (ICP) - short to medium term
5. Technology piloting program (TPP) - short term



Experimental field of KGF in Sher-e-Bangla Agricultural University

## MAJOR OUTCOMES & IMPACTS

During 2018-19, KGF had sponsored about 200 projects, some of which have been successfully completed while some others are ongoing in partnership with NARS institutions, university professors, NGOs and with a few overseas universities and institutions. Until 2021, support mostly went to Bangladesh Agricultural Research Institute (BARI) and Bangladesh Agricultural University (BAU) as 33 percent of all projects were from these institutions. Other institutes received funds ranging from 2-8%. Private sector participation was minimal.

In 2019, KGF took up a novel initiative of 'Technology Commercialization' with a project entitled, 'BAU-BRO Chicken Conservation and Piloting Producer' with the major objective of branding live and dressed BAU-BRO chicken to increase its market share. A tripartite agreement was signed with BAU, the product developer, and KGF to invest in scaling

the technology and BAU to return the investment through commercialization.

Avoiding research duplication is the primary task of research coordination. Agricultural Research Management Information System (ARMIS) was thus created by KGF to serve as a database of research in the country since 1975. Until 2021, ARMIS has generated 28,000 research information entries which can be accessed by anybody interested from anywhere in the world with a simple click as a decision support tool to learn from past research. This noteworthy program also includes crop suitability assessment support based on a long-term database of bio-physical parameters until union level. This expert tool (khamari mobile app) helps in finding out not only crop suitability of a given plot but also soil nutrient requirements of a crop and its cropping pattern. To create an agricultural database, KGF attempted to establish a data center that could support policy briefs on agriculture from 2018 to



*Tripartite agreement signing ceremony for commercializing BAU-BRO chicken*



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দিন

ড. তপন কুমার দে  
সিনিয়র প্রোগ্রাম স্পেশালিস্ট, কেজিএফ

*KGF sponsored TV program for dissemination of technology to larger audience*

2021. It did produce some policy briefs on agriculture.

An impact assessment study carried out in 2018 by the Bureau of Socio-economic Research and Training (BSERT), BAU, indicated positive effects of the KGF-sponsored R&D projects on knowledge development, value addition, income increase, productivity enhancement and improvement of nutritional status of the beneficiaries.

KGF undertakes capacity enhancement programs through trainings, workshops, consultations for public and private research and development organizations. The focus of such programs is on updating the researchers with advanced scientific development (Intellectual property rights, advanced breeding tool, research methodology, climate change modelling, etc.), even bringing in experts

from abroad. In technology piloting, KGF in partnership with extension departments apply the research outputs in farmer fields.

Up to 2020 KGF established collaboration with the following national and international research organizations through Memorandums of Understanding (MoUs):

- Australian Center for International Agricultural Research (ACIAR), Australia;
- The Asia-Pacific Association of Agricultural Research Institutions (APAARI), Thailand;
- The International Centre for Integrated Mountain Development (ICIMOD), Nepal;
- Indian Society of Coastal Agricultural Research (ISCAR), Kolkata, India; and
- ICCCAD, International Centre for Climate Change and Development (ICCCAD), Dhaka.



Capacity development on 'IPR and technology commercialization in agriculture'

## LESSONS LEARNT

KGF continues to be an important institutional innovation that had been introduced for strengthening agricultural research in Bangladesh. However, there is scope for enhancing its contributions and these are discussed below:

- **Need for strengthening the capacities for project proposal development:** KGF has been receiving a large number of project proposals from various organizations. During screening a large number of these proposals are rejected due to lack of relevance and poor quality. So, there is a lot of scope for enhancing capacities in both project proposal development and project implementation. These gaps need to be addressed.
- **Strengthen capacities for policy research:** There is very little policy relevant research that can support policy makers to make evidence-based decision making. Also, little expertise exists within the agricultural research community to engage in policy relevant research and this needs further strengthening.
- **Support development of research management expertise:** KGF requires to identify priority areas for research funding based on overall policy and planning process, as well as to select relevant research proposals, engage in monitoring and evaluation of the projects it funds and support transfer of new knowledge generated to end users. KGF needs to internally strengthen this expertise for successful management of the research process.
- **Encourage more research on livestock and fisheries:** Bangladesh has meagre scientific manpower in livestock and fisheries research and therefore only a very few proposals are coming from these areas. There is a need to address this issue.
- **Encourage private sector participation:** While KGF does have an objective of encouraging participation of private sector and NGOs in competitive research grants, the involvement of private sector in agricultural research is poor. As the role of private sector in the agri-input sector is increasing, there is a lot of potential for strengthening research



*Consultation workshop on Hill Agriculture Development project*

in technology adaptation, supporting commercialization, agro-industrial linkage development and product development through KGF support.

## WAY FORWARD

A lot more could be done to enhance the quality of KGF's governance through a Board of Directors having eminent persons. Such a Board can play an important role in shaping the nature of agricultural research and create an enabling environment that can strengthen quality of the research process – right from developing good proposals, implementing projects and promoting uptake of new knowledge thus generated. The Board can also develop an accountable regulatory framework in a more balanced way. Implementation of such a framework in a participatory manner in consultation with broad stakeholders can help address several challenges faced by Bangladesh's agriculture.

KGF is functioning with the interest accrued from the endowment fund. With the lowering of bank interest rates, the annual budget of KGF currently may not accommodate the requirements for funding an adequate number of quality research projects, especially in the new area of sciences emerging globally. KGF needs to exploit new opportunities for generating additional funding from other sources such as Green Climate Funds and other development partners.

With the experience gained so far KGF may consider capacity development of research organizations in both public and private sectors and narrow the prevailing skill gap in undertaking upstream research. It could also invite globally reputed scientific professionals to provide hands-on training to the R&D system in the country. Considering the dearth of policy research, KGF could open a policy research support unit to guide policy makers in production, post-production, institutional management,

marketing, gender participation, food safety, farm profitability, mechanization, etc. It needs to widen its visibility among national and global audience for experience sharing. The collaboration with existing partners can be fully exploited with meaningful programs.

## REFERENCE

Stads, G.J., Rahman, M.M., Nin-Pratt, A. and Gao, L., 2019. Bangladesh (No. July 2019). ASTI country brief. International Food Policy Research Institute (IFPRI), International Food Policy Research Institute, Asia-Pacific Association of Agricultural Research Institutions (APAARI), and Bangladesh Agricultural Research Council (BARC).

**Authors note:** The views and opinions expressed in this article are based on the author's experiences with KGF until the year 2020.

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The Asia-Pacific Islands Rural Advisory Services Network (APIRAS) and the Asia-Pacific Association of Agricultural Research Institutions (APAARI), in close collaboration with the Office of Innovation at the Food and Agriculture Organization (FAO) of the United Nations, are committed to strengthening Agriculture Innovation Systems (AIS) in the Asia-Pacific region to transform agri-food systems.

There is a growing recognition on the importance of institutional innovations in promoting more efficient and productive collaboration among the various actors in AIS. The publication of this series of Good Practice Notes by APIRAS and APAARI is an attempt to document cases of institutional innovations that are currently transforming agri-food systems.

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