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2007-2008

NARM Annual Report



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PREFACE

While presenting the Annual Report 2007-08, I feel extremely happy as it gives us the opportunity to give the account for entire year's accomplishments in training, research, consultancy and policy support. It also gives us occasion to see where we stood last year and what efforts would be needed to achieve ever more. The last year was, in real sense, a watershed period when the Academy started making earnest efforts to do some out of box thinking which was given spurt by the Academy's Quinquennial Review Team (QRT). As we gained confidence in our own capabilities, we thought it would be worth making the paradigm shift from a training institution since last more than three decades to a global learning institution with an aim to produce global thought leaders. But our quest for excellence in capacity building programmes for individuals and institutions of India National Agricultural Research System (NARS)and others will go unabated. So, it has been a truly exciting period for all of us at the Academy. Our Vision- 2025 and XI Plan SFC documents were prepared after much deliberation and reflect our aspirations for the future.

The Academy was entrusted with the responsibility of Consortium Leader of NAIP sub-project in 'Learning and Capacity Building' in partnership with Indian Institute of Management, Lucknow; National Institute of Rural Development, Hyderabad and National Institute of Agricultural Extension Management, Hyderabad as Consortium Partners. A number of programmes were organized, mainly by the Academy but also by the partnering institutions. The Academy is also a partner in three NAIP Consortia led by ICRISAT, Hyderabad; NCAP, New Delhi and NBPGR, New Delhi. A Help Desk was created at the Academy for providing support to prospective institutions in preparing their concept notes and full proposals of approved concept notes and their on-line submission and through a number of workshops with proposed Lead institutions and their partners under Components 2 and 3 of NAIP. Our support to PIU of NAIP has been strong and well recognized.

On the training front, three FOCARS courses – the flagship programme of the Academy, were organized, one of the batches was quite large. There have been some innovations in the FET Programme for the FOCARS trainees, for instance we tried theme based FET this time, the theme being GI. Other programmes included EDPs, MDPs, Summer and Winter Schools in which research managers and different levels of scientists and teachers participated. Besides our regular client institutions under NARS, we also had participants from other organizations as well. The Council has been laying much emphasis on sensitization about the IP and technology management issues. First training-cum-workshop on this theme was organized at the Academy which dealt with important issues. The Academy also organized a number of off-Campus programmes for the benefit of larger number of scientists, teachers, technical and administrative staff of SAUs and ICAR institutes who otherwise could not come to NAARM at a time in



such number. These courses have been well appreciated. Besides our national level programmes, international programmes for foreign nationals were also organized.

An Expert Consultation on Agricultural Research Networks and Consortia in Asia-Pacific – a joint ICAR-ICRISAT-APAARI programme organized at the Academy had the participation of delegates from a large number of countries of the Region. Besides providing logistics for the Meet, we saw it as an opportunity to showcase the Academy to the participating countries / institutions with whom there could be future collaborations.

The ICAR South Zone Sports Tournament, organized by the Academy had a record number of participants from 21 institutes. The redeeming feature of this Tournament was that NAARM bagged the Overall Team Championship, Best Woman All Rounder and Best Woman Athlete, Second Best Man All Rounder Awards and the Champions' Trophy. All the officials including our FOCARS Probationers, who brought laurels to the Academy, deserve my highest praise.

To our efforts, due impetus was provided by the inspiration, guidance and encouragement by our Visionary Leader Dr. Mangala Rai, Secretary DARE and Director General, ICAR, who took personal interest in the affairs of the Academy despite his very busy schedule and I express my gratitude to him profusely. I thank Dy. Director General (Education) Dr. S. Prakash Tiwari whose untiring efforts and constant support gave us much needed resolve to go ahead. My thanks are due to Dr. B S Bisht, Asstt. Director General (HRD) who has been very supporting and helpful throughout. I am also thankful to strong support provided by the Director (Finance) and Personnel Division of the Council to the Academy.

My sincere thanks are to Drs. G.P. Reddy, T. Balaguru, D. Rama Rao and P. Manikandan of the Editorial Board for bringing out this Report with their dedicated efforts. I am also thankful to all the faculty for shouldering academic responsibilities, technical, administrative and supporting staff of the Academy for their efforts in undertaking various activities during the reported period. I also thank my personal staff for their timely help.

As I thank all contributors and well wishers of the Academy, I am sanguine about the greater role to be played by it in years to come in the service of Indian and World agriculture.



(S.M. Ilyas)

Hyderabad
August 2008





कार्यकारी सारांश

कार्यकारी सारांश

अपने प्राप्त अधिदेशों में जैसे दर्शाया गया है, अकादमी द्वारा अपने आरंभकाल से ही अपनी मानव संसाधन एवं संरचनात्मक क्षमता के अनुरूप, राष्ट्रीय कृषि अनुसंधान पद्धति (एन.ए.आर.एस) के मानव संसाधन विकास का उत्तरदायित्व निभाया जा रहा है। विश्व के बदलते आर्थिक एवं कृषि परिदृश्य के अनुसार यह महत्वपूर्ण हो जाता है, कि राष्ट्रीय कृषि अनुसंधान पद्धति की प्रतिक्रिया उसके अनुरूप हो। यदि सारे पणधारी, सहभागिता मोड़ में साझेदारी निभायेंगे, तब यह पद्धति अत्यधिक प्रभावात्मक होगी। राष्ट्रीय कृषि अनुसंधान पद्धति का, राष्ट्रीय कृषि नवोन्मेषी पद्धति में हुए इस परिवर्तन को इसी संदर्भ में देखा जाना चाहिए। राष्ट्रीय कृषि अनुसंधान पद्धति (एन.ए.आर.एस) के संस्थान एवं व्यक्ति विशेष के क्षमता निर्माण का राष्ट्रीय कृषि नवोन्मेषी पद्धति (एन.ए.आई.एस) में हुआ यह परिवर्तन, आज का आवश्यक एवं चुनौतिपूर्ण कार्य है।

अकादमी द्वारा राष्ट्रीय कृषि अनुसंधान पद्धति के लिए पिछले तीन दशकों से मानव संसाधन विकास की यह भूमिका निभाई जा रही है तथा इन प्रयासों को मान्यता भी मिली है। अकादमी द्वारा प्रमुखतः भा.कृ.अनु.प. संस्थानों एवं कृषि विश्वविद्यालयों के मानव संसाधन आवश्यकताओं की पूर्ति की जा रही है। कृषि एवं अन्य संबद्ध क्षेत्र के संपोषणीय लाभदायिकता को बढ़ाने तथा सामाजिक एवं पर्यावरणात्मकता संरक्षण के इस राष्ट्रीय प्रयास में विविध पृष्ठभूमि के साझेदार सहभागी इस प्रक्रिया में जुड़ने से, आज सार्वजनिक - निजी - जन साझेदारी से युक्त प्रचालन क्षेत्र का दायरा विस्तृत हुआ है तथा राष्ट्रीय कृषि नवोन्मेषी परियोजना के तहत एक उद्यमी एवं श्रमशील कदम कहा जा सकता है। यह परिवर्तन अति तुरंत हो, इसी में इसका मर्म निहित है। अकादमी द्वारा राष्ट्रीय कृषि नवोन्मेषी परियोजना (एन.ए.आई.पी) को समर्थन प्रदान किया जा रहा है तथा परियोजना कार्यान्वयन एकक (पी.आई.यू) के एक संभाग के रूप में इस प्रतिष्ठात्मक परियोजना के कार्यान्वयन के लिए सुविधात्मक भी है, जिसकी सफलता पर हमारे कृषि अनुसंधान के भावी मार्ग की दिशा निर्भर है। अनुसंधानदाताओं को अभिनवता की ओर प्रायः प्रेरित रहना होगा एवं सभी महत्वपूर्ण पणदाताओं को उनके प्रौद्योगिकी प्रजनन तथा उसके प्रयोग, सामाजिकता एवं संपोषणीयता की ओर ध्यान देते हुए अपने दायरे में समाहित करना होगा। इसके परिणामस्वरूप एक राष्ट्रीय संतोष मिलेगा, जो एक सुसंस्कृत समाज का एक महत्वपूर्ण उद्देश्य भी है।

अकादमी द्वारा एन.ए.आई.पी. के तहत एक 'सहायता डेस्क' का गठन किया गया, जिसके द्वारा सभी भावी संस्थानों/व्यक्ति विशेषों को सफल प्रस्ताव बनाने एवं सक्षम साझेदारों को जागृत करने हेतु ऑनलाइन सहायता प्रदान की जाती है जो पी.आई.यू, एन.ए.आई.पी. को अपने प्रस्ताव भेजने तथा उन्हें विकसित करने में अभिरूचि रखने वाले सभी नार्म की सहायता डेस्क से अवश्य सहायता लेते हैं। नार्म के इस सहायता डेस्क द्वारा सहायता संघ आधारित सभी भावी सदस्यों को भी परियोजना प्रस्ताव बनाने एवं उसके ऑनलाइन प्रस्तुतीकरण में भी सक्रिय रूप से सहायता दी जाती है। यह अकादमी का प्रगाढ़ विश्वास है कि यदि एन.ए.आई.पी. द्वारा प्राप्त अवसरों का उपयोग संकाय सदस्यों द्वारा किया जाए, तब उत्तम अनुसंधान का कार्य किया जा सकता है एवं जो महत्वपूर्ण पणधारी हैं, उन सहभागी सदस्यों की सहायता से भारतीय कृषि को अधिक प्रभावी बनाने के इस महत्वपूर्ण आवश्यकता में हम अवश्य भागीदार बन सकते हैं।

राष्ट्रीय कृषि नवोन्मेषी परियोजना (एन.ए.आई.पी) द्वारा नार्म को शिक्षा एवं क्षमता निर्माण (एल एवं सीबी) परियोजना की स्वीकृति दी गई, जिसके लिए एन.ए.आई.पी. एवं परिषद के सभी प्राधिकारियों के प्रति अकादमी सदैव कृतज्ञ रहेगी। अकादमी में 19-20 दिसंबर, 2007 को आयोजित कार्यशाला में इस परियोजना का शुभारंभ किया गया। शिक्षा एवं सक्षमता निर्माण के इस प्रयास में, अकादमी के संबंध प्रख्यात संस्थान जैसे भारतीय प्रबंधन संस्थान (आई आई एम) लखनऊ, राष्ट्रीय ग्रामीण विकास संस्थान, (एन.आई.आर.डी), हैदराबाद एवं राष्ट्रीय कृषि विस्तार प्रबंधन

संस्थान, (मॉनेज) हैदराबाद सभी से सहभागी के रूप में, भारतीय प्रशासनिक स्टॉफ महाविद्यालय, हैदराबाद, जी.बी.पंत कृषि एवं प्रौद्योगिकी विश्वविद्यालय, पंतनगर, एम.एस.स्वामीनाथन अनुसंधान फॉउंडेशन, चेन्नई, कॉर्ड- एम हैदराबाद एवं गुरु परामर्शदाता बेंगलूर सभी सहायक संस्थान के रूप में जुड़े रहे। परियोजना के तहत विभिन्न स्तर एवं अवधि के क्रियाकलापों की योजना बनाई गई। इस परियोजना के तहत लगभग 3,500 व्यक्तियों को प्रशिक्षण दिलवाने का प्रस्ताव है। आई आई एम, लखनऊ एवं रा.ग्रा.वि.संस्थान, हैदराबाद के साझेदारी में कई अनुसंधान अध्ययन किए जायेंगे। अकादमी एक सफल एवं सार्थक साझेदारी की कामना करती हैं।

एन.ए.आई.पी. के शिक्षा एवं क्षमता निर्माण (एल एवं सीबी) के उप-परियोजना के अनुमोदन के बाद, अकादमी द्वारा अपने साझेदार संस्थान आई आई एम, लखनऊ के साथ कई कार्यक्रम आयोजित किये गए। इस परियोजना के तहत आई आर आर आई, फिलीपाइन्स में चावल के मार्कर सहायक चयन क्षेत्र में कई वैज्ञानिकों को प्रशिक्षण दिया गया। पी.आई.यू., एन.ए.आई.पी. को समर्थन करने के इस प्रयास द्वारा सार्वजनिक-निजी सा-झेदारी को सुदृढ़ करने एवं निजी क्षेत्र को सम्मिलित करने से, अत्यधिक निधियुक्त प्रस्ताव प्राप्त करने में सहायता मिलेगी। एल एवं सीबी उप-परियोजना के एक शीर्ष संस्थान के अलावा, अकादमी, एन.सी.ए.पी. द्वारा प्रायोजित V पेज एवं इक्रिसॉट द्वारा प्रायोजित आई सी टी- मध्यस्थ ज्ञान प्रबंधन से युक्त “कृषक-विस्तार-कृषक-अनुसंधान शिक्षा संघ की अभिकल्पना” नामक उप-परियोजना में भी साझेदार सहभागी है।

अपने शीर्ष कार्यक्रम के रूप में, अकादमी अपना अत्यधिक ध्यान तथा संसाधन, कृषि अनुसंधान सेवा बुनियादी पाठ्यक्रम की ओर केंद्रित करती है। रिपोर्ट के अवधि के तहत 81,82 एवं 83 फोकार्स तीन ऐसे कार्यक्रम आयोजित किए गये। पाठ्यक्रम के आयोजन में कई अभिनव प्रयास किए गये, जिसमें पाठ्यक्रम में संशोधन तथा सुधार, क्षेत्र अनुभव प्रशिक्षण को अधिक विशिष्ट एवं केंद्रिकृत करना (प्रमुख प्रकाश - जी आई पर रहा।) प्रशिक्षणार्थियों को उद्योग, बीज कंपनियों के निर्माता, प्रक्रमणकर्ता इत्यादियों से परिचय करवाने से इत्यादि निजी क्षेत्र की की जानकारी उन्हें मिली। चूंकि सार्वजनिक, निजी-जन सहभागिता (वी.पी.पी.पी) में निजी क्षेत्र को सम्मिलित करने का निर्णय लिया गया है, यह ज्ञानबोध निश्चित ही लाभप्रद होगा। वैज्ञानिक प्रशिक्षणार्थियों को उत्तम संभाव्य अनुभव प्रदान करवाया गया जिससे वे भविष्य की चुनौतियों को स्वीकार करने सदैव तत्पर रहेंगे। इसके अतिरिक्त, नियमित प्रशिक्षण पाठ्यक्रम में एवं एन.ए.आई.पी. क्रियाकलापों के तहत नूतन प्रशिक्षण क्षेत्र पहचाने गए एवं कार्यान्वित भी किए गये।

अकादमी को अपारी एवं क्लॉन कार्यकारी समिति की बैठक भी 8 अक्टूबर, 2007 को आयोजित करने का सौभाग्य प्राप्त हुआ, जिसमें परिषद तथा सी.जी.आई.ए.आर. संस्थानों के अधिक संख्या में वरिष्ठ अधिकारियों के अलावा अपारी सदस्य देशों के तीस सहभागियों ने इसमें भाग लिया। इस बैठक का उद्घाटन माननीय महा निदेशक, भा.कृ.अनु.प. ने किया तथा डॉ.आर.एस.परोदा जी, पूर्व महानिदेशक, भा.कृ.अनु.प. कार्यकारी सचिव, अपारी ने अकादमी के इन प्रयासों की सराहना की। तकनीकी सत्रों में कई सार्थक विचार-विमर्श हुए एवं कई महत्वपूर्ण सिफारिशें भी उभर कर हमारे समक्ष आईं।

अकादमी अपने परिसरीय/गैर-परिसरीय कार्यक्रमों के माध्यम से राष्ट्रीय कृषि अनुसंधान पद्धति (एन.ए.आर.एस के वैज्ञानिकों तथा शिक्षकों के क्षमता निर्माण में अपना सक्रिय योगदान देने में नियमित रूप से प्रयासरत है। ग्रीष्म/शीतकालीन पाठशालाओं सहित विभिन्न अवधि के प्रशिक्षण कार्यक्रमों के आयोजन के अतिरिक्त, अकादमी द्वारा भा.कृ.अनु.प. के विभिन्न संस्थानों के निदेशक तथा कृषि विश्वविद्यालयों के निदेशक एवं संकायाध्यक्षों के लिए दो कार्यकारी विकास कार्यक्रम (ई.डी.पी) आयोजित किए गये, जो अत्यधिक प्रचलित हुए। इन प्रशिक्षण कार्यक्रमों का एक अभिप्रेरित अंग गैर-रा.कृ.अनु.पद्धति के अधिकारियों की सहभागिता रहा, जो एक स्वागतात्मक कदम कहा जा

सकता है। क्योंकि अकादमी की सक्षमताओं की पहचान अब अन्य संस्थानों में होने लगी। इसके द्वारा भविष्य में सहकारिता तथा परामर्शसेवाओं के लिए मार्ग प्रशस्त होगा। कुल ग्यारह गैर परिसरीय व प्रशिक्षण कार्यक्रम आयोजित किए गए जिसमें अधिक संख्या में व्यक्तियों को लाभ पहुँचाया गया। भा.कृ.अनु.प. संस्थानों एवं कृषि विश्वविद्यालयों के उत्कृष्ट प्रतिक्रिया से अकादमी को सदैव प्रोत्साहन मिलता है। अकादमी द्वारा हैदराबाद के एन.ए.आर.सी., नेपाल के वैज्ञानिकों एवं अधिकारियों को तथा अनुराधापुरम में श्रीलंका के राजराटा विश्वविद्यालय के संकाय सदस्यों को प्रशिक्षण प्रदान किया गया। केन्या रिपब्लिक के उच्च स्तरीय प्रतिनिधिमंडल ने अकादमी का दौरा किया एवं उसके मानव संसाधन सक्षमताओं का प्रयोग करने में अधिक अभिरुचि व्यक्त की।

पी.वी.पी. एवं एफ.आर. प्राधिकरण ने अकादमी द्वारा आयोजित कार्यक्रमों तथा पी.वी.पी एवं एफ.आर. मदों के प्रति वैज्ञानिकों तथा बीज उद्योग को जागृत करने के विशेष प्रयास की सराहना की जिसके प्रति जनता में पूर्णतः अवगाहना नहीं थी। अकादमी, राष्ट्रीय जैव विविधता प्राधिकरण (एन.पी.ए) के साथ सहयोगिता निभा रही है, विशेषतः समृद्ध जैव विविधता के संरक्षण की आवश्यकता पर महत्व डालने हेतु राज्य जैव विविधता बोर्ड से भी संपर्क बनाएँ हुए हैं।

वैज्ञानिकों एवं शिक्षकों के अलावा, अकादमी द्वारा प्रशासनिक एवं लेखा कर्मियों के क्षमता निर्माण पर अत्यधिक महत्व दिया जा रहा है। आई.जी.एफ.आर.आई, झांसी, केंद्रीय कृषि अनुसंधान संस्थान (सी.ए.आर.आई) पोर्टब्लेयर एवं भा.कृ.अनु.प. परिसर, गोवा में दो ऐसे कार्यक्रम आयोजित किए गये। प्राप्त अनुभव से यह सिद्ध हुआ है कि किसी भी पद्धति के समग्र सफलता के लिए वहाँ के कर्मचारियों को क्रमबद्ध करना आवश्यक है। सी.ए.आर.पी. श्रीलंका के अनुरोध पर वहाँ के कृषि अनुसंधान एवं शिक्षा से जुड़े वरिष्ठ अधिकारियों को प्रशिक्षित करने हेतु एक वरिष्ठ संकाय सदस्य को भेजा गया।

यथार्थ कृषि एवं कृषि में सूचना प्रौद्योगिकी पर दो मस्तिष्क मंथन सत्र अकादमी द्वारा आयोजित किए गए ताकि इन महत्वपूर्ण मदों पर प्रमुख विशेषज्ञों की धारणाओं को एकीकृत किया जा सकें। यह दोनों क्षेत्र उभरते हुए हैं एवं भावी कृषि की रूपकल्पना में इनके अत्यधिक योगदान की अपेक्षा है। अकादमी द्वारा व्याख्यानों ने प्रशिक्षण, कार्यशालाओं एवं प्रकाशनों के माध्यम से राष्ट्रीय कृषि अनुसंधान पद्धति को बौद्धिक संपत्ति अधिकार के मदों संबंधी जागृत किया जा रहा है। इंडो-संयुक्त राज्य कृषि ज्ञान पहल के तहत अकादमी द्वारा हरियाणा कृषि विश्वविद्यालय, हिसार एवं मिशिगन राज्य विश्वविद्यालय, संयुक्त राज्य अमेरिका के सहकार्य से बौद्धिक संपत्ति अधिकार पर प्रशिक्षण आयोजित किया गया। कई ऐसे कार्यक्रमों की भविष्य में संभावना है।

कृषि अनुसंधान में ए.आई.सी.आर.पी. की संकल्पना ने भा.कृ.अनु.प-राज्य कृषि विश्वविद्यालयों के सहकारिता के लिए मार्ग प्रशस्त किया है जिसके परिणामस्वरूप कई किस्म प्रजनन एवं प्रौद्योगिकियों का विकास हुआ जिससे फसल उत्पादन, फल एवं तरकारी, दूध, माँस, अण्डा एवं मछली, संसाधन प्रबंध यांत्रिकरण एवं फसलोपरांत प्रबंधन के उत्पादन की प्रगति में सुदृढ़ समर्थन प्रदान किया। यह नवीनतम संकल्पना जिससे अत्यधिक प्रख्याति मिली, विश्व में कहीं ओर दुहराई नहीं ही जा सकती है। बीते समय के साथ, ए.आई.सी.आर.पी. ने विस्तृत रूप लिया तथा निदेशालयों में इनका रूपांतरण हुआ। अब ए.आई.सी.आर.पी. को एक सूक्ष्म दृष्टि से अवलोकन करने का समय आया है, ताकि उनके पुनःसंगठन, सुदृढीकरण द्वारा उपयुक्त नीति से वे सशक्त एवं जटील चुनौतियों का सामना कर सकते हैं। इस कार्य में अकादमी सक्रिय रूप से जुड़ी हुई है तथा हाल ही में एक प्राथमिक बैठक का आयोजन भी किया गया तत्पश्चात इस क्षेत्र में राष्ट्रीय स्तर पर एक मस्तिष्क मंथन भी आयोजित किया जाएगा।



अकादमी का एक पंचवर्षीय मूल्यांकन प्रतिवेदन परिषद को प्रस्तुत किया गया, जो अकादमी के लिए भावी मार्ग अवश्य प्रशस्त करेगा। इससे राष्ट्रीय कृषि अनुसंधान पद्धति को ही नहीं, अपितु भारतीय कृषि के प्रति प्रभावी रूप से सेवाबद्ध होने में सुविधात्मक होगा। भारतीय कृषि की चुनौतियाँ विकट हैं तथा अकादमी अवश्य उन चुनौतियों का सामना करने हेतु क्रियात्मक सुझाव देगी व (राष्ट्रीय एवं विश्वीय) उभरती चुनौतियों पर प्रकाश डालने में भी महत्वपूर्ण भूमिका निभाएगी। “अकादमी का परिदृश्य - 2025 में” का निर्माण किया गया है ताकि अगामी वर्षों में अकादमी की भावी भूमिका को हम अतःदृष्टि से देख सकें। ई.एफ.सी. प्रलेख की XI योजना में अकादमी की प्रक्रियाएँ एवं निधि के लिए प्रस्ताव स्पष्ट किए गए। इसकी हमें प्रत्याशा है कि प्राधिकार को हमारी धारणाएँ स्वीकृत होगी तथा निकट भविष्य में अकादमी का नया रूपांतरण होगा। यह नूतन रूपकल्पना, निश्चित ही नई विस्तृत दिशा लेगी तथा अनिवार्यतः ही सक्रिय, सुंदर, उज्वल रूपांतरण होगा।

हिंदी पखवाड़े के संदर्भ में नार्म समाचार को द्विभाषिक (हिंदी एवं अंग्रेजी) बनाया गया जो अवश्य हमारे पाठकों को, पसंद आयेगा। अभिनवता का नया अंकुरण पल्लवित होगा। जैसे अकादमी के उत्तरदायित्व बढ़ेंगे, इसकी संरचना को सुदृढ़ करने की आवश्यकता हेतु हमें प्रयास करने होंगे। प्रशिक्षण कार्यक्रम, कार्यशालाएँ इत्यादि को अधिक प्रभावी बनाने एवं सहभागियों को सुविधात्मक आवास व्यवस्था हेतु इसकी अनिवार्य आवश्यकता है। इस संदर्भ में हमारे सहभागियों द्वारा प्राप्त अमूल्य मूल्यांकन/सुझावों से हमें से अपनी भूमिका निभाने तथा उत्कृष्ट सेवा प्रदान करने में सहायता मिलेगी।

अकादमी द्वारा दक्षिण क्षेत्र के लिए अंतर-संस्थानीय खेलकूद प्रतियोगिता का सफल आयोजन किया गया, जिसमें विभिन्न प्रतियोगिताओं के लिए कुल 21 भा.कृ.अनु.प. संस्थानों के लगभग 600 सहभागियों ने भाग लिया। इस वर्ष भी, नार्म ने ओवर ऑल चैंपियन हासिल किया तथा नार्म द्वारा प्रायोजित एन.के.अनंतराव रोलिंग ट्राँफी प्राप्त की। अकादमी के हमारे सभी कर्मचारी बधाई के पात्र हैं, जिनके अथक प्रयास से इस महत्वपूर्ण कार्यक्रम का व्यवस्थित आयोजन हो सका तथा चैंपियनशीप जीतने, उत्तम आल राऊंडर महिला, उत्तम अथलिट महिला एवं द्वितीय उत्तम आल राऊंडर पुरुष पारितोषक जीतने हेतु हार्दिक बधाई।

जैसे दर्शाया गया कि भारतीय कृषि को अत्यधिक समर्थन की आवश्यकता है, प्रौद्योगिकी हस्तांतरण के लिए निरंतर समर्थन के अलावा कृषि अनुसंधान एवं शिक्षा के लिए भी संसाधन अधिक आबंटित किए गये। ज्ञान के सृजन, प्रयोग तथा प्रसार के सिवाय-कृषि में आपेक्षित मात्रा एवं गुणवत्ता की आपेक्षा नहीं की जा सकती है। भावी प्रौद्योगिकी को विकसित करने हेतु संसाधन को जुटाना अनिवार्य है। राष्ट्रीय कृषि अनुसंधान पद्धति को समर्थन करने वाले प्रबंधकों को, विश्व के सर्वोत्तम निष्पादन हेतु अद्यतन उपकरण एवं तकनीकों से सुसंबद्ध करना होगा। अकादमी सर्वाथा ज्ञान से मानव संसाधन सशक्तिकरण की ओर अपने वचनबद्धता के प्रति समर्पित है, ताकि प्रभावी प्रबंधन के परिवर्तन से पद्धति को सुसंपन्न किया जा सकें। अशिक्षित, शिक्षित एवं पुनःशिक्षित प्रक्रिया को क्रियाशील बनाना होगा ताकि सभी क्षेत्रों के वर्तमान एवं उभरती चुनौतियों का भली-भाँति सामना किया जा सकें। अकादमी आशाभाव से है, क्योंकि परिषद के नेतृत्व को अकादमी के वर्तमान विचारशैली एवं अभिनव सक्रिय क्रियाशीलता की जानकारी है एवं उसके सक्षम योगदान में प्रगाढ़ विश्वास भी है। अकादमी पिछले तीन दशकों से भारतीय कृषि के प्रति सेवाबद्ध है तथा अपनी उपलब्धियों से निश्चित ही समाधानयुक्त है। जितनी अधिक की प्रत्याशा होती है, उतनी ही आकांक्षा अधिक होगी। अपने सभी संसाधन से मानव संसाधन विकास एवं एच.आर.एम. के क्षेत्र में अपने योगदान से, हम एक विस्तृत दायरे में शीर्ष शिक्षा संस्थान के रूप में शोभायमान, प्रतिष्ठात्मक रूप से उभरना चाहते हैं।

गतिविधियों की एक झलक

अप्रैल

- ❖ प्रदाता से निधि प्राप्त करने के लिए अनुसंधान प्रस्ताव बनाने में सहभागियों में आवश्यक कुशलताओं को विकसित करने कृषि अनुसंधान में सफल अनुसंधान प्रस्तावों के विकास पर अप्रैल 20-25, 2007 के दौरान छः दिवसीय प्रशिक्षण कार्यक्रम आयोजित किया गया। 14 कर्मचारियों ने इस कार्यक्रम में भाग लिया।
- ❖ केंद्रीय चावल अनुसंधान संस्थान, कटक (उड़ीसा) में सतर्कता प्रशासन एवं प्रबंधन पर अप्रैल 16 से 18, 2007 के दौरान एक तीन दिवसीय विशिष्ट प्रशिक्षण कार्यक्रम आयोजित किया गया। इसका प्रमुख उद्देश्य सतर्कता प्रशासन एवं प्रबंधन का एक परिदृश्य उपलब्ध करवाने एवं संस्थानों के निदेशकों को अद्यतन केंद्रीय सतर्कता समिति के मानदण्डों से अवगत कराना था। भा.कृ.अनु.प. संस्थानों के कुल 14 निदेशकों परियोजना निदेशको/संयुक्त निदेशकों ने इस कार्यक्रम में भाग लिया।

मई

- ❖ मई 7-17 के दौरान सामूहिक अध्ययन उपागम पर ग्यारह दिवसीय प्रशिक्षण कार्यक्रम आयोजित किया गया, जो कृषि अनुसंधान एवं शिक्षा के सामूहिक प्रयास संबंधी संकल्पनाओं के प्रति कृषि विश्वविद्यालय संकाय में जागृति पैदा करने तथा सामूहिक अध्ययन उपागम के लिए उपयुक्त शैक्षणिक सामग्री के निर्माण हेतु सहभागियों में प्रतिस्पर्धात्मकता विकसित करने हेतु आयोजित था। राज्य कृषि विश्वविद्यालय के आठ सहायक/सह प्राध्यापकों में इस कार्यक्रम में भाग लिया।
- ❖ भा.कृ.अनु.प. पद्धति में बौद्धिक संपत्ति एवं प्रौद्योगिकी प्रबंधन पर 28-30 मई, 2007 के दौरान भा.कृ.अनु.प. द्वारा प्रायोजित तीन दिवसीय कार्यशाला आयोजित की गई। यह कृषि अनुसंधान में बौद्धिक संपत्ति प्रबंधन एवं प्रौद्योगिकी हस्तांतरण/वाणिज्यिकरण पर भा.कृ.अनु.प. मानदण्डों के व्यवस्थित कार्यान्वयन हेतु आयोजित था। इस कार्यशाला में भा.कृ.अनु.प. संस्थानों के उप महानिदेशक एवं निदेशकों, 31 भा.कृ.अनु.प. संस्थानों के संस्थान प्रौद्योगिकी प्रबंधन समिति के 50 प्रतिनिधियों ने भाग लिया।

जून

- ❖ कृषि अनुसंधान सेवा (फोकार्स) के लिए, 81वाँ बुनियादी पाठ्यक्रम जून 12 से अक्टूबर 9, 2007 के दौरान संपन्न हुआ। 27 कृ.अनु.सेवा बुनियादी प्रशिक्षणार्थियों ने इस कार्यक्रम में भाग लिया।
- ❖ संगठनात्मक प्राथमिकता एवं आवश्यकता की पूर्ति हेतु अपने वरिष्ठ अधिकारियों को सकारात्मक प्रशासनिक समर्थन प्रदान करने तथा कर्मचारियों में अपने कार्य निष्पादन में सक्षमता एवं कुशलता में सुधार लाने हेतु 12-19 जून, 2007 के दौरान प्रशासनिक सक्षमता एवं वित्तीय प्रबंधन के सुधार पर एक सप्ताह का कार्यक्रम आयोजित किया गया। भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालयों के 20 प्रशासनिक अधिकारी, वित्त एवं लेखा अधिकारी, सहायक प्रशासनिक अधिकारी, सहायक वित्त एवं लेखा अधिकारियों ने इस कार्यक्रम में भाग लिया।



- ❖ कंप्यूटर आधारित मल्टीमीडिया प्रस्तुतीकरण पर तीन सप्ताह का पुनश्चर्या पाठ्यक्रम 20 जून से 10 जुलाई, 2007 के दौरान आयोजित किया गया। इस कार्यक्रम का उद्देश्य ई-शिक्षा एवं ज्ञान प्रबंधन में मल्टीमीडिया प्रयोग को समझना था तथा सहभागियों को वेब एवं सीडी आधारित प्रस्तुतीकरण दोनों के लिए डिजिटैजिंग, सिनथसैजिंग ऑनिमेटिंग एवं पॉकिंग इमेजस, साऊंड, ग्राफिक्स, वीडियो एवं विषय सार के प्रति जागृत करने की ओर था। भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालय के 15 वैज्ञानिक, अनुसंधान प्रबंधक, शैक्षणिक प्रशासक एवं तकनीकी अधिकारी सभी इस कार्यक्रम में सम्मिलित थे।
- ❖ कृषि अनुसंधान परियोजना प्रबंधन की उन्नतियों पर तीन सप्ताह की ग्रीष्मकालीन पाठशाला जून 21 से 11 जुलाई, 2007 के दौरान आयोजित की गई। इस कार्यक्रम का प्रमुख उद्देश्य, अनुसंधानकर्ताओं में, बदलते विश्वीय कृषि परिदृश्य के अनुरूप भारतीय कृषि की भावी परिकल्पना विकसित करने एवं अनुसंधान परियोजनाओं के सक्षम एवं प्रभावी प्रबंध के लिए उपयुक्त उपकरण एवं तकनीकों से परिचित करवाना था। भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालय के 26 वैज्ञानिकों ने इस कार्यक्रम में भाग लिया।

जुलाई

- ❖ संपोषित जल संसाधन प्रबंध एवं यथार्थ कृषि के लिए निर्णय समर्थन पद्धति पर आधारित भौगोलिक सूचना पद्धति (जी.आई.एस) पर तीन सप्ताह की ग्रीष्मकालीन पाठशाला जुलाई 4-24, 2007 के दौरान संपन्न हुई। इस कार्यक्रम का उद्देश्य जी.आई.एस. की संकल्पना एवं अंतरिक्षीय प्रौद्योगिकी से संबंधित रिमोट सेंसिंग तथा इमेज प्रोसेसिंग से परिचित करवाना, जी.आई.एस. सॉफ्टवेयर एवं हार्डवेयर से संबंधित व्यावहारिक अनुभव प्रदान करवाना एवं संपोषित कृषि के लिए निर्णय समर्थन पद्धति पर आधारित जी.आई.एस. संबंधित केस अध्ययन को आरंभ करना था। इस कार्यक्रम में भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालय के 23 वैज्ञानिकों ने इसमें भाग लिया।
- ❖ नेतृत्व एवं व्यक्तित्व विकास पर एक सप्ताह का कार्यक्रम जुलाई 5-12, 2007 के दौरान आयोजित किया गया। इस कार्यक्रम का उद्देश्य राष्ट्रीय कृषि अनुसंधान पद्धति के अनुसंधानकर्ताओं एवं शिक्षकों को प्रभावी नेतृत्व सक्षमताओं को विकसित करने हेतु वैयक्तिक बाधाएँ पहचानने में सहायक उपकरणों एवं ज्ञान से समृद्ध करना था। भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालयों के 16 वरिष्ठ वैज्ञानिकों ने यह प्रशिक्षण प्राप्त किया।
- ❖ नेपाल कृषि अनुसंधान परिषद (एन.ए.आर.सी), नेपाल के दो प्रतिनिधियों के लिए प्रशासन एवं वित्तीय प्रबंध पर तीन सप्ताह का कार्यक्रम वर्ष 2006-07 के लिए भा.कृ.अनु.प - एन.ए.आर.सी. के तहत जुलाई 10-30, 2007 के दौरान संपन्न हुआ। इस कार्यक्रम का प्रमुख उद्देश्य अधिकारियों को उनके कार्यनिष्पादन क्षमता एवं प्रभावात्मकता बढ़ाने में कुशलता विकसित करने तथा आधुनिक प्रबंधन संकल्पनाओं के प्रति उन्मुख करना था।
- ❖ भा.कृ.अनु.प. संस्थानों के राजभाषा से जुड़े कर्मचारियों के लिए जुलाई 17-21, 2007 के दौरान पांच दिवसीय गहन हिंदी प्रशिक्षण व कार्यशाला संपन्न हुई। कार्यक्रम का केंद्रबिन्दु हिंदी के व्यावहारिक प्रयोगात्मकता के बारे में चर्चा करना था। इस कार्यक्रम में भा.कृ.अनु.प. संस्थानों के 31 अधिकारियों ने भाग लिया।

अगस्त

- ❖ व्यक्तिगत विकास एवं संगठनात्मक वृद्धि हेतु सृजनात्मक उत्कृष्टता पर पांच दिवसीय कार्यशाला 6-10 अगस्त, 2007 के दौरान संपन्न हुई। इसका प्रमुख लक्ष्य, व्यक्तिगत वृद्धि एवं संगठनात्मक विकास में उत्कृष्टता प्राप्त करने में निजी वैयक्तिक रूपरेखा को सुधारना था तथा व्यक्तिगत एवं संगठनात्मक परिवर्तन हेतु सहभागियों में प्रभावी योजना तथा कार्यक्रम की योजना से अवगत कराना था। भा.कृ.अनु.प. संस्थानों, राज्य कृषि विश्वविद्यालयों एवं कृषि विज्ञान केंद्रों से 23 संकायाध्यक्ष, प्रधान वैज्ञानिक एवं वरिष्ठ संकाय सदस्यों में इस कार्यशाला में भाग लिया।
- ❖ कृषि व्यापार, विपणन बुद्धिमत्ता एवं सूचना प्रौद्योगिकी की उन्नतियों पर तीन सप्ताह की ग्रीष्मकालीन पाठशाला 7-27 अगस्त, 2007 के दौरान संपन्न हुई। अन्तर्राष्ट्रीय व्यापार के बदलते विश्वीय कृषि परिदृश्य के अनुरूप सक्षम एवं प्रभावी कृषि व्यापार प्रबंध के लिए बाजार एवं सूचना पद्धति को विश्लेषित करने हेतु सहभागियों में उपयुक्त उपस्कर एवं तकनीकों से परिचित करवाना था। भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालयों के 25 वरिष्ठ स्तर के वैज्ञानिकों, शिक्षकों ने इस कार्यक्रम में भाग लिया।
- ❖ विश्व बैंक द्वारा समर्थन प्राप्त राष्ट्रीय कृषि नवोन्मेषी परियोजना (एन.ए.आई.पी) के दो दिवसीय प्रबोधन एवं मूल्यांकन कार्यशाला अगस्त 9-10, 2007 के दौरान संपन्न हुई। इसका प्रमुख लक्ष्य सहायता संघ आधारित सहभागियों के लिए प्रत्याशित उपलब्धियों तथा परियोजनाओं के प्रबोधनीय मद्दों की समय-योजना बनाना तथा अनुवर्ती केस अध्ययन करने, पी.एम.टी.एस. की अभिकल्पना एवं एम एवं ई डी फारमेट बनाना, प्रबोधन एवं मूल्यांकन पद्धति (एम व ई) के उद्देश्यों संबंधी विचार-विमर्श करना था। भा.कृ.अनु.प. राज्य कृषि विश्वविद्यालय एवं राष्ट्र व्यापी निजी संगठनों के 40 वरिष्ठ अधिकारियों ने इस कार्यशाला में भाग लिया।
- ❖ अगस्त 20-25, 2007 के दौरान ई-शिक्षा पर छः दिवसीय कार्यक्रम आयोजित किया गया था। विषय-सामग्री विकास, डेटा विश्लेषण एवं डेटाबेस प्रबंधन के लिए ओपन सोर्स साफ्टवेयर से सहभागियों को परिचित करवाने एवं विषय-सार विकास परियोजना मोड़ पर केस अध्ययन विकसित करना ही इसका प्रमुख उद्देश्य रहा। भा.कृ.अनु.प. संस्थानों, राज्य कृषि विश्वविद्यालयों एवं अन्य संबद्ध संगठनों के 20 संकाय सदस्य वैज्ञानिकों, तकनीकी अधिकारियों ने इस कार्यक्रम में भाग लिया।
- ❖ कृषि अनुसंधान में एक सप्ताह का प्रबंध विकास कार्यक्रम अगस्त 24-30, 2007 के दौरान संपन्न हुआ। यह अनुसंधान संस्थानों के संगठनात्मक ढाँचे में मध्यम स्तरीय सक्षमताओं को विकसित करने एवं कर्मचारियों में कार्यक्षेत्र की व्यावहारिकता के प्रति सचेत करने हेतु आयोजित किया गया। इस कार्यक्रम में भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालयों के 16 विभाग प्रमुखों ने भाग लिया।
- ❖ भा.कृ.अनु.प. संस्थानों के नोडल अधिकारियों/डेटा इंदराजकर्ताओं के लिए बौद्धिक प्रतिवेदन पद्धति पर दो दिवसीय व्यावहारिक प्रशिक्षण कार्यक्रम 30-31 अगस्त, 2007 के दौरान संपन्न हुआ। इस कार्यक्रम में सहभागियों को उनके अपने संस्थानों में आई.आर.एस. पद्धति लगाने एवं विभिन्न प्रशासनिक स्तरों पर तथा सर्वर से भी डेटा लोड करने से परिचित करवाने के ओर उन्मुख था। इस कार्यक्रम के द्वारा भा.कृ.अनु.प. संस्थानों के 87 प्रशासनिक एवं वित्तीय कर्मियों को लाभ पहुँचा।



सितंबर

- ❖ ज्ञान प्रबंधन के लिए मीडिया निर्माण प्रयोग में व्यावहारिक अभ्यास हेतु सहभागियों के लिए एक सदृढ़ मंच प्रदान करने हेतु 5-25 सितंबर, 2007 के दौरान सहभागिता मीडिया एवं ज्ञान प्रबंध पर तीन सप्ताह का पुनश्चर्या पाठ्यक्रम संपन्न हुआ। भा.कृ.अनु.प. संस्थानों एवं कृषि विश्वविद्यालय के कुल छः वैज्ञानिक एवं संकाय सदस्यों ने इस कार्यक्रम में भाग लिया।
- ❖ कृषि अनुसंधान प्रबंध पर चार दिवसीय कार्यकारी विकास कार्यक्रम 18-21 सितंबर, 2007 के दौरान संपन्न हुआ। यह कार्यक्रम भा.कृ.अनु.प. संस्थानों के निदेशकों एवं संयुक्त निदेशकों तथा राज्य कृषि विश्वविद्यालयों के संकायाध्यक्षों एवं निदेशकों जैसे अनुसंधान प्रबंध के वरिष्ठ कर्मियों के हितार्थ आयोजित किया गया था। इस कार्यक्रम की अभिकल्पना, संस्थान प्रबंध, प्रशासन एवं वित्तीय क्रियाकलाप संस्थान निर्माण एवं विधीय अधिनियम तथा वैज्ञानिक गतिविधियों के प्रमुख विषय क्षेत्र में मूल संकल्पना के प्रति जागरूकता पैदा करने एवं सक्षमता निर्माण करने हेतु की गई थी। कुल 17 अनुसंधान संस्थानों के निदेशक, भा.कृ.अनु.प. के राष्ट्रीय संस्थानों के सहायक महानिदेशक, एवं संयुक्त निदेशक, राज्य कृषि विश्वविद्यालय के संकायाध्यक्ष एवं निदेशकों ने इस कार्यक्रम में भाग लिया।
- ❖ कृषि एवं ग्रामीण विज्ञान फाऊंडेशन (एफ.आर.एस.एफ) के सहकारिता से 25 सितम्बर, 2007 को पंजीकृत पादप किस्मों के वार्षिक शुल्क के मदों पर सार्वजनिक निजी पादप प्रजननकर्ताओं से वार्तालाप पर एक दिवसीय कार्यशाला संपन्न हुई। यह कार्यक्रम पादप किस्म संरक्षण एवं कृषक अधिकार प्राधिकरण (पी.पी.वी. एवं एफ.आर.ए) भारत सरकार, नई दिल्ली द्वारा प्रायोजित किया गया। कुल 26 कृषि वैज्ञानिक, एकस्वाधिकार प्रतिनिधि, कार्यपालक एवं निजी बीज कंपनियों के अनुसंधान प्रबंधक तथा एकस्वाधिकार कार्यालय, चेन्नई के प्राधिकारियों ने इसमें भाग लिया।
- ❖ कृषि में वेब आधारित शैक्षणिक प्रौद्योगिकी प्रयोग पर तीन सप्ताह की शीतकालीन पाठशाला 20 सितम्बर, 2007 को संपन्न हुई। इसका प्रमुख उद्देश्य वेब आधारित शैक्षणिक प्रौद्योगिकी प्रयोग का मूल्यांकन करने तथा अद्यतन प्रवृत्तियों से अवगत कराने एवं इंटर तथा इंटरनेट वेब आधारित पाठ्यक्रम विकसित करने एवं प्रकाशित करने हेतु रहा। इस कार्यक्रम में भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालयों के 26 शिक्षक एवं वैज्ञानिकों ने इसमें भाग लिया।

अक्टूबर

- ❖ एशिया पॉसिफिक सहायता आधारित संघ एवं कृषि अनुसंधान नेटवर्क पर विशेषज्ञ परामर्श 8-10, अक्टूबर, 2007 के दौरान नार्म और इक्रिसॉट में संपन्न हुई। भा.कृ.अनु.प. एवं इक्रिसॉट के संयोजन से कृषि अनुसंधान संस्थानों का एशियाई पॉसिफिक संघ (अपारी) एवं अनाज व फली एशियाई नेटवर्क (क्लॉन) से संबंधित कई बैठकें आयोजित किये गए। इसका प्रमुख उद्देश्य, विभिन्न क्षेत्रीय अनुसंधान नेटवर्कों की प्रगति तथा अपारी के साथ साझेदारी से प्रचालक सहायता संघ आधारित बैठकें या व्यक्तिगत रूप से आयोजित बैठकें या एशियाई-पॉसिफिक क्षेत्रीय विकास के लिए कृषि अनुसंधान एवं विकास के विभिन्न पणदाताओं को सम्मिलित कर भविष्य में सहयोग बढ़ाने हेतु योजना बनाना है। लगभग 70 सहभागियों में चयनित नेटवर्क समन्वयक एवं अपारी से संबद्ध ए.आर.डी.नेटवर्क के साझेदार जिसमें राष्ट्रीय कृषि अनुसंधान सेवा के प्रमुख नेता तथा ऑस्ट्रेलिया, बांग्लादेश, चीन, फिजी,

भारत, इंडोनेशिया, इरान, जापान, मलेशिया, म्यांमार, नेपाल, नव कॉलिडोना, पापुआ, न्यू ग्यूनिया, फिलीपाईन्स, पाकिस्तान, कोरिया रिपब्लिक, समोआ, श्रीलंका, थाइलैंड, थाइवान, वियतनाम के अन्य पणधारियों ने इन बैठकों में भाग लिया।

- ❖ बौद्धिक संपत्ति (आई.पी.) अधिकार : पादप किस्मों का संरक्षण - प्रक्रिया एवं प्रणाली पर अक्टूबर 3-6, 2007 के दौरान कृषि एवं ग्रामीण विज्ञान फाउंडेशन (एफ.आर.एस.एफ) हैदराबाद के सहकारिता से चार दिवसीय प्रबंध विकास कार्यक्रम संपन्न हुआ। इसका उद्देश्य वैज्ञानिकों को पादप किस्म संरक्षण की अद्यतन जानकारी से अवगत करवाना एवं उन प्रक्रियाओं तथा प्रणालियों से भी परिचित करवाना रहा। यह कार्यक्रम पादप किस्म संरक्षण एवं कृषक अधिकार प्राधिकरण (पी.पी.वी. एवं एफ.आर.ए), भारत सरकार, नई दिल्ली द्वारा प्रायोजित किया गया। इस कार्यक्रम में भा.कृ.अनु.प. संस्थानों एवं कृषि विश्वविद्यालयों के 22 वरिष्ठ वैज्ञानिक एवं संकाय सदस्यों ने भाग लिया।
- ❖ राज्य कृषि विश्वविद्यालयों के शैक्षणिक प्रौद्योगिकी प्रकोष्ठों की स्थापना एवं योगदान पर तीन दिवसीय कार्यशाला 18-20 अक्टूबर, 2007 के दौरान आयोजित की गई। इस कार्यशाला का उद्देश्य, राज्य कृषि विश्वविद्यालय पद्धति में शैक्षणिक प्रौद्योगिकी प्रकोष्ठों की आवश्यकता एवं उन्हें प्रदत्त उत्तरदायित्वों पर विचार-विमर्श करना था तथा संरचना, निवेश एवं वित्तीय ढाँचे से युक्त विशेषतः कृषि शिक्षा की गुणवत्ता में सुधार तथा इन प्रकोष्ठों की स्थापना की क्रियात्मक लाभदायिकता पर विस्तृत चर्चा करना था। इस कार्यशाला में विभिन्न कृषि विश्वविद्यालयों के 19 सहायक एवं सह प्राचार्यों ने भाग लिया।
- ❖ कृषि सूचना प्रबंधन के लिए नेटवर्किंग आवश्यकताओं पर दस दिवसीय कार्यक्रम 16-25 अक्टूबर, 2007 के दौरान आयोजित किया गया। इस कार्यक्रम का प्रमुख केन्द्रबिंदु, राष्ट्रीय कृषि अनुसंधान सेवा में कृषि के विशेष संदर्भ में नेटवर्किंग विकास एवं क्षमताओं के प्रति जागरूकता पैदा करना तथा प्रभावी नेटवर्किंग आवश्यकताओं पर ज्ञान प्रदान करना था। इस कार्यक्रम में लगभग 18 भा.कृ.अनु.प. संस्थानों एवं कृषि विश्वविद्यालय के प्रबंधकीय वैज्ञानिक, संकाय सदस्य (शिक्षक), तकनीकी अधिकारी, एरिस/कंप्यूटर केंद्रों के प्रभारी, नेटवर्क प्रशासकों ने भाग लिया।

नवम्बर

- ❖ वीडियो एवं मल्टीमीडिया निर्माण की उन्नतियों पर तीन सप्ताह की शीतकालीन पाठशाला 1-21 नवम्बर, 2007 के दौरान संपन्न हुई। इसका लक्ष्य डिजिटल उच्च परिभाषित वीडियो जैसे वीडियो एवं मल्टीमीडिया प्रौद्योगिकियों की संकल्पनाओं को परिचित करना था एवं सहभागियों को संबद्ध हार्डवेयर एवं साफ्टवेयर में व्यावहारात्मक अनुभव प्रदान करना था। इस प्रशिक्षण द्वारा भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालयों के 22 वैज्ञानिक एवं संकाय सदस्य, लाभान्वित हुए।
- ❖ नवम्बर 1-6, 2007 के दौरान कृषि अनुसंधान संगठनों के कार्य-निष्पादन मूल्यांकन पर छः दिवसीय प्रबंध विकास कार्यक्रम संपन्न हुआ, जिसका प्रमुख उद्देश्य राष्ट्रीय कृषि अनुसंधान पद्धति के अनुसंधान संगठनों में कार्य-निष्पादन का मूल्यांकन कर, सहभागियों को ऐसे अवसर प्रदान करें, जिससे वे परिमाण के उपयुक्त संकेतको से भली-भाँति परिचित हो सकें। इस कार्यक्रम में उनके संगठनों में अनुसंधान के कार्य-निष्पादन मूल्यांकन कार्य से जुड़े भा.कृ.अनु.प. संस्थानों एवं कृषि विश्वविद्यालयों के 10 वैज्ञानिक एवं संकाय सदस्यों ने भाग लिया।



- ❖ प्रशासनिक सक्षमता एवं वित्तीय प्रबंधन के सुधार पर एक सप्ताह का पाठ्यक्रम नवम्बर 13-20, 2007 के दौरान आयोजित किया गया, जिसमें संगठनात्मक प्राथमिकताओं एवं आवश्यकताओं की पूर्ति हेतु वरिष्ठ अधिकारियों को सकारात्मक प्रशासनिक समर्थन प्रदान करने कर्मियों में अपनी क्रियाकलापों के सक्षम एवं कुशल कार्य-निष्पादन प्रति सुधार लाने के प्रति उन्मुख था। इस पाठ्यक्रम में विभिन्न भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालयों के 29 प्रशासनिक अधिकारी, वित्त एवं लेखा अधिकारी, सहा.प्रशासनिक अधिकारी एवं सहायक वित्त एवं लेखा अधिकारियों ने भाग लिया।
- ❖ नवम्बर 14-17, 2007 के दौरान “अभिप्रेरणा तकनीकों पर निदेशकों की गुप्त बैठक - कार्य में मनोरंजन” पर चार दिवसीय कार्यकारी विकास कार्यक्रम आयोजित किया गया, जिसमें सहभागी प्रतिनिधियों को अभिप्रेरणा की संकल्पनाओं एवं प्रक्रियाओं से अवगत करवाना गया। इस कार्यक्रम में कुल 12 भा.कृ.अनु.प. संस्थानों के निदेशक एवं राज्य कृषि विश्वविद्यालय के निदेशक एवं संकायाध्यक्षों ने भाग लिया।
- ❖ नवम्बर 14 से 4 दिसंबर, 2007 के दौरान भारतीय कृषि पर विश्व व्यापार करार एवं अन्य अन्तर्राष्ट्रीय करार के प्रभाव पर तीन सप्ताह की शीतकालीन पाठशाला आयोजित की गई। भारतीय कृषि पर विश्व व्यापार संगठन अवधि के तदोपरांत विभिन्न अन्तर्राष्ट्रीय करारों के प्रभाव अनुवर्ती नीति एवं कृषि अनुसंधान पद्धति के लिए संस्थानीय आदेशकों से सहभागियों को परिचित करवाना था। भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालयों के 22 वैज्ञानिक एवं संकाय सदस्यों ने इस कार्यक्रम में भाग लिया।

दिसम्बर

- ❖ राजभाषा अधिकारियों द्वारा अनुभव की गई राजभाषा कार्यान्वयन की समस्याओं पर दिसम्बर 4-6, 2007 के दौरान राजभाषा अधिकारियों की समस्याओं पर चार दिवसीय कार्यशाला आयोजित की गई। इस कार्यशाला में राजभाषा कार्यान्वयन से संबद्ध कर्मी कुल 38 सहायक निदेशक (रा.भा), अनुभाग प्रभारी, तकनीकी अधिकारियों ने भाग लिया।
- ❖ केन्द्रीय बारानी कृषि अनुसंधान संस्थान (क्रिडा), हैदराबाद में 10-15 दिसम्बर, 2007 के दौरान कार्य में मानव सक्षमताओं की वृद्धि पर एक गैर परिसरीय विशिष्ट पाठ्यक्रम आयोजित किया गया। इस कार्यक्रम द्वारा एक वैविध्य समूह के सहभागियों को अपनी-अपनी भूमिकाओं एवं उत्तरदायित्वों को समझने में सुविधा प्रदान की गई। कुल 25 सहभागी रहें, जिसमें वैज्ञानिक, तकनीकी अधिकारी एवं प्रशासन तथा लेखा कर्मी भी सम्मिलित थें।
- ❖ दिसम्बर 12-15, 2007 के दौरान चार दिवसीय दल निर्माण कार्यशाला व प्रशिक्षण संपन्न हुआ। इस कार्यशाला का प्रमुख उद्देश्य कृषि व्यावसायिकों में दल निर्माण क्षेत्र के अद्यतन ज्ञान तथा कुशलता से संपन्न करना तथा अन्तर वैयक्तिक संबंधों से भी अवगत कराना था। इसके द्वारा सहभागियों को वैयक्तिक, अन्तर वैयक्तिक, समूह की प्रभावात्मकता एवं साथ मिलकर कार्य करने की प्रक्रिया का महत्व समझाया गया। इस कार्यशाला में भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालयों के 22 सहभागियों ने भाग लिया।
- ❖ विश्व बैंक द्वारा समर्थन प्राप्त राष्ट्रीय कृषि नवोन्मेषी परियोजना (एन.ए.आई.पी) के अन्तर्गत भारतीय कृषि अनुसंधान परिषद द्वारा अकादमी को शिक्षा एवं क्षमता निर्माण (एल एवं सीबी) पर एक प्रमुख परियोजना आयोजित की गई। एन.ए.आई.पी. - एल एवं सीबी कार्यक्रम की

दो दिवसीय लांच कार्यशाला दिसम्बर 19-20, 2007 को संपन्न हुई, जिसमें सहयोगी संस्थानों एवं साझेदारी संस्थानों के बीच कार्य-योजना एवं उत्तरदायित्वों को अंतिम रूप दिया गया। इस कार्यशाला में भारतीय प्रबंधन संस्थान (आई.आई.एम) लखनऊ, राष्ट्रीय ग्रामीण विकास संस्थान (एन.आई.आर.डी) हैदराबाद, मॉनेज, हैदराबाद, ए.एस.सी.आई, हैदराबाद, गोविंद वल्लभ पंत कृषि एवं प्रौद्योगिकी विश्वविद्यालय, (जी.बी.पी.यू.ए. एवं टी), पंतनगर, एम.एस.एस.आर.एफ, चेन्नई, कॉर्ड-एम हैदराबाद एवं गुरु परामर्शदाता, बेंगलूर के प्रतिनिधियों ने इस कार्यशाला में भाग लिया।

जनवरी

- ❖ जनवरी 4-6, 2008 के दौरान सहायक संघ आधारित गुप्त बैठक के दौरान तीन दिवसीय राष्ट्रीय कृषि नवोन्मेषी परियोजना (एन.ए.आई.पी.) कार्यशाला संपन्न हुई, जो प्रचालकीय गुप्त बैठक में अनुभव किये गए प्रचालकीय एवं प्रबंधकीय मद्दों को पहचानने हेतु आयोजित थी। इस कार्यशाला में आठ सहायता संघ आधारित बैठकों के लगभग 100 व्यक्ति, जिनमें प्रशासन एवं वित्तीय कर्मचारियों के साथ प्रधान अन्वेषकों ने भाग लिया। कार्यशाला में प्रबोधन एवं मूल्यांकन सदस्य सहायता डेस्क एवं संप्राप्ति परामर्शदाताओं ने कार्यशाला में अपना निवेश दिया तथा एन.ए.आई.पी. के राष्ट्रीय निदेशक एवं राष्ट्रीय समन्वयकों ने सहभागियों की समस्याओं का समाधान प्रदान किया।
- ❖ भा.कृ.अनु.प. में नये भर्ती हुए वैज्ञानिकों के लिए 7 जनवरी से मार्च 14, 2008 के दौरान कृषि अनुसंधान सेवा के लिए 82 वें बुनियादी पाठ्यक्रम (फोकर्स) आयोजित किया गया। बुनियादी पाठ्यक्रम का प्रमुख उद्देश्य वैज्ञानिकों को उत्तम अनुसंधान कार्यकर्ताओं के रूप में रूपांकित करना है। 114 नये भर्ती हुए वैज्ञानिकों ने इस प्रशिक्षण में भाग लिया।
- ❖ जनवरी 16-22, 2008 के दौरान संगठनात्मक प्रभावात्मकता की वृद्धि के लिए तनाव प्रबंधन की नीतियों पर छः दिवसीय वरिष्ठ कार्यक्रम संपन्न हुआ। इससे सहभागियों को तनाव की संकल्पनाएँ, तनाव प्रक्रिया एवं तनाव संबंधित विकारों प्रति अभिमुखीकृत करना है। इस कार्यक्रम का आशय, तनाव के प्रभावी प्रबंधन के लिए वैयक्तिक एवं संगठनात्मक घटकों का विश्लेषण करने एवं विभिन्न तकनीकों तथा नीतियों को विकसित करना था। इस कार्यक्रम में भा.कृ.अनु.प. संस्थानों एवं कृषि/पशुचिकित्सा विश्वविद्यालयों में कार्यरत 15 वरिष्ठ स्तर के वैज्ञानिकों एवं शिक्षकों ने इसमें भाग लिया।
- ❖ निश क्षेत्र परियोजना के अन्तर्गत 16-23 जनवरी, 2008 के दौरान ई-शिक्षा पर आठ दिवसीय प्रशिक्षण कार्यक्रम आयोजित किया गया। इससे सहभागियों को विषय-सामग्री विकास के लिए ओपन सोर्स साफ्टवेयर, डेटा विश्लेषण एवं डेटाबेस प्रबंधन एवं विषय-सामग्री विकास परियोजना मोड पर केस अध्ययन विकसित करने में सहायता मिली। इस कार्यक्रम में भा.कृ.अनु.प. संस्थानों राज्य कृषि विश्वविद्यालय एवं अन्य संबद्ध संगठनों के 13 संकाय सदस्यों वैज्ञानिकों तकनीकी अधिकारियों ने भाग लिया।
- ❖ आई.जी.एफ.आर.आई, झांसी द्वारा 16-21 जनवरी, 2008 के दौरान प्रशासनिक, वित्त एवं लेखा मानवशक्ति की सक्षमता सुधार पर छः दिवसीय गैर परिसरीय प्रशिक्षण कार्यक्रम आयोजित किया गया। इसका प्रमुख उद्देश्य संगठनात्मक प्राथमिकताओं एवं आवश्यकताओं की पूर्ति हेतु वैज्ञानिक सामुदाय को सकारात्मक प्रशासनिक समर्थन देने हेतु कर्मचारियों को अपने कार्य निष्पादन में कार्यकुशलता एवं प्रभावात्मकता में सुधार लाना था। इस प्रशिक्षण कार्यक्रम में संस्थान के 25 प्रशासनिक एवं वित्तीय कर्मचारियों ने भाग लिया।



- ❖ कृषि शिक्षा में वैश्विक प्रतिस्पर्धात्मकता के लिए शैक्षणिक प्रौद्योगिकी पर निश उत्कृष्टता क्षेत्र परियोजना के तहत कृषि महाविद्यालय, बिरसा कृषि विश्वविद्यालय, रांची में 22-28 जनवरी, 2008 के दौरान शैक्षणिक प्रणाली एवं अनुदेशात्मक प्रौद्योगिकी पर गैर परिसरीय संकाय विकास कार्यक्रम संपन्न हुआ। इस कार्यक्रम का प्रमुख उद्देश्य, शिक्षकों में शिक्षा प्रौद्योगिकी में आवश्यकता आधारित ज्ञान, कुशलता एवं क्षमताओं को बढ़ाना तथा उन्हें शैक्षणिक मॉड्यूल एवं उपकरणों की योजना एवं निर्माण में शैक्षणिक अभिकल्पना के सिद्धांतों को सुव्यस्थित रूप से लागू करना था। इस कार्यक्रम में कुल 24 सहायक व सह प्राध्यापक, जिनमें बिरसा कृषि विश्वविद्यालय के 15 एवं राज्य कृषि विश्वविद्यालय से 9 प्राध्यापकों ने भाग लिया।
- ❖ जनवरी 21-22, 2008 के दौरान निश उत्कृष्टता क्षेत्र के तहत कृषि में यथार्थ कृषि एवं सूचना प्रौद्योगिकी प्रबंध के लिए पाठ्यक्रम अभिकल्पना पर मस्तिष्क मंथन कार्यशाला आयोजित की गई। प्रथम दिवस के मस्तिष्क मंथन सत्र में भारतीय कृषि विश्वविद्यालयों में स्नातकाधीन एवं स्नातकोत्तर पाठ्यक्रम में यथार्थ कृषि को सम्मिलित किया गया। कृषि में सूचना प्रौद्योगिकी प्रबंधन के महत्व पर ध्यान देते हुए, अकादमी की इस क्षेत्र में भी शैक्षणिक कार्यक्रम आरंभ करने की प्रत्याशा है। तदनुसार, दूसरे दिन के कार्य सारणी में कृषि में सूचना प्रौद्योगिकी प्रबंधन पर स्नातकोत्तर का एक संपूर्ण डिप्लोमा अभिकल्पित करने पर प्रकाश डाला गया। मस्तिष्क मंथन के विभिन्न क्षेत्र : सक्षम नियोक्ता, कुशलता आधारित आवश्यकताएँ, पाठ्यक्रम रूपरेखा, प्रवेश प्राप्ति की आवश्यकताएँ, ऑन्ड्रोगॉगी एवं संबद्ध अन्य विषय रहें। इस कार्यशाला में 40 सहभागियों ने भाग लिया।

राष्ट्रीय परामर्श सेवाएँ

डॉ.टी.बालगुरु, प्रमुख, कृषि अनुसंधान पद्धति प्रबंधन परियोजना (ए.आर.एस.एम.पी) प्रभाग, श्रीलंका के राजारटा विश्वविद्यालय, मिहिंटेल के कृषि अनुसंधान प्रबंधन क्षेत्र में परामर्शदाता के रूप में प्रतिनियुक्ति पर थे। उन्होंने दिसम्बर 27-28, 2007 के दौरान कृषि अनुसंधान प्रबंध पर प्रशिक्षण व कार्यशाला आयोजित की, जो सहभागियों को अनुसंधान प्रबंध के समसामयिक मर्दों के प्रति जागृत करने एवं अनुसंधान के उत्तम प्रबंधन की तकनीकों तथा उपकरणों से परिचित करवाने के प्रति उन्मुख था। भा.कृ.अनु.प. - सी.ए.आर.पी. कार्य योजना के तहत सी.ए.आर.पी. श्रीलंका के अनुरोध पर आयोजित इस कार्यक्रम में कृषि के अतिरिक्त प्रबंधन, सामाजिक विज्ञान, मानविकी अनुप्रयुक्त विज्ञान एवं चिकित्सा जैसे विभिन्न क्षेत्रों से 37 वैज्ञानिकों ने इसमें भाग लिया।

फरवरी

- ❖ निश क्षेत्र परियोजना के तहत फरवरी 1-21, 2008 के दौरान कंप्यूटर आधारित मल्टीमीडिया प्रस्तुतीकरण पर एक पुनश्चर्या पाठ्यक्रम आयोजित किया गया। यह पाठ्यक्रम ई-शिक्षा एवं ज्ञान प्रबंधन में मल्टीमीडिया प्रयोग को भली-भाँति अवगत करवाने तथा वेब एवं सी डी आधारित प्रस्तुतीकरणों दोनों के लिए सहभागियों को डिजिटैजिंग, संश्लेषणीकरण, ऑनिमेटिंग, प्रतिबिंब पॉकिंग, ध्वनि, ग्राफिक्स वीडियो इत्यादि से परिचित करवाना था। इस कार्यक्रम द्वारा सहभागियों को विभिन्न वर्गों के मल्टीमीडिया निर्माण उपकरणों से परिचित करवाने तथा सहभागिता ज्ञान प्रबंधन के लिए आई.सी.डी.सी. (सूचना संप्रेषण एवं विश्वीय पद्धति) के लिए स्वयं के माड्यूल विकसित करने में भी सहायता मिली।

- ❖ फरवरी 1-21, 2008 के दौरान संपोषित कृषि के लिए जी.आई.एस. आधारित निर्णय समर्थन पद्धति पर एक-प्रशिक्षण कार्यक्रम संपन्न हुआ, जो कृषि उत्पादन पद्धति के संपोषणीयता से संबंधित संबद्ध संकल्पनाएँ संकेतक एवं प्रश्नों के निर्माण एवं समाधान हेतु अंतरिक्षीय प्रौद्योगिकी संबद्ध रिमोट सेंसिंग एवं इमेज प्रक्रमण तथा जी.आई.एस. की संकल्पनाओं को आरंभ करने हेतु था। इस कार्यक्रम द्वारा जी.आई.एस. साफ्टवेयर एवं हार्डवेयर का व्यावहारिक अभ्यास भी प्रदान किया गया।
- ❖ आई.जी.एफ.आर.आई, झांसी में फरवरी 12-15, 2008 के दौरान तकनीकी कर्मियों के सक्षमता सुधार पर एक गैर परिसरीय विशिष्ट लघु पाठ्यक्रम आयोजित किया गया। इस कार्यक्रम का प्रमुख उद्देश्य तकनीकी कर्मियों में राष्ट्रीय कृषि अनुसंधान पद्धति के विस्तृत परिप्रेक्ष्य में परिचित करवाना एवं कृषि अनुसंधान उपयुक्तता में अपने योगदान हेतु सक्षमता एवं प्रतिस्पर्धात्मकता को सुधारना था।
- ❖ इंडो-संयुक्त राज्य कृषि ज्ञान पहल के तहत 14-16 फरवरी, 2008 के दौरान बौद्धिक संपत्ति संरक्षण एवं कृषि में प्रौद्योगिकी अनुज्ञाप्तिकरण पर एक कार्यक्रम संपन्न हुआ। यह कार्यक्रम, भा.कृ.अनु.प. संस्थानों एवं कृषि विश्वविद्यालयों के वैज्ञानिकों एवं शिक्षकों को अपने-अपने संगठनों में बौद्धिक संपदा प्रबंधन में प्रशिक्षकों के रूप में उनकी क्षमता निर्माण के प्रति उन्मुख था। यह कार्यक्रम सी.सी.एस. हरियाणा कृषि विश्वविद्यालय, भा.कृ.अनु.प. एवं मिशिगन राज्य विश्वविद्यालय, संयुक्त राज्य अमेरिका द्वारा संयुक्त रूप से आयोजित किया गया।
- ❖ भा.कृ.अनु.प. के नये भर्ती हुए वैज्ञानिकों के लिए कृषि अनुसंधान सेवा (फोकार्स) हेतु 83 बुनियादी पाठ्यक्रम का उद्घाटन 26 फरवरी, 2008 को किया गया। यह प्रशिक्षण 24 जून, 2008 को पूरा होगा। इस बुनियादी पाठ्यक्रम का प्रमुख उद्देश्य वैज्ञानिकों को उत्तम अनुसंधानकर्ताओं के रूप में रूपकल्पित करना है। कुल 23 वैज्ञानिक प्रशिक्षणाधीन है।
- ❖ फरवरी 28 से मार्च 01, 2008 के दौरान भा.कृ.अनु.प.अनुसंधान परिसर, गोवा के वैज्ञानिक, प्रशासनिक एवं तकनीकी कर्मियों के लिए एक लघु-अवधि प्रशिक्षण कार्यक्रम संपन्न हुआ, जो आयकर प्रविधि एवं सूचना अधिनियम अधिकार 2005 के अद्यतन विकास से परिचित करवाने एवं उन्हें समृद्ध करने के प्रति आयोजित था।

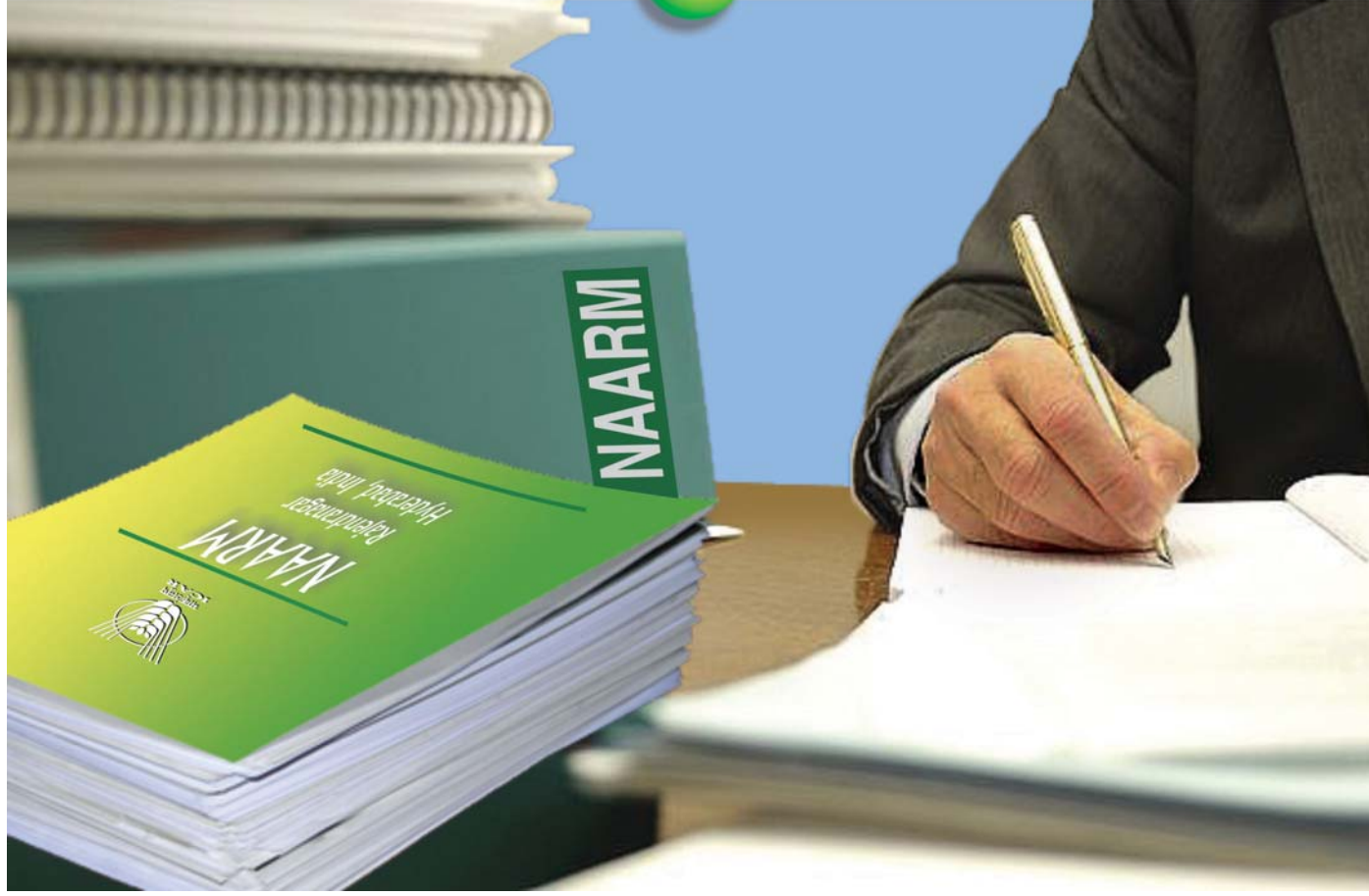
मार्च

- ❖ निश क्षेत्र परियोजना के तहत मार्च 6-7, 2008 के दौरान समन्वयकों के लिए एक क्षेत्र अनुभव प्रशिक्षण (एफ.ई.टी) अभिमुखीकरण कार्यशाला संपन्न हुई। इस कार्यशाला में हमारे भावी स्थानीय एफ.ई.टी. समन्वयकों को क्षेत्र अनुभव प्रशिक्षण के विषय-सामग्री एवं प्रणालियों के प्रति अवगत करवाना था, जो कृषि अनुसंधान सेवा (फोकार्स) के बुनियादी पाठ्यक्रम का एक अन्तर्निष्ठ भाग है। इस कार्यशाला में क्षेत्र अनुभव प्रशिक्षण के प्रभावी प्रबंधन के लिए स्थानीय समन्वयकों के योगदान के प्रति भी सहभागियों को भली-भाँति ओत-प्रोत किया गया। भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालय के 46 वैज्ञानिक एवं संकाय सदस्यों ने इस कार्यशाला में भाग लिया।
- ❖ कृषि महाविद्यालय, मंडया, कर्नाटक में 10-15 मार्च, 2008 के दौरान शैक्षणिक प्रणाली एवं अनुदेशात्मक प्रौद्योगिकी पर गैर-परिसरीय संकाय विकास प्रशिक्षण कार्यक्रम संपन्न हुआ। इस कार्यक्रम का आशय, शैक्षणिक में शैक्षणिक प्रौद्योगिकी में आवश्यकता आधारित



ज्ञान, कुशलता एवं सक्षमताओं को बढ़ाना है तथा शिक्षक मॉड्यूल एवं उपकरणों की योजना एवं निर्माण के विकास में अनुदेशात्मक अभिकल्पनाओं के सिद्धान्तों को सुव्यवस्थित रूप से लागू करने में सुविधा प्रदान करना था। 25 संकाय सदस्य, जिनमें 10 कृषि विज्ञान विश्वविद्यालय, बेंगलूर तथा कर्नाटक पशुचिकित्सा, प्राणी एवं मात्स्यिकी विज्ञान विश्वविद्यालय, बीदर के 15 संकाय सदस्यो ने इस प्रशिक्षण कार्यक्रम में भाग लिया।

- ❖ राष्ट्रीय कृषि नवोन्मेषी परियोजना को नीति एवं प्राथमिकता, प्रबोधन एवं मूल्यांकन (पी.एम.ई) समर्थन पर एक प्रबंधन विकास कार्यक्रम/कार्यशाला मार्च 11-17, 2008 के दौरान एन.ए.आई.पी.-एल एवं सी बी के तहत आयोजित की गई। यह कार्यक्रम, एन.ए.आई.पी. द्वारा चित्रित सहायता संघ आधारित अनुसंधान नीति के लिए संगठनात्मक एवं प्रबंधकीय सुधार, प्राथमिकता निर्धारण, प्रबोधन एवं मूल्यांकन के प्रति सहभागियों को जागृत करने की ओर अभिमुखीकृत था। सहभागियों को कृषि अनुसंधान एवं विकास के विभिन्न क्षेत्रों में पी.एम.ई. के कई तकनीकों से सुसंबद्ध करवाना था। भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालयों के पी.एम.ई. प्रकोष्ठों के प्रभारी एवं एन.ए.आई.पी. सहायता संघ परियोजनाओं द्वारा अनुमोदित पी.एम.ई. क्रियाकलापों से जुड़े 25 वरिष्ठ स्तर के वैज्ञानिक इस कार्यशाला में सम्मिलित थे।
- ❖ मार्च 17-22, 2008 के दौरान अकादमी में शैक्षणिक प्रौद्योगिकी, तनाव प्रबंधन, एवं कार्य सक्षमता सुधार की उन्नतियों पर एक संकाय विकास कार्यक्रम आयोजित किया गया, जो संगठनात्मक प्रभावात्मकता के लिए कार्य निष्पादन एवं सक्षमता में सुधार लाने तथा तनाव प्रबंध प्रणाली के प्रति जागृत करने हेतु था। पशुचिकित्सा एवं पशु विज्ञान महाविद्यालय, उद्गीर के 15 संकाय एवं कर्मचारियों ने इस प्रशिक्षण में भाग लिया।
- ❖ एन.ए.आई.पी.-एल एवं सीबी कार्यक्रम के तहत 24-29 मार्च, 2008 के दौरान सफल अनुसंधान प्रस्तावों के विकास पर प्रशिक्षण कार्यक्रम आयोजित किया गया, जो पणधारियों की आवश्यकताओं के विशेष संदर्भ में प्रदाताओं से निधि प्राप्त करने योग्य सफल अनुसंधान प्रस्तावों की योजना बनाने में कुशलता विकसित करने हेतु उन्मुख रहा। साथ ही अनुसंधान कार्यक्रम की योजना में परियोजना मूल्यांकन व मूल्यांकन तकनीक (पी.ई.आर.टी) एवं लॉग फ्रेम के उपयोग को विस्तृत रूप से विश्लेषित करने के प्रति भी आयोजित था। इस प्रशिक्षण कार्यक्रम में भा.कृ.अनु.प. संस्थानों एवं राज्य कृषि विश्वविद्यालयों के 16 वैज्ञानिकों ने भाग लिया।
- ❖ एन.ए.आई.पी. संघटक -1 जो भारत में कृषि विस्तार-कृषि अनुसंधान/आई.सी.टी. ज्ञान प्रबंधन से युक्त भारत में शिक्षा कनटिन्यूअम की अभिकल्पना के तहत 25 मार्च, 2008 के अंतरिक्षीय पुस्तकालय एवं सहभागिता ग्रामीण जी.आई.एस. पर मस्तिष्क मंथन कार्यशाला संपन्न हुई। इस मस्तिष्क मंथन में सम्मिलित विषय : 1. भू-अंतरिक्षीय पुस्तकालय - संकल्पनात्मक मूलाधार, रिमोट सेंसिंग डेटा एवं अध्ययन संसाधन, वेब अन्तरापृष्ठ आवश्यक डेटा सिद्धान्त, प्रचालन पहलू 2. सहभागिता जी.आई.एस. - आवश्यक डेटा, थीम ज्ञान संसाधन, सामुदायिक अन्तरापृष्ठ एवं मेट्रिकस इत्यादि। इस कार्यशाला में 34 सहभागियों ने भाग लिया।



Executive Summary

Executive Summary

As envisaged in the mandate, the Academy has been undertaking the responsibility of human resource development of the National Agricultural Research System (NARS), to the best of its human resource and infrastructure capability since its inception. This becomes important in the wake of rapidly changing global economic and agricultural scenario, to which NARS has to respond effectively. The effectiveness of the system will be much more if all the stakeholders join force in a partnership mode. The transformation of NARS into the National Agricultural Innovation System (NAIS) is to be seen in this context. The capacity building of individuals and institutions in the NARS, being transformed into NAIS, is an urgent and challenging task.

The Academy has been playing its role of human resource development for the NARS for over three decades and the effort has been recognized. So far, the Academy mainly catering to the HR needs of ICAR institutes and Agricultural Universities. Since more partners with diverse background are also joining the national effort in increasing the sustainable profitability of agriculture and allied sector and also in safeguarding the social and environmental concerns, its area of operation is now encompass other partners in the Public-Private-People Partnership, being assiduously built under the aegis of NAIP. The crux is that this transformation should take place sooner. The Academy has been lending its support to the National Agricultural Innovation Project (NAIP) and is also considered as a part of Project Implementation Unit (PIU) in facilitating the implementation of this prestigious project, on whose success the future roadmap of agricultural research will largely depend. The researches will have to trigger innovations and all important stakeholders will have to be taken in the loop right from technology generation to its adoption, giving due regards to social and environmental concerns and sustainability. This should lead to gross national happiness, which is perhaps a more important objective of any civilized society.

The Academy has established a Help Desk under NAIP, which extends on-line help to all prospective institutions/individuals in preparing winning proposals and in sensitizing potential partners. All those interested in developing and submitting proposals to PIU, NAIP took help from Help Desk at NAARM. The Help Desk established at NAARM has been actively helping the prospective consortia members in project proposal preparation and their on-line submission. It is Academy's belief that if the faculty members use the opportunity offered by NAIP, it shall be better prepared to undertake research with the help from the partners, who are also important stakeholders, and serve the cause of Indian agriculture more effectively.

The NAIP sanctioned the Learning and Capacity Building (L&CB) Project to NAARM, for which the Academy is grateful to NAIP and authorities in the Council. The Project was launched in a workshop held at the Academy during December 19-20, 2007. In this effort of learning and capacity building, the Academy is associated with renowned institutions like Indian Institute of Management, Lucknow (IIML), National Institute of Rural Development (NIRD), Hyderabad, and National Institute of Agricultural Extension Management (MANAGE), Hyderabad, as partners. A large number of activities are planned under the Project for different levels and duration. Under the Project,



around 3,500 persons are proposed to be trained. A number of research studies will be conducted in partnership with IIML and NIRD. The Academy looks forward to a successful and fruitful partnership.

Since the approval of NAIP sub-project on Learning and Capacity Building (L&CB), a number of programmes were organized by the Academy and its partnering institution IIM, Lucknow. Under this sub-Project, a number of scientists were trained in the area of Marker Assisted Selection in Rice at IRRI, Philippines. It is hoped that her efforts to support PIU, NAIP will help in getting quality funding proposals and greater involvement of private sector strengthening the Public-Private Partnership. Besides the L&CB sub-project as Lead institution, the Academy is also a partner in NCAP-led "V-PAGE" and ICRISAT-led "Redesigning Farmer-Extension-Agricultural Research/Education Continuum with ICT -Mediated Knowledge Management" sub-projects.

As its flagship programme, the Academy devoted its maximum attention and resources to the Foundation Course for Agricultural Research Service (FOCARS). During the period under report, three such programmes were conducted through 81st, 82nd, and 83rd FOCARS in which 164 newly-recruited probationary scientists underwent training. There have been many innovations in the conduct of the course, which include modified and improved curriculum, FET being made more specific and focused (the focus this time was GI), and introduction of a short exposure of probationers to the industries, seed companies, manufacturers, processors, etc. so as to give them a feel of what is going on in the private sector. Since action is already being taken to involve private sector in Public-Private-People Partnership (PPPP), this exposure will do them good. The probationary scientists were provided the best possible experience so that they are better prepared to take up the future challenges. Apart from this, new training areas were identified and implemented under regular training courses as well under NAIP activity.

The Academy was also privileged to organize the APAARI and CLAN Executive Committee Meeting on October 8, 2007, which was attended by more than thirty participants from APAARI member countries, besides a number of senior officials from CGIAR Institutes and the Council. The Meeting was inaugurated by the Hon'ble Director General, ICAR. Dr R.S. Paroda, Former DG, ICAR, and Executive Secretary, APAARI, appreciated the efforts made by the Academy. In the technical sessions, fruitful discussions were held and many important recommendations emerged from the deliberations.

The Academy continues to contribute in the capacity building of NARS scientists and teachers through its on / off – campus programmes. Besides organizing a number of training programmes of different duration, including Summer/ Winter Schools, the Academy has organized two EDPs for the Directors of sister institutes of ICAR and Directors and Deans of Agricultural Universities, which were well received. An encouraging trend in the training programmes is participation of non-NARS officials, which is welcome as the Academy's capabilities are now being recognized by other institutions. This will pave the way for future collaboration and consultancies. Two international programmes were organized one at the Academy for the administrative and finance

officers of the Nepal Agricultural Research Council (NARC); and another in Rajarata University, Mihintale, SriLanka for agricultural scientists of SriLanka. A high-powered Delegation from the Republic of Kenya visited the Academy and evinced keen interest in making use of its HR capabilities. In all, the Academy organized nineteen senior-level programmes, where in about 448 scientists participated.

The PVP&FR Authority has appreciated the programmes conducted by the Academy in sensitizing the scientists and the seed industries on PVP and FR issues, about which many people are not fully aware. The Academy has also been collaborating with the National Biodiversity Authority (NBA) and more closely with State Biodiversity Boards in highlighting the need for protection of our rich biodiversity.

About 272 faculty members of SAUs and other Agricultural Universities were trained through eleven off-campus training programmes during this year. The Academy is encouraged by the good response from ICAR institutes and AUs. Besides training of scientists and teachers, the Academy laid great emphasis on the capacity building of administrative and accounts personnel. Two such programmes were conducted at IGFRI, Jhansi; Central Agricultural Research Institute (CARI), Port Blair; and ICAR Complex, Goa. The experience gained so far confirms the belief that mainstreaming of these staff is essential to the overall success of the system. On the request of CARP, Sri Lanka, a senior faculty was sent there to train the senior officers engaged in agricultural research and education.

A total of 13 workshops were organized by the Academy in which 573 participants took part. Two well-attended brainstorming sessions on Precision Agriculture and IT in Agriculture were organized for eliciting the views of leading experts on these important issues. Both these areas are emerging and are expected to play a major role in shaping tomorrow's agriculture. The Academy has been sensitizing the NARS on IPR issues through lectures, trainings, workshops and publications. It also organized training on IPR in collaboration with HAU, Hissar, and Michigan State University, USA, under Indo-US Agriculture Knowledge Initiative. More such programmes are in offing.

The concept of AICRPs has been unique in agricultural research which paved the way for ICAR- SAU collaboration and resulted in the evolution of a large number of varieties, breeds and technologies providing eminent support to quantum progress in production of crops; fruits and vegetables; milk, meat, egg and fish; resource management; mechanization and post-harvest management. But this novel concept, which has been highly admired, could not be replicated anywhere in the world. With the passage of time, the AICRPs have expanded; some of them were upgraded as Directorates. There has been a thinking that time has come to take a close look at the AICRPs so as to devise suitable strategies to make them better prepared through reorganization, strengthening etc for taking up even stronger and complex challenges. The Academy, deeply interested in this exercise, recently organized a preliminary meeting to be followed by brainstorming at national level in the theme area.

The Quinquennial Review Report of the Academy has been submitted to the Council, which will pave way for a new road map for the Academy. This will facilitate it to



serve not only the NARS but also Indian agriculture more effectively. The challenges to Indian agriculture are formidable and the Academy should and will play an important role in showcasing the emerging challenges (national as well as global) and also in suggesting actions to be taken to meet them. The Academy's Vision - 2025 has been prepared to envision the role the Academy should be playing in the years to come. The XI Plan SFC document has reflected many of the concerns and also the Academy's responses and proposal for funding. Our SFC has been approved heralding a new era for the Academy. The approved changes will essentially be to broaden the horizons and to brighten the activity landscape.

The NAARM Newsletter was made bilingual (Hindi and English), which will be liked by the readers. Some more innovations are in the offing. As the Academy's responsibilities increase, more efforts will be needed to strengthen its infrastructure. This is being taken up so that the conduct of training programmes, workshops, etc., is more effective and the stay of participants more comfortable. In this regard, the valuable feedback received from the participants helped us to do better.

The Inter-institutional Sports Tournament for Southern Region was successfully organized by the Academy, with more than 600 participants from 21 ICAR institutes competing for different events. This year also, NAARM emerged as the Overall Champion of the Tournament and won NAARM-sponsored NK Anantha Rao Rolling Trophy. The Academy's staff deserve all praise for organizing such an important event smoothly and winning the championship as well as Best All-rounder Women, Best Athlete Women and Second Best All-rounder Men awards.

As has been often pointed out that Indian agriculture needs massive support, it is high time that more resources were allocated for agricultural research and education, besides the continued support for transfer of technology. Without the knowledge creation, application, and transmission, the much-desired quantum and quality jump in agriculture will remain a desire. For developing tomorrow's technologies, the resource matching is also essential. The people manning and managing the NARS will have to be equipped with the best and latest tools and techniques to produce what is best in the world. The Academy reaffirms its commitment to the cause of empowering the human resource with knowledge so that the effective management of change becomes the hallmark of the system. The system of unlearning, learning, and relearning should be made functional so that the present and emerging challenges from all quarters could be suitably addressed. The Academy is quite optimistic because the enlightened leadership of the Council is aware of its potential in contributing to the on-going task of thinking and doing differently. The Academy has been serving the cause of Indian Agriculture for over three decades and can look back with some satisfaction at what has been accomplished so far. But more is expected; more is desired. While it will continue to serve in the area of HRD and HRM vigorously with all sources at its command, it yearns to emerge as an outward looking lead learning institution for serving the cause in a much expanded way.



Activities at a Glance

Activities at a Glance

April

- A six-day training programme on Developing Winning Research Proposals in Agricultural Research was organized from April 20 to 25, 2007 to develop necessary skills among the participants for writing research proposals that can win funds from donors. Fourteen persons attended the programme.
- A three-day special training programme on Vigilance Administration and Management was organized at Central Rice Research Institute, Cuttack, Orissa from April 16 to 18, 2007 to provide an overview of vigilance administration and management, and to update and acquaint the Directors of the institutes with the latest Central Vigilance Commission guidelines. Fourteen Directors/Project Directors/Joint Directors of ICAR institutes attended the programme.

May

- Eleven-day training programme on Group Learning Approaches was organized from May 7 to 17, 2007 to sensitize agricultural university faculty to the concepts of synergy in agricultural research and education; and develop competence among the participants for the production of instructional materials suitable for group learning approaches. Eight Assistant / Associate Professors from State Agricultural Universities attended the programme.
- ICAR sponsored three-day workshop on IP and Technology Management in ICAR System was organized from May 28 to 30, 2007, to ensure smooth implementation of ICAR Guidelines on Intellectual Property Management and Technology Transfer / Commercialization in Agricultural Research. Fifty representatives of Institute Technology Management Committees of 31 ICAR institutes, DDGs and Directors of ICAR institutes participated in the workshop.

June

- 81st Foundation Course for Agricultural Research Service (FOCARS) was organized from June 12 to Oct. 9, 2007. Twenty-seven ARS scientist probationers attended the programme.
- A programme on Improving Administrative Efficiency and Financial Management was organized from June 12 to 19, 2007 to improve skills and efficiency of the personnel in discharging their functions and providing constructive administrative support to their superiors in meeting the organizational priorities and needs. Twenty Administrative Officers, Finance & Account Officers, Assistant Administrative Officers, Assistant Finance & Accounts Officers of ICAR institutes and State Agricultural Universities attended the programme.
- A refresher course on Computer-based Multimedia Presentation was organized from June 20 to July 10, 2007. The programme aimed to develop an understanding and appreciation of use of Multimedia in e-learning and knowledge management; and to expose participants to digitizing, synthesizing, animating and packing im-



ages, sound, graphics, videos and text for both web and CD based presentations. Fifteen Scientists, Research Managers, Educational Administrators and Technical Officers of ICAR institutes and State Agricultural Universities attended the programme.

- A three-week Summer School on Advances in Agricultural Research Project Management was organized at the Academy from June 21 to July 11, 2007. The programme aimed to develop in the researchers future perspective of Indian agriculture, in response to changing global agricultural scenario; and to acquaint them with appropriate tools and techniques for efficient and effective management of research projects. Twenty-six scientists from ICAR institutes and State Agricultural Universities participated in the programme.

July

- A three-week Summer School on Geographical Information System (GIS) based Decision Support Systems for Sustainable Water Resources Management and Precision Agriculture was organized from July 4 to 24, 2007. The programme aimed to introduce the concepts of GIS and related spatial technologies like remote sensing and image processing and provide hands-on experience of GIS software and hardware; and to introduce case studies of GIS based decision support systems for sustainable agriculture. Twenty-three scientists from ICAR institutes and State Agricultural Universities attended the programme.
- One-week programme on Leadership and Personality Development was organized from July 5 to 12, 2007. The programme aimed at equipping the researchers and teachers in the National Agricultural Research System with the knowledge and tools that would help them identify personal impediments to develop effective leadership capacities. Sixteen senior scientists from ICAR institutes and State Agricultural Universities underwent training.
- A programme on Administration and Finance Management for two delegates from Nepal Agricultural Research Council (NARC), Nepal was organized from July 10 to 30, 2007, under ICAR-NARC work plan for the year 2006-07. The programme aimed at orienting the officers to the modern management concepts and skills that would facilitate improving their efficiency and effectiveness in discharging their functions.
- A five-day programme on *Gahan Hindi Prashikshan Va Karayashala* was organized from July 17 to 21, 2007 for the employees of ICAR institutes, who were working in sections other than Hindi. The major objective of the programme was to discuss about the experiential usage of Hindi. Thirty-one officials from ICAR institutes attended the programme.

August

- A five-day Workshop on Creative Excellence for Individual Development and Organizational Growth was organized from August 6 to 10, 2007 to improve individuals' personality profile in achieving excellence in individual growth and organizational development and appraise the participants on effective planning and

programme formulation in bringing individual and organizational change. Twenty-three participants consisting of deans, principal scientists, and senior faculty members from ICAR institutes, SAUs and KVKs attended the workshop.

- A Summer School on Advances in Agribusiness, Market Intelligence and Information Technology was organized from August 7 to 27, 2007 to acquaint the participants with appropriate tools and techniques for analyzing markets and information system for efficient and effective management of agribusiness in response to changing global agricultural scenario of international trade. Twenty-five senior level scientists, teachers from ICAR Institutes and State Agricultural Universities attended the programme.
- A two-day Monitoring and Evaluation Workshop of World Bank supported National Agricultural Innovation Project (NAIP) was organized during August 9 - 10, 2007 to discuss objectives of Monitoring and Evaluation System (M&E); design of PMTS and reporting formats for M&E; time frame for reporting and follow up studies on monitorable variables in their projects and expected outcomes for the consortium participants. Forty senior officers of ICAR, State Agricultural Universities and private organizations across the nation participated in the workshop.
- A programme on E-Learning was organized from August 20 to 25, 2007 to familiarize the participants with open source software for content development, data analysis and database management, and develop case studies on content development project mode. Twenty faculty members, scientists, technical officers from ICAR institutes, State Agricultural Universities and other related organizations took part in the programme.
- One-week Management Development Programme in Agricultural Research was organized from August 24 to 30, 2007 to develop middle level competencies in the organizational set-up of research institutions and to sensitize on the behavioural issues of people at work. Sixteen Heads of Departments of ICAR institutes and SAUs participated in the programme.
- A two-day hands on training programme on Intelligent Reporting System (IRS) for Nodal Officers / Data Enterers of ICAR Institutes was organized during August 30 - 31, 2007, to acquaint the participants in installing IRS and enter their institutes data in various administrative forms and uploading the same to server. Eighty-seven administrative and financial personnel of ICAR institutes got benefited through this programme.

September

- A Refresher Course on Participatory Media and Knowledge Management was organized from Sept. 5 to 25, 2007 to provide a forum for the participants to practice media production applications for knowledge management. The programme was attended by six scientists and faculty members from ICAR institutes and agricultural universities.
- A training programme for the Administrative and Financial Personnel was organized at Central Agricultural Research Institute (CARI), Port Blair, from September



10 to 14, 2007. The programme oriented the participants to the various issues of administrative and financial management through experiential learning mode. Various topics covered in the programme included seamless administration, conduct rules, budgetary analysis, financial management, purchase procedures, vigilance management and disciplinary proceedings, service rules, leave rules, and human resource management. The programme benefited twenty-two administrative and financial personnel from CARI, Port Blair.

- A four-day Executive Development Programme on Agricultural Research Management was organized from Sept. 18 to 21, 2007 for the benefit of senior personnel in research management position such as Directors and Joint Directors of ICAR institutes and Deans and Directors of SAUs. The programme was designed for conceptual awareness and competency building in the theme areas of scientific endeavours and institute management, administration and finance functions, institution building, and legislative acts. Seventeen Directors of research institutes, Assistant Directors General and Joint Directors of National institutes of ICAR, Deans and Directors of SAUs took part in the programme.
- A Winter School on Web-based Educational Technology Applications in Agriculture was initiated on Sept. 20, 2007 with a view to review and update the latest trends in web-based educational technology applications and publish the developed web-based courseware on inter and intranets. Twenty-six teachers, scientists from ICAR institutes and SAUs attended the programme.
- One-day Workshop on Dialogue with Public/Private Plant Breeders on the issue of annual fee of registered plant varieties was organized on Sept. 25, 2007, in collaboration with Farm and Rural Science Foundation (FRSF). The programme was sponsored by Protection of Plant Varieties and Farmers' Rights Authority (PPV &FRA), Govt. of India, New Delhi. Twenty-Six agricultural scientists, patent attorneys, executives and research managers from private seed companies and authorities from patent office, Chennai, participated.

October

- A four-day Management Development Programme on Intellectual Property Rights: Protection of Plant Varieties – Procedures and Methodologies was organized from October 3 to 6, 2007 in collaboration with Farm and Rural Science Foundation (FRSF), Hyderabad, to sensitize and update scientists on plant variety protection and familiarize them with procedures and methodologies of plant variety protection. The programme was sponsored by Protection of Plant Varieties and Farmers' Rights Authority (PPV&FRA), Govt. of India, New Delhi. Twenty-two senior scientists and faculty members from ICAR institutes and Agricultural Universities participated in the programme.
- An Expert Consultation on Agricultural Research Networks and Consortia in Asia-Pacific was organized from October 8 to 10, 2007 at NAARM and ICRISAT. ICAR in collaboration with ICRISAT organized meetings related to the Asia Pacific Association of Agricultural Research Institutions (APAARI) and the Cereals and Legumes Asia Network (CLAN) with the objective to review the progress of various regional research networks and consortia that are operational in partnership with

APAARI or independently, and to devise strategy to enhance future collaboration involving various stakeholders for agricultural research and development in Asia-Pacific region. About 70 participants include selected Network coordinators and partners from those ARD networks associated with APAARI including NARS leaders and other stakeholders from Australia, Bangladesh, China, Fiji, India, Indonesia, Iran, Japan, Malaysia, Myanmar, Nepal, New Caledonia, Papua New Guinea, The Philippines, Pakistan, The Republic of Korea, Samoa, Sri Lanka, Thailand, Taiwan and Vietnam attended the meetings.

- A programme on Networking Essentials for Information Management in Agriculture was organized from October 16 to 25, 2007. The programme focused on sensitizing the NARS on the scope and potential of networking with special relevance to agriculture and imparts the knowledge on essentials of effective networking and its management. Eighteen scientists, faculty members (teachers), technical officers, in-charges of ARIS/Computer Centres, network administrators from ICAR institutes, Agricultural Universities attended the programme.
- A three-day workshop on Role and Establishment of Educational Technology Cells in State Agricultural Universities was organized from October 18 to 20, 2007. The workshop aimed at discussing the need and assigned responsibilities of Educational Technology Cells in SAU system and elaborates on the functional advantages of establishing the Cells more specifically in improving the quality of agricultural education along with infrastructure, investment and financial outlays. The workshop had the participation of nineteen Assistant and Associate Professors of different Agricultural Universities.

November

- A Winter School on Advances in Video and Multi-media Production was organized from November 1 to 21, 2007, to introduce the concepts of Video and Multimedia technologies like Digital High definition Video, Multimedia Production and Authoring to provide hands-on experience of related hardware and software to the participants. Twenty-two scientists and faculty members of ICAR institutes and State Agricultural Universities got benefited through this training.
- A six-day Management Development Programme on Performance Assessment of Agricultural Research Organizations was organized from November 1 to 7, 2007 to provide opportunities for the participants to have an exposure to identify and measure suitable indicators as well as to assess the performance of research organizations in NARS. Ten scientists and faculty members from ICAR institutes and Agricultural universities, who are associated with the work related to performance assessment of research in their organizations, attended the programme.
- A course on Improving Administrative Efficiency and Financial Management was organized from November 13 to 20, 2007 to improve the skills and efficiency of the personnel in discharging their functions effectively and for providing constructive administrative support to their superiors in meeting the organizational priorities and needs. Twenty-nine Administrative Officers, Finance and Accounts Officers, Assistant Administrative Officers, and Assistant Finance & Accounts Officers of various ICAR institutes and State Agricultural Universities participated in the course.



- A four-day Executive Development Programme entitled “Directors’ Conclave on Motivation Techniques – Fun at Work”, was organized from November 14 to 17, 2007 to sensitize the delegates on the concept and process of motivation. Twelve Directors of ICAR Institutes Directors and Deans of State Agricultural Universities attended the programme.
- A Winter School on Implications of World Trade Agreement and Other Allied International Agreements on Indian Agriculture was organized from Nov. 14 to Dec. 4, 2007. The programme aimed to sensitize the participants to the implications of various international agreements in the post-WTO regime on Indian agriculture, and the consequent policy and institutional imperatives for agricultural research systems. Twenty-two scientists and faculty members from ICAR institutes and State Agricultural Universities attended the programme.
- A six-day Faculty Development Programme on Educational Methodology and Instructional Technology was organized from November 26 to December 1, 2007, under the “Niche Area of Excellence” Project on Educational Technology. The programme aimed at facilitating the faculty members to develop a system of pedagogy that can be suitably applied for improving learning-teaching in Agricultural Universities and to understand management functions in agricultural education. The programme benefited 20 Assistant / Associate Professors of various Agricultural Universities.
- An off-campus short training course for Improving Efficiency of Junior Level Staff of IGFR was organized from November 27 to 30, 2007. The entire programme was based on learning through structured experience, wherein participants were taken through simulated exercises and the learning was brought out through elaborate debriefing on the experiences. The programme benefited 25 junior staff of IGFR, who were facilitated to develop the needed mindset to enhance their efficiency and effectiveness.
- A Workshop was organized for the Consortia Principal Investigators of the recommended Concept Notes through second call on November 28, 2007 at NAARM to expose them to financial, procurement and IP management, as well as to environmental and social safeguard analysis. Sixty-six participants from public and private sectors attended the workshop.

December

- A three-day *Rajbhasha Adhikariyonki Samasyayaen* Workshop was organized from December 4 to 6, 2007 on problems faced by Official Language officials in official language implementation. Thirty-eight Assistant Directors (Official Language), Section Incharges, Technical Officers, and personnel directly associated with official language implementation participated in the workshop.
- An off-campus specialized course on Enhancing Human Capabilities at Work was organized at CRIDA, Hyderabad, from December 10 to 15, 2007. The programme facilitated the diverse group of participants to develop an understanding and appreciation for each others’ roles and responsibilities. The participants, numbering 25, included scientists, technical officers, and personnel from administration and accounts.

- A four-day Team Building Workshop-cum-Training was organized from December 12 to 15, 2007. The workshop aimed at sensitizing agricultural professionals on the issues and imparts latest knowledge and skills in the area of team building and interpersonal relationships. It helped the participants to enhance their personal, interpersonal, group effectiveness, and understands the importance and process of working together. Twenty-two participants from SAUs, and ICAR institutions took part in the workshop.
- Under the aegis of World Bank supported National Agricultural Innovation Project (NAIP), the Indian Council of Agricultural Research (ICAR) has awarded a major project on Learning and Capacity Building (L&CB) to the Academy. Two days Launch Workshop on NAIP – L&CB programme was organized during December 19-20, 2007 for integration and finalization of work plan and responsibilities among the collaborative institutions and partners. Representatives from IIM, Lucknow; NIRD, Hyderabad; MANAGE, Hyderabad; ASCI, Hyderabad; GBPUA&T, Pantnagar; MSSRF, Chennai; CORD-M, Hyderabad, and Guru Consultants, Bangalore, took part in the workshop.

January

- A three-day NAIP workshop on Issues of Ongoing Consortia was organized from Jan. 4 to 6, 2008 to identify operational and management issues experienced by the ongoing consortia. Principal investigators along with their administration and finance staff from eight consortia numbering around 100 attended the workshop. Members of Monitoring and Evaluation, help desk and procurement consultants provided the inputs to the workshop.
- The first phase of the 82nd Foundation Course for Agricultural Research Service (FOCARS) was conducted for the newly recruited scientists of ICAR from Jan.7 to Mar. 14, 2008. The major objective of this foundation course was to make the scientists good research workers. One hundred and fourteen newly recruited scientists attended the training.
- A senior programme on Strategies for Stress Management for enhanced organizational effectiveness was organized from Jan. 16 to 22, 2008 to orient the participants to the concept of stress, stress process and stress-related disorders. The programme also intended to examine the personality and organizational variables that moderate stress as well as to develop coping techniques and strategies for effective management of stress. Fifteen senior-level scientists and teachers working in ICAR institutes and agricultural / veterinary universities participated in this programme.
- A training programme on E-Learning was organized from Jan. 16 to 23, 2008 under Niche Area Project to familiarize the participants with open source software for content development, data analysis and database management, and develop case studies on content development project mode. Thirteen faculty members, scientists, technical officers from ICAR institutes, State agricultural universities and other related organizations participated in the programme.
- An off-campus training programme on Improving Efficiency of Administrative, Finance and Accounts Manpower was organized at IGFRI, Jhansi from Jan. 16 to



21, 2008 to improve skills and efficiency of the personnel in discharging their functions effectively and to provide constructive administrative support to scientific fraternity in meeting the organizational priorities and needs. Twenty-five administrative and financial personnel of the institute took part in this training programme.

- A brainstorming workshop on Curriculum Design for Precision Agriculture and IT Management in Agriculture was organized under Niche area project on Jan. 21 & 22, 2008. The brainstorming session on the first day focused on courses on precision agriculture that can be integrated into the UG and PG curricula in Indian agricultural universities. Considering the importance of IT management in agriculture, the Academy intends to initiate academic programme in this area. Accordingly, the deliberations on second day were focused in designing a complete PG diploma on IT Management in Agriculture. The areas brainstormed were: potential employers, skill set needed, curriculum outline, entry prerequisites, andragogy and related topics. Forty participants attended the workshop.
- An off-campus FDP on Educational Methodology and Instructional Technology was organized from Jan. 22 to 28, 2008 at College of Agriculture, Birsa Agricultural University (BAU), Ranchi under the Project titled "Niche area of excellence on educational technology for global competitiveness in agricultural education". The programme aimed at enhancing the need-based knowledge, skills and competencies in educational technology among teachers and to facilitate them systematically apply the principles of instructional design and development in the planning and preparation of teaching modules and aids. Twenty-four assistant and associate professors, out of which 15 were from BAU and 9 from other SAUs of the region, participated in the programme.

February

- A refresher Course on Computer-based Multimedia Presentation was organized from Feb. 01 to 21, 2008 under Niche Area Project to develop an understanding and appreciation of use of Multimedia in e-learning and knowledge management and to expose participants to digitizing, synthesizing, animating and packing images, sound, graphics, videos and text for both web and CD based presentations. The programme also familiarized the participants with multimedia production tools in various categories and enabled them to develop their own modules for ICDS (Information Communication and Dissemination Systems) for participatory knowledge management.
- A training programme on GIS-based Decision Support Systems for Sustainable Agriculture was organized from Feb. 1 to 21, 2008 to introduce the concepts of GIS and related spatial technologies like remote sensing and image processing along with relevant concepts, indicators and framework to formulate and resolve questions related to sustainability of agricultural production systems. The programme also provided hands-on experience of GIS software and hardware.
- An off-campus specialized short course on Improving Efficiency of Technical Personnel was organized at IGFRI, Jhansi from Feb. 12 to 15, 2008. The programme aimed to enable technical personnel for understanding the wider perspectives of NARS and to improve the competency and capabilities for contributing in agricultural research suitably.

- A programme on Intellectual Property Protection and Technology Licensing in Agriculture under Indo-US Agricultural Knowledge Initiative was organized from Feb. 14 to 16, 2008 to build the capacity of scientists and teachers from ICAR institutes and agricultural universities who will act as trainers in IP management in their respective organizations. The programme was organized jointly by CCS Haryana Agricultural University, ICAR and Michigan State University, USA.
- 83rd Foundation Course for Agricultural Research Service (FOCARS) was inaugurated for the newly recruited scientists of ICAR on Feb.26, 2008. The probationary training will end by June 24, 2008. The major objective of this foundation course is to make the scientists good research workers. Twenty-three scientists joined this Foundation training.
- A short-term training programme for the scientific, administrative and technical personnel of ICAR Research Complex for Goa was conducted from Feb. 28 to Mar. 1, 2008 to strengthen and familiarize with latest developments on income tax procedures and Right to Information Act 2005.

March

- An orientation workshop for FET Coordinators was organized on Mar. 6 & 7, 2008 under Niche Area Project. The workshop sensitized and oriented prospective local FET coordinators about the content and methodology of Field Experience Training, which is an integral part of the Foundation Course for Agricultural Research Service (FOCARS). The workshop also apprised participants the role and functions of local coordinators for effective management of FET. Forty-six scientists and faculty members from ICAR institutes and SAUs took part in the workshop.
- An off-campus FDP training programme on Educational Methodology and Instructional Technology was organized from Mar. 10 to 15, 2008 at College of Agriculture, Mandya, Karnataka. The programme aimed at enhancing the need-based knowledge, skills and competencies in educational technology among teachers and to facilitate them systematically apply the principles of instructional design and development in the planning and preparation of teaching modules and aids. Twenty-five faculty members, out of which ten from UAS, Bangalore, and fifteen from Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar attended the training programme.
- A MDP workshop on Policy and Prioritization, Monitoring and Evaluation (PME) support to NAIP was organized from March 11 to 17, 2008 under NAIP-L&CB component to sensitize the participants to the O&M reforms for consortia-based research policy, priority setting, monitoring and evaluation, as envisaged in NAIP. The programme oriented the participants to the concepts and description of PME of Agricultural R&D, and equipped them with major techniques of PME in different areas of agricultural research and development. Twenty-five senior-level scientists involved in PME activities of approved NAIP consortia projects and in-charges of PME cells of ICAR institutes and SAUs took part in the workshop.
- A Faculty Development Programme on Advances in Educational Technology, Stress Management and Improving Work Efficiency was organized at the Academy



from Mar. 17 to 22, 2008 to improve performance and efficiency for organizational effectiveness and to create awareness on stress management strategies. Fifteen faculty and staff members from College of Veterinary & Animal Sciences, Udgir underwent training.

- A training programme on Developing Winning Research Proposals was organized from Mar. 24 to 29, 2008 under NAIP-L&CB Programme to develop skills and give practice in writing winning research proposals that can win funds from donors focusing on the needs of the stake holders, and to explain the use of *log frame* and Project Evaluation and Review Technique (PERT) in research programme planning. Sixteen scientists from ICAR institutes and SAUs participated in the training programme.
- A brainstorming workshop on Geospatial Library and Participatory Rural GIS was organized on March 25, 2008 under NAIP component-1 i.e., redesigning the farmer-extension-agricultural research/education continuum in India with ICT mediated knowledge management. The areas brainstormed were: I) Geospatial Library – Conceptual basis; remote sensing data and learning resources; web interface; essential data themes; mode of delivery; and operational aspects. II) Participatory GIS – Essential data themes; knowledge resources; community interface and metrics, etc. Thirty-four participants took part in the workshop.
- An off-campus training programme on Human Relations Management was organized for faculty of CIFE, Mumbai, from March 31 to April 2, 2008. The major objective of the programme was to enhance and understanding of organizational behaviour and improve the inter personnel relations among coworkers. Twenty-three participants underwent this training programme.

International Consultancy

- Dr T. Balaguru, Head, ARSMP Division, was on deputation as a consultant in the field of Agricultural Research Management to Rajarata University of SriLanka, Mihintale. He organized training-cum-workshop on Agricultural Research Management on Dec. 27 and 28, 2007 to expose the participants to contemporary issues in research management as well as to tools and techniques for better management of research. Thirty-seven scientists from various faculties like Management, Social Sciences, Humanities, Applied Science and Medicine besides Agriculture took part in the programme conducted at the request of CARP, SriLanka under ICAR-CARP Work Plan.



NAARM - An Overview

NAARM – An Overview

Indian NARS is one of the largest systems in agricultural research in the world employing over 25,000 scientists, who work in institutes distributed throughout the entire length and breadth of the country. Judicious and proper management of this vast manpower poses a formidable challenge to the system. Keeping in view this objective, the Government of India has established the National Academy of Agricultural Research Management (NAARM), Hyderabad. Since its inception in 1976, the Academy has expanded its horizon of activities over the years. Through its innovative training and research programmes in the specialized areas of Agricultural Research and Education Management, it has helped the systems in evolving appropriate policies to improve the efficiency and effectiveness of research and education in particular and agriculture at large.

Its scope has been further widened to encompass tailor-made training, especially for the international participants from the developing countries in Asia, Africa and Latin America. Research on management problems has formed another major activity of the Academy. This has provided an input for improvising training and the policy support. The Academy extends a facilitative role to the ICAR in developing policy guidelines on the various issues related to personnel, O & M reforms, HRD, assessment system, and others, all of which are aimed at improving the overall efficiency and effectiveness of the NARS. NAARM has been developing itself into a resource centre for management needs. On the strength of the experienced and expert faculty, the Academy has started offering specialized consultancy services in the areas of its mandated activities.

The Academy strives to generate a sense of fraternity and inculcate a scientific work culture amongst the agricultural scientists and teachers in the country. Being a unique institution of its kind, the Academy is well poised to augment its usefulness and aims to emerge as an institution *par excellence* to facilitate and support a culture of dynamic management in agricultural research and education.

Vision

“By the year 2020, the Academy will emerge as India’s dynamic and premier Institute of Excellence in the field of Agricultural Management, known and sought nationally and globally for its expertise in management of agricultural education, research, training, consultancy, public policy programmes and agri-business, and will contribute significantly to promote the sustainable growth and development of agriculture”.



Mission

“Committed to promote professionalism in the management of agricultural education, research and extension programmes and agri-business, and enhance the efficiency, responsiveness, and performance of the National Agricultural System (NAS)”.

Mandate

The Academy is mandated to enhance the efficiency and effectiveness of NARS through:

- Developing learning resources and systems;
- Research in agricultural innovation systems, policies and management;
- Facilitating organizational renewal and management of change;
- Providing techniques, technology and information to facilitate policy support to apex agencies; and
- Enabling development of need-based regional management capabilities in forging effective partnerships and networking at national and global level”.

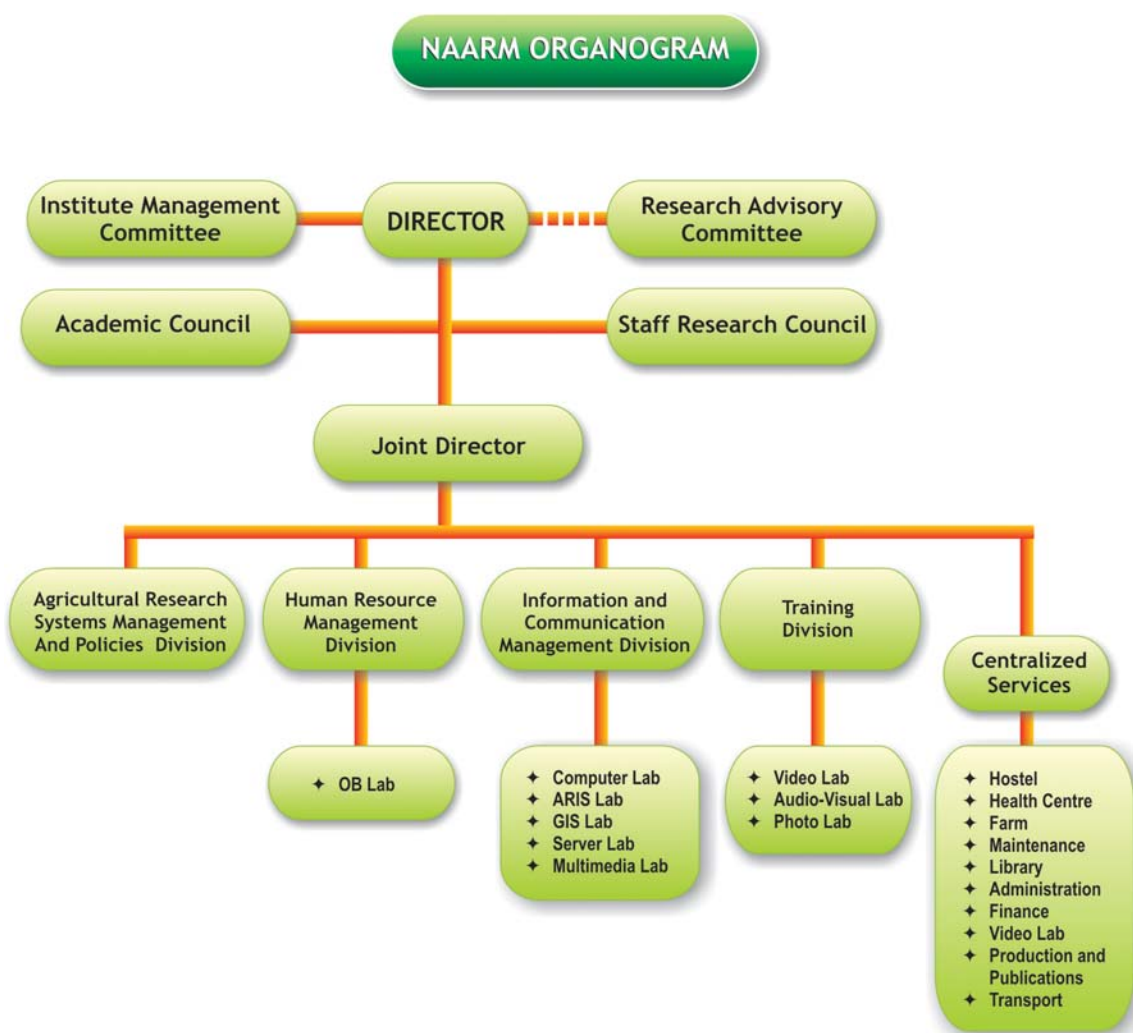
Objectives

Commensurate with the mandate, the following objectives are set for the Academy:

- To *impart* agricultural management education;
- To *enhance* the teaching-learning effectiveness through proper management of agricultural education;
- To *plan* and *organize* need-based, multi-tier, stakeholder-driven and customized on-campus and off-campus training programmes;
- To *facilitate* knowledge and technology dissemination management through innovative use of Information and Communication Technologies (ICTs);
- To *undertake* research on agricultural and technology management, and address emerging concerns in agriculture;
- To *offer* consultancy and *manage* dialogues to backstop training and to provide policy support to NAS;
- To *develop* suitable management tools, practices and processes for facilitating organizational effectiveness;
- To *assemble* quality resource material and function as a resource center of information and knowledge;
- To *promote* facilitative work culture for fostering creativity and innovativeness;
- To *enhance* administrative and financial management in the system;
- To *forge* and *strengthen* partnerships, linkages and networking at regional, national and global levels; and
- To *take up* other related activities for fulfilling the mandate.

Organization and Management

The Director leads the Academy supported by Joint Director. The faculty comprises several senior level scientists who are supported by a number of technical and administrative personnel. Administration, auxiliary and supporting personnel help in attaining Academy’s mandated objectives of training, research, consultancy, and related programmes and activities. Following organogram of NAAR, details the organizational structure of the Academy.



NAARM - An Overview



The Academy receives guidance for its effective functioning from the Institute Management Committee (IMC) and Research Advisory Committee (RAC), comprising eminent scientists, management experts, developmental agencies, and administrative personnel from within and outside the Academy. There are also Academic and Research Councils to guide the training and research activities of the Academy. To effectively implement its mandated activities, the Academy is organized under three Divisions, supported by various centralized services.

Linkages

NAARM has a rewarding and rich experience of having partnership with many Indian and international institutions. Strong linkages have been developed with:

- The ICAR system
- Agricultural Universities
- Development Departments
- Private sector
- Department of Science and Technology (DST)
- International Crops Research Institute for Semi Arid Tropics (ICRISAT)
- World Bank, and Food and Agricultural Organization (FAO) of the United Nations
- South-East Asian Association for Regional Centre for Graduate Study in Agriculture (SEARC)
- South-East Asian Association for Regional Cooperation (SAARC); and
- NARS of Developing Countries (Sri Lanka, Nigeria, Yemen, Tanzania, Nepal, etc.)

Infrastructure

The Academy is situated at Rajendranagar, under Cyberabad Police Station limits, about 18 km away from the city of Hyderabad. The Academy is established in a green, serene, sylvan, and sprawling campus of about 50 hectares.

The Academy, over the years, has steadily built infrastructure and logistic facilities, commensurate with the tall requirement to provide advanced training and also to pursue its research and consultancy programmes aimed at developing excellence in the system.

The facilities built over the years are detailed below.

- **Faculty Block, Academic Block, Administrative Block, Conference Hall and Others:** The Faculty block (built in 1990), Academic Block (1987), Administrative Block (1983), Conference Hall and Committee Hall (1986), Seminar Hall (1990) with all modern amenities and sufficient space for holding training programmes have been built over the years to meet the needs of various programmes and activities of the Academy. The conference and training facilities of the Academy are often being

used by other public sector undertakings, Agricultural Universities and sister ICAR institutes as well.

- **Video Laboratory:** The Video Instruction and Production Lab (VIPL) was originally established in 1986 and subsequently with the support of United Nations Development Programme (UNDP), AHRDP and National Agricultural Technology Project (NATP), it has been developed as a full-fledged modern video production lab. Today, it is one of its kind in the whole of the NARS system. The lab also imparts skill training to the Foundation Course trainees and other special groups of participants and it also caters to the needs of other ICAR institutes, SAUs and central organizations in making professional video programmes.
- **Computer, Multimedia, Agricultural Research Information System (ARIS) and Server Labs:** The Academy has a unique centralized computer and multimedia facility with 200 Personal Computers in 3 labs connected with (Local Area Network) LAN. Besides, all the faculty, officers and staff working in the various units and divisions are equipped with PCs and the related support systems. The Academy can boast of as the only learning centre with modern computer-based instructional and networking facilities and paperless communication system in the whole of Indian NARS.
- **GIS Lab:** The Geographic Information System (GIS) Lab with state-of-the-art facilities for training and its application was established at the Academy in 2002 with the support of NATP, DST and AP Cess funds. The GIS Lab intends to become a national clearinghouse of NARS for technical support in GIS application development and geo-referenced data for research and development policy. The Lab has been the focal point of NAARM training programme in the recent past.
- **Organizational Behaviour (OB), Audio-Visual and Communication Labs:** To meet the essential needs of socio-psychological behaviour of individual participants under HRD programmes, a well-designed OB lab has been put into operation since 1990 with multimedia production facilities. Similarly, an audio-visual and communication lab has been functioning since 1978 to support the training programmes and which has been updated with modern audio-visual equipment and gadgets (since 1986 with UNDP support).
- **Library and Documentation Centre:** The Library and Documentation Centre of the Academy has around 25,000 books and it subscribes to around 200 journals, including a few on-line journal databases and CD-ROM databases. The library is rich with its unique collections on management, which is extensively used by trainees, faculty members and other staff from a number of neighbouring institutions.
- **Medical and Health Centre:** A modest health centre with minimum of diagnostic facilities and other related services has been functioning from 1999 to meet the



health care needs of trainee participants, staff members and campus residents including the retired ICAR employees residing at Hyderabad.

- **Guest Houses and Trainee's Living Facilities:** For the trainee participants of the Academy, there are 3 hostels namely (i) Halls of Residence having 200 rooms (ii) Scientists' Home equipped with 30 AC suites for the senior and middle level officers, and (iii) New Guest House with 10 independent suites for international participants. Such training facilities support the trainees and visiting faculty sharing the learning experiences during their stay at the campus.
- **Housing and Residential Quarters:** The Academy has in all 97 quarters of different types to house the staff members in the campus. Besides, NAARM has also provided facilities for the ICAR sister institutes – Directorate of Oil Seeds Research, Directorate of Rice Research, National Bureau of Plant Genetic Resource, and Project Directorate on Poultry to build their residential quarters in its campus. NAARM campus has recreation and sports facilities for its campus employees, residents and the trainees.

Human and Financial Resources

Human Resources (as on 31.03.2008)

Sl.No	Category	Sanctioned Posts	Filled Strength	Vacant Positions
1.	Research Management Positions	02	02	—
2.	Scientific	40	20	20
3.	Technical	51	46	05
4.	Administrative	43	41	02
5.	Supporting	39	39	—
	Total	175	148	27

Budget Allocation, Expenditure during the year 2007-08

Expenditure Statement - Non-Plan

(Rs. in lakhs)

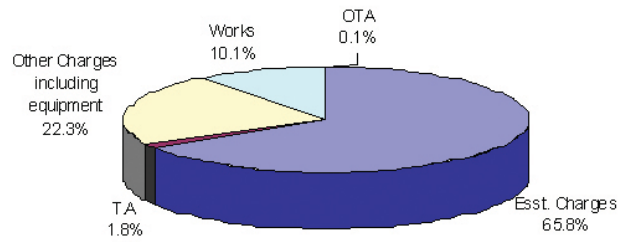
Sl.No	Head of Account	Budget Allocation	Expenditure
1	(a) Estt. Charges including LSP & PF	520.00	474.97
	(b) wages	40.00	39.81
2	(b) OTA	0.60	0.60
3	T.A.	15.00	15.00
4	Other Charges including equipment	189.40	189.25
5	Maintenance of Residential / Non-Residential bldgs including Petty Works	27.00 53.00 6.00	27.00 53.00 6.00
	Total	851.00	805.63
Sl.No	Head of Account	Budget Allocation	Expenditure
1	Pension & Retirement Benefits	35.00	35.00
2	Loans & Advances	12.00	12.00

Expenditure Statement – Plan (Rs. in lakhs)

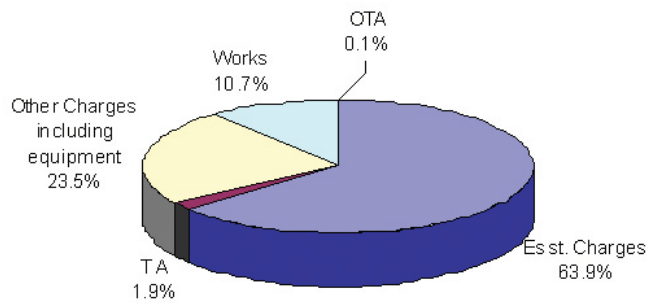
Sl.No	Head of Account	Budget Allocation	Expenditure
1	(a) Estt. Charges (b) Wages		
2	T.A.	15.00	15.00
3	Other Charges including equipments	95.00	95.00
4	Furniture & Fixtures	30.00	29.98
5	Library Books & Scientific Journals	30.00	30.00
6	Works	42.00	41.66
7	Other Items - H.R.D.	5.00	2.96
	Total	217.00	214.60



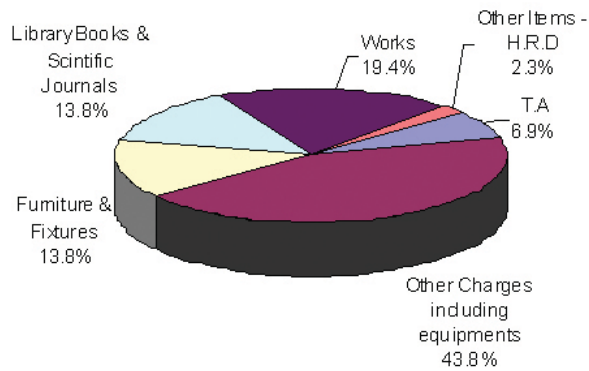
Non-Plan Budget Allocation - 2007-08



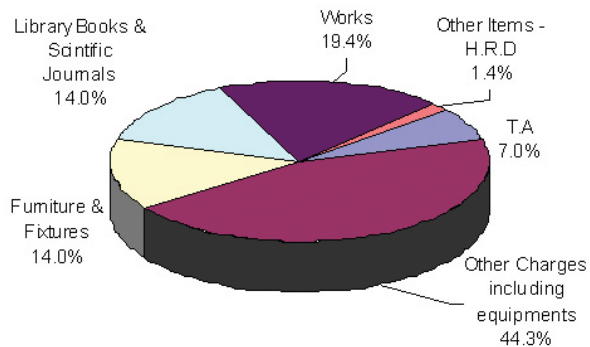
Non-Plan Budget Expenditure - 2007-08

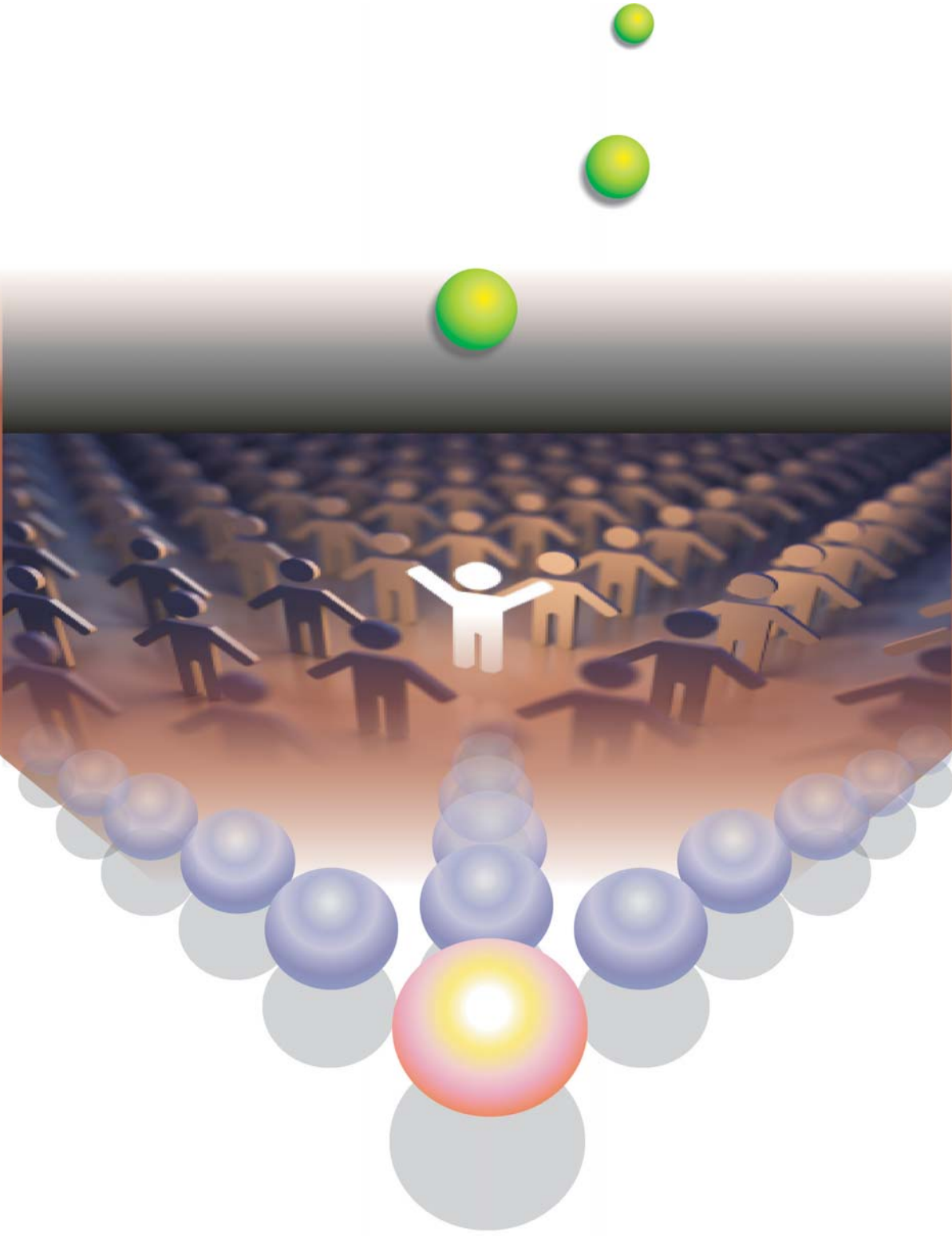


Plan Budget Allocation - 2007-08



Plan Budget Expenditure - 2007-08





Capacity Building

Capacity Building

Capacity building is the primary mandate of the Academy. The Academy imparts training in the areas of research and education management, information and communication technology, and administrative and finance management. Its client group includes scientists and faculty, administrative officers, executives, and senior research managers of the ICAR and SAUs, which form major subsystems of the National Agricultural Research System (NARS). During the reported period, a total of 59 such programmes including training programmes, workshops and orientation meetings were organized with 1693 participants. A glimpse of the various types of programmes organized at the Academy is as follows.

Sl. No.	Type of Programme	No. of Programmes	No. of Participants
1	Foundation Course for Agricultural Research Service (FOCARS)	03	164
2	Refresher Courses (21 days) Including Summer/Winter Schools	10	205
3	Senior Programmes	19	448
4	Workshops	13	573
5	Off-Campus Programmes	10	235
6	Executive Development Programmes	02	29
7	International Programmes	02	39
	Total	59	1693

Foundation Course for Agricultural Research Service (FOCARS)

FOCARS, the flagship programme of the Academy, is designed for the newly recruited entry-level scientists in Agricultural Research Service of the ICAR.

Title	Dates	Number of Participants	Programme Director(s)
81 FOCARS	June 12 -Oct. 9, 2007	27	BS Sontakki C Sriram
82 FOCARS	Jan. 7 –May. 5, 2008	114	P Manikandan MN Reddy N Sandhya Shenoy
83 FOCARS	Feb. 26 – June 24, 2008	23	D Rama Rao SK Soam



The major objective of this Foundation Course was to make the scientists better research workers. The four-month long programme emphasized on other important and related areas that are crucial for executing research and other functions more effectively in the organization. The training also provided an exposure on the concepts and principles

of project management with special emphasis on project formulation and implementation. The programme emphasized on important and related areas such as agricultural research systems policies and management, human resource management, and information and communication management.

The programme was organized in three phases. The first phase stressed on aspects like Indian agricultural research system, issues of WTO and IP management, research project management, communication management, computer based information technology, organizational behavioural issues, administrative and financial rules. During the second phase of the programme, the scientists underwent Field Experience Training (FET), which aimed at orienting the scientist - trainees to theme-based participatory rural appraisal. The major focus in this phase for 81st FOCARS was Geographical Indication (GI) whereas for 82nd and 83rd FOCARS batches it was agri-input and service systems. The scientists were sent for FET to selected 23 centres identified for studying the major theme of the FET. The scientists conducted socio-economic survey in addition to interaction with various stakeholders for an elaborate understanding of agri-input and service systems. They also identified the researchable issues for establishing geographical link, product development, and enhancement of livelihood activities.

The second phase of the training included industrial attachment training. During this industrial part of the FET, the scientist-trainees understood the interplay and linkages among the stakeholders with respect to equity and profit sharing along with probable interactions and modes existing among the players and the value chains in technology commercialization process. As a part of the industrial training, the trainees visited rural ICT projects to collect information in order to understand IT enabled services, adoption of IT based systems by villagers, benefits derived by these services, the overall development benefit due to ICT project, and the potential of IT enabled services for use in agri-services and agri-marketing.

The third phase of the programme focused on sharing of experiences by trainees and study visits. The three Foundation Courses have a participation of 164 scientists.

Refresher Courses / Summer Schools / Winter Schools (21 days)

Title	Dates	Number of Participants	Programme Director(s)
Computer-based Multimedia Presentation	June 20-July 10, 2007	15	KM Reddy VKJ Rao
Advances in Agricultural Research Project Management	June 21-July 11, 2007	26	T Balaguru
GIS-based Decision Support Systems for Sustainable Water Resources Management and Precision Agriculture	July 4-24, 2007	23	NH Rao
Summer School on Advances in Agribusiness Market Intelligence and Information	Aug. 7-27, 2007	25	GP Reddy
Participatory Media & Knowledge Management	Sept. 5-25, 2007	06	VKJ Rao N Sandhya Shenoy
Web-based Educational Technology Applications in Agriculture	Sept. 20- Oct. 10, 2007	26	MN Reddy
Advances in Video and Multi-media Production	Nov. 1-21, 2007	20	VKJ Rao
WTA, GATS and IPR: Implications in Agricultural Research	Nov. 14 to Dec. 4, 2007	22	SK Soam
GIS-based Decision Support Systems for Sustainable Agriculture (Under NAIP-L&CB Programme)	Feb. 1-21, 2008	23	MN Reddy NH Rao
Computer-based Multimedia Presentation(Under Niche Area project)	Feb. 1-21, 2008	19	KM Reddy VKJ Rao



Computer-based Multimedia Presentation



A three-week refresher course on Computer-based Multimedia Presentation was organized in appreciation of new advances in information technology and the support resources created by multimedia, especially in teaching / training and in agricultural research organizations. The programme provided hands-on experience in multimedia tools and techniques to produce various learning modules that would help enhance teaching-learning effectiveness and better understanding and appreciation of use of multimedia in technology development and transfer. Scientists, Research Managers, Educational Administrators, and Technical Officers of ICAR institutes and Agricultural Universities attended the programme.

Advances in Agricultural Research Project Management

Summer School on Advances in Agricultural Research Project Management was organized with the objectives to develop in the researchers a future perspective of Indian agriculture in response to changing global agricultural scenario and to acquaint them with appropriate tools and techniques for efficient and effective management of research projects. Some of the major themes covered in the programme included changing agricultural scenario including globalization of agriculture, sustainable agriculture, technological forecasting, research management process, project management cycle, MS Project, multidisciplinary team building, scientific communication, and information technology.

Geographical Information System (GIS) based Decision Support Systems for Sustainable Water Resources Management and Precision Agriculture



Geographical Information Systems (GIS) based Decision Support Systems for Sustainable

Geographical Information Systems (GIS) provide an effective framework to integrate diverse spatial data sets into decision support systems to define and resolve complex issues related to sustainable management of agricultural production systems. With this in view, a three-week Summer School on Geographical Information Systems (GIS) based Decision Support Systems for Sustainable

Water Resources Management and Precision Agriculture was organized with twin goals of understanding and applying GIS tools and related spatial technologies in agriculture and to develop a decision support framework for managing agricultural production systems for sustainability. The programme provided enough opportunities for the participants to develop the needed knowledge and skills through concepts clarification and hands-on experience, thereby enabling them to design research programmes and projects on GIS based decision support systems for sustainable agriculture.

Advances in Agribusiness, Market Intelligence and Information Technology

Agribusiness is gaining momentum in the country, particularly in the post-WTO regime. The Govt. of India has introduced several measures in the form of establishing Agri- Exports Zones (AEZ), Special Economic Zones (SEZ), value added centers, etc., to improve export performance and to develop agriculture. Development of market infrastructure in rural areas has been accorded special attention in Indian planning, particularly during the tenth plan. Keeping these in view, a Summer School on Advances in Agribusiness, Market Intelligence, and Information Technology was organized to acquaint the participants with appropriate tools and techniques for analyzing markets and information system for efficient and effective management of agribusiness; and to orient the researchers to the future perspective of Indian marketing in response to the changing global agricultural scenario of international trade.

Participatory Media and Knowledge Management

Customizing available agricultural knowledge to suit user's situation through participatory media and knowledge management requires learning and capacity building of the personnel concerned with these activities. In order to provide a forum for the participants to practice media production applications for knowledge management, a programme on Participatory Media



and Knowledge Management was organized for the scientists and faculty members from ICAR institutes and Agricultural Universities, and training officers from KVK, ATIC, FTC, and Communication Centres, who have basic knowledge of computers.



Web-based Educational Technology Applications in Agriculture

A Winter School on Web-based Educational Technology Applications in Agriculture was initiated with a view to review and update the latest trends in Web-based Educational Technology applications and to help publish the developed web-based courseware on Inter and Intranets. The Winter School received a good appreciation from teachers and scientists of various Agricultural Universities and ICAR institutes.

Advances in Video and Multimedia Production

Multiple forms of information content are often not considered multimedia if they don't contain modern forms of presentation such as audio or video. Various tools and software also contribute significantly in multimedia product development. Developing learning object based module in agriculture is a part of knowledge management process. During this process, the use of video and Multimedia inputs as basic building blocks to develop learning objects and integrating them for module development is the key for effective information and knowledge management. There is an arising need to enhance the knowledge and skills of scientists and teachers in the system to develop multimedia modules using video as one of the inputs. With this backdrop, a Winter School on Advances in Video and Multimedia Production was organized with diverse activities incorporated in the training methodology of the programme, such as interactive lectures, demonstration, and hands-on experience with various related hardware and software. The scientists and faculty members of ICAR institutes and Agricultural Universities were facilitated to develop expertise in knowledge management and information development in agriculture.

WTA, GATS and IPR: Implications in Agricultural Research and Education



To sensitize the NARS scientists to the implications of various international agreements in the post-WTO regime on Indian agriculture and the consequent policy and institutional imperatives for agricultural research systems, a Winter School on Implications of World Trade Agreement and Other Allied International Agreements on Indian Agriculture was organized. The programme was also aimed to orient the participants to the appropriate instruments and methods for dealing with the intellectual property used in and arising out of their research to facilitate commercialization and technology transfer. The programme covered the broad areas such as Agricultural scenario, World Trade Orga-

nization, Agreement on agriculture, TRIPS and its implications, Protecting biodiversity in post-TRIPs regime, PPVFR and its implications for agricultural scientists, GATS and its implications on agricultural education and research, SPS and TBT agreements, GI, Trademark, Design, and copyright, and Institutional strategies and mechanisms. A panel discussion on 'Enforcement of Intellectual Property Rights' was also organized as a part of the Winter School. The programme had intellectual input from academicians, legal practitioners, and many leading professionals.

GIS-based Decision Support Systems for Sustainable Agriculture

Sustainability of agricultural production systems has become a major area of concern in recent times. Sustainability is a complex issue to address as it encompasses technological, social, economic, and ethical dimensions, and requires integration of large and diverse spatial data sets of natural resources, socio-economic conditions, crop and livestock resources, and their management. Several institutions of NARS have recognized the importance of Geographical Information System (GIS), which provides an effective framework to integrate such diverse spatial data sets into decision support systems that help to define and resolve the complex issues related to sustainable management of agricultural production systems. Keeping this in view, a programme on GIS based Decision Support Systems for Sustainable Agriculture was organized, under NAIP, to expose the participants to the concepts of GIS and other related spatial technologies such as remote sensing and image processing, and also to provide them hands-on experience of GIS software. The programme also oriented the participants to the case studies of GIS-based decision support systems for sustainable agriculture.

Computer-based Multimedia Presentation

Interactive digital video, imaging, digitizing, scanning, and other computer graphic technologies have paved way for developments in multimedia. Various tools and software also contribute significantly in multimedia product development. Learning and capacity building processes as well as transformation of technology are supplemented and complemented through multimedia. There is an arising need to build the capacity of scientists and teachers working in the system in the important areas of multimedia basics, tools, software, and multimedia module development. With this backdrop, a three-week Refresher Course on Computer-based Multimedia Presentation was organized under Niche Area Project of ICAR, to familiarize the participants with multimedia production tools in various categories and enabled them to develop their own modules for Information Communication and Dissemination Systems (ICDS) for participatory knowledge management. Participants were also guided to complete small presentation projects using software like Macromedia Director, Flash, Photoshop, Audiograbber, etc.



Senior Programmes

Title	Dates	Number of Participants	Programme Director(s)
Developing Winning Research Proposals in Agricultural Research	April 20-25, 2007	14	Jagannadham Challa D Rama Rao
Group Learning Approaches	May 7-17, 2007	08	A Gopalam
Improving Administrative Efficiency and Financial Management	June 12-19, 2007	20	M Suresh Kumar VS Subramanian
Leadership and Personality Development	July 5-12, 2007	16	MM Anwer P Manikandan
Gahan Hindi Prashikshan Va Karyashala	July 17-21, 2007	31	Pradeep Singh
E-Learning	Aug. 20-25, 2007	20	GRK Murthy MN Reddy
MDP in Agricultural Research	Aug. 24-30, 2007	15	Jagannadham Challa KH Rao
Intelligent Reporting System (IRS)	Aug. 30-31, 2007	86	MN Reddy M Suresh Kumar, NAARM; Mr P.K. Jain and Mr P. Sakthivel, ICAR, New Delhi
NAARM-FRSF collaborative training programme MDP on IPR: Protection of Plant Varieties- Procedures and Methodologies	Oct. 3-6, 2007	22	SK Soam R Kalpana Sastry
Networking Essentials for Content Management in Agriculture	Oct. 16-25, 2007	18	GRK Murthy KM Reddy
Performance Assessment of Agricultural Research Organizations	Nov. 1-7, 2007	10	T Balaguru RVS Rao
Improving Administrative Efficiency and Financial Management	Nov. 13-20, 2007	29	VS Subramanian M Suresh Kumar
FDP on Educational Methodology and Instructional Technology(Under Niche Area project)	Nov. 26 to Dec. 1, 2007	20	A Gopalam KH Rao
Rajbhasha Adhikariyonki Samasyayaen	Dec. 4-6, 2007	38	A Gopalam J Renuka
Strategies for Stress Management for Enhanced Organizational Effectiveness	Jan. 16-22, 2008	15	P Manikandan KH Rao
E-Learning(Under NICHE Area project)	Jan. 16-23, 2007	13	GRK Murthy D Rama Rao
IP Protection and Technology Licensing in Agriculture" (under Indo-US Agricultural Knowledge Initiative)	Feb. 14-16, 2008	42	T Balaguru
FDP on "Advances in Educational Technology, Stress Management and Improving the Work Efficiency"(For the faculty of College of Vet. & Animal Sciences, Udgir, Latur, MAFSU)	March 17-22, 2008	15	RVS Rao A Gopalam
Developing Winning Research Proposals in Agricultural Research (Under NAIP- L&CB Programme)	March 24-29, 2008	16	Jagannadham Challa D Rama Rao

Developing Winning Research Proposals in Agricultural Research

A training programme on Developing Winning Research Proposals in Agricultural Research was organized from April 20 to 25, 2007. The programme focused on developing skills among scientists and teachers for writing winning research proposals, with focus on the needs of the stakeholders that can win funds from donors. The programme gave enough exposure in writing various components of a research proposal. It also explained the use of log frame and Project Evaluation and Review Technique (PERT) in research programme planning, thus leading to developing a good project design and budget estimate that are rationally accepted. Fourteen scientists and teachers from various ICAR institutes and Agricultural Universities participated in this training programme.



Group Learning Approaches

A ten-day programme on Group Learning Approaches was organized from May 7 to 17, 2007, to sensitize the faculty members of agricultural universities to the concepts of synergy in agricultural research and education and to develop competence among the participants for the production of instructional materials suitable for group learning approaches. The programme sensitized the participants to the learning philosophy, cycles, and institutional learning concepts. The programme essentially emphasized on various issues related to group learning strategies through structured experiences, group discussion, and experience sharing. The programme had the participation of eight Assistant and Associate Professors from various Agricultural Universities.

Improving Administrative Efficiency and Financial Management

There is a need to strengthen the existing administrative and financial management processes in ICAR institutes. The personnel involved in discharging these functions need to be sensitized for facilitative administration and financial management and also for use of modern management techniques. In order to fulfill these requirements, a programme on Improving Administrative Efficiency and Financial Management was organized from June 12 to 19, 2007. The programme provided a forum for the administrative and accounts personnel to share and discuss their experiences. Administrative Officers, Finance and Accounts Officers, Assistant Administrative Officers, Assistant Finance and Accounts Officers of ICAR institutes, numbering 20, participated in the programme.



Leadership and Personality Development

Creative leaders grab the first opportunity and find out the new and innovative options to get self-motivated and inspire others to be empowered to realize their dreams. There is a greater need for effective leadership to keep pace with the challenges and the changing scenario. Times of upheaval require not just more leaders but effective leadership. People at all levels, including researchers, must be empowered to share leadership responsibilities. To understand issues such as personal traits, leadership abilities, and leader behaviour, a programme on Leadership and Personality Development was organized from July 5 to 12, 2007. The programme aimed at equipping the researchers and teachers in the National Agricultural Research System with the knowledge and tools that would help them identify personal impediments to develop effective leadership capacities. Sixteen senior level scientists from ICAR institutes and Agricultural Universities participated in this programme.

Gahan Hindi Prashikshan Va Karyashala



A programme on *Gahan Hindi Prashikshan Va Karyashala* was organized from July 17 to 21, 2007, for the employees of ICAR institutes, who are working in sections other than Hindi. The major objective of the programme was to discuss about the experiential usage of Hindi. Various topics covered in the programme included effective imple-

mentation strategy of Official Language in ICAR institutes, the grammatical correctness in the usage of Hindi, importance of grammar, and technical terminology. The programme facilitated deliberations on Official Language correspondence, more specifically coming under the purview of Act 3(3), in day-to-day functioning of government institutions. Thirty-two officers and staff from various ICAR institutes attended the programme.

E-Learning



The processes of learning and knowledge management have acquired new dimensions with the advent of fast developing trends in Information and Communication Technologies. With the increasing global competition in the agriculture sector, learning process has to be rapid, updated, highly dynamic, and tailor-made to the global needs. E-

learning is the most potential tool to meet this future demand. With this backdrop, a programme on E-Learning was organized from August 20 to 25, 2007, to familiarize the participants with open source software for content development, data analysis, and database management, and to orient them for course development in project mode. This programme is unique and first of its kind to provide capacity building in e-learning and content creation and management. The programme was designed to cover open source e-learning tools – audio, video tools, content capturing techniques, modern e-learning methodologies – mobile learning, pod-casting, internet radio, video conferencing, and basics of open source software in content management. The programme had the participation of twenty faculty members, scientists, and technical officers from various ICAR institutes, Agricultural Universities, and other related organizations.

NAARM makes inroads into initiating E-Learning in SAUs

Assam Agricultural University has launched a portal on e-Vet-Edu in its LAN and has incorporated 12 courses for students and one course on teaching technology for the teachers. The trainees who received training on E-Learning from the Academy have initiated the process. The trainees trained a core group of 10 teachers on E-Learning. This group will now act as course creators. There are department-wise demonstrations for the teachers to involve all for creating the courses.

Management Development Programme in Agricultural Research

The Academy has been regularly organizing Management Development Programme (MDP) in Agricultural Research for the benefit of Heads of Departments, Zonal Coordinators, and Project Coordinators of ICAR, and Heads of Departments and Associate Directors of Research from Agricultural Universities (AUs). The 12th MDP in Agricultural Research was organized from August 24 to 30, 2007, with a view to provide opportunities for enhancing middle level management competencies in the system. The programme explored various issues related to the four important areas such as research management, human resource management, information and communication management, and administration and financial management. The programme had the participation of fifteen Management functionaries of ICAR institutes and AUs.

Intelligent Reporting System

A two-day hands on training programme on Intelligent Reporting System (IRS) for Nodal Officers / Data Enterers of ICAR Institutes was organized at the Academy on August 30 and 31, 2007, to acquaint the participants in installing IRS to enter their institutes' data in various



administrative forms and in uploading the same to server. The programme was organized by M/s. CGS for Nodal Officers/ Data Enterers of ICAR institutes. Eighty-six administrative and financial personnel from 45 ICAR institutes participated in the programme.

Intellectual Property Rights: Protection of Plant Varieties- Procedures and Methodologies



Scientists, faculty members, research managers, and policy makers in the National Agricultural Research System need to be sensitized towards intellectual property laws and protection of biodiversity and genetic endowment. They also need to become proficient in activities concerning protection of Intellectual Properties (IPs). With this backdrop, a Management Development Programme

on “Intellectual Property Rights: Protection of Plant Varieties - Procedures and Methodologies” was organized from October 3 to 6, 2007, in collaboration with Farm and Rural Science Foundation (FRSF), Hyderabad. The programme was sponsored by Protection of Plant Varieties and Farmers’ Rights (PPV&FR) Authority, Govt. of India, New Delhi.

The programme addressed a broad range of issues related to protection of plant varieties under PPV&FR Act 2001, and other legal instruments available in India and abroad. The programme gave enough exposure to the participants on Intellectual Property Rights of Indian agriculture, Legal and administrative aspects of plant variety protection under PPV&FR Act 2001, Legal and administrative aspects of plant variety protection as Geographical Indication and patent, Transfer/exchange of biological material, and Licensing for commercialization of protected plant varieties. The programme had benefited senior scientists and faculty members, numbering 22, from ICAR institutes and Agricultural Universities.

Networking Essentials for Content Management in Agriculture

Knowledge in agriculture, which was hitherto limited to a region, crop, climate, etc., needs to expand its boundaries to withstand the global competition. Internet plays a vital role in agriculture for accessing market information, weather updates, package of practices for a particular commodity, and for seeking experts’ advise in real time. Networking knowledge, therefore, becomes very crucial. The Academy, being a hub of activity in the area of information and communication management for NARS, planned and organized a programme on Networking Essentials for Information Management in

Agriculture from October 16 to 25, 2007. The programme focused on sensitizing the participants on the scope and potential of networking with special relevance to agriculture and helped in imparting the knowledge on essentials of effective networking and its management. The programme provided opportunities for the participants to develop adequate knowledge and expertise on types of networks and their management, file management in networking, applications of networking – conferencing, Internet radio, and e-learning, and concepts of internet – agri-information portals and network security management. Scientists, faculty members, in-charges of ARIS / Computer Centres, and network administrators from ICAR institutes and Agricultural Universities, numbering 18, attended the programme.

MDP on Performance Assessment of Agricultural Research Organizations

With the increased demand on accountability, agricultural research organizations need to be equipped with a realistic methodology for assessing the performance in a comprehensive way. With a view to providing opportunities for the participants to have an exposure to identify and measure suitable indicators as well as to assess the performance of research organizations in NARS, a Management Development Programme on Performance Assessment of Agricultural Research Organizations was conducted from November 1 to 7, 2007. The programme was built around major topics such as performance-oriented evaluation system, measurement of research output and outcome, and assessment of research management process. The programme equipped the participants with the principles and methodology needed for identifying and measuring suitable indicators and for undertaking performance assessment of their respective institutes. The programme had the participation of ten scientists and faculty members from ICAR institutes and Agricultural universities who are associated with the work related to performance assessment of research in their organizations.

Improving Administrative Efficiency and Financial Management

Administrative and Accounts Officers play a pivotal role in extending the needed support to the Director and various other personnel in the research organization. One of the most critical problems faced by the institutions is the development of general management talent for dealing with the demands of rapidly changing external and internal administrative environment. In order to provide a forum for the administrative and accounts personnel of ICAR to share and discuss experiences with a view to finding solutions to specific cases, a course on Improving Administrative Efficiency and Financial Management was organized from November 13 to 20, 2007. The broad areas covered in the course included modified general financial rules as applicable to ICAR, pay fixation and retirement benefits, NAIP procedures, accrual system of accounting, legal matters, vigilance management and disciplinary procedures, and development administration. Administrative Officers, Finance & Accounts Officers, Assistant Administrative



Officers, and Assistant Finance & Accounts Officers of various ICAR institutes and AUs numbering 29, participated in the course.

Educational Methodology and Instructional Technology



Developing awareness on the basic philosophy of Educational Methodology and Instructional Technology (EMIT) and extrapolating it to different situations will have far reaching implications in improving learning teaching. To develop an awareness on EMIT philosophy among the faculty members of Agricultural Universities, a six-day Faculty Development

Programme on Educational Methodology and Instructional Technology was organized from November 26 to December 1, 2007, under the "Niche Area of Excellence" Project on Educational Technology. The programme aimed at facilitating the faculty members to develop a system of pedagogy that can be suitably applied for improving learning-teaching in Agricultural Universities and to understand management functions in agricultural education. The programme oriented the participants to the various issues related to management of agricultural education, different teaching-learning functions for improving the teaching effectiveness, and human skill aspects needed for agricultural education. The programme benefited 20 Assistant / Associate Professors of various Agricultural Universities.

Workshop on Rajbhasha Adhikariyonki Samasyayaen

A three-day workshop on *Rajbhasha Adhikariyonki Samasyayaen* was organized from December 4 to 6, 2007, with a view to orienting Official Language officials to the problems faced in official language implementation. The workshop focused on effective and systematic use of Official Language and on facilitative issues needed for following the Official Language policy. Some of the important topics that were covered in the programme included effective Official Language implementation strategy in ICAR institutes, usage of appropriate technical terminology, and techniques of translation. The programme facilitated deliberations on Official Language correspondence, more specifically coming under day-to-day functioning of government institutions. During the course of the workshop, the participants got clarifications on a number of points for effective implementation of Official Language policy in their institutions. Assistant Directors (Official Language), Section In charges, Technical Officers, and personnel directly associated with Official Language implementation, numbering 38, have participated in the workshop.

Strategies for Stress Management for Enhanced Organizational Effectiveness

Stress management is gaining more and more importance in the recent times, particularly in the organizational context. Stress is intrinsic to the job itself, where competing demands and pressures cannot be escaped. Very often, scientists and teachers experience tension, frustration, and anxiety while executing their assigned duties. There is, therefore, a need for the scientists and teachers to understand the techniques of moderating and modulating their individual stress level. With this view, a training programme on Strategies for Stress Management for Enhanced Organizational Effectiveness was organized from January 16 to 22, 2008. The programme facilitated the participants to understand the process of stress and stress-related disorders, and helped them to examine the personality and organizational variables that moderate stress. Senior-level scientists and teachers in the National Agricultural Research System, numbering fifteen, were facilitated through this programme to develop coping techniques and strategies for effective management of stress.

E-Learning

The processes of learning and knowledge management have acquired new dimensions with the advent of fast developing trends in information and communication technologies. With increasing global competition in the agriculture sector, learning process has to be rapid, updated, highly dynamic, and tailor-made to the global needs. E learning is the most potential tool to meet this future demand. With this backdrop, a programme on E Learning was organized from January 16 to 23, 2008, under Niche area project. This programme was designed to familiarize the participants with open source software for content development, data analysis, and database management, and to orient them for developing case studies on content development in project mode. The programme oriented the participants to open source e-learning tools – audio, video tools, and content capturing techniques, modern e-learning methodologies – mobile learning, pod casting, internet radio, and video conferencing, and basics of open source software in content management. The programme had the participation of thirteen scientists and technical officers from various Agricultural Universities.

Capacity Building on Intellectual Property Protection and Technology Licensing in Agriculture

The new trends of globalization in trade and Intellectual Property Protection have compelled institutions to build adequate capacity for the development of new technologies and products, for licensing and commercialization of new technologies, and for building a culture of Intellectual Property (IP) protection. To create awareness and to build qualified human resources in the area of Intellectual Property Management, a three-day capacity building programme on Intellectual Property Protection and Tech-



nology Licensing in Agriculture was organized from February 14 to 16, 2008, under Indo-US Agricultural Knowledge Initiative, in collaboration with Chaudhary Charan Singh Haryana Agricultural University, Hisar, Haryana, Michigan State University, USA, and Indian Council of Agricultural Research, New Delhi.

The main objective of the programme was to build an expert class of scientists from the Agricultural Universities and ICAR institutes, through training, in the subject domain of IP management. Ms. June Blalock, Coordinator, Technology Licensing Program, USDA-ARS, Dr Muralee Nair, Professor, Michigan State University, and Dr Fred Reinhart, Associate Vice President, Wayne State University, were the resource persons from USA. About 42 scientists associated with Technology Management Units of Agricultural Universities and ICAR Institutes of Eastern and North-Eastern States, Andhra Pradesh, Chattisgarh, Jharkand, and Madhya Pradesh participated in the programme.

FDP on Advances in Educational Technology, Stress Management, and Improving the Work Efficiency



The Academy has been catering to the specific requests from various institutes and universities in the National Agricultural Research System by organizing need-based, tailor-made programmes for scientists and staff of the clientele institutions. Based on the specific request received from the College of Veterinary

and Animal Sciences, Udgir, Latur, Maharashtra, a six-day Faculty Development Programme on Advances in Educational Technology, Stress Management, and Improving the Work Efficiency of faculty members and staff was organized, at the Academy, from March 17 to 22, 2008. The programme focused on various issues that met the requirements of diverse and mixed group of participants. The programme essentially focused on important issues related to human behaviour in the organization, in addition to a brief orientation to aspects of educational technology and administrative procedures. Various topics covered in the programme included lifelong learning, learning styles, developing attitudes in learning, motivation, personality development, team work, time management, leadership, performance improvement, commitment of staff for organizational effectiveness, stress management strategies, administrative procedures with a focus on interface and conflict management, and accounting procedures. The programme benefited 15 faculty members and staff of the College of Veterinary and Animal Sciences, Udgir.

Programme on Developing Winning Research Proposals in Agricultural Research

In view of the increasing competition for scarce research funding, it is vital for the scientists of agricultural research organizations to design projects that can attract external funding for specific research efforts. Some scientists are adept at writing successful and winning proposals but others experience difficulties.



In order to equip the scientists in NARS with the needed skills, an NAIP-sponsored training programme on Developing Winning Research Proposals in Agricultural Research was organized from March 24 to 29, 2008. The programme was aimed at developing necessary skills among the participants for writing research proposals with a focus on the needs of the stakeholders that can win funds from donors and to orient them to the use of log frame and Project Evaluation and Review Technique (PERT) in research programme planning. The programme covered broad areas such as how to write a good concept note as a preamble to the research proposal, how to write research proposals to inform and to persuade the donors, how to sharpen writing skills indicating urgency and need, and how to prepare the budget. Scientists from ICAR Institutes and Agricultural Universities, numbering 16, were benefited through this programme.



Workshops

Name of the workshop	Duration	No. of participants	Programme Director(s)
First Training-cum-workshop on IP and Technology Management in ICAR System	May 28-30, 2007	67	R Kalpana Sastry SK Soam
Creative Excellence for Individual Development and Organizational Growth	Aug. 6-10, 2007	22	RK Samanta BS Sontakki
Monitoring and Evaluation Workshop of NAIP	Aug. 9-10, 2007	44	T Balaguru
NAARM-FRSF Workshop on Dialogue with Public/Private Plant Breeders on Issue of Annual Fee of Registered Plant Varieties	Sept. 25, 2007	26	SK Soam
Role and Establishment of Educational Technology Cells in SAUs-Strategy Options	Oct. 18-20, 2007	19	A Gopalam KH Rao
NAIP Pre-stakeholders workshop	Nov. 28, 2007	66	T Balaguru
Team Building Workshop cum Training	Dec. 12-15, 2007	22	RVS Rao KH Rao
NAIP-Learning and Capacity Building (L&CB) Programme Launch Workshop	Dec. 19-20, 2007	36	NH Rao T Balaguru
NAIP workshop on Issues of Ongoing Consortia	Jan. 4-6, 2008	122	D Rama Rao
Brainstorming Workshop on Curriculum Design for Precision Agriculture and PG Diploma on IT Management in Agriculture (Under NICHE Area project)	Jan. 21-22, 2008	41	D Rama Rao NH Rao
Orientation Workshop for FET Coordinators (Under NICHE Area of Project)	March 6-7, 2008	46	A Gopalam SK Nanda
MDP Workshop on Policy and Prioritization, Monitoring and Evaluation (PME) Support to National Agricultural Innovation Project (under NAIP-L&CB programme)	March 11-17, 2008	25	GP Reddy B S Sontakki
Brainstorming Workshop on Geospatial Library and Participatory Rural GIS	March 25, 2008	37	NH Rao MN Reddy

Intellectual Property and Technology Management in ICAR System

The first Training-cum-Workshop on “Intellectual Property and Technology Management in ICAR System” was organized from May 28 to 30, 2007. The workshop aimed at bringing together all the representatives of the Institute Technology Management Committees (ITMCs) to discuss and develop IPR culture in agricultural research and education in ICAR. Dr (Mrs) Rita Sharma, Additional Secretary and Financial Advisor, DARE and ICAR, New Delhi, inaugurated the workshop. Eminent research and policy managers chaired various sessions which included human resource management; implementation of the guidelines; capacity building; XI Plan scheme on IP Management; extant varieties, germplasm, genetic stocks, and genes.



The following major recommendations emerged from the workshop.

- ✍ It is mandatory for all ITMC representatives to make a presentation on the guidelines of IPR and all the dimensions of its operationalization, not only to their institutes' members but also to the staff members from nearby institutes who have not participated in this workshop.
- ✍ Regional short duration re-orientation programmes on IP Portfolio Management and Technology Transfer/Commercialization would be conducted by NAARM in collaboration with ICAR Headquarters at identified institutions, based on the initiative shown by them. Institutes offering to host such programmes should send their intent positively by 31st July 2007, along with their suggestions on coverage of specific ICAR institutes in the region and number of total participants that can be hosted.
- ✍ Scientists showing initiative and enthusiasm in this direction would be encouraged through exposure under the provisions of Business Planning and Development (BPD) component of NAIP or Indo-US Agricultural Knowledge Initiative (AKI), or Borlaug, Cochran, and similar other fellowships. It was decided to develop a core group of at least 100 IPR and technology management experts in ICAR, through HRD, in XI Plan Period.

It was pointed out during the workshop that implementation of the ICAR guidelines for Intellectual Property Management and Technology Transfer/Commercialization shall aim at facilitating: (i) enhanced institutional partnerships, (ii) faster technology delivery, and (iii) safeguarding of genetic resources.



While addressing the participants of the Workshop during the valedictory function, Dr Mangala Rai, Secretary, DARE, Govt. of India, and Director General, ICAR, New Delhi, urged all the participants to work towards measures to bring the Indian farmers towards subsistence, with the transfer of our Intellectual Property Right (IPR) enabled-technologies through commercial, cooperative, and public routes. The programme provided a forum for meaningful interaction for over 67 delegates who are part of the ITMCs of various ICAR institutes.

Creative Excellence for Individual Development and Organizational Growth

Creative excellence plays a decisive role in promoting human development in today's new climate of social change. It is utmost necessary for a leader in 'making difference' in the lives of employees by creating a deep meaning in the pursuit of an ambitious aspiration, by providing the hope of a future after restructuring, and by opening every possible avenue for personal contribution. Keeping this view, a workshop on Creative Excellence for Individual Development and Organizational Growth was organized from August 6 to 10, 2007. The programme aimed at improving individuals' personality profile in achieving excellence and also in building capacity in individuals to perform meaningfully in tune with the changing life styles to win and excel. The workshop provided a platform for the participants to explore various dimensions of human behaviour, their expectations and desire, and facilitated a desirable change in behaviour in the individuals for their professional and personal growth. Twenty three participants comprising Deans, Principal Scientists, and Senior faculty members from ICAR Institutes, Agricultural Universities, and Krishi Vigyan Kendras were facilitated through the workshop to exchange views, share each others' experience, and learn from one another.

Monitoring and Evaluation Workshop of National Agricultural Innovation Project



Under the aegis of World Bank supported National Agricultural Innovation Project (NAIP), a two-day Workshop on Monitoring and Evaluation was organized at NAARM during August 9 - 10, 2007, to deliberate on the mechanism for effectively monitoring and evaluating the consortia-based projects to be implemented by various stakeholders in the NARS.

While inaugurating the Workshop, Dr M.V. Rao, Former Special Director General (ICAR), emphasized the need for transforming Indian agriculture, through innovation, so as to

enable the country attain self-sufficiency by improving the production and productivity of agricultural commodities, particularly the oilseeds, and safeguard the interests of vulnerable groups operating in disadvantaged regions. The strategy of NAIP to address the twin challenges of sustainable livelihood security and business orientation in agriculture was highlighted by Dr Mruthyunjaya, National Director (NAIP). The Task Team Leader from the World Bank, Dr P.S. Sidhu, stressed the need for building public-private partnership in realizing the objectives of NAIP. Dr S.M. Ilyas, Director (NAARM), highlighted the necessity for evolving suitable monitoring and evaluation strategies to ensure the success of consortia-based projects involving partners from diverse backgrounds. Forty-nine delegates from ICAR, Agricultural Universities, World Bank, and Private Sectors across the nation participated in the Workshop.

Various aspects of monitoring and evaluation (M&E), with specific focus on consortia-based projects under NAIP, were deliberated upon by the delegates in seven Business Sessions. A broad overview of objectives, components and activities of NAIP, including the data needs of project implementation and MIS was presented by Drs Asseye Legesse from World Bank, Dr S.D. Sharma from IASRI, and Mr Vijaya Raghavan from the Help Desk at NAARM. This was followed by a detailed presentation on the concept and objectives of M&E system; information flow; identification and measurement of research outputs, outcome and impact; and baseline survey by Dr U.K. Srivastava from CES. This Workshop enabled the delegates to get a clear picture of M&E framework to be followed for monitoring and evaluation of various consortia-based projects under all the four Components of NAIP.

NAARM-FRSF Workshop on Dialogue with Public/Private Plant Breeders on Issue of Annual Fee of Registered Plant Varieties

The Academy, in collaboration with Farm and Rural Science Foundation (FRSF), Hyderabad, conducted a one-day workshop on "Dialogue with Public/Private Plant Breeders on Issue of Annual Fee of Registered Plant Varieties" on September 25, 2007. This workshop was the 2nd National Dialogue on Annual Fee in the context of PPV&FR Act



2001. The workshop was sponsored by Protection of Plant Varieties and Farmers' Rights (PPV&FR) Authority, Govt. of India, New Delhi. Dr S. Nagarajan, Chairperson of the PPV&FR Authority, in his inaugural address, emphasized on several issues related to annual fee in India and abroad. Dr S.M. Ilyas, Director, NAARM, in his introductory remarks, explained the importance of annual fee for the development of resource poor farmers. He described several modalities of payment and maintenance of annual fee.



Dr E.A. Siddiq, President, FRSF, gave several suggestions of definition of Essentially Derived Varieties (EDVs), hybrids, genetic stock, etc. The workshop had participants from the Private seed sector, Agricultural Universities, State Government system, and Intellectual Property Rights stakeholders. Considerable amount of discussion was held on various issues that govern the annual fee, which is the requirement under the Act for retailship of the varieties under registration. In the workshop, a consensus was developed towards criteria for fixing the annual fee for different clusters of varieties under question and also the percent share of the identified criteria.

Role and Establishment of Educational Technology Cells in Agricultural Universities

Educational Technology can be conceived as a science of techniques and methods by which educational goals can be realized. The agricultural sector, which supports the livelihood of 70% population in India, needs to have technologically capable and service-oriented graduates in the changing global economic scenario. The responsibility of grooming such agriculturally qualified graduates lies with the Agricultural Universities (AUs). Therefore, the faculty members in AUs and in other agricultural education institutions need to be properly oriented to accomplish these goals. In order to provide an appropriate platform for in-depth discussion, a three-day workshop on Role and Establishment of Educational Technology Cells in Agricultural Universities was organized from October 18 to 20, 2007. The workshop aimed at discussing the need and assigned responsibilities of Educational Technology Cells in AU system, more specifically in improving the quality of agricultural education and also elaborated on the functional advantages of establishing the Cells along with issues related to institutional, infrastructure, physical, and financial aspects of Educational Technology Cells. The workshop enabled the delegates to prepare an approach document and initiate proposals for the establishment of Educational Technology Cells in their own University. The workshop was attended by about 19 Assistant and Associate Professors from State Agricultural Universities.

NAIP Pre-stakeholders workshop

A one-day Workshop was organized for the Consortia Principal Investigators of the recommended Concept Notes through second call on November 28, 2007 at NAARM to expose them to financial, procurement and IP management, as well as to environmental and social safeguard analysis. Sixty-six participants from public and private sectors attended the workshop.

Team Building Workshop-cum-Training

Teamwork is a collective activity of a group of two or more individuals who are totally committed to the team's goals and who collaborate with each other for the

successful completion of a given task. Agricultural research, like most human endeavour, is best done in teams. Research projects may be utilizing people of a single discipline or they could be inter or multi-disciplinary. The coming together of such diverse people would also mean that there would be considerable differences in their personalities. These call for an understanding of the skills and nuances of working together effectively in teams. In order to sensitize agricultural professionals to the issues of interpersonal relationships and team building in the organization, a team building workshop-cum-training was organized from December 12 to 15, 2007. The workshop facilitated the participants to enhance their personal, interpersonal, and group effectiveness, and sharpened their understanding of the importance and process of working together. Twenty two senior-level scientists and teachers from ICAR institutes and Agricultural Universities took active part in the workshop. Some of the recommendations brought out, during the workshop, for enhancing teamwork in the organizations include setting SMART goals for achieving organizational objectives, collective team decision making, good interpersonal relationships, free and open communication among the team members, and a supportive organizational climate.

NAIP L&CB Programme - Launch Workshop

A launch workshop of the Learning and Capacity Building (L&CB) programme under NAIP was organized during December 19–20, 2007, at the Academy, for integration and finalization of the work plan and for identifying the responsibilities among the collaborating institutions and partners for the next six months. A brochure, prepared by NAARM, describing the project activities was also released on this occasion. Thirty six representatives from IIM, Lucknow, NIRD, Hyderabad, MANAGE, Hyderabad, ASCI, Hyderabad, GBPUA&T, Pantnagar, MSSRF, Chennai, CORD-M, Hyderabad, Guru Consultants, Bangalore, and NAARM, Hyderabad, attended the workshop.

NAIP workshop on Issues of Ongoing Consortia

A three-day NAIP workshop on “Issues of Ongoing Consortia” was organized from Jan. 4 to 6, 2008 to identify operational and management issues experienced by the ongoing consortia. Principal investigators along with their administration and finance staff from eight consortia numbering around 100 attended the workshop. Members of Monitoring and Evaluation, help desk and procurement consultants provided the inputs to the workshop whereas National Director and National coordinators, NAIP clarified the issues raised by the participants.

Brainstorming Workshop on Curriculum Design for Precision Agriculture and PG Diploma on IT Management in Agriculture

The brainstorming workshop on “Curriculum Design for Precision Agriculture and IT Management in Agriculture” was organized under Niche area project on Jan. 21





& 22, 2008. The brainstorming session on the first day focused on courses on precision agriculture that can be integrated into the UG and PG curricula in Indian agricultural universities. Considering the importance of IT management in agriculture, the Academy intends to initiate academic

programme in this area. Accordingly, the deliberations on second day were focused in designing a complete PG diploma on IT Management in Agriculture. The areas brainstormed were: potential employers, skill set needed, curriculum outline, entry prerequisites, andragogy and related topics. Forty participants attended the workshop.

Orientation Workshop for FET Coordinators

As a part of Foundation Course for Agricultural Research Service (FOCARS) Scientist-trainees undergo field experience training (FET) at selected centres under the control of Agricultural Universities and ICAR research institutes. The Academy imparts model instruction to the scientist-trainees by equipping them with the needed knowledge and skills, through mock FET, during the first phase of FOCARS. The trainees have to translate the knowledge and skills into the actual FET, which they undergo for about a month during the second phase of the training. The designated coordinators for this part of FET from the respective university or institute facilitate and closely monitor the various activities of the scientist-trainees during their FET. These coordinators need to be oriented to the actual requirements of the Academy in general and the FET field-level operations in particular, in order to facilitate them supervise the FET activities effectively. In view of this, an Orientation Workshop for FET Coordinators was organized on March 6 and 7, 2008. During the workshop, various issues related to FET methodology as depicted in the working manual were discussed and clarified. The workshop, organized under the Niche project, was participated by 46 FET coordinators from various centers.

MDP Workshop on Policy and Prioritization, Monitoring, and Evaluation Support to National Agricultural Innovation Project



Prioritization, Monitoring, and Evaluation (PME) is a management tool that can be used to validate programme existence and adjust research agenda for enhanced effectiveness in case of public agricultural research system. PME is an integrated approach, which should incor-

porate the viewpoints of clientele, policy-makers, researchers, and donors to address the societal goals, as otherwise conflict would remain in priority setting, resource allocation, and accountability. The PME of agricultural R & D projects is critical when the intended R & D has multiple objectives, ranging from food security to sustainability, poverty alleviation, gender issues, export, etc. In order to equip the scientists of National Agricultural Research System with techniques of PME, a Management Development Programme workshop on Policy and PME Support to National Agricultural Innovation Project was organized from March 11 to 17, 2008. The programme was aimed at orienting the participants to the concepts and description of PME and for bringing together the viewpoints of researchers, administrators, and donors to make PME effective and rewarding, in the light of National Agricultural Innovation Project. Senior level scientists involved in PME activities of approved NAIP consortia projects and In-charges of PME cells of ICAR institutes and Agricultural Universities, numbering 25, participated in this programme.

Brainstorming workshop on Geospatial Library and Participatory GIS

A one-day Brainstorming workshop on Geospatial Library and Participatory GIS was organized to chalk out the work plan for the sub project on redesigning the farmer-extension-agricultural research education continuum in India with ICT mediated knowledge management, under NAIP. The Principal Investigator of the project stressed the need



and importance of the Geospatial library and PGIS, particularly in the context of natural resources management, and cited newly emerging examples of how they can be effectively deployed in a small scale. Dr S.M. Ilyas, Director, NAARM, briefly explained the importance of the project in the context of the transition of the NARS to NAIS, and emphasized the role of knowledge management in enabling the farming community attain higher incomes and improve their livelihood. The purpose of the workshop was to sensitize the faculty and staff of the associate institutions involved in the project to the activities and requirements for designing, developing, and implementing a geospatial library at ANGRAU, Hyderabad, as well as participatory village GIS at Sri Aurobindo Institute of Rural Development (SAIRD), Gaddipalli. It was agreed that the technical programme and the financial proposals would be prepared by the various institutions in consultation with NAARM in the formats provided for processing by the PIU, NAIP.



Off-Campus Programmes

Name of the programme	Duration	No. of participants	Programme Director(s)
EDP on Vigilance Administration and Management for Eastern Region Directors of ICAR institutes (organized at CRRRI Cuttak, Orissa)	April 16-18, 2007	14	M.P. Pandey, Director, CRRRI and M Suresh Kumar, CAO, NAARM
Training Programme for Administrative and Financial Personnel at CARI, Port Blair	Sept. 10-14, 2007	22	M Suresh Kumar VS Subramanian
Short Course on Improving Efficiency of Junior Staff of IGFRI, Jhansi	Nov. 27-30, 2007	25	M.M. Anwer P. Manikandan
Specialized Training Programme on Enhancing the Human Capabilities at Work at CRIDA, Hyderabad	Dec. 10-15, 2007	25	M.M. Anwer P. Manikandan
Improving Efficiency of Administrative, Finance and Accounts Manpower organized at IGFRI, Jhansi	Jan. 16-21, 2008	25	M Suresh Kumar RVS Rao
FDP on Educational Methodology and Instructional Technology at College of Agriculture, BAU, Ranchi (Under Niche Area Project)	Jan. 22-28, 2008	24	A Gopalam KH Rao
Short Course on Improving Efficiency of Technical Personnel at IGFRI, Jhansi	Feb. 12-15, 2008	25	MM Anwer P Manikandan
Short-term Training Programme for Scientific, Administrative, and Technical Staff of ICAR Research Complex, Goa	Feb. 28 to March 1, 2008	27	M Suresh Kumar
FDP on Educational Methodology and Instructional Technology for UAS, Bangalore (Under NICHE Area Project)	March 10-15, 2008	25	A Gopalam KH Rao
Specialized Training Course on Human Relations Management for Faculty of CIFE, Mumbai	March 31 to April 2, 2008	23	MM Anwer P Manikandan

Vigilance Administration and Management

An off-campus, special training programme on Vigilance Administration and Management was organized at Central Rice Research Institute, Cuttack, in collaboration with Central Vigilance Commission, from April 16 to 18, 2007, to provide an overview of vigilance administration and management and to update and acquaint the Directors of the ICAR institutes with the latest Central Vigilance Commission guidelines. The programme focused on enhancing efficiency in vigilance administration and also in taking appropriate action on anonymous and pseudonymous complaints and matters related to procurement processes from vigilance angle. Fourteen Directors and Project Directors of ICAR institutes, located in the states of West Bengal, Orissa, Assam, Bihar, Jarkhand, and all states of North Eastern region, including Andaman & Nicobar group of Islands, took active part in the programme.

Programme for Administrative and Financial Personnel

One of the most critical problems faced by the organization is the development of general management talent capability for dealing with the demands of rapidly changing external and internal administrative environment. Administrative and Accounts Officers play a pivotal role in extending administrative support in the research organization. Services offered by the administration / accounts personnel assist in collective planning, which help organizations meet their goals and improve the research productivity. Keeping this in view, a training programme was specifically planned and organized for the Administrative and Financial Personnel at Central Agricultural Research Institute (CARI), Port Blair, from September 10 to 14, 2007. The programme oriented the participants to the various issues of administrative and financial management through experiential learning mode. Various topics covered in the programme included seamless administration, conduct rules, budgetary analysis, financial management, purchase procedures, vigilance management and disciplinary proceedings, service rules, leave rules, and human resource management. The programme benefited twenty-two administrative and financial personnel from CARI, Port Blair.

Short Course on Improving Efficiency of Junior-level Staff of IGFR, Jhansi

For an organization to enhance its productivity, every member of the organization needs to be oriented to enhance his/her efficiency and effectiveness. With a view to providing an opportunity for personnel at junior level to sharpen their knowledge and skills, a tailor-made, off-campus short course for Improving Efficiency of Junior Level Staff of IGFR was organized from November 27 to 30, 2007. The entire programme was based on learning through structured experience, wherein participants were taken through simulated exercises and the learning was brought out through elaborate debriefing on the experiences. The programme benefited 25 junior staff of IGFR, who were facilitated to develop the needed mindset to enhance their efficiency and effectiveness.



Enhancing Human Capabilities at Work



Based on the feedback of the earlier programme conducted as well as the request received, an off-campus Specialized Course on Enhancing Human Capabilities at Work was organized for CRIDA, Hyderabad, from December 10 -15, 2007. The participants, numbering 25, included scientists, technical officers, and personnel from administration and accounts. The programme facilitated the diverse group of participants to develop an understanding and appreciation for each other's roles and responsibilities. The contents of the programme were drawn so carefully to meet the common requirements of all the participants, who were facilitated to enhance their understanding and skills in various aspects related to enhancing their human skills and capabilities.

Improving Efficiency of Administrative, Finance, and Accounts Manpower

Constructive support from administration and finance will go a long way in the better realization of organizational goals. This calls for a sensitization among the administrative and accounts personnel on various issues that will help improve their efficiency and effectiveness. Keeping this in view, a programme on Improving Efficiency of Administrative, Finance, and Accounts Manpower at IGFR, Jhansi was organized from January 16 to 21, 2008, at Jhansi. The programme oriented the administrative and accounts personnel to their roles and responsibilities and provided them opportunities to enhance their skills and understanding on various issues that would facilitate them in discharging their support functions in the organization more meaningfully.

The programme covered broad areas such as Administration on way to management and leadership, Conduct rules, Vigilance management and disciplinary proceedings, Financial management, Accrual system of accounting, Purchase procedures as per new GFR, Pension, pay fixation, and other related matters, and a few important issues related to soft skills development. Twenty-five administrative, finance, and accounts personnel from IGFR, Jhansi, were benefited through this programme.

Educational Methodology and Instructional Technology

Developing awareness on the basic philosophy of educational methodology and instructional technology (EMIT) and extrapolating it to different situations will have far reaching implications in improving learning teaching. Keeping this in view, a Faculty Development Programme on Educational Methodology and Instructional Technology

was organized from January 22 to 28, 2008, at Birsa Agricultural University, Ranchi. The programme was aimed at developing an awareness on EMIT philosophy among the faculty members, developing a system of pedagogy that will be suitably applied for improving learning teaching in agricultural universities, and providing an overview of management functions in agricultural education. The programme focused on theme areas, viz. educational technologies and their application, innovative and modern learning approaches and processes, and personality development. The programme was conducted under the project titled "Niche Area of Excellence in Educational Technology for Global Competitiveness in Agricultural Education". Fifteen faculty members from Birsa Agricultural University and ten faculty members from Assam Agricultural University, Jorhat, Rajendra Agricultural University, Pusa, Orissa Agricultural University, Bhubaneswar, and C.S. Azad Agricultural University, Kanpur, participated in this programme.

Improving Efficiency of Technical Personnel

The efficiency and effectiveness of people in the organization depends to a large extent on their ability to utilize a variety of soft skills that are essential for performing various activities. Technical personnel constitute an important component of human resources in an institute and their support to a variety of activities help in a large measure in realizing the organizational goals. There is, therefore, a need to sensitize this important group of technical personnel to the various soft skills that are required in performing their roles and responsibilities efficiently and effectively. Keeping this in view and based on the request received, a specialized short course on Improving Efficiency of Technical Personnel at IGFRI, Jhansi, was organized from February 12 to 15, 2008. The programme oriented the technical personnel to the important issues of organizational behaviour and human resource management, which have a great bearing on improving their efficiency. Some of the important issues that were covered in the programme included importance of human relations management in the organization, personality development, motivation, interpersonal relationship, team work, conflict management, trust building, and orientation to resources utilization and super ordinate goal attainment. The participants were sensitized to these various issues through structured experiences, which helped them to understand their shortcomings in terms of their knowledge and skills. The programme benefited 25 technical personnel from IGFRI, Jhansi.

Scientific, Administrative, and Technical Staff of ICAR Research Complex, Goa

Modern management skills, effective personnel management system, adoption of modern technology for work simplification, and automation have become essential requirements for extending effective and excellent services in the organization. Scientists as well as personnel from administration and accounts play a pivotal role in extending support in the research organization. In order to provide an exposure as well as to provide a forum for interaction among the participants on various important issues



that need attention, an off-campus programme was organized for scientific, administrative, and technical staff at ICAR Research Complex, Goa, from February 28 to March 1, 2008. The programme aimed at improving the skills and efficiency of the personnel in providing constructive research and administrative support in meeting the organizational priorities and needs. Various topics covered in the programme included Administration on way to management and leadership, Right to Information Act, Accrual system of accounting, e-procurement and payments, Recruitment rules, Technical service rules, e-governance, Contract labour recruitment, and Income tax filing procedures. The programme benefited 27 administrative, financial, and technical personnel from ICAR Research Complex, Goa.

FDP on Educational Methodology and Instructional Technology

The Academy has been conducting several programmes on Educational Methodology and Instructional Technology (EMIT) for the faculty members of Agricultural Universities as a part of one its major mandates. Developing awareness on the basic philosophy of EMIT and extrapolating it to different situations will have far reaching implications in improving teaching learning. Niche area of excellence in educational technology for global competitiveness in agricultural education provides opportunities for promoting this objective. Under this project, an FDP on Educational Methodology and Instructional Technology was organized at the College of Agriculture under University of Agricultural Sciences, Bangalore, from March 10-15, 2008. The programme oriented the participants to conceptualize the EMIT philosophy and facilitated them develop methodology that can be used for improving classroom instruction either for complimenting or for supplementing the instructional function. The programme benefited 15 faculty members from the affiliated colleges of UAS, Bangalore, and 10 faculty members from Karnataka Fisheries and Animal Sciences University, Bidar.

Human Relations Management

An off campus training programme on Human Relations Management was organized for faculty of CIFE, Mumbai from March 31 to April 2, 2008. The major objective of the programme was to enhance and understanding of organizational behaviour and improve the inter personnel relations among coworkers. Twenty-three participants underwent this training programme.

Executive Development Programmes

Name of the programme	Duration	No. of participants	Programme Director(s)
Agricultural Research Management	Sept. 18-21, 2007	17	Jagannadham Challa C Sriram
Directors Conclave on Motivation Techniques – Fun at Work	Nov. 14-17, 2007	12	MM Anwer RVS Rao

Agricultural Research Management

As a part of the Academy's endeavour towards promoting learning and capacity building of the NARS, an Executive Development Programme in Agricultural Research Management, the 9th in series, was organized from September 18 to 21, 2007, for the benefit of senior personnel in Research Management position such as Directors and Joint Directors of ICAR institutes and Deans and Directors of Agricultural Universities. The programme was designed for conceptual awareness and competency building in the theme areas of scientific endeavour and institute management, administration and finance functions, institution building, and legislative acts. The programme aided the delegates to develop visionary approach towards perspective planning for their research institutes. The programme was structured into interactive sessions by in-house and guest faculty, case analysis, and presentations.



Directors' Conclave on Motivation Techniques – Fun at Work

To make things happen and to accomplish them in life, whether it is personal or professional, a person should have dream, desire, and imagination. A person should also draw inspiration and motivation from the achievers and the performers who have made things happen in their life. Motivation is crucial to everyone for energetic working and is necessary for effective and efficient functioning of any organization. People who are highly enthusiastic enjoy their work and do not consider it drudgery and as a result they have fun at the work place. The ability to drive the self and others is an important skill in management of organizations. Motivation is not a one-time act but it is a continuous process. Competent leadership requires the understanding of the various techniques of self-motivation as well as motivating others that would result in an environment conducive to work.



To evolve an action plan for employing effective motivation skills in NARS, an Executive Development Programme "Directors' Conclave on Motivation Techniques – Fun at Work" was organized from November 14 to 17, 2007. The Conclave provided a forum for the Directors of NARS to look at the status of motivation tactics in NARS and to synthesize the experiences on successful motivators. Study visits and syndicate sessions incorporated in the Conclave design provided learning experiences on various issues related to motivation and fun at work. The delegates of the Conclave, numbering 12, were facilitated to develop a strategic plan for their respective institutions for motivating their people.



International programmes

Name of the programme	Duration	No. of participants	Programme Director(s)
Training Programme on Administration and Finance Management for officials from Nepal	July 10-30, 2007	02	VS Subramaniam PP Brahmaji
Training-cum-Workshop on Agricultural Research Management organized at Rajarata University of Sri Lanka, Mihintale, Sri Lanka	Dec. 27-28, 2008	37	T Balaguru

International Programme on Administration and Finance Management

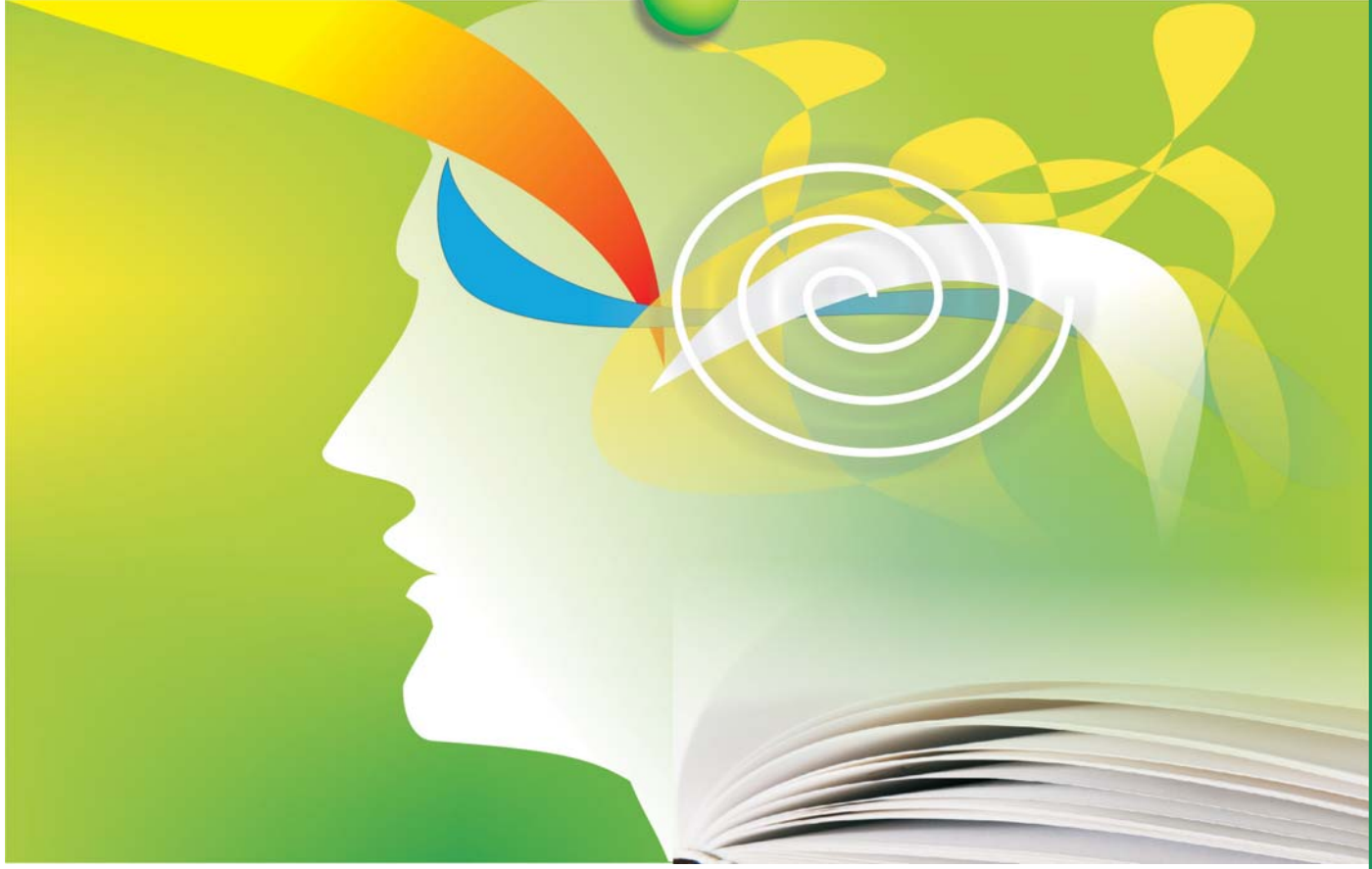


As a part of the Memorandum of Understanding (MoU) signed between Indian Council of Agricultural Research (ICAR), New Delhi, and Nepal Agricultural Research Council (NARC), Nepal, two Administrative and Finance Officers from NARC, Nepal, attended a three-week programme on Administration and Finance Management. The

programme was specifically planned and organized for them, at the Academy, from July 10 to 30, 2007, under ICAR-NARC work plan for the year 2006-07. The programme aimed at orienting the officers to the modern management concepts and skills that would facilitate improving their efficiency and effectiveness in discharging their functions. The programme covered various topics like conduct rules, office automation, pay fixation and pension rules, service rules, accounting and auditing, disciplinary matters, personality development, communication skills, etc. The programme exposed the participants to the various systems of administrative and financial procedures that are in vogue, which facilitated them to pick up details and learning that can be used for enhancing various administrative and financial functions in the back home situation.

Agricultural Research Management Programme in Sri Lanka

Under the Work Plan signed between CARP and ICAR, an international off-campus programme on 'Agricultural Research Management' was organized during December 27-28, 2007, at Rajarata University of Sri Lanka, Mihintale, with the support of UCG of Sri Lanka. The programme was designed to expose the participants to the contemporary issues in research management as well as to the tools and techniques for better management of research. The programme oriented the participants to the various issues of research management process, research priority setting, project management techniques, monitoring and evaluation, sustainable agricultural development, intellectual property management, performance-oriented evaluation system, research methods in Social Sciences, and managerial grid analysis. The programme benefited 37 scientists from the Faculty of Agriculture, Management, and Medicine in the Rajarata University of Sri Lanka.



Research

Research

The research endeavours at the Academy are carried out through funding support from ICAR as well as external donors. During the period under report, the major research activities are initiated under World Bank funded National Agricultural Innovative Project (NAIP). The output of these research projects provides support to the system to address the larger policy concerns and issues of research, education, information and communication and extension management in agriculture. The research-based cases, databases and empirical evidences add practical value to the training endeavours of the Academy. The major research achievements are summarized below.

Sl. No	Project Title	Sponsor	Investigator(s)
1.	Organizational Climate in ICAR	NAARM	KH Rao BS Sontakki C Sriram
2.	Role Efficacy and Motivation Levels of ICAR Scientists	NAARM	KH Rao BS Sontakki GP Reddy
3.	Assessment of Transfer of Learning (ToL) of NAARM Training to NARS	NAARM	BS Sontakki RK Samanta
4.	Impact Assessment of Fisheries Research in India	AP Cess	GP Reddy BS Sontakki MN Reddy
5.	Organizational Stress and Stressors among the Scientists and Teachers of NARS	NAARM	P Manikandan KH Rao MM Anwer RVS Rao
6.	Leadership Styles and Effectiveness in ICAR Institutes	NAARM	MM Anwer P Manikandan RVS Rao KH Rao
7.	Evaluation of E-learning Methodologies in Open Source Environment	NAARM	GRK Murthy KM Reddy
8.	Efficacy of PRA for Research Project Formulation	NAARM	VKJ Rao KM Reddy C Sriram
9.	Public-Private Partnership in the Service of Farmers through Information and Communication Technologies (ICTs)	NAARM	N Sandhya Shenoy D. Rama Rao MN Reddy VKJ Rao
10.	Assessment of Learning Objects for Transfer of Technology	NAARM	VKJ Rao KM Reddy
11.	Promotion of Inter-disciplinary Orientation and Inter-institutional Collaboration in the NARS	NAARM	T. Balaguru P. Manikandan
12.	Development of Education and Training through E-learning	NAARM	D Rama Rao MN Reddy GRK Murthy



13.	Simulation Model for Quality Assessment of Agricultural Education	NAARM	SK Nanda D Rama Rao J Challa
14.	Assessment of Open Source Software (OSS) Tools for MIS in Agricultural Research	NAARM	MN Reddy N Sandhya Shenoy KV Kumar
15.	Strategies for Enhancing Agricultural Engineering Research Output in ICAR	NAARM	C Sriram
16.	Assessment of Qualitative Rating of Colleges in SAUs	AP Cess	J Challa SK Nanda D Rama Rao
17.	Performance Assessment of Agricultural Universities	NAARM	J Challa T Balaguru
18.	Modeling Strategic Management Action Plan for Curriculum up gradation for Indian SAU system in the Global Scenario	AP Cess	A Gopalam SN Saha
19.	Developing Educational Technology for Global Competitiveness in Agricultural Education	ICAR Niche Area	A Gopalam J Challa
20.	Indo US Agricultural Knowledge Initiative	ICAR	A Gopalam

Organizational Climate in ICAR

Objectives:

- To generate baselines data and information on organizational climate in ICAR institutes.
- To analyze and report on the prevailing organizational climate in ICAR institutes at both individual institute and ICAR level.
- To offer recommendations, through changes in organization structure and work processes, aimed at improving organizational climate at the institute and ICAR level.
- To evolve a system to regularly monitor organizational climate in ICAR institutes and ICAR as an organization.
- To report, in a structured manner, the prevailing organizational climate at individual institute and ICAR level.
- To promote creative and enabling climate in ICAR.

Achievements:

Data, collected from 734 respondents of ICAR institutes through mailed questionnaire survey, was analyzed. The prevailing organizational climate in ICAR was analyzed in terms of the six climate motives viz., achievement, expert influence, extension, affiliation, control and dependence using MAO-C scale of Pareek (1988). Highest percentage of respondents (28%) reported control as the dominant motive, followed by dependence (22%), expert influence (16%), extension (16%), achievement (14%) and

affiliation (9%). The desirable motives in scientific research institutions are achievement, expert influence, affiliation and extension for teamwork, greater efficiency and effectiveness with increased output. The observation that nearly half of the respondents reported control and dependence motives, are not a good sign as it reflects the high incidence of bureaucracy and presence of low job autonomy in the organization. Higher order of cooperation and coordination is not possible in such climate. In terms of overall perception of organizational climate in ICAR, two-thirds (67%) of the respondents perceived organizational climate of ICAR as 'favourable' followed by 21% and 11% who perceived it as 'unfavourable' and 'highly favourable', respectively. Final report is under print.

Role Efficacy and Motivation Levels of ICAR Scientists

Objectives:

- To empirically map the role of perception of ICAR scientists and suggest ways
- To enhance correct role perception by suitable interventions

Achievements:

The project is completed during period under report. Data was collected from 237 research personnel from various research institutions of Indian Council of Agricultural Research (ICAR) using mailed questionnaire survey method with the help of a pre-tested instrument structured for the purpose. The instrument consists of three parts viz., personal profile of the respondents, the role perception scale and suggestions to improve role perception. Analysis of the data showed that only 33% of the respondents perceived their roles at highly satisfactory level (>85). Around 48% of the respondents exhibited a satisfactory overall role perception index (45-85), indicating sufficient scope to enhance the role perception of the respondents by suitable organizational interventions. About 19% of the respondents have fallen under below satisfactory level (<45). Organization should view this seriously and should take appropriate measures to enhance their role perception to enhance their efficiency and effectiveness. The overall role perception of research personnel was measured as the total perception of its ten dimensions. Detailed analysis of different role dimensions revealed that only 16.8 % of respondents scored the highly satisfactory index for role centrality. Only 18.9 % of the respondents were able to perceive the super ordination goals in their present role at highly satisfactory level. 31.4% of the respondents failed to perceive the super ordination goal at satisfactory level in their present job. The mean indices for pro-activity (51.2) and role influence (51.0) were not encouraging, while mean indices of role integration (71.9), role creativity (69.2), inter-role linkage (66.8), helping relationship (76.3), growth (63.7) and role confrontation (86.8) are at satisfactory level. Experience (length of service) showed positive and significant correlation with role integration, while designation (cadre/ position) of the respondent exhibited positive and significant association with helping relationship. It is observed that the centrality, integration, pro-activity, creativity, linkage, super ordination and influence have highly significant relationship among different dimensions of role perception. Interestingly, role confrontation did not exhibit interrelationship with other dimension of role perception.



This project aimed to empirically map the role perception of ICAR scientists and suggest ways to enhance clear role perception by suitable interventions. Data was collected from over 300 scientists of ICAR using mailed questionnaire survey method with the help of a pre-tested instrument structured for the purpose. The instrument consisted of three parts viz., personal profile of the respondents, the role perception scale and suggestions to improve role perception. Role perception questionnaire developed by Pfeiffer and Jones (1980) and modified by Pareek (1986) was used. This questionnaire measured role perception in terms of the strength / degree of 10 dimensions namely, centrality, integration, proactivity, creativity, inter-role linkage, helping relationship, super-ordination, influence, personal growth and confrontation. Data was analyzed for overall role perception, dimension-wise role perception, antecedents of role perception, and suggestions to improve role perception. Final report is under preparation.

Assessment of Transfer of Learning (ToL) of NAARM Training to NARS

Objective:

- To improve overall effectiveness of NAARM training programmes by augmenting the transfer of learning to actual work situations in NARS

Achievements:

This project aims to empirically explore the transfer of learning (ToL) of NAARM training to actual work situation by the participants and suggest measures to enhance ToL to improve the overall effectiveness of Academy's training programmes. Literature review was undertaken to conceptualize study framework and work out the methodological aspects including selection of training programmes for the purpose and empirical assessment of ToL. The data collection instrument was developed and pre-tested in selected training programmes of the Academy. The instrument was refined based on pre-test results and was used to collect data from 4 training programmes of the Academy. Based on the analysis of the available data, project report will be prepared and submitted. It is proposed to take up the remaining part of the project under the research study on Training Needs and Impact Assessment for L&CB under NAIP.

Impact Assessment of Fisheries Research in India

Objectives:

- To analyze investments in capture and culture fisheries research in India;
- To evaluate return to investment of research in capture and culture fisheries; and
- To assess the socio-economic and environmental impacts of fisheries technologies in different systems.

Achievements:

This project is being implemented with funding from AP Cess involving 10 institutions in network mode. The project seeks to assess the economic, social and environment impact of fisheries research in India with focus on macro and micro impact analysis. Midterm project review workshop was conducted at CIBA, Chennai during August 1-3, 2007 in which centre-wise progress was reviewed and activities for the next year

planned. A working manual on Methodologies for Impact Assessment of Fisheries Research was released in this workshop. Collection and analysis of primary data on impact of shrimp and scampi culture from over 1000 aquaculture farmers from East and West Godavari districts of AP was completed. A spatial database for the fish farms of East and West Godavari districts is being developed using GPS, GIS and Google-Earth images. In this project Spatially balanced sampling (SBS), a relatively new approach to develop survey designs that is useful for natural resource researchers and practitioners (Stevens, 1997), is validated. The SBS approach generates a survey design that is probability based and spatially well balanced. Natural resource data typically are spatially auto correlated. Sample locations that are close together tend to be more similar than more distance one (Stevens and Olsen, 2004). A sample is well balanced when the polygon area around sample locations are similar i.e. low variance in polygon area. As a result a SBS design improves the efficiency of estimated values by maximizing spatial independence among sample locations. The efficiency of probability-based design called Reversed Randomized Quadrant-Recursive Raster (RRQRR) based on the concept of SBS (Theobald et al., 2007) is investigated with respect to the sample selection of Aquaculture ponds in the study area. The following figure shows the efficiency of SBS compared to simple random sampling in terms of standard error of the estimated mean value of the Thesian polygons constructed around the sample ponds for different sample sizes. The algorithm is implemented in ARC GIS. It is clear that SBS is more efficient in terms of spatial balancing than Simple random Sampling.

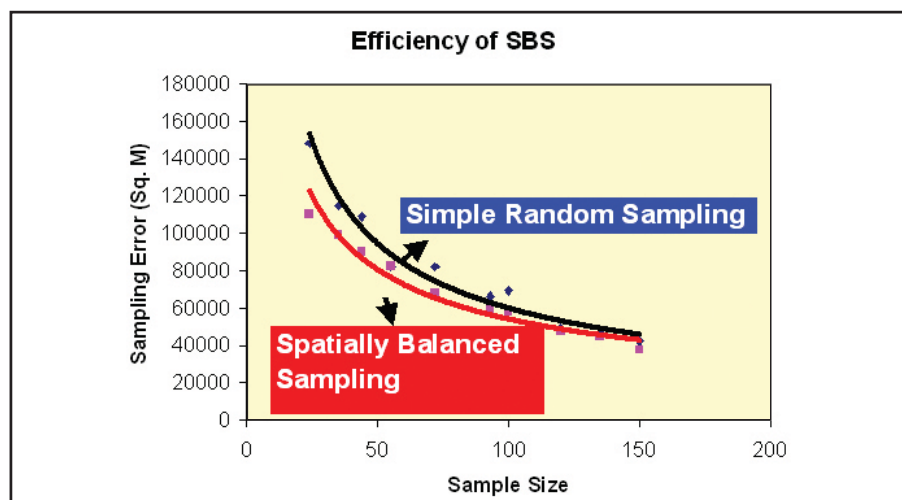


Fig. Efficiency of Spatially balanced sampling (SBS) design over Simple Random Sampling (SRS) Design for sampling of Aquaculture ponds in Korangi Village of East Godavri (AP)

Environmental Impact Assessment:

In this study, Environmental Impact Assessment (EIA) was also undertaken with twin objectives of application of EIA in environmental decision-making and the incorporation of public participation within the EIA process. The latter is an important requirement in Environmental Impact Statements that are federally required for major developments and reflect the increasing importance of environmental considerations in plan-



ning and community decision-making. Greenberg *et al.* (1978) suggests that society increasingly faces a dilemma between balancing economic development against quality of life, health and protecting the environment. Accordingly, environment was studied in East and West Godavari districts of AP to know the impact of fisheries technologies on quality of life.

Organizational Stress and Stressors among the Scientists and Teachers of NARS

Objectives:

- To identify the major stressors for scientists and teachers
- To assess the organizational stress among the scientists and teachers

Achievements:

Information was collected from a total of 333 respondents, which included scientists in the ICAR system and faculty members in the Agricultural University system. Data collected from scientists and faculty members were coded for entry into the datasheet. Analysis was taken up of the information collected through the questionnaire, for a few of the respondents. The analysis indicated that nearly 95 per cent of the respondents have moderate to high stressors. Stress overload was obvious in nearly 60 per cent of the respondent scientists and teachers. It is observed that majority of the responded scientists and teachers do not resort to regular stress management practices (86.0%).

Nearly 98 per cent of the respondents feel that they have inadequacies in their personal factors, which cause them stress. Among the major personal factors, personality, assertiveness, time management, and loneliness contribute in a larger measure for the stress of scientists and teachers. Though a large proportion of scientists and teachers indicated medium to high work stress (85%), it is satisfying to note that majority of them feel that they have high job control, in terms of matching demand and support for the job. It is gratifying to note that only about 53 per cent of the respondents have indicated some or the other form of role stress. Of the various sources of role stress, role erosion, role stagnation, self/role conflict, and resource inadequacy, in that order, are considered as important sources for stress.

Leadership Styles and Effectiveness in ICAR Institutes

Objectives:

- To identify leadership styles of research leaders of ICA
- To measure the leadership effectiveness of these leaders
- To collect information through self-assessment on basic leadership qualities of research leaders

Achievements:

The project was completed in which 432 research leaders were studied for different characteristics of leadership as the dependent variable. The characteristics studied were Readiness to take up leadership role, Assertiveness, Strength of achieve-

ment motive, Charismatic tendencies, Leadership effectiveness, Risk taking, Situational leadership both main style and backup style, Situational leadership effectiveness score, Political behavior, Impression making with boss, Personal creativity, Creating an effective climate for innovation, Attitude towards technology, Becoming an empowering manager, Team work, Effectiveness as a coach, Valuing diversity, Leadership style, Flexibility, Task oriented attitude and behavior, Communication effectiveness and Strategic thinking. Correlation studies with different independent variables like Discipline, Position category, Age group, gender, highest educational qualification, total experience in years, time spent on different activities, technical and management trainings undergone indicated that there is no correlation with risk taking, impression making, Creating an effective climate for innovation, communication ability, situational leadership, charisma, and valuing diversity. However, there is either positive or negative correlation with some of these independent variables with other leaders characteristics.

Evaluation of E-learning Methodologies in Open Source Environment

Objectives:

- To evolve a method to develop content and its management in the context of e-learning and knowledge management
- To identify suitable e-learning methodologies with emphasis on open source environment and suitability to the domain of agriculture

Achievements:

Among the suitable e-learning methodologies explored, MOODLE is chosen for its simplicity in installation, compatibility with Windows environment and relevance for learning resource management suitable for agricultural education institutions. Suitable capacity building strategy is evolved using scientists and subject matter specialists in different agriculture and allied disciplines. A status on IT preparedness of SAUs to implement the e-Learning strategy is also being studied.

- Status of IT infrastructure in the Agricultural Universities: Fourteen Universities were studied for their infrastructural preparedness for promoting E-learning. The number of computer labs in the universities varied from a minimum of one to a maximum of twenty with an average of five per university. Number of computers per lab varied from a minimum of 3 to 100 with an average of 29 per lab. All the universities are equipped with internet and networked. Basic course on computers is offered in all programs. This amply suggests that different universities have started to use computers, though in a small measure.
- Perception of learning MOODLE through training: The strategy adopted to train the personnel in using MOODLE is evaluated on a 1-5 scale. Perceptions of respondents are summarized as below:
 - i. About 88 per cent of participants strongly felt (with a rating of 4 and above) that it is easy to install the MOODLE using the method advocated. This is a significant positive step towards the promotion of open source E-Learning strategy in Agricultural Universities, considering the fact that the partici-



pants had least touch with web based technologies and never used any LMS.

- ii. More than 90 per cent of the participants (with a rating of 4 and above) felt that it is easy to run MOODLE in their campus as course administrators / teachers / students accepting MOODLE as a user friendly software.
- iii. Forty five percent of participants never faced (with a rating of 5) any error or difficulty in using the MOODLE while forty percent of participants faced some error occasionally (with a rating of 4)
- iv. About 82 percent of participants felt online support for the software as quite good (with a rating of 4 and above). This is a strong point for using the software as participants are confident of getting online support in case of any technical difficulty.

Efficacy of PRA for Research Project Formulation

Objectives:

- To examine whether FET through PRA provide opportunities to Agricultural Scientists to understand farmers' needs and aspirations, and suggest available and relevant technological solutions
- To study whether the FET helps scientists to identify and prioritize field problems related to agriculture, develop multi-disciplinary projects, and transfer technologies effectively
- To establish PRA as a valid methodology for developing field problem based research projects by a multidisciplinary and cohesive team of Agricultural Scientists

Achievements:

An instrument covering all aspects of FET from center selection to drawing an action plan has been developed. It was administered through mail, focused interviews on a stratified random sample of scientists drawn from those who have undergone FET which used PRA (from 49th FOCARS onwards) and the SAU scientists/faculty who have not undergone FET but use the methodology for research project formulation. The total sample from treatment group (from ICAR) was 280 and control group (from SAUs) were 100 to make the total to 380. Relevant statistical analysis has been undertaken to draw conclusions. For the entire variables index measurement has been used on a ratio scale of measurement. The items and sub items relevant to cover the variable has been used for scoring.

Synthesizing the PRA/PLA outputs to the relevant stakeholders is important for the development of technology, its management, assessment, evaluation and refinement, to develop appropriate technologies and bridge the research and extension gaps, and also the development gaps. Therefore, this exercise is usually done at the end of the PRA exercise, often after report writing is over. We search for synthesis strategies and try to forecast them through a discussion. The purpose is to integrate farmers' needs and aspirations in technology development process, and its transfer and man-

agement. The purpose also is to make all the stakeholders relevant for the end user (farmer) in the developmental process through technological interventions.

This study also identified that logistics, team building, and proper village selection after the selection of the FET center along with checklist preparation as necessary prerequisites for enhancing the utility of PRA tools for research project formulation. The PRA techniques and processes may suitably be modified to suit every discipline so that they use it for research project formulation and goes a long way in developing appropriate technologies as livelihood intervention options, and in the process of empowering and developing our scientists to develop appropriate research action plans for conducting need based research.

Public-Private Partnership in the Service of Farmers through Information and Communication Technologies (ICTs)

Objectives:

- Public and private partnership for sharing agricultural information
- Using ICT in agriculture technology dissemination for problem solving

Achievements:

Public-Private Partnership in the service of farmers through Information and Communication technologies (ICTs) facilitated the two selected NGO organizations namely, Development of Humane Action (DHAN) foundation and the Society for Women Education and Environmental Training (SWEET) by equipping the information centres with a variety of conventional and IT based ICTs that aid in agriculture information sharing for farming community based on the participatory appraisal and prioritization of agricultural needs carried for the information needs assessment of farmers, farmwomen and youth, and by capacity building of the NGO volunteers to provide need based information. The project used ICTs such as informative VCDs, Internet, Video conferencing, cell phones etc. for linking farmers to scientists in a public-private partnership mode.

The major functional factors or issues for Public Private Partnership as identified by the public sector (State department of Agriculture), private organizations (SWEET and DHAN Foundation members) and stakeholders of the project (farmers using the ICTs for problem solving in agriculture) were memorandum of understanding specifying the roles, support for content management and capacity building, participatory needs assessment and prioritization, costs sharing for infrastructure and maintenance, sustainability issues for information centre, motivated farmers to use ICTs for information sharing and the role conflicts arising due to mismatching expectations.

In addition, focussed group discussions were conducted through selected NGOs on the expectations from public private partnership on process, content and technological issues. The following are the highlights of the case studies conducted at Aepur village on PPP mode among farmers. TV, Radio and newspaper are the most important sources of information, and farmers wish to have individual information as compared to group information. The mode of acquiring agricultural information is through fellow farmers



on cell phones and personal discussion with progressive farmers, The type of partnership expected is only contractual to obtain inputs and services and not decisions about farming which the farmer takes on his own. In order to have functional PPP farmers expressed thrift, credit and savings as important factors binding them to come together. The most important factors to run the VKC (Village Knowledge Centre) on a sustainable basis is to have a corpus fund to run it as well as thrift societies to take loan and re lend it at 0.5% higher rate of interest to run the operational costs. Regarding helping farming community-using ICTs they expressed that public sector must provide the infrastructure for VKC and private sector should give training, while farmers will run it on a sustainable basis, provided the costs are met. They agree that ICTs are very helpful and have liberalism (positive attitude towards the ICTs).

The project enabled the testing of integrated ICT model including the participatory needs assessment and prioritization, need-based information support for problem solving and capacity building for sustaining efforts through the information and communication technologies in a public private partnership mode issues were identified.

Assessment of Learning Objects for Transfer of Technology

Objectives:

- To identify various types of learning objects existing in NARS for Knowledge Management (KM) in Village Knowledge Centres and Digital media forums
- To characterize and assess learning objects with respect to their efficacy in building modules and used in KM
- To develop a mechanism to share and disseminate the learning objects for effective KM across users of NARS
- To design a training module for capacity building among NARS personnel in developing learning objects for KM

Achievements:

The project started in October 2007. During the period under report, collection and classification of learning objects across various web portals and sites was done. Parameters chosen are ease of download/upload and ease of integration in multiple authoring platforms, open source softwares like PLONE are used as content management systems to host the learning objects, and a variety of softwares (open source) are used to convert one file type into the other for ease of hosting the learning objects. A variety of learning objects are developed through learning interactions in flash. The video learning objects are streamed through web as Flash video, and downloaded as Flash video through Real player 11 beta software. The learning objects need to be hosted on a content management system developed on PLONE software was also tested during the period under report.

Promotion of Inter-disciplinary Orientation and Inter-institutional Collaboration in the NARS

Objectives:

- To build inter-disciplinary perspectives in the researchers through capacity building activities
- To evolve suitable mechanism for effective inter-institutional collaboration through policy intervention

Achievements:

As an applied science basically, agricultural research needs to be essentially multidisciplinary in nature. Agricultural production problems require solutions to be developed based on contributions from several disciplines. This calls for a shift in the orientation of scientists in the NARS from a narrow disciplinary focus to a broad multidisciplinary focus. In the face of increasingly felt resource crunch and the complexity of agricultural production problems, it becomes necessary to bring together institutions engaged in agriculture and allied areas to work as partners in technology development and dissemination. This project attempts to address this issue in the NARS with specific reference to the implementation of National Agricultural Innovation Project (NAIP) in a consortia mode.

On the basis of extensive literature search and interactive with scientists in NARS, the developed questionnaires on these two aspects were pilot tested and refined to suit NAIP requirements. The revised questionnaires focus on the following major areas:

A. Inter-disciplinary Orientation:

- ★ Necessity: Problem orientation of agricultural research
- ★ Programmes amenable for inter-disciplinary dispensation
- ★ Intended benefits: Synergism
- ★ Factors facilitating inter-disciplinary orientation
- ★ Constraints hindering inter-disciplinary orientation
- ★ Evolving appropriate HRD strategy
 - Orientation through sensitization programmes
 - Skill development through training and experience building
- ★ Policy interventions
 - Appropriate programme/project appraisal system
 - Relevant HRD strategy
 - Suitable incentive/reward system

B. Inter-institutional Collaboration:

- ★ Need for effective collaboration
 - Plurality of stakeholder involvement – Public sector, private sector, agro-industries, NGO's, farmer groups, international institutions, etc.
 - Efficient utilization of infrastructure facilities and expertise
- ★ Intended benefits: Synergism
- ★ Public – private partnership (PPP) building



- Partnership mode – contractual, collegial, strategic, etc.
- Shared vision and goals
- Balancing service and commercial goals
- Exchange of information and expertise
- Orientation through sensitization
- ★ Threats for building collaboration
 - Cultural barriers
 - Perception of competition
 - Procedural weakness
- ★ Policy interventions
 - Procedure simplification – administrative and financial
 - Common facility creation
 - Evolving appropriate legal framework
 - Suitable credit/risk sharing mechanism

This project originally proposed as NAARM project has been included as one of the research studies under L&CB proposal of Component 1 of NAIP. By administering the questionnaire through mail survey, data on inter-disciplinary orientation and inter-institutional collaboration have been collected from 76 scientists at all levels, viz. Principal Scientists/Professors, Senior Scientists/ Associate Professors and Scientists/ Assistant Professors from ICAR Institutes and Agricultural Universities. Analysis of the collected data is in progress.

Development of Education & Training through E-learning

Objective:

- To develop an operational plan for e-learning under NAIP. The project envisages identifying centres for e-learning activity, content and courses for development, capacity building and broad framework for its implementation under NAIP

Achievements:

1. The project work started on Sept.1, 2006. The Academy initiated dialogue with NARS partners and a sensitization workshop on ICT projects was conducted at NAARM on Sept. 4-5, 2006. In all 36 participants from nine SAUs, seven ICAR institutes and private sector participated in the workshop. The outcome of the workshop are as under:
 - The courses are to be developed on open sharing mode. The first semester UG course in agriculture will be developed first. The participating SAUs in the workshop were asked to inform their priority among the first semester courses.
 - NAARM will liaise with the universities to identify resource faculty for all the UG courses in agriculture and veterinary sciences and these lessons will be developed subsequently based on the experiences in developing the first semester courses.
 - Each ICAR institute and SAU present in the workshop may also indicate maximum of two e-learning modules (related to training programmes / vocational courses) aimed at professionals and students.

- The UG e-learning course contents will be hosted on a central server at NAARM or some other appropriate location. All other knowledge management and e-learning modules will be hosted on the servers of the respective institutes / SAUs. However, all the modules are to be developed as sharable objects.

The proposals received from NARS institutions with 22 partners were collated by the Academy and a comprehensive proposal for 83 million rupees was submitted to NAIP on Oct. 5, 2006.

2. Strategy for E-learning activity under NAIP

A strategy paper was developed, covering the broad themes of e-learning and knowledge management components that can be covered, the mode of sub-proposal initiation and responsibilities for coordination. The strategy paper was submitted to NAIP as a proposal, where Academy will be coordinating e-learning at NARS institutions. Salient points of the suggested approach for e-learning is as under:

- E-learning would include initially UG and PG courses in agriculture and allied subjects and entrepreneurship oriented training courses. Following the approach of engineering education by MHRD, E-learning in agri-UG/PG - courses can be developed by select departments in agricultural universities.
- If the courses are developed within AUs system, it will provide the AUs an opportunity to publish in digital mode and also change / improve contents time-to-time. However, SAUs may seek professional support through consultants or software houses. As TNAU is ready to provide e-learning content for UG agriculture course, it may be supported. For other courses, well established departments from AUs to be identified to develop the courses (best teacher awardees of ICAR and Universities can be the resource persons). For the PG courses strong research departments and faculty can be identified from among the ICAR institutions and SAUs
- Tentative cost (course covering all lessons in a semester syllabus) would be minimum of Rupees one lakh per credit course. Typical UG courses of 150 credits would thus need about Rs 150 lakhs.
- About ten ICAR institutes can be identified to develop entrepreneurship oriented training courses. NAARM will coordinate this activity and undertake capacity building, engage a consultant firm to provide initial support to bring certain degree of uniformity in style, delivery mode, capacity building in content creation and making the final products available on open access mode in a national repository.
- NAIP may propose a 3-5 member experts team to review and take appropriate decisions on selection of locations / sub project proposals at NAARM.

3. Knowledge Management review meeting

A meeting to review Knowledge Management activities under ICDS Component of NAIP was held at NAARM on March 7, 2007. The meeting was attended by officials from NAIP, World Bank, ICRISAT and NAARM. ICRISAT in association with NAARM would develop a consortia proposal involving NARS institutions, IITs and select software houses.



4. Technological options in E-learning

The Carmen learning management system (LMS) in use at Ohio State University (OSU) who use for managing e-learning in the university was studied. Interactions were held with the course developers and managers using other platforms like Joomla and moodle. OSU offers about 15 per cent of the total courses online. Main impediments in spreading online courseware is lack of time for the teachers to tailor make the courseware and lack of incentives for developing/using advanced learning resources. Online learning can be more enriched by video capturing of the lessons and keeping the same in the university web. This enabled the students to learn the lessons even if they were absent in the class. The repeated hearing of the lessons (recorded) enhanced understanding. Based on this experience at OSU, one training program on E-learning using open source tools (in the month of Sept 2007) is proposed for the benefit of NARS personnel.

Simulation Model for Quality Assessment of Agricultural Education

Objectives:

- To conceptualize the quality dimensions in agricultural education
- To develop a simulation model for dynamic quality assessment

Achievement:

The project will be carried out in two distinct phases. First phase will be devoted to development of quality assessment framework with conceptualization of various parameters. Forty-nine quality parameters were identified for assessment of agricultural education institutions. These parameters were used to develop quality construct map.

Assessment of Open Source Software (OSS) Tools for MIS in Agricultural Research

Objectives:

- To assess current software use through benchmark survey and assess future software needs in NARS
- To assess and identify the effective OSS for data analysis and database management in agricultural research management
- To assess and identify the effective OSS for web design and web-based content development

Achievements:

During the period under report, questionnaire was developed for collecting the benchmark data on present use of the software and the software requirements in the areas of Data analysis, Database Management, and Web Designing from the scientists and faculty from the ICAR institutes and SAUs. Computerized 115 questionnaires collected on benchmark data on the existing use of software for data analysis, database management and web-design. Among these respondents 72% are from SAUs and the remaining are from ICAR institutes. The frequency of participants in the use of computers in the above areas is as follows:

Software Use	Extensive	Moderate	Occasional	Total
Data bases	20	15	38	73
Spreadsheet	36	40	28	104
Statistical Analysis	28	37	38	103
Web Design	8	12	21	41

Among the respondents, about 90% are using computers for statistical analysis and spreadsheet applications, 64% for database applications and 36% for web applications. The software SPSS for statistical analysis, Microsoft FrontPage for Web applications, Microsoft Access for database applications and Microsoft Excel for spreadsheet applications are being used by majority of the participants. More than 85% of the respondents expressed the use of software for statistical analysis and, spreadsheet and database applications as essential or valuable.

Strategies for Enhancing Agricultural Engineering Research Output in ICAR

Objectives:

- To fine tune the role of agricultural engineers in consonance with mandate of institute and relevance to the present trends
- To identify the areas of training needs of Agricultural Engineering manpower for their effective role in the context of present day technological developments

Achievements:

The study involved the preparation of questionnaire and administering the same to various institutes and intended to the agricultural engineers working over there. A total of 33 respondents were analyzed to meet the aforementioned objectives. The collected information was adopted into EXCEL database for data extraction and analysis.

Assessment of Qualitative Rating of Colleges in SAUs

Objectives:

- To develop an appropriate methodology for relative ranking of colleges and disciplines
- To assess relative ranking of colleges in SAUs in terms of inputs, output, commercial and social acceptance of its graduates, and competitiveness and career development of graduates and post graduates globally

Achievements:

During the year under report, the following activities were taken up. Data logging of 128 colleges was completed. Complete data on 29 colleges was available and analysis completed. Final report is under preparation.



Performance Assessment of Agricultural Universities

Objectives:

- Development of appropriate methodology and mechanism for performance assessment of agricultural universities
- To help in standardization and rationalization of Sardar Patel ICAR Institution Award for outstanding agricultural university
- To enhance global competitiveness of agricultural universities
- To improve SAUs to attract performance-based funding

Achievements:

The preliminary documentation work and literature survey was completed. It was also submitted to the Vice Chancellors Conference of ICAR held in January 19-20, 2008. The proposal was approved. One Brainstorming workshop is scheduled for May 2008 for developing a methodology and finalization of Indicators and parameters.

Modeling Strategic Management Action Plan for Curriculum upgradation for Indian SAU System in the Global Scenario

Objectives:

- To define the process dimensions and also document the action plan matrix for acceptable curriculum up gradation for accommodating global developments and world reactions
- To develop methodology for curriculum modification for socially acceptable agricultural education under the premises of global change and world developments

Achievements:

Needs Assessment

A questionnaire for assessing the curriculum needs was developed and prevalidated for content, criteria and concurrent validity and acceptable precision requirements administered at ANGRAU, MAU, OUAT and UAS (Dharwad) and UAS (Bangalore). This questionnaire was focused on team working, empowerment, work based learning, vocational and instructional material utilization. Results indicated that these parameters have pronounced effect on curriculum design and development.

Management action plan

On the basis of faculty responses a management action plan was drawn and determinants for Curriculum design and development were identified.

Workshop on Curriculum Design and development in arising contexts

A workshop on Curriculum Design and Development was organized at NAARM from March 16-19, 2007 where in 17 participants participated. The workshop

deliberated upon various issues of curriculum design aspects and was assigned with following objectives.

- To have the first hand knowledge on curriculum design and development in the arising contexts and promote durability in knowledge and skills
- To systematize curriculum development into a process and assess for learning, instructional and performance objectives
- To convert knowledge and skill into vocationally appropriate system with a due emphasis on practical orientation and answering the professional needs.

Participants presented 14 papers on different aspects of curriculum design process.

Resource material on Curriculum: A book on 'Formulating curriculum in agriculture' is being prepared.

Developing Educational Technology for Global Competitiveness in Agricultural Education

Objectives:

- To conduct performance evaluation in various ET modes – Technology in class rooms instruction, web based learning and CD based learning
- To develop educational technology work groups in SAU system for outlining the curriculum, learner, teacher and infrastructure essentials and instructional strategies which integrates ICT and ET
- To develop teaching methodology for non formal education and education for and under graduate students

Achievements:

- Four off-campus training programmes on Educational methodology and Instructional technology were conducted respectively at Birsa Agricultural University, Ranchi. College of Agriculture, Mandya under University of Agricultural Sciences, Bangalore and Karnataka, Veterinary Animal and Fisheries Sciences University, Bidar and at Indian veterinary research Institute, Izatnagar.
- Training in the areas of Pedagogy to the SAU faculty improved the learning teaching and there by improved the quality of agricultural education
- SAU faculty exhibited exceptional interest in such programmes and desired that long term advantage in instructional improvement
- It is economical to conduct such training as off campus compared to in campus
- Orientation workshop for FET Coordinators conducted at NAARM brought about definite advantage in realizing the objectives of FOCARS
- Discussion on implementation methodology of FET clarified the conceptual issues
- The classrooms were furnished for providing the ambience in learning teaching. Equipment like high powered LCD projectors integrated the instructional effectiveness optimizing the conceptual clarity in discussion issues
- Repairs and renovations of class rooms enabled provision of ambience for learning teaching



- Data logging machines procured enable the faculty for conducting field surveys and organize learning teaching in off campus training programmes

Indo US Agricultural Knowledge Initiative

Objectives:

- To develop and implement a programme in educational methodology and instructional technology for faculty members of SAU
- Develop school of education in each SAU as practiced in American SAU
- To conduct training in the areas of learning and teaching to the entry level faculty of Agricultural Universities with a sharp focus on instruction improvement and also update the skills and knowledge as a continuous training function in SAU
- To sensitize the faculty members on issues related to educational planning and administration and also on the role of educational technology.
- To conduct policy level workshops to the educational administrators on the arising subjects of Agricultural education in order to develop curriculum in upcoming areas with a view to make the Agricultural education more vibrant, dynamic and purpose oriented
- To establish a platform for interaction on various problems which effect the Indian agricultural education.
- To undertake research in the area of educational methodology and instructional improvement and develop appropriate case studies

Achievements:

The Academy was given the responsibility of coordinating the activities of Indo US Agricultural Knowledge Initiative project by ICAR. Under this project, Dr B.S. Sontakki, Senior scientist, NAARM was deputed to Ohio State University (OSU) on Teaching learning, and four faculty members from OSU would visit NAARM during 2008-2009, and conduct a two-day workshop.

National Agricultural Innovation Project

Under the aegis of the World Bank supported National Agricultural Innovation Project (NAIP), the Indian Council of Agricultural Research (ICAR) has awarded a major project on Learning and Capacity Building (L&CB), to a consortium led by the Academy, with a budgetary outlay of Rs 24.09 crores.

The overriding objective of this mega project is to institutionalize a learning organization mode in the National Agricultural System for sustained innovation, by harnessing the combined strength of public and private institutions to raise agricultural income by efficient management of value chain, providing livelihood security, and enhancing the competitive advantage of Indian agriculture.

The Project will be executed during the next five years, in consortia mode, with partner institutions such as Indian Institute of Management (IIM), Lucknow, National Institute of Rural Development (NIRD), Hyderabad, and National Institute of Agricultural Extension Management (MANAGE), Hyderabad. The various L&CB models adapted will focus on institutional change, research partnerships, leadership, policy and project management, capacity strengthening in institutional, technical, and behavioural skills in identified areas, international training for enhancing knowledge and skills in emerging areas, and developing new learning models based on e-learning, internet resources, and other media. The L&CB initiatives will be backed by collaborative research studies to generate high quality learning resources, based on specific case studies in areas relevant to NAIP.

NAIP Initiatives at NAARM

Under Component 1 of NAIP, a proposal on Learning and Capacity Building (L&CB), with a budgetary outlay of Rs1972 lakhs, was developed by NAARM. The overriding objective of the proposed project is to institutionalize the L&CB processes in NARS to harness the combined strength of public and private institutions for sustained innovation that raises agricultural income, provides livelihood security, and enhances the competitive advantage of Indian agriculture. The work plan encompasses a variety of L&CB initiatives by NAARM that include Sensitization workshops, Management Development workshops in O&M Reforms, Refresher courses for enhanced knowledge and technical and behavioural skills in identified areas, National and international training, and Adopting new learning models based on e-learning, internet resources, and other media. The L&CB initiatives will be backed by research studies to generate high quality learning resources based on specific case studies in areas/projects relevant to NAIP. They will also help to sustain the L&CB role of NAARM in enhancing the performance of individuals and institutions of NARS in their transition to innovation systems.



Main Project Title:
Learning and Capacity Building (L&CB) under Component – 1 of NAIP

Lead Institute - NAARM

Sl. No	Research Studies	Co PI	Investigators
1	Training needs and impact assessment of L&CB under NAIP	BS Sontakki	T Balaguru KH Rao GP Reddy J Challa MK Avasthi, IIM Lucknow Susheel Kumar, IIM, Lucknow
2	Information and Communication Technologies (ICTs) for promoting agricultural innovation	MN Reddy	
	Assessment of the role of ICTs and develop a road map on ICTs use in agriculture value chain		D Rama Rao BK Sikka
	Assessment of the ICT readiness of rural women in agriculture in terms of awareness of ICT Applications and develop strategy of ICTs in bridging digital divide for rural women		N Sandhya Shenoy VKJ Rao
	Assessment of the extent of availability, use and need of Digital Resources in NAIS and to develop comprehensive digital resource management strategy.		KM Reddy VKJ Rao GRK Murthy
	Information requirement for effective decision making among farmers and to suggest model for developing real time information system through customizing		VKJ Rao N Sandhya Shenoy KM Reddy
	Identification and integration of decision support tools through content management models for effective knowledge and technology transfer		GRK Murthy KM Reddy
	Developing on the job training interventions through distance digital mode for enhancing the effectiveness of research and educational institutes		J Challa MN Reddy GRK Murthy
	Optimization of learning and capacity building for agricultural innovation in agricultural Universities		A Gopalam KH Rao

3	Policy studies for promoting research and innovation in agricultural value chains	GP Reddy	
	Promotion of interdisciplinary orientation and inter-institutional collaboration in public private partnerships in NAIS		T Balaguru P Manikandan SK Nanda
	Policy support for strengthening the value chain to address the challenges of globalization		GP Reddy KH Rao MN Reddy NH Rao
	Intellectual property management in public private partnerships - Patents, PVP and Copyrights		R Kalpana Sastry SK Soam
	IP management in public private partnerships - Agro-biodiversity, Geographical indications and Traditional Knowledge		SK Soam R Kalpana Sastry
4	Organizational change for promoting innovation through research consortia	P Manikandan	
	Change Management		P Manikandan MM Anwer RVS Rao
	Leadership Effectiveness		MM Anwer RVS Rao P Manikandan
	Enhancing Performance		RVS Rao P Manika MM Anwer
	Assessment and Development of organizational citizenship behaviour		KH Rao RVS Rao GP Reddy BS Sontakki
5	Knowledge Systems for research policy and management for sustainable rural livelihoods security	NH Rao	
	Development of knowledge discovery and knowledge management tools to characterize livelihood systems		M.N. Reddy N.H. Rao G.P. Reddy K.H. Rao K.V. Kumar



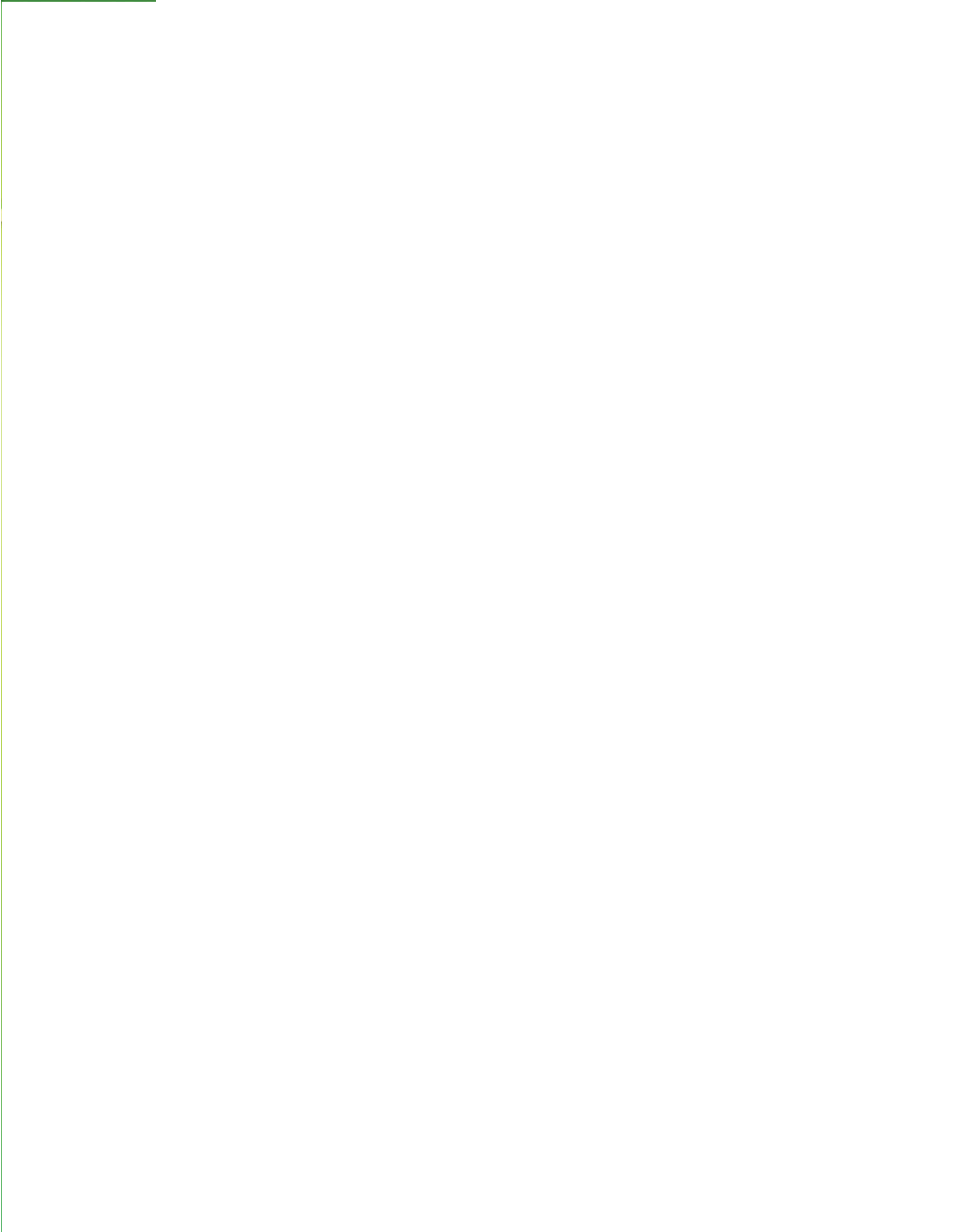
	Development of a spatial framework for assessing vulnerability and adaptive capacity of livelihood systems to climate and market stressors		N.H. Rao M.N. Reddy G.P. Reddy K.H. Rao K.V. Kumar
	Assessment of implications for research policy and management		N.H. Rao M.N. Reddy
	Developing procedures for total quality management in multi-stakeholder and multi-institutional consortia-based research project aimed at improving agricultural innovations for livelihoods security		S.K. Nanda T. Balaguru

Others

		Lead institute	Partner	PIs and Co-PIs
6	Assessment of Inter-relations between R&D in agriculture and other fields of science. Assessment of developments in Nanotechnology for agri. R&D	NCAP	NAARM	Suresh Paul, NCAP & SM Ilyas NH Rao R Kalpana Sastry, NAARM
7.	Knowledge Management through Geospatial Library, rural GIS and capacity Building in Digital Content Development	ICRISAT	NAARM	V. Balaji, ICRISAT NH Rao MN Reddy KM Reddy GP Reddy SK Soam KH Rao KV Kumar, NAARM



Consultancy and Policy Support



Consultancy and Policy Support

1. Consultancy to CARP, SriLanka

Under the ICAR – CARP Work Plan, a two-day Specialized Training Programme on Research Management was designed and offered at Anuradhapura in Sri Lanka for the teachers from various faculties of Rajarata University, Mihintale, SriLanka on December 27 and 28, 2007 by Dr T. Balaguru, Head, ARSMP Division, NAARM. The participants were exposed to contemporary issues in research management as well as to tools and techniques for better management of research. Thirty-seven scientists from various faculties like management, social sciences, humanities, applied science and medicine besides agriculture took part in the programme. This programme was sponsored by the UGC of Sri Lanka.

2. Consultancy to CAPART

Dr N. Sandhya Shenoy has undertaken consultancy service in preparation of the Institute Evaluation for Pre-Funding Appraisal report of the Indira Priyadarshini Women Welfare Association, Jadcherla on its project proposal on gender based activities on women development with skill development training for Council for Advancement of People's Action and Rural Technology (CAPART).

3. Expert Consultation on Agricultural Research Networks and Consortia in Asia-Pacific

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), in collaboration with the Indian Council of Agricultural Research (ICAR), organized Expert Consultation meeting related to the Asia Pacific Association of Agricultural Research Institutions (APAARI) and the Cereals and Legumes Asia Network (CLAN), from October 8 to 10, 2007, with the inauguration and the first day's events hosted at NAARM and the other two days at ICRISAT.



While inaugurating the meeting, Dr Mangala Rai, Secretary, DARE, and Director General, ICAR, New Delhi, said that for meeting the demands of today's fast-moving R&D, technology-intensive business environs and access to international networks and databases were necessary. He indicated that the best-suited enterprises should



be identified for different agro-ecological settings and these should be supported by physical as well as institutional infrastructure. Competitive global liberalization has thrown new and formidable challenges to compete with international technologies. Technological improvement is the most important source of growth in total factor productivity and in improvement of efficiency, he added. Dr Rai also released two publications of APAARI.

Dr R.S. Paroda, Executive Secretary, APAARI, explained the activities of APAARI. He stressed the need for knowledge sharing and for enabling policy environment to promote and accelerate agricultural innovations and share the best practices among partners, especially in the emerging technologies such as ICT, biotechnology, and post harvest technology. Dr Raghunath Ghodake, Chairman, APPARI, welcomed the delegates and stressed the need for increased linkages with stakeholders and for greater participation of private sector in our mutually beneficial joint ventures. He said that the meeting would provide new insights to the regional and inter-regional partners of the consortium for developing new strategies and for planning new initiatives.

Dr William Dar, Director General, ICRISAT, expressed the hope that the meeting would provide an excellent opportunity to review and improve agricultural research and development in the Asia-Pacific region so as to increase agricultural productivity and profitability. Dr Carlos Sere, Director General, ILRI, said that Agricultural Research for Development (ARD) in the Asia-Pacific region is effectively promoted and facilitated through novel partnerships among NARS and other related organizations so that it contributes to sustainable improvements in the productivity of agricultural systems and to the quality of the natural resource base, thereby enhancing food and nutrition security and economic and social well being of communities.

The objective of the Expert consultation was to review the progress of various regional research networks and consortia that are operational either in partnership with APAARI or independently, and to devise plans and strategies for enhancing future collaboration involving various stakeholders for agricultural research and development in Asia-Pacific region. The three days events also included APAARI Executive Committee meeting and CLAN Steering Committee meeting. The delegates for the Expert Consultation, numbering 70, included selected network coordinators and partners from ARD networks associated with APAARI, including NARS leaders and other stakeholders from Australia, Bangladesh, China, Fiji, India, Indonesia, Iran, Japan, Malaysia, Myanmar, Nepal, New Caledonia, Papua New Guinea, the Philippines, Pakistan, the Republic of Korea, Samoa, Sri Lanka, Thailand, Taiwan and Vietnam.



Other Events

Other events

Fifth Quinquennial Review Team (QRT) of NAARM Meeting

The Fifth Quinquennial Review Team (QRT) of NAARM was constituted by ICAR to review the activities and achievements of the Academy during 2001-2005.



While appreciating the significant achievements made by NAARM during the review period, the Team gave several far-reaching recommendations to take the Academy to newer heights in the area of Agricultural Management. Some of the major recommendations made by the Team include:

- ☆ NAARM should aim to become a Global Center of Excellence in Agricultural Management by reorienting its mission, vision, mandate, structure and functioning.
- ☆ The Academy should strive to attain the status of a Deemed to be University by initiating Postgraduate Degree and Diploma Programmes in areas of topical interest relating to Agricultural Management.
- ☆ In order to become a robust Management Institute, NAARM needs to move from an 'Inward Focus to Outward Focus' by creating ten distinct areas of management coupled with innovative governance structure and broad-based recruitment policy.
- ☆ With a view to providing a broader and more relevant mandate' the name to be modified from NAARM (National Academy of Agricultural Research Management) to IAAM (Indian Academy of Agricultural Management).

Institute Management Committee Meeting

The 41st Management Committee Meeting was held on April 28, 2007, under the chairmanship of Dr S.M. Ilyas, Director. The meeting was attended by other distinguished members, which included Dr J.H. Kulkarni, Vice Chancellor, UAS, Dharwad; Dr R.K. Mishra, Director,



IPE, Hyderabad; Dr. D.M. Hegde, Project Director, DOR, Hyderabad; and Dr N. Seetharama, Director, NRCS, Hyderabad. Dr T. Balaguru, Head, ARSMP Division, NAARM; Dr P. Manikandan, Head, HRD Division, NAARM; Dr D. Rama Rao, Head, ICM Division, NAARM; Mr M. Suresh Kumar, CAO, NAARM; and Mr V.S. Subramanian, FAO, NAARM, also participated in the meeting. The Committee deliberated on various issues such as NAIP activities, training fee structure, FOCARS curriculum, budget allocation and expenditure, and manpower issues and provided useful guidance and meaningful recommendations for the effective functioning of the Academy.

Research Advisory Committee Meeting



The 8th meeting of the Research Advisory Committee (RAC) was held on July 21, 2007. The meeting was chaired by Dr A.M. Krishnappa, Former Vice Chancellor, University of Agricultural Sciences, Bangalore. The following members attended the meeting. Dr I.V. Subba Rao, Former Vice Chancellor, ANGRAU, Hyderabad; Dr (Mrs) Vijaya Khader, Former Dean, College of Home Science, ANGRAU, Hyderabad; Dr Pakki Reddy, Agri Biotech Foundation, Hyderabad; Dr S.M. Virmani, Former Agro-climatologist, ICRISAT, Hyderabad; Dr S.P. Tiwari, Deputy Director General (Education), ICAR, New Delhi; Dr S.M. Ilyas, Director, and Dr D. Rama Rao, Head, ICM Division, NAARM (Member Secretary). Dr R.K. Samanta, Joint Director, NAARM; Dr T. Balaguru, Head, ARSMP Division, NAARM; and Dr P. Manikandan, Head, HRD Division, NAARM, were also present in the meeting.

During the meeting, the Chairman made brief remarks on deliberations of the previous meeting and suggested various measures for bringing about improvements in the various activities in the coming year. RAC felt that there was a need to initiate foundation training to the newly recruited faculty members of Agricultural Universities. This may be carried out on the lines of FOCARS or by facilitating AUs to develop similar programmes with the support from the Academy's faculty members and learning resources. The Academy has to identify certain programmes for review by the past trainees. The review might help the Academy in revising the curriculum for its future programmes on the same theme. The EFC document for the XI Plan should reflect activities as envisaged in Vision 2025, the Committee observed. It was pointed out during the meeting that the Academy should aim to emerge as an academic institution and offer short courses as well as PG/Ph. D programmes. In case of NAIP, RAC pointed out that the Academy has to take lead in knowledge management activities. This being the last meeting of the present RAC, Director, NAARM, Dr Ilyas, thanked the Chairman and all the Members of the Committee for supporting the activities of the Academy and

for providing very useful suggestions for enhancing the scope and utility of NAARM's programmes and activities.

Meeting of the Consortium Partners of the NAIP Project on Agroweb

A two-day meeting of the Consortium Partners of the Proposed NAIP Project on Agroweb was organized on November 13 and 14, 2007, to discuss about the objectives, work plan, activities, deliverables, outcome, and budget of the project. Dr R.C. Agrawal, the PI of the project, made a detailed presentation about the recommendations and suggestions given by the referees on the various details of the project. Based on the discussion in the meeting, the proposal would be revised and submitted to NAIP. Dr S.M. Ilyas, Director, NAARM, Dr D. Rama Rao, Head, ICM, NAARM, Dr N.T. Yaduraju, National Coordinator, NAIP, and all consortium partners attended the meeting.

Hindi Fortnight Celebrations

Hindi Fortnight Celebrations were organized at the Academy from September 1 to 14, 2007. To mark the celebrations, various competitions were held which included noting, drafting, elocution, essay writing, dictation, translation, words making, just a minute, general knowledge, memory, and singing. Various categories of employees of the Academy participated in these competitions with enthusiasm and interest.

The valedictory function of the Hindi Fortnight Celebrations was held on September 20, 2007. During the valedictory programme, Dr A. Gopalam, Officer-in-Charge (Hindi), gave a detailed account of the various activities undertaken by the Official Language Cell during the last one year and pointed out the various steps taken by the Academy in promoting the use of Hindi. Delivering the valedictory address, Dr S.M. Ilyas, Director, emphasized the need for commitment, dedication, and continuous efforts for the effective use of the official language. He pointed out that simple language and regular usage only would help in the enhanced use and implementation of the official language. Dr Ilyas released the publication "Krishi Prabhandan ke Naye Aayaam" brought out by the Academy on this occasion and also distributed the prizes to the winners. Dr D. Venkateswarlu, Technical Officer (Hindi), proposed the vote of thanks.

Foundation Day Celebrations

Marking the productive and successful completion of 31 years, the Academy celebrated its 32nd Foundation Day on September 1, 2007. A Foundation day lecture was organized to mark this occasion, which was delivered by painter, graphic artist, and art-historian Padmashri Jagdish Mittal, who is the Founder Chairman of "Jagdish and Kamla Mittal Museum of Indian Art", Hyderabad, and Founder-member of "Indian National Trust for Art and Cultural Heritage", New Delhi. During his lecture, Dr Mittal presented various forms of contemporary art and pointed out at the intricacies of the



same. He said that both science and art require creativity and innovation. He emphasized that the scientists need to be more focused in their endeavour in order to bring out the best in their output. On this occasion, Dr Mittal released the publication "Vision 2025" of the Academy. He also awarded the Best Worker award – 2007 to Mr C. Bagaiah (Administrative Services), Mr K. Suryanarayana (Technical Services), and Mr Khalid (Supporting Services), for their excellent performance in their respective job assignments.

Dr S.M. Ilyas, Director, while welcoming the gathering, gave a bird's eye view of the progress of the Academy. He said that the Academy has visualized alternate scenarios and developed relevant perspectives to facilitate the institutions under NARS in achieving the nation's development goals. Based on the past achievements and the future needs, the Academy has committed in fulfilling the learning and capacity building functions of the National Agricultural Innovation System in the areas of agricultural research, education, and innovation management. While doing that, full cognizance has been taken of the ongoing global changes in knowledge and science-led initiatives, government policies, and the facilitative role needed towards development of a knowledge and innovation-driven growth in agriculture and rural development.

The Directors and Heads of Divisions of sister institutes at Hyderabad and Heads of other institutions located in Rajendranagar graced the occasion. All the staff members and the trainees of the various programmes took part in the celebrations, which ended with a scintillating cultural programme.

ICAR inter-institutional Sports Tournament (South Zone)



The Academy hosted the ICAR South Zone Sports Meet, which was organized at the Railway Recreation Club grounds, Secunderabad, from February 2 to 6, 2008. A large contingent of 612 players from 21 ICAR institutes took active part in this tournament. Ms S. Geetha, Olympian, South Central Railway, took salute at the march-past on the opening ceremony of the Sports Meet and inaugurated and declared the tournament open. Delivering the presidential address, Dr S.M. Ilyas, Director and Advisor, Tournament Organization Committee, said that the tournament would help foster the spirit of true sportsmanship, fraternity, and brotherhood. The sports would help in a great measure by imparting physical fitness, relieving stress, enriching the overall life style, recharging energy, and rejuvenating the body and soul, he added. Ms Saina Nehwal, National Women's Badminton Champion, was the Guest of Honour in the Opening Ceremony.

Ms K.K. Rukmani Ammal of NAARM, Hyderabad, was adjudged as the best women all rounder of the tournament, whereas Mr K. Krishnan Nair of CPCRI, Kasaragod, was adjudged as the best men all rounder. The best women athlete championship went to Ms Poonam Kashyap, and the best march-past award was bagged by CTCRI, Trivandrum. The overall team championship was awarded to NAARM contingent led by Dr A. Debnath, which bagged 100 points, followed by CPCRI, Kasaragod, with 73 points. The Chief Guest for the closing function was Dr Y.S. Ramakrishna, Director, CRIDA, Hyderabad, and Dr S.M. Ilyas, Director, NAARM, delivered the presidential address. Dr Ramakrishna gave away the champion trophies. Dr Jagannadham Challa, Principal Scientist, NAARM, was the Organizing Secretary of the Sports Meet. The following are the winners of the NAARM contingent in the Sports Meet.

Name of the person(s)	First	Second	Third
Ms Poonam Kashyap	100 m, 200 m, Long jump	High jump	
Ms K. Rukmani Ammal	Shot put, Discus Badminton – singles & doubles	Table tennis - doubles	Javelin
Ms Pushpanjali	Badminton – doubles	Badminton - Singles	—
Ms G. Aneeja	Javelin	Discus, Shot put	—
Mr M.K. Samson	Shot put, Discus, Carrom	—	—
Mr A. Debnath	—	Javelin	—
Ms Savithri Murali	—	Carrom	—
Ms N. Vijayalakshmi	—	Chess	—
Ms Saritha Yadav	—	—	High jump
Mr N. Ramesha	—	800m	—

The Academy also won the volleyball and table tennis – men (team event) runner-up titles. NAARM family congratulates the winners of the NAARM contingent, who brought laurels to the Academy.

Inter-Zonal Sports

The sports contingent of the Academy, led by Dr A. Debnath, participated in the ICAR Inter-Zonal Sports Meet 2006, held at Indian Agricultural Research Institute, New Delhi, from November 20 to 24, 2007. Ms K.K. Rukmini Ammal bagged first prize in shot put and discus; runner up in shuttle badminton (singles) and third prize in javelin. She was adjudged as best athlete (Women) of the tournament. In the men's events, Mr M.K. Samson bagged first prize in shot put and third prize in discus.

Womens' Day Celebrations

On the occasion of International Women's Day on March 8, 2008, NAARM women cell organized a get together wherein the Chief Guest Mrs. Shama Parveen



felicitated sports women who were winners in ICAR South Zone Sports Meet organized at Hyderabad from February 2 to 6, 2008. On the occasion, Dr S.M. Ilyas, Director, NAARM addressed the women colleagues and enlightened them on the contribution and dynamic role of women as mothers in upbringing, shaping the value system in children and thus contributing towards development of society.

NAARM Womens' Cell organized inter-institutional community lunch programme during November 2007 through collaboration and net working among the women employees of various ICAR institutes located in Hyderabad to enhance and encourage fraternity feelings among them. Yoga classes were also organized for women employees of NAARM and campus residents during February 2008 to enhance physical fitness and to bring awareness regarding the exercises to various ailments.

Other Events





Awards and Recognitions



Awards and Recognitions

Awards

- In recognition of his outstanding contribution to the profession, the Indian Society of Agricultural Engineers conferred its highest award – Gold Medal, to Dr S.M. Ilyas, Director, at its 42nd Convention held at Central Institute of Agricultural Engineering, Bhopal. The Award was given on February 1, 2008, by the Chief Guest, Dr Mangala Rai, Director General, ICAR.
- Dr R. Kalpana Sastry has been awarded Fulbright Senior Research Fellowship 2007-08 from US Dept. of State/Bureau of Education and Cultural Affairs/ Foreign Fulbright Scholarship Board, and also Occasional Lecture Award (OLP) Award, 2007-08 by Fulbright Scholar Program OLP Award-2007-08.

Recognitions

- Dr N.H. Rao's paper on "A framework for implementing information and Communication technologies in agricultural development in India", Technological Forecasting and Social Change, (491-518), is classified as '*hot paper*' by the *Journal* - among 25 most downloaded papers from journal web site.
- The University of Warwick, UK has identified Dr S.K. Soam for policy support in the area of IP protection. He is one among seven globally selected members of 'Research Advisory Group' of ESRC funded research project 'Localising Economic Control through Clubs-examining the IP Protection of Feni in Goa, India'.

Membership in Professional Societies / Bodies

Dr S.M. Ilyas

- Member, Food and Agriculture Division Council, Bureau of Indian Standards (BIS), New Delhi
- Chairman, Food grains, Starches and Ready to Eat Foods Sectional Committee (FAO – 16), BIS, New Delhi
- Member, Board of Management, ANGRAU, Hyderabad
- Member, Central Technology Management Committee, ICAR, New Delhi.
- Cooperating Editor, AMA Journal, Tokyo.
- Member, University Court, Integral University, Lucknow.

Dr N.H. Rao

- Member, Academic Council, Kerala Agricultural University
- Member, CAS committee for CRIDA
- Member, CAG of NAIP project at CRIDA



Dr T. Balaguru

- Member, Review and Technical Guidance Team of UNCTAD – supported research study on Geographical Indications.
- Panel Member of External Experts recognized by the Acharya N.G. Ranga Agricultural University (ANGRAU) for evaluation of Postgraduate Thesis.
- Member, Expert Committee on 'Soil, Sediments and Microbial Diversity' of National Biodiversity Authority (NBA), Chennai.

Dr R. Kalpana Sastry

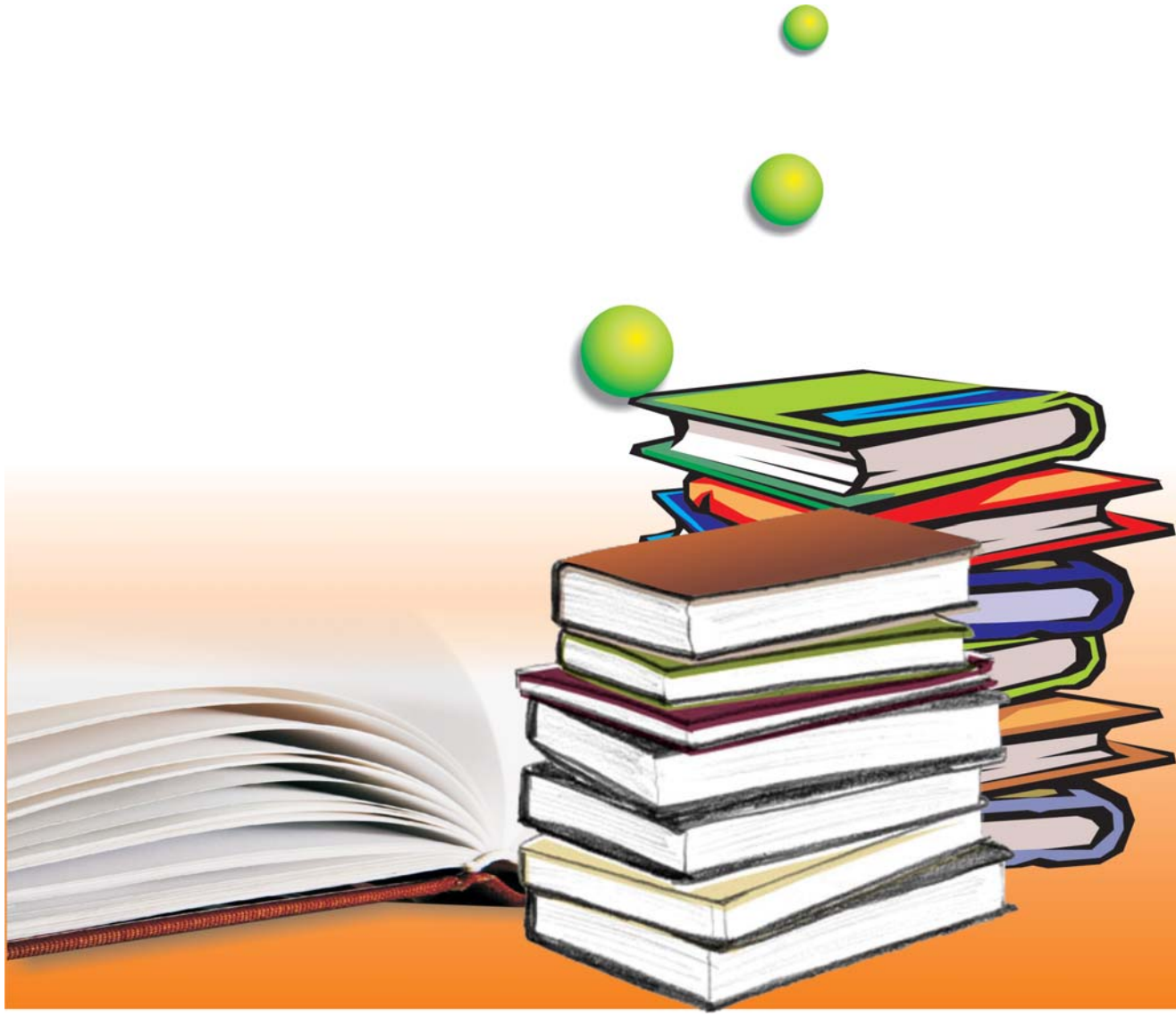
- Member, ITMC of PDP, CRIDA, CII-APTDC, DOR
- Invited Member-of committee for formulation of Guidelines for benefit sharing from National Biodiversity Authority (NBA).
- Invited to special meeting of WTO cell-farmers interaction on issues of biodiversity and IPR from WTO Cell, Govt. of AP.
- Invited as Co-convener for Sub Theme: IPR and related matters by organizing committee for International Symposium on Management of Coastal Ecosystem: Technological Advancement and Livelihood Security in October 2007
- Member of IBSC for three years (2005-2008) of Directorate of Oilseeds Research

Dr N. Sandhya Shenoy

- Member, Panel of Referees, The Journal of Research, Acharya N.G. Ranga Agricultural University (ANGRAU), Rajendranagar, Hyderabad.
- Member, Research Advisory Council of Ph.D programme at Extension Education Institute, Acharya NG Ranga Agricultural University, Rajendranagar, Hyderabad.
- Subject Expert for the Transfer of Technology division, Staff Research Council meeting of the Directorate of Rice Research.
- Member nominee of the Director, NAARM, in 33rd Management Committee Meeting of Acharya NG Ranga Agricultural University, held at the Extension Education Institute, Hyderabad.

Dr G.P. Reddy

- Executive Member, Indian Society of Agricultural Marketing, Nagpur, India.



Publications

Publications

Papers published in journals

Sl.No.	Title	Journal	Author(s)
1.	Strategies for Professionalization of Extension System in India	International Journal of Extension Education. 3: 89-97. 2007	Sontakki, B.S.
2.	Decision-Making Profile of Rural Women of Uttar Pradesh	Indian Journal of Extension Education. 42 (1&2): 116-117. 2006	Priya Vashishtha and Sontakki, B.S.
3.	Information and Communication Technologies for Sharing Agriculture Information in Rural India	Report of AP Cess Funded Research Project. NAARM, Hyderabad. 2007	Sandhya Shenoy, N., Rama Rao, D., Reddy, M. N., Rao, N. H., and Sontakki, B. S.
4.	Reforms in Agricultural Marketing in the context of WTO regime in India	Indian Journal of Agricultural Marketing (conf.spl),21(3):122. 2007	Reddy.G.P.
5.	Impact Assessment of Fisheries Research in India – Concepts and Measurements	Applied Bioinformatics, Statistics and Economics in Fisheries Research Eds. AK Roy and N.Sarangi CIFA, Bhubaneswar 352-359. 2007	Reddy G.P., Sontakki, B.S and Reddy, M.N.
6.	Potential Applications of Spatial Information Technology in Aquaculture and Inland Fisheries	Applied Bioinformatics Statistics and Economics in Fisheries Research Eds. AK Roy and N.Sarangi CIFA Eds CIFA, Bhubaneswar, Vol (3): 223-231. 2007	Reddy M.N, Reddy, G.P and Sontakki, B.S.
7.	Measurement of Technical Efficiency in Upland rain fed Rice Production in tribal belt of Orissa, India.	The Asian Economic Review, vol.49 (2): 237-241. 2007	Reddy, G.P, R.C.Srivastava and H.N.Verma
8.	Personality characteristics of Directors of Indian National agricultural R&D institutions with reference to their change management skills	ICFAI Journal of Management Research, 6 (4): 7-20. 2007	Rao, R.V.S., Rao, K.H., Sontakki, B.S., and Anwer, M.M.
9.	Action Research on the Process of Change Management in Indian National Agricultural R&D organizations	ICFAI Journal of Management Research, 6 (5): 7-19. 2007	Rao, R.V.S., Rao, K.H., Sontakki, B.S., and Anwer, M.M.
10.	Relationship between change management ability of Directors of research institutes and effectiveness of change in their organizations,	ICFAI Journal of Management Research, 6 (6): 7-17. 2007	Rao, R.V.S., Rao, K.H., Sontakki, B.S., and Anwer, M.M.



11.	Bioactive Peptides Derived from Food Proteins	Beverage and Food World 34 (7): 27-35. 2007	Raju, P.N., Rao, K.H and Pal, D
12.	Preparation and evaluation of high protein biscuits containing whey protein concentrate	Journal of Food Science and Technology, 44(5): 532-535. 2007	Raju, P.N., Rao, K.H and Devi, N.L
13.	Microstructure of smoked buffalo meat sausages containing whey protein concentrate	Journal of Food Science and Technology, 44 (4): 422-425. 2007	Rao, K.H., Deenathayalan, P., Anjaneyulu, A.S.R and Yadav, P.L
14.	Quality of cheddar cheese from buffalo milk incorporated with goat milk and lactobacillus casei	Indian Journal of Dairy Science, 60 (3): 16-164. 2007	Rao, K.H and Singh, S.
15.	Modified Atmosphere Packaging for extended shelf life of foods	Processed Food Industry, 10 (8): 30-35. 2007	Raju, P.N., Rao, K.H and Pal, D.
16.	Biochemical and microbiological changes during ripening of cheddar cheese from buffalo milk supplemented with goat milk and microencapsulated enzymes,	Journal of Food Science and Technology, 44 (6): 626-629. 2007	Rao, K.H and Singh, S.
17.	Computer aided modeling and performance prediction of fertilizer solar pond for agricultural operations	Journal of Agricultural Engineering Vol. 44(2): 44-53.	G.R. Ramakrishna Murthy, Ravindra Naik, and Pandey, K.P.
18.	System dynamics modelling and analysis for employment prospects of trained agricultural manpower,	International J. of System Dynamics and Policy Planning, 14(1&2): 27-46.	Nanda, S. K., Rama Rao, D. and Vizayakumar, K.,
19.	A study on adoption level of mango growers of Krishna district of Andhra Pradesh.	Journal of Research, ANGRAU, Vol. 35(1): 73-76, 2007	Ahire, L.M., Sandhya Shenoy, N. and Venugopal Reddy, Ch.
20.	Awareness on eco-friendly / IPM technologies in cotton by the cotton growers in Andhra Pradesh.	Indian Journal of Social Research, Vol. 48(4): 319- 323, 2007	Ahire, L.M. and Sandhya Shenoy, N.
21.	Assessment of management training needs of agricultural research managers.	The Icfaian Journal of Management Research VII(4):21-31, 2008	Manikandan, P. and Anwer, M.M.
22.	Spatial and Temporal Trends of Rice Yield Response to Fertilizer in Andhra Pradesh: An Assessment from the Sustainability Perspective	Productivity, Vol.48 (2): July-Sept., 139-148, 2007	M. Narayana Reddy, N.H.Rao and Kumar, K.V.
23.	A framework for implementing information and communication technologies in agricultural development in India	Technological Forecasting and Social Change, 491-518 ('hot paper'- among 25 most downloaded papers from journal web site) 2007	Rao, N.H.

24.	Preference ranking of Farm Problems through PRA techniques	Indian Journal of Extension Education, Vol: 42 (1&2): 49-53, 2006	M. Sreedhar, L. Jalapathi Rao, R. Uma reddy, N. Mallikharjun, R. Sudarshan, M. Raghava Rao and J. Challa.
25.	Role of Micro-nutrients in Dermatological Disorders of Dog	INTAS Polyvet, Vol. 8(2): 467-471, 2007	Pankaj Kumar, J. Challa, U. Dimri and Manish Kumar
26.	Mechanisms of Protection of Agricultural Innovations in India	DESIDOC Bulletin of Information Technology 27(6): 3-11. 2007	Kalpana Sastry, R.
27.	Trade in Educational Services: An Overview of GATS and Policy Implications for Higher Agricultural Education in India	Journal of Agricultural Education and Extension (Wageningen University, The Netherlands), 13(1): 49-68, 2007	Soam, S.K., Kalpana Sastry, R. and Rashmi, H.B.
28.	Group Task Accomplishment: A New Approach to Training and Development	The Icfai Journal of Management Research VI(3): 23-33. 2007.	Manikandan, P. and Balaguru, T.

Book/ Book Chapters/ Reports / Technical Bulletins

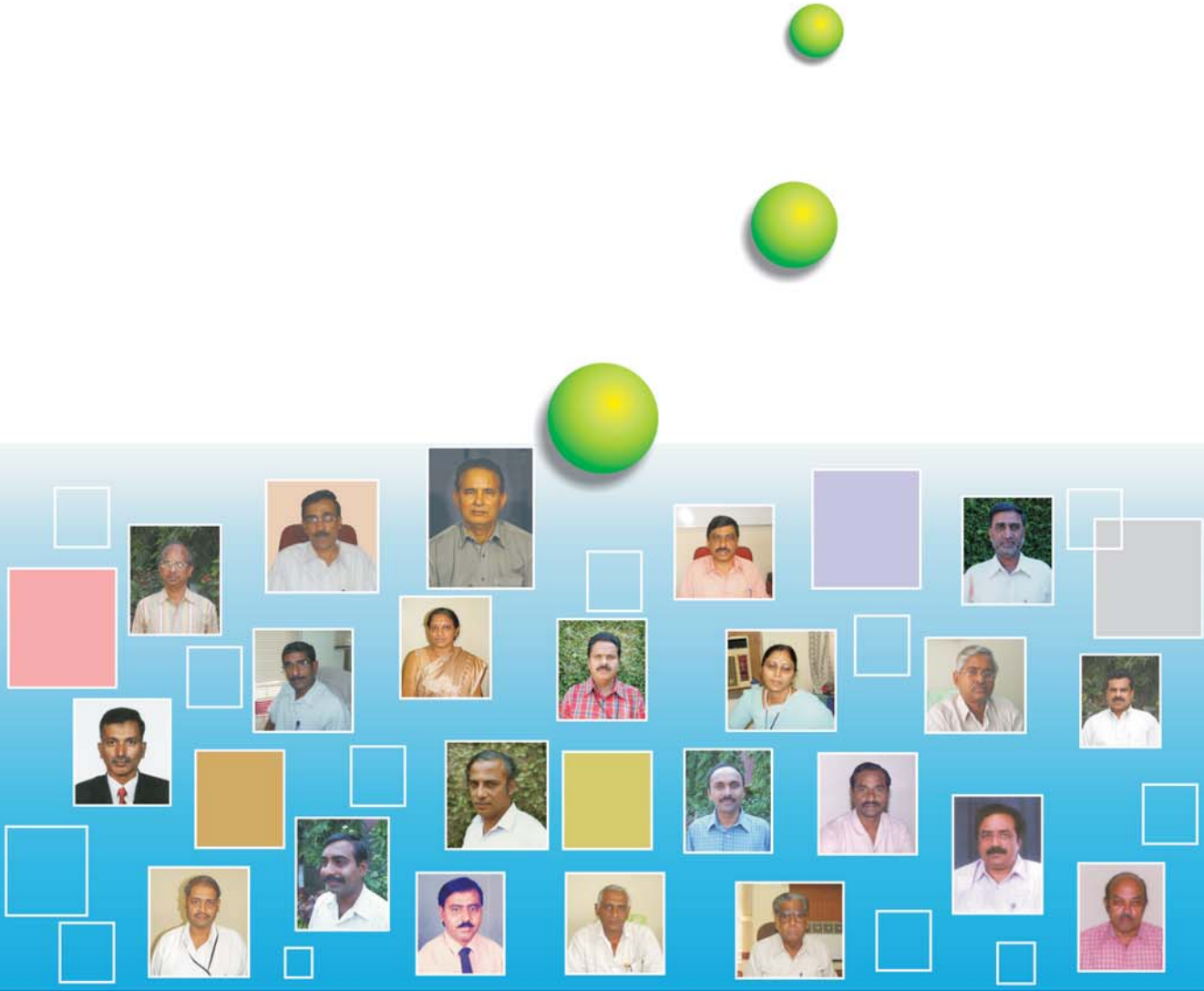
Title	Publisher / Journal	Author(s)
Biodiversity: Issues and Concerns (3 Volumes)	Associated Publishing Co, New Delhi	S. Kannaiyan and A. Gopalam (Eds.)
Manual on Methodologies for Impact Assessment of Fisheries Research.	NAARM, Hyderabad. 2007	Reddy, G. P., Sontakki, B. S. and Reddy, M. N.
Strategies for Strengthening Research-Extension Linkages for Effective Delivery of Agricultural Technologies: Human Centered Approach.	Proceedings of SAIC-NAARM Regional Workshop on Research - Extension Linkages for Effective Delivery of Agricultural Technologies in SAARC Countries held at NAARM from Nov. 20 to 22, 2006. SAIC, Dhaka, Bangladesh. pp 21-44.	Samanta, R. K. and Sontakki, B. S. (Eds)
Agribusiness Management- Opportunities and Challenges	Summer School on Agribusiness held at NAARM from Aug. 7 to 27, 2007 - Training Manual: 210-218. 2006	Reddy, G.P.
Quality Issues in Fisheries Exports	Summer School on Agribusiness held at NAARM from 7 to 27-August 2007 - Training manual: 234-239.	Reddy, G.P.
Forecasting Models for Market Research	Summer School on Agribusiness held at NAARM from Aug. 7 to 27, 2007 - Training manual: 234-239	Reddy, G.P.



Econometric Models for Markets Response	Summer School on Agribusiness held at NAARM from Aug. 7 to 27, 2007. 234-239	Narayana Reddy, M. and Reddy, G.P.
Economics of Precision Agriculture	Summer School on GIS held at NAARM from Feb. 1 to 21,2007.	Reddy, G.P.
Livelihood Concepts and Methods for Research and Development	Summer School on GIS held at NAARM from Feb. 1 to 21,2007.	Reddy, G.P.
Advances in Agribusiness Market Intelligence and Information Technology	Training Manual NAARM, 2007.	Reddy, G.P. <i>et al</i>
Assessing the Impact of Fisheries Research	Training Manual NAARM, 2007.	Reddy, G.P., Sontakki, B.S. and Reddy, M.N. 2007
Spices Board Scheme on Research: Evaluation and Strategic Plan	Consultancy Report NAARM, 2007.	Balaguru, T. Rao, N.H., Kalpana Sastry, R. and Reddy, G.P. (2007)
Application of GRAM GIS in Micro-level Planning and Development for Sustainable Agriculture	Training Manual NAARM. 2007	Rao, N.H., Reddy, M.N., Rao, K.H., Reddy, G.P., Soam, S.K., Kumar, K.V. (2007)
Chapter – 7: Role Efficacy of Faculty Members in State Agricultural Universities. In: Education Sector–HR Perspectives, Volume II, Editor: VRK Prasad, First Edition, Page 88-102.	ICFAI University Press, Hyderabad.	Rao, K.H., Rao, R.V.S., Kumar, K.V. and Anwer, M.M.
Section II - Employee Commitment: Strategic perspectives, Chapter – 7: Organizational Commitment of Employees at Workplace: Concept and Strategies. In: Employee Commitment-An Introduction, Editor: K.Sangeetha, First Edition, Page 59-71	ICFAI University Press, Hyderabad.2007	Rao, K.H and Unnava, H.R
Participatory Media and Knowledge Management	Training Manual NAARM. 2007. p 349	Jayaraghavendra Rao, V.K. and Sandhya Shenoy, N.
Advances in Video and Multimedia Production	Training Manual NAARM. 2007. p 361	Rao, V.K.J., Reddy, K.M., Murthy, G.R.K., Sandhya Shenoy, N. and Rama Rao, D.
FET guidelines	NAARM, 2007. P- 21	Sriram, C., Sandhya Shenoy, N., Rao, V.K.J., Sontakki, B.S., Reddy, K.M. and Rao, K.V.S.

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Spatial Information Technology in Aquaculture and Inland Fisheries	Applied Informatics, Statistics and Economics in Fisheries Research. Edited by Ajit Kumar Roy and Dr. Niranjan Sarangi, New India Publishing Agency, New Delhi. Chapter 37, Pages: 185-195 in 2008	Reddy, M.N., Reddy, G.P. and Sontakki, B.S.
Impact assessment of Fisheries Research –Concepts and Measurements	Applied Informatics, Statistics and Economics in Fisheries Research. Edited by Ajit Kumar Roy and Dr. Niranjan Sarangi, New India Publishing Agency, New Delhi. Chapter 38, Pages: 541-549 2008	Reddy, G.P., Reddy, M.N. and Sontakki, B.S.
Assessing the Impact of Fisheries Research in India	National Agricultural Research Management, Hyderabad, April 2007	Reddy, G.P., Sontakki, B.S. and Reddy, M.N.
Information and Communication Technologies for Sharing Agriculture Information in Rural India	Report of AP Cess funded research project. NAARM, Hyderabad. 2007	Sandhya Shenoy, N., Rama Rao, D., Reddy, M.N., Rao, N.H. and Sontakki, B.S.
Educational Technology for Agricultural Sciences	NAARM priced publication (To be released as in 2008).	Jagannadham Challa and Reddy, M. N.
IPR at a glance. A Brief Insight into Current IP Systems in India	NAARM. 2007. 35p	Kalpana Sastry, R. and Soam S.K.
Sustainable use and Conservation of Agro-biodiversity through Protecting as Goods of Geographical Indications	In Agrobiodiversity, Vol. 1: Crop Genetic Resources and Conservation, (S.Kannaiyan and A. Gopalam, eds). National Biodiversity Authority, Chennai, Associated Publishing Company, New Delhi, 2007, p 229-241	Soam, S. K., Prakash Tiwari, S. and Kalpana Sastry, R.
International Treaty on Plant Genetic Resources for Food and Agriculture. International Treaty on Plant Genetic Resources and Protection of Plant Varieties and Farmers' Rights Act-Orientation lectures	Edited by Dr K. Jessy Thomas and Dr I. Johnkutty, joint publication of WTO Cell Govt of Kerala and Kerala Agric. University, Thrissur, January 2008, p 7-17	Soam, S.K.
Principles and Management of NAIP	National Academy of Agricultural Research Management, Hyderabad, mimeo, pp 1-9, 2007.	Balaguru, T.



Faculty News

Faculty News

Paper presented and published in proceedings of Seminars/ Conferences / Workshops / Symposia, etc., by faculty members during the period under report.

Title of the paper	Name of the seminar / Conference	Presented by
NAIP: Concept, Process and Implementation of NAIP	Brainstorming Workshop held at NAARM, Hyderabad, on April 20, 2007	Balaguru, T.
Overview of NAIP	Pre-Stakeholders Workshop organized under NAIP at NAARM, Hyderabad, on Nov. 28, 2007.	Balaguru, T.
Agricultural research management training needs of scientists and staff of NARS.	Brainstorming Workshop on Training Needs Analysis of NAIS, held at IIM, Lucknow. Feb. 27-29, 2008 under NAIP.	Jagannadham Challa
Profile of Nanotechnology based products in agri-food systems.	Workshop on The Commercialization of Nanotechnologies. CNF, Cornell University on April 10, 2008.	Justina Conner and Kalpana Sastry, R.
Can Nanotechnology provide the innovations for a second green revolution in Indian agriculture?	National Science Foundation (USA): Nanoscale Science and Engineering Grantees Conference, Dec. 3-6, 2007, Washington, USA	Kalpana Sastry, R., Rao, N.H., Cahoon, R., and Tucker, T.
Framework for Protecting Innovations of Grassroots Workers in Rural India.	CIIFAD Forum presentation. Agro ecological Perspectives for Sustainable Development Seminal Series. Cornell University on March 5, 2008.	Kalpana Sastry, R.
Demystifying E-Learning	CDAC, Mumbai during Jan. 5-6, 2008	Murthy, G.R.K., and Reddy, K.M.
E-Learning initiatives for capacity building – An experience	“Demystifying E-Learning” organised by CDAC, Mumbai during Jan. 5-6, 2008.	Murthy, G.R.K., Reddy, K.M., Rama Rao, D., and Reddy, M.N.
ICTs for Traceability in Small Scale Agri-business in India	International Conference on Agribusiness, Aug. 10-12, 2007, IIM, Lucknow.	Rama Rao, D.
Implementation of HACCP in cheese factory – A model frame work	Compendium of National Seminar on Safety Assessment and Consumer Protection with reference to Dairy and Food Industry, held at Tamil Nadu Veterinary and Animal Sciences University, Chennai during Nov. 28-29, 2007. pp 20-23.	Rao, K.H.



Title of the paper	Name of the seminar / Conference	Presented by
Extension and Knowledge Management'.	Key Paper presented in the National Seminar on 'Appropriate Extension Strategies for Management of Rural Resources' organized by the Indian Society of Extension Education from Dec. 18-20, 2007 at University of Agricultural Sciences, Dharwad.	Rao, V.K.J., and Sandhya Shenoy, N.
Impact Analysis of Shrimp Farming in East Godavari District of Andhra Pradesh, India.	Asian Fisheries Forum held at Kochi from Nov. 20 – 23, 2007.	Reddy, G. P., Reddy, M. N., Sontakki, B. S., and Balaprakash, D.
Environmental Impact Assessment (EIA) of Fisheries Technology using Participatory GIS.	ESRI User Conference held at New Delhi during Jan. 18 – 20, 2008.	Reddy, G. P., Reddy, M. N., Sontakki, B. S., Kumar, K. V., Madhusudhana Rao, S., and Balaprakash, D.
Impact Assessment of Fisheries Research–Concepts and Measurements	Winter school on Social Science Research tools in the inland Fisheries Development held at CIFRI, Barrackpore in Jan. 2008.	Reddy, G.P
Impact of WTO in Marketing of Indian Fisheries products in Domestic and international markets,	National workshop on Development of strategies for Domestic Marketing of Fish and Fisheries products held at Muthkur, college of Fisheries, Nellore, AP. 2008	Reddy, G.P., and Balaprakash, D.
Participatory Methods and Spatial Information Systems for Sustainable Rural Livelihoods	Workshop on 'Geospatial Knowledge Management and Participatory GIS" held at NAARM on March 25, 2008.	Reddy, M.N., Rao, N.H., Rao, V.K.J., Reddy, G.P., and Kumar, K.V.
Integrated ICT model for sharing livestock information in rural India	National Workshop on 'Digital inclusion on development in rural India with an emphasis on livestock and poultry sector, organized by TANUVAS (Tamilnadu University of Veterinary and Animal Sciences) and NIC, Ministry of Communication & Information Technology, Govt of India, on Nov. 24, 2007, at TANUVAS, Chennai.	Sandhya Shenoy, N.
Transformation of Agricultural Extension System in India: Need for Human Centered Approach.	National Seminar on Appropriate Extension Strategies for Management of Rural Resources held at University of Agricultural Sciences, Dharwad from Dec. 18 to 20, 2007.	Sontakki, B. S., and Samanta, R. K.
Strategic Model for Organizational Renewal: The Case of A Fisheries Extension Organization.	National Seminar on Appropriate Extension Strategies for Management of Rural Resources held at University of Agricultural Sciences, Dharwad from Dec. 18 to 20, 2007.	Sontakki, B. S

Academic guidance

Dr N. H. Rao

- One Ph.D (GIS and Remote Sensing) – Birla Institute of Technology and Science, Mesra.
- One MS Geoinformatics, Symbiosis Institute of Geoinformatics, Pune

Dr T. Balaguru

- Evaluated two theses of M.Sc. (Ag) students of the Acharya N.G. Ranga Agricultural University (ANGRAU) in the discipline of Soil Science & Agricultural Chemistry.

Dr N. Sandhya Shenoy

- Evaluated two Ph.D theses of the Yashwant Rao Chauhan Maharashtra Open University (YCMOU), Nasik, in the area of Agricultural Communication and Agricultural Extension.
- Recognized as Research guide for M.Sc. and Ph.D (Agriculture Extension, Agricultural Communication and Agricultural Development) by the Yashwant Rao Chauhan Maharashtra Open University (YCMOU), Nashik. During 2007-08, I had provided research guidance for a M.Sc. (Agriculture Extension) student and three Ph.D. students under YCMOU.
- Internal referee for an M.Sc. student and external referee for a Ph.D. (Ag Extension) student of the Yashwant Rao Chauhan Maharashtra Open University (YCMOU), Nasik.

Dr G.R.K. Murthy

- Four B.Tech students from Saint Theresa Institute of Engineering and Technology, an affiliated college of JNTU, on developing call-log system. The Call-log System is a network based information system on maintenance and management of IT resources. The system is designed with database in SQL server-2000 and information management (input and retrieval) through ASP.NET with VB.NET. The system is being tested on Academy's network for making timely decision and in removing the paper work pertaining to maintenance of IT facilities.



Participation in Training Programmes / Seminars / Conferences / Workshop / Symposium / Meeting

Name of the Programme	Organized by / at	Attended / Presented by
Sensitization Workshop 'Intellectual Property Management in Agriculture' & handled a session on Introduction to IPRs in Agriculture.	Directorate of Rice Research during Jan. 29-30, 2008.	Balaguru, T.
International Training Programme on 'Strategies for Agriculture and Rural Development' Linkage.	NIRD during Jan. 10 – Feb. 6, 2008 handled a session on Research-Extension	Balaguru, T.
Policy Dissemination Workshop on 'Agricultural Science and Technology Indicators (ASTI) for India'	NCAP and IFPRI at New Delhi on August 13, 2007.	Balaguru, T.
MDP on Training Need Analysis for National Agricultural Innovation System. Presented the outputs of research studies carried out on the theme	IIM, Lucknow, from Feb. 27 to 29, 2008.	Challa, J.
National Workshop on 'Managing stress related disorders'	Indian Society of Health Administrators, Bangalore, from Oct. 29 to 31, 2007.	Debnath, A.
Workshop on 'Eco-friendly Agricultural Practices'. Delivered a lecture on the topic 'Value Addition in Agriculture'	Environment Protection Training and Research Institute, Hyderabad, on June 5, 2007.	Ilyas, S.M.
Brainstorming workshop for finalizing the priority areas for NAIP	NASC Campus, New Delhi, on Aug. 2, 2007.	Ilyas, S.M.
Core committee meeting on 'Transforming Agriculture in Bihar - Roadmap to New Fertile Crescent'	NAAS, New Delhi, on July 30, 2007.	Ilyas, S.M.
Workshop on 'Capacity Building for Risk Analysis and Modeling to Promote Agriculture Trade in India'	ANGRAU, Hyderabad, on July 23, 2007	Ilyas, S.M.
Brainstorming workshop on 'Mainstreaming Gender in Agricultural Research and Education'. Presentation on the topic "Capacity strengthening in gender budgeting and analysis'	NCAP, New Delhi, on July 10, 2007.	Ilyas, S.M.
National Workshop on 'Identification of appropriate primary processing technologies for value addition of minor produces in tribal areas: A step on rural development'	CIPHET, Ludhiana on Oct. 4, 2007.	Ilyas, S.M.
Interactive Workshop on 'Administrative and Financial Matters', for the ICAR institutes placed under Southern Zone	NIAND, Bangalore, during Oct. 26, 2007.	Ilyas, S.M.
'Kisan Mela', as a Guest of Honour	IVRI, Izatnagar, on Nov. 1, 2007.	Ilyas, S.M.

Name of the Programme	Organized by / at	Attended / Presented by
Core Committee Meeting on 'Transforming Agriculture in Bihar: Road Map to New Fertile Crescent'	National Academy of Agricultural Sciences, New Delhi, on Nov. 27, 2007.	Ilyas, S.M.
2 nd NAIP Implementation Support Review Mission of the World Bank Meeting,	Krishi Anusandhan Bhavan, New Delhi, from Dec. 2 to 3, 2007.	Ilyas, S.M.
Central Technology Management Committee (CTMC) on 'Intellectual property management and technology transfer/ commercialization'	ICAR, New Delhi, on Jan. 2, 2008.	Ilyas, S.M.
Vice Chancellor's Conference of Agricultural Universities	New Delhi, on Jan. 19 and 20, 2008.	Ilyas, S.M.
Chaired the 5 th Meeting of Foodgrains, starches, and ready to eat foods Sectional Committee	BIS, New Delhi, on Jan. 22, 2008.	Ilyas, S.M.
Meeting of the Technical Programme Committee of AARDO, as a Special Invitee, to discuss AARDO's (Afro-Asian Rural Development Organization) work programme for the Triennium 2009-2011,	AARDO headquarters at New Delhi during Mar. 4-5, 2008.	Ilyas, S.M.
Food and Agricultural Division meeting	BIS, New Delhi on Mar. 5, 2008.	Ilyas, S.M.
National Partner Programme meeting of the Central Advisory Service on Intellectual Property (CAS-IP)	Central Advisory Service on Intellectual Property, Maccaresse, Italy, on May 20 and 21, 2007	Kalpana Sastry, R.
MDP on 'Leadership for Innovation in Agriculture'	Indian Institute of Management (IIM), Lucknow from Feb. 4 to 8, 2008	Manikandan, P.
Seminar on 'Demystifying E Learning' & presented a case study on 'E Learning initiatives for capacity building in MOODLE for agricultural education – An experience'	Centre for Development of Advanced Computing, at Navi Mumbai, on Jan. 5 and 6, 2008	Murthy, G.R.K.
Professional development programme on 'Application of quality management in research and development to achieve excellence'	Engineering Staff College of India, Hyderabad from Nov. 5 to 7, 2007.	Nanda, S.K.
International Conference on 'Agri-business and Food Industry in Developing Countries: Opportunities and Challenges'	Indian Institute of Management, Lucknow, on Aug. 10 to 11, 2007.	Rama Rao, D
MDP on Public-Private Partnership for Innovation in Agriculture,	Indian Institute of Management, Lucknow, from March 3 to 8, 2008.	Rama Rao, D.



Name of the Programme	Organized by / at	Attended / Presented by
International Conference on 'Traditional Dairy Foods'	National Dairy Research Institute, Karnal during Nov.14-17, 2007	Rao, K.H.
National workshop on 'Safety Assessment and Consumer Protection with reference to dairy and food industry'	Tamil Nadu Veterinary and Animal Sciences University, Chennai during Nov. 28-29,2007.	Rao, K.H. Rao, K.H.
NAIP L&CB Programme Launch Workshop	NAARM during Dec. 19-20, 2007.	Rao, K.H.
Brainstorming workshop on 'Geospatial Library and Participatory Rural GIS' under component-1 of NAIP	NAARM on March 25, 2008.	Rao, K.H.
Brainstorming workshop on 'Mainstreaming Gender in Agricultural Research and Education' and presented on the topic 'Capacity strengthening in gender budgeting and analysis'	NCAP, New Delhi on July 10, 2007.	Rao, N.H.
International Conference on 'Bangalore Nano 2007: Heralding the Nano revolution in India'	Jawaharlal Nehru Centre for Advanced Scientific Research, Govt. of Karnataka, and M/s M.M. Activ Science-Technology Communication Company from Dec. 6 to 7, 2007.	Rao, N.H.
Negotiation strategies in work environment for scientists sponsored by Department of Science and Technology, Govt of India, New Delhi	Administrative Staff College of India (ASCI), Hyderabad, from May 21 to June 1, 2007.	Rao, R.V.S.
MDP on Leadership for Innovation in Agriculture sponsored by NAIP	Indian Institute of Management (IIM), Lucknow from Feb. 4 to 8, 2008.	Rao, R.V.S.
21 st National Conference on 'Agricultural Marketing'	Agricultural College and Research Institute, Madurai, from Dec. 20 to 22, 2007.	Reddy, G.P.
MDP on Public-Private Partnership for Innovation in Agriculture	IIM, Lucknow from March 3 to 8, 2008.	Reddy, G.P.
'Perspectives and Current Trends in Bioinformatics' sponsored by DST, Ministry of Science and Technology, GOI	CCMB, Hyderabad from Sept. 12 to 18, 2007	Reddy, K.M.
Seminar on 'Demystifying E- Learning' and made a case study presentation titled 'E-Learning initiatives for capacity building in MOODLE for agricultural education – An experience'.	Centre for Development of Advanced Computing, at Navi Mumbai campus of Mumbai, on Jan. 5 and 6, 2008,	Reddy, K.M.

Name of the Programme	Organized by / at	Attended / Presented by
Scientists-Administrators' Interface	Lal Bahadur Shastri National Academy of Administration, Mussourie, Ministry of Science and Technology from June 25 to 29, 2007.	Samanta, R.K.
Brainstorming session on 'Registration and Documentation of Biodiversity related Traditional Knowledge'	Andhra Pradesh Biodiversity Board at Aranya Bhavan on Jan. 25, 2008.	Sandhya Shenoy, N.
Brainstorming Workshop on 'Women in Agriculture in Rural India – New ways forward, re-engineering Programmes & projects'	Glasgow Caledonian University, United Kingdom, Centre for Research on Innovation and Science Policy (CRISP) and Cirrus Management Services Pvt. Ltd., Bangalore, on Feb. 8, 2008 at Hyderabad, Andhra Pradesh.	Sandhya Shenoy, N.
State level Consultation Workshop on 'Designing Information System on Sustainable Agriculture'	Centre for Sustainable Agriculture (CSA), Centre for Development of Advanced Computing (CDAC) and Division of Agricultural Extension, IARI on April 11, 2007 at Hyderabad.	Sandhya Shenoy, N.
'WTO workshop on ITPGRFA and PPV&FR Act' & Delivered an expert lecture on ITPGRFA	Dept of Agric., Govt. of Kerala at College of Agric., Padannakkad on Jan. 16, 2008.	Soam, S.K.
Policy Synthesis Workshop on 'Fisheries and Aquaculture Policy'	CIFE, Mumbai on Dec. 16-17, 2007.	Sontakki, B.S.
National Seminar on 'Appropriate Extension Strategies for Management of Rural Resources'	University of Agricultural Sciences, Dharwad, from Dec. 18 to 20, 2007.	Sontakki, B.S.
Project Review Workshop on 'Impact Assessment of Fisheries Research in India'	CIBA, Chennai on Aug. 2, 2007.	Sontakki, B.S.
MDP Workshop on 'Training Needs Analysis for Innovation' (under the L&CB project of NAIP)	IIM, Lucknow from Feb. 27 to 29, 2008.	Sontakki, B.S.
Workshop on 'Employment Separation – How to manage separation lawfully'	Institute of Public Administration, Bangalore, on June 6, 2007.	Suresh Kumar, M.

Apart from the above, all faculty members of the Academy participated in NAIP Learning and Capacity Building Launch Workshop on Dec. 19 and 20, 2007 at NAARM.



Foreign Visits

- The US Department of State's Bureau of Educational and Cultural Affairs (ECA) and the Foreign Fulbright Scholarship Board (FBS) in Washington D.C. selected Dr R. Kalpana Sastry, Principal Scientist, for a Fulbright Senior Research Fellowship, to work on "Policy and Strategy Options for Nanotechnology in Agricultural and Food Systems" at Cornell University, Ithaca, New York, USA.
- Dr R. Kalpana Sastry participated in Training Workshop in IP proposal writing organized by National Program Initiative of CAS-IP/CGAIR at Kuala Lumpur, Malaysia from Feb 18 to 22, 2008.
- Dr B.S. Sontakki attended a Training on "Teaching and Learning Excellence: A Capacity Building Model" attended at DHCR, CFAES, OSU, Columbus, USA, from March 28 to April 16, 2008 under the Indo-US Agriculture Knowledge Initiative - 2008. Realizing the need to re-conceptualize and re-orient the agricultural education curriculum, implement research based teaching methods with increased emphasis on student centered learning and to promote internship experiences for agriculture students.



Visitors

Visitors

- As a part of the Memorandum of Understanding (MoU) signed between Indian Council of Agricultural Research (ICAR), New Delhi, and Nepal Agricultural Research Council (NARC), Nepal, two scientists Mr Subhasha Nanda Vaidya, Chief, Monitoring and Evaluation Division, NARC, Kathmandu, Nepal, and Mr P. Mandal, Senior Scientist, Regional Agricultural Research Centre, Tarahasa, Nepal, were on study visit to NAARM from July 15 to 21, 2007.

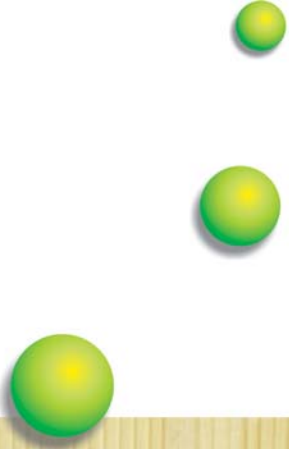
Apart from discussions with the Director and Joint Director of the Academy and visit to various facilities at NAARM, they visited various ICAR institutes / Management institutes located in Hyderabad and discussed with the respective Heads of the institutes about their objectives, functions, programmes of research / management activities with a view to develop effective linkages for collaboration in future.

(Programme Coordinators: Dr B.S. Sontakki and Mr R.V.V.S. Prakasa Rao)

- A high level Kenyan delegation comprising Mr John Mutunga, Chief Executive Officer, Kenya National Federation of Agricultural Producers (KENFAP); Mr Julius Kiptarus, Director, Livestock Production; Dr Samuel G. Mulgai, National Coordinator, Kenya Agricultural Productivity Project; Mr Andrew Dibo, Convener, Extension Specialist, Kenya Agricultural Productivity Project; Dr Christopher Ngichabe, Convener, Research Task Force, Kenya Agricultural Productivity Project; Mr Gem Kodhek, Coordinator, Agricultural Sector Coordinator Unit; Ms Florence Odweso, Convener, Information and Communication Task Force, Kenya Agricultural Productivity Project; Dr Vasey Mwaja, Member, Research Task Force, Agro-Chemicals Association of Kenya; Mr Francis Baiya, Monitoring and Evaluation Specialist, Kenya Agricultural Productivity Project; Mr Moses Kinuthia, Farmer Empowerment Specialist, Kenya Agricultural Productivity Project; Mr Charles N. Kahuthu, Sector Coordinator, Agriculture and Rural Development, Kenya Private Sector Alliance; and Prof. John G. Mwangi, Chairman, Extension/Research/Thematic Working Group, visited the Academy on December 4, 2007, and had discussions with Dr S.M. Ilyas, Director, NAARM, Dr T. Balaguru, Head, ARSMP Division, and Dr P. Manikandan, Head, HRD Division, on different facets of growth in Indian agriculture and also on areas of expertise and possible collaboration.

- A three member delegation comprising Mr Kuroki Yoshiaki, Executive Director, Japan Agriculture Hiroshima Centre, Mr Natsume Makoto, General Manager, Association of Hikari of the House, and Mr Kagawa Yonosuke, Executive Director, Japan Agriculture Hiroshima Centre, visited the Academy on February 11, 2008, and held discussions with Dr S. M. Ilyas, Director, NAARM, on different facets of growth in Indian Agriculture and also on the various activities undertaken by the Academy. Dr P. Manikandan, Head, HRD Division, and Dr D. Rama Rao, Head, ICM Division, were also present during the discussion.

- Shri B.A. Countinho, Additional Secretary and Financial Advisor, Department of Agricultural Research and Education (DARE) and Indian Council of Agricultural Research (ICAR), New Delhi, visited the Academy on March 14, 2008.



Committees

Committees

Institute Management Committee

Dr S.M. Ilyas Director, NAARM, Hyderabad	Chairman
Dr P. Raghava Reddy Vice Chancellor, ANGRAU	Member
Dr J.H. Kulkarni Vice Chancellor, UAS, Dharwad	Member
Dr D.M. Hegde Director, DORRajendranagar, Hyderabad	Member
Dr P.K. Joshi Director, NCAP, New Delhi	Member
Dr P.K. Agarwal National Professor, IARI, New Delhi	Member
Dr M.M. Pandey Director Central Institute of Agril Engg., Bhopal	Member
Dr B.S. Bisht ADG (HRD)Education Division, ICAR, New Delhi	Member
Dr K. Thirupathaiah Commissioner and DGAMRAPARD, Rajendranagar, Hyderabad	Member
Mr B.D. Sati Finance and Accounts Officer, CRIDA, Hyderabad	Member
Mr A. Mohandatta Deshmukh Ahmednagar, Maharashtra	Member
Mr Y. Narsimharaju Yadav Guduru, Krishna Dt. Andhra Pradesh	Member
Mr Suresh Kumar Chief Admn. Officer, NAARM, Hyderabad	Member-Secretary



Research Advisory Committee

Dr Pritam Singh Ex-Director, IIM, Lucknow & Prof. MDI, Gurgaon	Chairman
Dr R.P. Singh Ex. Prof. IIM, Lucknow	Member
Dr V. Balaji Head, Knowledge Management & Sharing, ICRISAT, Hyderabad	Member
Dr A.K. Bakhshi Ex - Director (Res.) SKUAS & T, Jammu	Member
Dr Prathap Reddy Ex-Director, IRMA & Associated with Byrraju Foundation, Hyderabad	Member
Dr K. Vijayaraghavan Satguru Consultants, Hyderabad	Member
Dr S.P. Tiwari DDG (Edn), ICAR, KAB-II, New Delhi	Member
Dr S.M. Ilyas Director, NAARM, Hyderabad	Member
Mr A. Mohandatta Deshmukh Ahmednagar, Maharashtra	Member
Mr Y. Narsimharaju Yadav Guduru, Krishna Dt. Andhra Pradesh	Member
Dr M.M. Anwer Principal Scientist, NAARM, Hyderabad	Member-Secretary

Quinquennial Review Team (QRT)

Eminent persons with vast experience in institution building and management constituted the Team, as under:

Dr Pritam Singh Former Director Management Development Institute Gurgaon	Chairman
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Dr Katar Singh Former Director Institute of Rural Management Anand	Member
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Dr Dilip Bandopadhyay Director Indian Institute of Forest Management Bhopal	Member
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Dr S. Bisaliah Former Vice Chancellor University of Agricultural Sciences Bangalore	Member
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Dr A.N. Mukhopadhyay Former Vice Chancellor Assam Agricultural University Jorhat	Member
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Dr T. Balaguru Head – ARSMP Division NAARM, Hyderabad	Secretary
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Personnel

Personnel

Research Management Positions

Dr S.M. Ilyas, **Director**

Dr R.K. Samanta, Jt. Director (up to 03.09.2007)

Dr N. Hanumantha Rao, Joint Director (w.e.f 01.05.08)

Scientific Positions

Dr T. Balaguru, Head-ARSMP

Dr P. Manikandan, Head, HRD

Dr D. Rama Rao, Head, ICM

Dr C. Sriram, Principal Scientist

Dr A. Gopalam, Principal Scientist

Dr Jagannadham Challa, Principal Scientist

Dr K.M. Reddy, Principal Scientist

Dr M.M. Anwer, Principal Scientist

Dr M. Narayana Reddy, Principal Scientist

Dr (Mrs.) R. Kalpana Sastry, Principal Scientist

Dr. (Mrs.) N. Sandhya Shenoy, Principal Scientist

Dr Santosh Kumar Nanda, Principal Scientist

Dr G.P. Reddy, Principal Scientist

Dr R.V.S. Rao, Principal Scientist

Dr K.H. Rao, Senior Scientist

Dr S.K. Soam, Senior Scientist

Dr V.K. Jayaraghavendra Rao, Senior Scientist

Dr Bharat S. Sontakki, Senior Scientist

Dr G.R.K. Murthy, Senior Scientist

Technical positions

Grade T-9

V. Murali, Garden Superintendent

Grade T (7-8)

Dr A. Debnath, Medical Officer

Zameer Ahmed, Manager (HS)

M.A. Basith



Grade T-6

P.V. Nirmala
K.V. Kumar
Ch. Janardhan Rao
P. Vijender Reddy
P. Namdev

Grade T-5

N.R. Nageswara Rao
Sohail Ahmed Khan
Bansidhar Nayak
G. Aneeja
P. Mohan Singh
L. Ramesh
M. Shekhar Reddy
B. Veeraiah
Ahire Laxman
N. Naresh Kumar
M. Ravi

Administration and Finance

M. Suresh Kumar, CAO
V.S. Subramanian, F&AO
Y. Sankara Rao, AAO
P.P. Brahmaji, AAO
C. Bagaiah, Junior Accounts Officer
J. Renuka, Asst Director (Hindi)
B.Ch. Satyanarayana, Security Officer

Private Secretaries

L. Jhansi Lakshmi
Sarada Samanta
N. Raghunath

Retirement

- Mr Mantri Narasimha Rao, Assistant, retired voluntarily on April 30, 2007, after serving the Academy for 23 years. NAARM family remembered his contributions to the Academy and wished him good luck in all his future endeavours.



- Mr M.M. Mohan Rao, T-3 (Vehicle Mechanic), retired voluntarily on October 1, 2007.
- Mr R.V.V.S. Prakasa Rao, Editor, retired on March 31, 2008 after serving the Academy for 33 years.



Farewell

- A fond farewell was given to Dr R.K. Samanta, Joint Director of the Academy, by the faculty members and staff of NAARM, on his new assignment to the post of Vice Chancellor of Bidhan Chandra Krishi Viswavidyalaya, Nadia, West Bengal. Dr Samanta was relieved on September 3, 2007, to take up his new assignment.



Transfers

- Mr Pradeep Singh, Assistant Director (Hindi), was transferred along with the post to Directorate of Oilseeds Research (DOR), Hyderabad, and was relieved on October 31, 2007.
- Dr D. Venkateswarlu, T-6 (Technical Officer), was transferred along with the post to Directorate of Rice Research (DRR), Hyderabad, and was relieved on November 13, 2007.

Obituary

- Mr M. Mohan Rao, T-3 (Electrical), expired on November 9, 2007.

Promotions

Name of the person	Previous position	Promoted to
Dr S.K. Nanda	Sr. Scientist	Principal Scientist
Dr G.P. Reddy	Sr. Scientist	Principal Scientist
Dr R.V.S. Rao	Sr. Scientist	Principal Scientist
Mr V. Murali	T (7-8)	T-9
Mr R.V.V.S. Prakasa Rao	T (7-8)	T-9
Ms B. Padma Saroja	UDC	Assistant

