

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: PIDA65086

Project Name	National Agricultural Higher Education Project (P151072)
Region	SOUTH ASIA
Country	India
Sector(s)	Agricultural extension and research (50%), Tertiary education (30%), Agro-industry, marketing, and trade (10%), Public administration- Education (5%), Information technology (5%)
Theme(s)	Education for the knowledge economy (35%), Managing for development results (5%), Rural services and infrastructure (30%), Improving labor markets (20%), Rural policies and institutions (10%)
Lending Instrument	Investment Project Financing
Project ID	P151072
Borrower(s)	Republic of India
Implementing Agency	Indian Council of Agricultural Research
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	01-May-2016
Date PID Approved/Disclosed	01-May-2016
Estimated Date of Appraisal Completion	06-May-2016
Estimated Date of Board Approval	16-Jun-2016
Appraisal Review Decision (from Decision Note)	The Review did authorize the team to appraise and negotiate the proposed project.

I. Project Context

Country Context

India is a lower middle-income country with per-capita GDP of US\$ 1,582 (2014). GDP growth reached 7.3% in 2015, compared to a global average of 3.1%. High rates of investment and savings contributed to this growth, as did strong exports. Yet today some 263 million people in India (80% of whom live in rural areas) subsist on less than USD 1.90/day. India faces challenges in reducing extreme poverty and achieving shared prosperity. The Government of India (GoI) has emphasized increased agricultural productivity as fundamental to India's poverty reduction and growth strategy. Building relevant skills sets has been a persistent challenge across the economy. Educational institutions, particularly at the tertiary level, are critical to accelerate India's emergence in global markets, yet teaching is poorly linked with labor market demand, research and development, thereby producing graduates with limited problem-solving skills.

Sectoral and institutional Context

Agriculture in India employs 52% of the labor force and is the main source of livelihood for 80% of the rural poor, but contributes only 14% to GDP and 10% to total exports. Women constitute about 60% of the economically active population in agriculture and livestock. The Green Revolution in the late 1960s and 1970s, with investment in new seeds, production technologies, cultivation methods and irrigation practices, improved agricultural productivity and made India food-secure. Haryana and Punjab where the Green Revolution flourished are today among the higher income states in the country. However, agricultural productivity growth declined in the 1990s, rebounded in the 2000s, and today still remains low. Moreover, this growth has been largely price driven and heavily reliant on inputs rather than efficiency gains.

At current total factor productivity (TFP) growth, India's domestic agricultural output will meet 59% of the country's 2030 projected food demand (GAP Report 2014). The rising middle class demand for a more diverse diet, along with persistent malnutrition, increased water scarcity and climate change point to the urgency of achieving greater agricultural productivity. Agricultural higher education can be the engine for increasing agricultural productivity through better skilled technicians, innovative research and market-based extension linked to technologies and practices, all of which were common under the Land Grant model that India followed in establishing its Agricultural Universities (AUs).

The Indian Council of Agricultural Research (ICAR) carries the mandate for the coordination and quality assurance of agricultural higher education in India. The ICAR-AU System comprises 61 State-level AUs, five Research Institutes (known as Deemed Universities), four Central-level universities with agricultural faculty and three Central-level AUs. The once-impressive AUs established during India's Green Revolution have become less effective and less relevant in stimulating the needed transformative change in Indian agriculture. ICAR has taken the lead in analyzing the challenges facing agricultural higher education in India. This has led to an ambitious reform agenda for AUs, detailed in the 2013 Bhubaneswar Declaration, emphasizing: (a) transparent governance; (b) financial and academic autonomy; (c) adequate and consistent funding; (d) standards and accreditation; (e) public-private partnerships; (f) revamped teaching curricula and methodologies; and (g) international cooperation. Nonetheless, several challenges confront AUs in achieving these reforms, namely:

- Poor AU governance: Overall academic accountability is weak and not linked to either desired student learning outcomes or faculty performance.
- High AU faculty vacancy rates and pervasive academic inbreeding: Some 56% of AU faculty positions are currently vacant, with minimal recent recruitment, leading to heavy workloads, poor teaching performance and scarce time available for research or extension. 51% of AU faculty have earned all their degrees from the same university, only 17% of faculty recruits are new to the respective AU, and 46% of AU faculty have more than 15 years at the same institution. Limited contacts with national or international centers of excellence and weak linkages with industry, farms and the private sector have led to generalized academic stagnation, at a time when competitiveness requires more such interaction. There are few incentives in place to spur faculty productivity in teaching, research or extension.
- Disconnect between agricultural higher education and future employment: The private sector generates nearly one-half of agricultural employment opportunities in India, yet AU curricula remain focused on the shrinking opportunities in the public sector. More importantly, AU curricula lack a problem-solving orientation and offer little in terms of experiential learning. AUs

must strengthen job-driven programs, including entrepreneurship-focused courses and certificate programs, to build pathways for off-farm work and facilitate technology transfer from lab-to-land.

➤(€ AU capital development and financial management: Salaries comprise up to 90% of AUs' expenditures, funding is almost entirely sourced from the public sector and AU budgets have not kept pace with increasing student admissions. In contrast, a typical Land Grant university in the United States sources only about 20% of its annual budget from public funds and about 80% from its own revenue (e.g., fees, tuition, royalties). AUs must begin to raise their own resources through fee-based/market-oriented programs, sales of proprietary seed/planting material, consultancies and capital development initiatives. Assuring the quality and relevance of the AU academic product will be key to unlocking this potential revenue.

➤(€ Meeting globalization: Greater infusion of AU curricula in the frontier sciences (e.g., biotechnology, nanotechnology, precision and climate-resilient agriculture, information and communication technology), good agricultural trade practices, and market intelligence are critical to promote efficiency, awareness, equity, and competitiveness in agriculture as India strives to cement its role as a global player in agriculture.

➤(€ Forging agricultural service market development: Employment demand among agro-industry, as well as professional private and public agricultural service providers will require business and technical skills to meet the knowledge demanded by farmers, particularly women.

The Development Grant (ICAR's annual financial support program to AUs) is perhaps the most significant tool to stimulate and encourage progress in addressing these challenges. Almost all of AU capital expenditure comes from ICAR through its Development Grant. As such, the norms and standards which ICAR establishes in deploying its Development Grant to AUs can play a critical role in enhancing the quality of agricultural higher education across the ICAR-AU System. Starting in 2016, AU accreditation will be a factor in determining AU eligibility for the Development Grant. What is now needed is a refinement in how ICAR and the AUs engage with respect to the Development Grant: greater transparency, attention to quality outcomes, links to student and faculty performance, and objective and verifiable metrics need to be incorporated.

The proposed National Agriculture Higher Education Project (NAHEP) provides an opportunity for ICAR to construct a new way of implementing its Development Grant to AUs. ICAR, through NAHEP, would seek to revise and update its operational criteria that govern how AUs:

- (€ gain access to the Development Grant (i.e., accreditation);
- (€ deploy these financial resources (i.e., selectivity, outcome-based); and
- (€ monitor and evaluate the intended outcomes from its Development Grant (i.e., effectiveness).

The proposed project supports the World Bank Country Partnership Strategy (CPS) 2013-17 and addresses the three engagement areas of integration, transformation and inclusion. These engagement areas foresee increased agricultural productivity and also support quality improvements of higher education to create a more skilled workforce that continuously improves the productivity of key sectors, including agriculture. Furthermore, by working with AUs, particularly in low-income states, the proposed NAHEP supports the CPS strategy of improving their economic performance. The proposed project is also a multi-Global Practice collaboration (Agriculture and Education) and is expected to support activities and results directly related to cross-cutting strategic areas of climate change, jobs, gender and public-private partnerships.

The proposed NAHEP would contribute to the achievement of four United Nations Sustainable Development Goals, namely:

➤(€ Goal 4 ➤(Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. NAHEP would finance interventions that increase the supply of qualified technicians (through certificate programs at AUs) and teachers (through international cooperation for teacher training and faculty exchange).

➤(€ Goal 8 ➤(Promoting inclusive and sustainable economic growth, employment, and decent work for all. NAHEP would foster a stronger innovation culture by twinning participating AUs with other higher-performing centers of learning (both in India and internationally) and strengthening AU-private sector linkages to better orient student learning toward market-relevant skill sets.

➤(€ Goal 9 ➤(Building resilient infrastructure, promoting sustainable industrialization, and fostering innovation. The Institutional Development Plans (IDPs) which participating AUs would prepare and implement to access Development Grant funding, would create a unique opportunity to deepen the university's capacity to build partnerships for scientific excellence and expand both uptake and absorption of external research funds ➤(both of which will significantly impact student learning and faculty performance.

➤(€ Goal 13 ➤(Take urgent action to combat climate change and its impacts. The proposed NAHEP would specifically target AU curricula reform to internalize climate change and resilience in current and future course content and tie this with experiential learning for certificate, undergraduate (UG) and post-graduate (PG) students for practical career applications.

II. Proposed Development Objectives

The proposed NAHEP would support participating Agricultural Universities and ICAR in providing more relevant and higher quality education to agriculture university students.

III. Project Description

Component Name

Support to Agricultural Universities

Comments (optional)

Component 1 would finance investments by reform-ready Agricultural Universities through competitively selected and performance-based Institutional Development Plans (IDPs) that identify and prioritize key challenges faced by these universities, propose interventions that respond to them, and set time lines and indicators for measuring achievement. The component would also finance competitively selected multidisciplinary centers for advanced agricultural science and technology (CAASTs) that focus on critical and emerging agricultural topics (e.g., climate change and resilience; effective pedagogy and knowledge transfer; agro-industry). The Component would also support Innovation Grants to make agricultural universities reform ready for their participation in IDPs and CAASTs.

Component Name

Investments in Indian Council of Agricultural Research Leadership in Agricultural Higher Education

Comments (optional)

Component 2 would finance ICAR's internal reforms to enhance its effectiveness in: (a) coordinating, guiding and managing agricultural higher education across the ICAR-AU System; and (b) its interactions with AUs and key stakeholders nationwide through interventions that increase the quality and relevance of agricultural higher education. Activities would include: (a) technical

assistance to participating Agricultural Universities for developing and implementing IDPs and CAASTs; (b) partnerships between the Education Division/ ICAR and other globally recognized agricultural higher education institutions; and (c) digital information systems for data collection, analysis and dissemination to improve quality metrics in agricultural higher education.

Component Name

Project Management and Learning

Comments (optional)

Component 3 would support NAHEP project management, primarily through the Education Division/ ICAR, to administer, supervise, monitor and evaluate overall project implementation. The component would support: (a) an NAHEP Steering Committee that would provide strategic guidance to the Education Division/ ICAR throughout project implementation; (b) a Technical Committee to evaluate IDP, CAAST and Innovation Grant proposals; (c) a communication strategy to build awareness among AUs and other stakeholders regarding the objectives and activities of the proposed NAHEP; and (d) training and capacity-building for both ICAR and the AUs to achieve and sustain increased quality, relevance and effectiveness of agricultural higher education across the ICAR-AU System

IV. Financing (in USD Million)

Total Project Cost:	165.00	Total Bank Financing:	82.50
Financing Gap:	0.00		
For Loans/Credits/Others			Amount
BORROWER/RECIPIENT			82.50
International Development Association (IDA)			82.50
Total			165.00

V. Implementation

NAHEP would be implemented by the Education Division/ ICAR. An NAHEP Steering Committee ? headed by the Director General, ICAR and including representatives inter alia from agricultural universities (national and international), Ministry of Agriculture and Farmers Welfare, the private sector and any other institution in addition to or in substitution of the aforementioned as agreed with the Bank ? would provide strategic and policy guidance to the proposed project. A Project Implementation Unit (PIU), established within the Education Division/ ICAR and led by the Deputy Director General, Education, ICAR, would be responsible for the coordination and facilitation of overall project implementation. The PIU would include: (a) technical experts to oversee the subproject grants (i.e., IDPs, CAASTs and Innovation Grants) under Component 1; (b) change management expertise under Component 2; and (c) both newly contracted and seconded ICAR staff in the areas of project administration, financial management, procurement, monitoring, evaluation, management information systems (MIS), learning and capacity building, and social and environmental safeguards.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	x	
Natural Habitats OP/BP 4.04		x

Forests OP/BP 4.36		X
Pest Management OP 4.09	X	
Physical Cultural Resources OP/BP 4.11		X
Indigenous Peoples OP/BP 4.10	X	
Involuntary Resettlement OP/BP 4.12		X
Safety of Dams OP/BP 4.37		X
Projects on International Waterways OP/BP 7.50		X
Projects in Disputed Areas OP/BP 7.60		X

Comments (optional)

In response to OP/BP 4.01 and OP 4.09, an Environment Management Framework, prepared by the Education Division/ ICAR, details the integration of environmental dimensions into the overall project design and implementation. The Education Division/ ICAR has also prepared an Equity Action Plan that responds to OP/BP 4.10 and addresses issues of gender equality and social inclusion, with special attention to the needs of the both students and faculty members from Scheduled Tribes and Scheduled Castes.

VII. Contact point

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