19. National Agricultural Innovation Project

The NAIP is for facilitating accelerated and sustainable transformation of Indian agriculture in support of poverty alleviation and income generation by collaborative development and application of agricultural innovation by public research organizations in partnership with farmers groups, private sector, civil society organizations and other stakeholders. The total budget for the project is US $ 250 million; the World Bank will fund US $ 200 million as credit and US $ 50 million will be contributed by the Government of India. The project is planned for 6 years, and was launched on 26 July 2006.

The NAIP will function through four components:

- The ICAR as Catalyzing Agent for Management of Change in the Indian NARS
- Research on Production to Consumption Systems (PCS)
- Research on Sustainable Rural Livelihood Security (SRLS), and
- Basic and Strategic Research in the Frontier Areas of Agricultural Sciences (BSR).

Achievements

- A total of 7 projects have been sanctioned in the first Component. They cover research on visioning, policy analysis and gender in NARS, establishment of a consortium for e-Resources in Agriculture (CeRA), development of e-Courses for B Sc (Agric.), B V Sc and Animal Husbandry degree programmes, and digitization of Ph D theses submitted since 2000, Knowledge Management in Agriculture, involving IIT Mumbai, IIT Kanpur and IIT Thiruvananthapuram, and ICRISAT; and strengthening learning and capacity-building in the NARS involving IIM Lucknow, MANAGE, Hyderabad and NIRD, Hyderabad. The project on "Visioning Policy Analysis and Gender (V-PAGe)" was launched on 26–27 June 2007 at the NCAP, New Delhi.
- In Component 2, a total of 15 projects have been developed into full proposals. Four have been approved and they include value-chain of biofuel crops in rainfed areas, value-chain for cotton, responsible harvesting and utilization of selected marine small pelagics and freshwater fishes, and value chain on small millets.
- In Component 3, so far 6 projects have been sanctioned. They include sustainable rural livelihood security in backward districts of Maharashtra, enhancement of livelihood security through sustainable farming systems and related farm enterprises in the North-West Himalaya, livelihood improvement and empowerment of rural poor through sustainable farming systems in the North-East India, sustainable rural livelihoods through enhanced farming system productivity and efficient support systems in rainfed areas in Andhra Pradesh, livelihood and nutritional security of tribal dominated areas through integrated farming system and technology models in 4 backward districts of Rajasthan and developing sustainable farming system models for prioritized microwatersheds in rainfed backward districts of Jharkhand.
- In Component 4, three projects have been sanctioned. They include arsenic in food chain: cause, effect and mitigation; unravelling molecular processes involved in adventive polyembryony towards genetic engineering for fixation of heterosis; and genomics of cotton boll and fibre development. Eight other projects were also approved.

- A number of short-and long-term consultancies have been finalized. They include Financial Management System, Monitoring and Evaluation of NAIP projects and for developing a road map for commercialization of technologies and business planning and development of NARS, and consultancy on Communication and Public Awareness in the NARS.
- The first call for concept notes made in November 2006 met with an overwhelming response, 992 concept notes have been received. The second call for concept notes was made in September 2007.

National Fund for Basic and Strategic Researches in Agriculture

Under the National Fund for Basic and Strategic Researches in Agriculture, 14 projects were sanctioned towards the end of 2006–07, and 7 have been sanctioned in 2007. These projects are in diverse, novel and advanced fields of researches: Understanding molecular and genetic bases of crop-plants, responses to biotic and abiotic stresses; studies on molecular and physiological bases of reproductive systems in buffaloes (a very important but not well understood area); autotransgenics in fish; rumen microbial manipulation to enhance feed efficiency in cattle; use of apomixis for hybrid development in plant; plant-biomass based decentralized production of hydrogen and urea in rural areas; and use of electromagnetic radiations for seed conservation. All projects are multi-institutional and multi-disciplinary. Project leaders are from ICAR institutes (16), State Agricultural Universities (2), IISc (1), CSIR (1) and ICRISAT (1). These projects will generate not only new knowledge and solve outstanding scientific problems but will also be directly applicable in the near future for technology development for solving problems in agriculture.

❑